The Eastern Wharves, from the "Bird’s Eye View of Savannah" by Augustus Koch, 1891.

An Archaeological Survey of the Proposed Radisson Hotel Construction Site and River Walk Corridor Savannah, Chatham County, Georgia

The Jeffrey L. Brown Institute of Archaeology
The University of Tennessee at Chattanooga

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Columbia Sussex Corporation
Ft. Mitchell, Kentucky

An Archaeological Survey of the Proposed
Radisson Hotel Construction Site and River Walk Corridor
Savannah, Chatham County, Georgia

Prepared by
R. Bruce Council
Research Instructor

The Jeffrey L. Brown Institute of Archaeology
The University of Tennessee at Chattanooga

Nicholas Honerkamp, PhD
Principal Investigator

June 1990
Abstract

During October, 1989, the Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, conducted a Phase I archaeological reconnaissance survey of a tract on the east side of Savannah, Georgia, for the Columbia Sussex Corporation. As the site of a proposed hotel and river walk complex accessing the Savannah River, the U. S. Army Corps of Engineers and the Department of Natural Resources, State of Georgia, required cultural resource testing to determine if sites eligible for inclusion on the National Register of Historic Places would be impacted by the proposed construction. The site of the proposed hotel was adjacent to the eastern boundary of the City of Savannah National Register District.

The main hotel tract consisted of four parcels of land, identified for most of the 19th century as: the eastern portion of Lot 19, Trustees’ Garden; Lots 1 and 2, front and back, of the Eastern Wharves, Lamar Ward; and a triangular portion of a large tract south of Lots 1 and 2 known generally as the Cotton Warehouse Lot. Prior to the late 1830s, the land was in rice cultivation and otherwise unoccupied. The Eastern Wharf Company, headed by industrialist Gazaway Bugg Lamar, drained and filled the waterfront area, creating the Eastern Wharves and subdividing them into Lots 1-6. G. B. Lamar, and son Charles A. L. Lamar, erected a cotton press and warehouses on Lots 1 and 2 prior to 1853, and these early improvements were replaced by similar but more substantial structures prior to 1871. The press and warehouses remained standing until the 1940s, passing through several compress and warehouse companies in the process. The warehouse lots were not reutilized until the 1960s, when a marine construction company purchased the lots.

On Lot 19, bought in 1835 by Henry F. Willink Sr., a shipyard was built including a boat slip. In 1851, the yard passed into the control of H. F. Willink Jr., who retained title to the lot until 1860 when it was sold to G. B. Lamar. During the Civil War, several Confederate warships, including the ironclads Savannah and Milledgeville, as well as smaller vessels, were built on the yard under Willink’s supervision. In December, 1864, the yard was burned and the incomplete Milledgeville was scuttled in the river. In the early 1870s, Willink moved his marine railway and ship repair facilities across the river to Hutchinson Island, and the Lot 19 property reverted to commercial dock uses. The principal tenant in the late 1800s was the Merchants’ and Miners’ Transportation Company, who used the wharf for freight and commodity transfers associated with the Baltimore Shipping Company. The eastern portion of the Lot 19 wharf was bought by founder William Kehoe in 1904, who erected a marine railway on the eastern fringe of the lot. Subsequently, the eastern portion was occupied by the Marine Railway Company and later by the Savannah Foundry and Machine Company. The marine railway had been filled in by the late 1960s, when Sayler Marine Construction occupied the eastern portion of Lot 19, Lots 1 and 2 in the adjoining Eastern Wharves, and the triangular parcel to the south. Sayler Marine moved from the property in the 1980s, leaving little standing architecture.

Seven archaeological search trenches were excavated by backhoe and recorded during a three-week field testing program. Profiles were drawn and photographed, with 45 features being recorded in a total of 159m of trenchline. Excavations were hampered by groundwater and poor visibility.

No in situ aboriginal remains were encountered in the testing program, nor any features clearly attributable to the Colonial or early Federal periods. Landforms such as dams and ditches, associated with early rice cultivation, could not be conclusively identified. Most of the features encountered were brick and/or timber structural footings associated with the postbellum cotton warehouses situated on Lots 1 and 2, Eastern Wharves. Many of the brick footings encountered were supported on pads of boards or planks to provide support and buoyancy in the unstable sandy site soils. Heavy timber cribs associated with an antebellum feature known as Lamar’s Canal, a wharf-fronted canal
built prior to 1840 along the west side of Wharf Lot 1, were recovered and complemented historically-described construction techniques in an 1854 wharf construction contract.

The concrete walls of the marine railway on the eastern portion of Lot 19 were also exposed; the marine railway, built in the period 1904-16, adversely impacted that portion of the historic Willink shipyard that fell within the project boundaries. Extensive deposits of fill of 20th century origin were common in all areas of the site, and the remains of concrete foundation pads from the last tenant of the site were also in place at the time of testing.

Although extensive archaeological features were encountered at this site, closed-context deposits containing datable remains are apparently rare. Much of the archaeological record has resulted from modern fill efforts, and such secondary depositions possess marginal analytical utility. Secondary testing of the terrestrial component of the site was not recommended.
Acknowledgements

One of the many pleasures of working in Savannah, Georgia is to have at hand a number of resources invaluable to the conduct of historical and archaeological research. The most important of these resources are the Georgia Historical Society at Hodgson Hall, the Chatham County Public Library, and the library of Armstrong State College. The staffs of these institutions were uniformly courteous and helpful, as were employees at the Register’s Office, Chatham County Courthouse.

Brad Marman, Project Engineer for Columbia Sussex Corporation, and their local attorney, Barnard Portman, provided valuable assistance in the prosecution of the research. The Savannah engineering consulting firm of Hussy, Gay, Bell, and DeYoung provided project plans for our use. Map collections in the possession of the Savannah District office of the Army Corps of Engineers were placed at our disposal by Judy Wood and David McCullough. In particular, I want to thank Judy Wood for freely sharing information from her files concerning maritime activities in the Savannah harbor. Archaeologist Dr. Larry Babits of the Department of History, Armstrong State College, provided invaluable assistance in the form of historical information and also assisted in securing the services of a local crew of field technicians. Jack Sayler, former owner of the site, visited the excavation several times, and was very helpful in explaining the nature of site modifications in the recent past.

The firm of Porter-Huggins Inc. provided a backhoe and operators for the trenching, and we would particularly like to thank Wayne Cross not only for his excavating skills but his sense of humor. Mr. E. L. Stephens of Coastal Saws and Pumps responded quickly to our needs for pumping equipment, and we’d like to thank him for helping us literally keep our heads above water. The on-site convenience furnished by Waste Management Inc. was appreciated several times a day.

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Administrative support for the project was provided by Diane Miller, Director, and Maria Derrick of the Grants and Research office, University of Tennessee at Chattanooga. Accounting and secretarial assistance was rendered by Michaele Kennedy of the Sociology-Anthropology Department.

Any errors in the presentation, or in the interpretation of site history or archaeology, are the sole responsibility of the author.

R. B. C.  
June 29, 1990
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Introduction

In September, 1989, Dr. Nicholas Honerkamp, Director of the Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, was contacted by Savannah, Georgia attorney Mr. Barnard Portman on behalf of the Columbia Sussex Corporation of Ft. Mitchell, Kentucky. Columbia Sussex proposed to construct a Radisson Hotel on a parcel of land on the eastern fringe of the historic district of Savannah, and as part of these plans, designed a river walk to connect the hotel site with the developed riverfront at Emmet Park at the eastern end of the River Street tourist area. Historically, the project area was known in the 19th century as the Eastern Wharves.

In the process of accessing the shoreline of the Savannah River, the construction project was subjected to review from the Department of Natural Resources, State of Georgia, and the United States Corps of Engineers to determine the environmental and cultural resource impacts of the proposed construction. The main hotel tract was two blocks east of the eastern boundary of the Savannah National Register District, and the river walk technically extended into the Historic District. Both the Department of Natural Resources and the Corps of Engineers required that an archaeological survey of the hotel site and river walk corridor be performed to assess the presence or absence of significant archaeological resources threatened by construction impacts. In addition, an underwater archaeological reconnaissance was to be made to determine if significant maritime remains were present in the river channel along the river walk corridor and in front of the hotel tract.

The Institute of Archaeology prepared a technical proposal and budget to perform the terrestrial portion of the required Phase I cultural resource survey and was awarded the contract. Nicholas Honerkamp was Principal Investigator on the project, with R. Bruce Council serving as Principal Researcher and Project Director. The research consisted of two distinct operations: documentary research to collect data pertinent to historic utilizations of the hotel tract and shoreline and archaeological fieldwork which determined if coherent physical remains were present on the site.

Eight days of historical research provided data with which a documentary framework of site history was constructed. This research was not exhaustive, but rather, like the archaeological survey that followed, was intended merely to sample the available data and generate an outline of site utilizations through time. Three weeks of archaeological fieldwork followed the historical research. In keeping with the industrial nature of the site, and in the interest of economy, the testing of the site involved the machine excavation of search trenches which provided stratigraphic views of the site.

The boundaries of the proposed hotel site and river walk corridor defined the geographic limits of the research area. These boundaries were shown on plans prepared by the Savannah engineering consulting firm of Hussey, Gay, Bell, and DeYoung and provided to the Institute by Columbia Sussex. The main hotel tract is situated east of the town bluff on the banks of the Savannah River on a strip of land with approximately 470 feet (142m) of river frontage and a maximum depth of about 900 feet (273m) measured along the east hotel property line from the river south to the right of way of General Lachlan McIntosh Boulevard. The property thence roughly follows the highway north and west to a point where the extension of Bay Street intersects McIntosh Highway. From this point, the property line extends to the river. If extended north, Randolph Street would form the western boundary of the site as, in fact, it had in the past. Two modern streets run east-west through the property. Bay Street parallels the shore at a distance of about
100m (340'), and the former St. Julian now Harbor Street does the same at about 190m (630'). Only Harbor Street remains an open public thoroughfare at this time.

West of the main hotel tract the survey was to examine the shoreline of the river where the river walk would extend and join Emmet Park, better known as Waving Girl Park. Most of the adjoining land is owned by the Savannah Electric and Power Company. The overall extent of the proposed river walk is ca. 365m or 1200 feet. The required underwater archaeological survey of the waterfront of the proposed project was conducted by Panamerican Consultants of Tuscaloosa, Alabama, under the direction of Tim Mistovich and Stephen James.

Practically speaking, the boundaries of the archaeological site are coincident with the boundaries of the proposed construction area, including hotel site and river walk corridor, as demarcated above. However, the bulk of the terrestrial component of the site, excluding the tidal flux zone and river walk corridor, consists of two lots functionally associated and owned for a long span of time by a single family, as revealed by historical research. Consequently, the archaeological site may be succinctly designated as the Lamar Cotton Warehouse Site.

The Savannah Historic District, listed on the National Register of Historic Places, is bounded on the east by East Broad Street (see Figure 1). The main hotel tract of the proposed construction project is two blocks to the east of the district. Nominally speaking, the river walk extends into the historic district approximately one block. It is on the basis of the project area's proximity to the historic area that archaeological testing was predicated.

The following report is written in a descriptive, narrative style, and is organized in a chronological manner outlining the progress of research. The first step in the study of the hotel tract in the Eastern Wharves was the conduct of historical research to generate a documentary framework through which to interpret the archaeological remains.

Historical Research Methods

Historical records constitute a research resource not unlike the archaeological record. And like the archaeological survey discussed below, our examination of the history of the Eastern Wharves area is not exhaustive. Rather, it is the result of sampling the available documentary sources of information on life and industry in the lowlands on the east side of Savannah. There were two basic objectives to the historical research. One was to produce an overall historical context to the archaeological remains encountered on the site. The other was to collect data which would allow us to predict to a greater or lesser degree where we might expect to find specific features or deposits associated with a certain period, structure, or enterprise. The term "ground-track data" refers to information used to lay out archaeological intercept trenches at locations of specific physical remains as indicated on maps.

Several lines of research were pursued in the course of these investigations. Chain of title research has shown to be a useful historical tool, particularly where a specific and defined tract of land is to be tested archaeologically. Deed research minimally provides a list of names, a series of dates on which, often, land uses changed as well as ownership, and frequently, specific improvements (buildings, wharves, fencelines, etc.) are described in the deeds. Chain of title data on the relevant lots are detailed in Appendices 1 and 2. Deed plats often provide a two-dimensional view of land use and improvements and are useful in targeting excavations to encounter documented features. Of similar significance are large scale maps and land plats illustrating cultural divisions superimposed on the natural landscape. A number of such maps were examined for data pertinent to the Eastern Wharves, including the highly detailed and very informative fire insurance maps produced after the late 19th century. Accurate scaled maps such as those produced by the Sanborn Map and Publishing Company produced the most useful "ground-track data."
Map references and deed information produced a list of names and enterprises who operated specifically or generally upon the project area through time. Key persons were often described in biographical compilations of Savannah residents, and clipping or vertical files sometimes detailed the operations of specific companies. Street indexes were useful in providing the names of tenants on lots in the project area through time. Many local newspapers have been indexed for content, and these indexes were consulted for listings of key persons, companies, and events.

Secondary historical treatments of Savannah history are numerous and cited below as required. These histories provided the needed overview to remove the narrative from the myopia of the very site-specific documentation required for generating excavation targets and to provide more general data on the regional context of the activities taking place on the eastern wharves. For this historical documentation portion of the report, we have adopted the footnote format commonly used by historians to present the thread of narrative in the main text and yet provide thorough listings of references from which the narrative is drawn.
Figure 1. Project area and the adjacent National Register District. The Savannah National Register District (cross-hatched at left) extends from West Broad Street east to East Broad Street, from the Savannah River south to Gwinnett Street. The main hotel tract is two blocks east of the historic district and outlined by white lines in this figure. This 1978 U.S.G.S. quadrangle map shows the projecting wharf built by Sayler Marine.
The history of prehistoric occupation of the eastern fringes of Savannah is recorded in the archaeological record and in the accounts of the early English settlers of the Georgia colony. The earliest name for the site of Savannah, as recognized by the English settlers, was Yamacraw Bluff, at the time of European settlement in the domain of the Yamacraw Creek Chief Tomochichi. Oglethorpe and Tomochichi quickly agreed upon a treaty whereby the English were ceded rights to occupy and possess an enclave adjoining the coast, and the Creek inhabitants of the area thereafter only entered Savannah for purposes of trading.

Significant aboriginal archaeological sites are abundant in the Savannah region, and several are (or were) located within two miles to the south and east of the project area. Largely due to the pioneering work of Antonio J. Waring in the 1930s and 40s, the nearby Bilbo and Deptford sites provided Waring and other researchers with data seminal to the formulation of the first meaningful cultural chronologies of coastal Georgia. The Bilbo Site is located approximately 1.2km (3/4 mi.) to the southeast, and the Deptford Site, 3.2km (2 mi.) to the east. Two other sites, Dulany and Brewton Hill, are also to the east within 3km of the project area.1

Other aboriginal sites were apparently destroyed during the creation of Savannah. Royal surveyor John Gerar William de Brahm noted on a c. 1770 plan of the fortifications of Savannah the former presence of an "Indian Hill" at the northeast corner of the town bluff. His accompanying narrative stated: "Between the City and the Trustees Garden is an artificial Hill upon the Bay, part of which in 1760 was dug through (: to open a Communication with this Suburb and the City:) whereby a Stratum was opened near the Plane of the City filled with human Bones..."2 This account apparently describes a Woodland or Mississippian burial mound situated on the natural eminence of the bluff.

The marshes east of Savannah were only marginally suited for permanent aboriginal habitations because of low elevation and tidal flooding. However, sea level changes in the Late Pleistocene geologic period may have inundated previously dry sites. Archaeologist Chester DePratter has documented a number of coastal sites in the region which, though now inundated by tidal flux, formerly were dry sites under normal circumstances. Sea level regression may have reached a maximum of 4m (13') shortly after 3,000 years before the present (B.P.), and the subsequent rise in sea level to its modern elevation by ca. 2400 years B.P. would have inundated archaeological sites created in low-lying areas in the previous centuries.3 Archaeological components affected by this inundation are those of the St. Simons and Refuge periods.

With the settlement of the high river bluff by General James Edward Oglethorpe in 1733 a new geographic order was imposed on the natural landscape to parallel the social order envisioned by Oglethorpe and the Trustees of the colony. Slavery was prohibited in Georgia, and the social, economic, and military organization of the colony was based on a free yeomanry responsible for its own economy and defense. The unique town plan based on a series of squares flanked by "trust" lots and surrounded by "tything" lots radiated out from the center of the town on the bluff top overlooking the river. Outside the urban core of residences, government offices, and merchant houses was a zone of garden lots

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assigned to each inhabitant for the cultivation of food stuffs. Beyond this zone as a tier of farm lots devoted to commercial-scale economic pursuits.

Without slavery, the economic basis of the new colony could not parallel those of the growing colonies to the north. Consequently, new ventures had to be tried. To test the local soils for crop suitability, the Trustees created a ten-acre garden tract on the eastern edge of the town bluff. A variety of crops were planted in this garden to test their viability in the sandy Georgia soils. Mulberry trees, to provide food for silk worms, did not do well, nor did imported grape vines, intended to be the basis for a colonial winery. A number of exotic plants were tried at the Trustees' Garden, but none of the experiments pointed the way to a new agricultural basis for the colony.

The Trustees Garden was a failure, as was the idealized economic order envisioned by Oglethorpe and the Trustees. Unable to compete with the slave-based plantation economies of the Carolina provinces on the other side of the Savannah River, the colony could not maintain itself. The Trustees surrendered their charter in 1751, and slavery was introduced into Georgia. Soon, large plantations based on slave labor supplanted many of the small landholdings of the early days, and the new Royal colony assumed an economic stance comparable to the Carolinas.

Defense against hostile Indians and the incursions of aggressive European powers like Spain dictated that the fledgling town be surrounded by fortifications. The high ground of the sandy bluffs formed a natural defense line on the east side of the town. At the point where the river bluff turned inland, an earthen fortification was created, near the site of the Indian burial mound. The large cove of fresh-water marsh to the east of the town bluff was drained by two creeks, one of them flowing north and west into the river along the very fringes of the bluff. The second creek drained into the river about 350m (1150') downstream. Until the late 18th century, there seems to have been little development of the marshlands at the foot of the eastern bluff, but information on this point is scant and conflicting.

During the American Revolution, the last Royal Governor, James Wright, was driven from the city by rebel forces in March, 1776, but the British retook the town in December, 1778. The British, under the command of Brigadier General Augustine Prevost, set at once to the rebuilding of the curtain of earthen fortifications surrounding the city. One of these earthwork redoubts was at the northeast corner of the town bluff. This work has sometimes been referred to as Fort Prevost (Figure 2). Toward the end of 1779, word came of the approach of a combined American and French force consisting of a substantial French fleet under Count Charles Henri d'Estaing and a unified Anglo-French army including troops of General Benjamin Lincoln.

The defenders of the city were quick to realize that not one but several rivers passed to the north of town, creating a problem in securing the town against naval attack. The so-called Front River was the channel that ran along the river bluffs at the north end of the town. The Savannah River was split at this point by Hutchinson and Fig Islands, and behind these islands was the Back River. The two channels merged into one at the foot of Fig Island two miles below the town. To secure their position from attack by the French fleet, the British sank vessels at strategic points in the channel below town, thus hindering the approach of large ships trying to move into bombardment range. The frigate Rose, already riddled with worm holes and on the verge of sinking, was stripped and scuttled in the channel a mile below town.1 Two other vessels were sunk as were four barges. Some of these were sunk at the foot of Fig Island, blocking the entrance to the Front River.

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Figure 2. Detail from the plan of the Anglo-French siege of Savannah, 1779, facing south. The British sited a battery (point #9) at the corner of the town bluff overlooking the vacant eastern marshes. A creek, perhaps artificially straightened (?) passes along the foot of the bluff. The upper end of Fig Island is at left. Missing from this plan is any indication of rice dams and ditches in the eastern marshes.
The Anglo-French assault failed, and the town remained in British hands until the need for troops elsewhere compelled the evacuation of the city in July, 1782. Continental commander Lieutenant Colonel James Jackson took control of the city. In the same year, the fortification at the northeast corner of the town bluff was renamed Fort Wayne for the commander of Continental troops in Georgia, General Anthony Wayne.  

After the Treaty of Paris in 1783, the citizens of Savannah sought to restore the economy of the region and repair the damages of the war. For the port city seventeen miles from the open sea, the status of the river channels was of paramount importance. The ships sunk in the Front River channel by the British in 1779 had begun to trap river-borne sediments, and soon a silt bank had formed near the foot of Fig Island, hindering passage through what was appropriately known as the "Wrecks Channel." Upstream from the Wrecks Channel was a large and growing silt bank. Taking its name from the nearby Trustees Garden tract, this navigation obstruction became known as the Garden Bank.

The Front River had been slowly filling with river-borne sediments since the colonial period, and the shallowing of the channel was noted with anxiety at an early date. At the root of the problem was the fact that most of the flow in the Savannah River tended to pass through the Back River channel, leaving the commercially-important Front River a sluggish backwater. Measures were taken to redirect some of the flow of the Back River and into the Front River shipping channel. By increasing the flowage in the Front River, it was hoped that the sediment would be flushed out to sea. As this basic plan evolved in time, the strategy resulted in blocking the channels between Argyle and Hutchinson Islands, and later, closing the cut between Hutchinson and Fig Islands.

The low ground east of the town bluffs was well suited to rice cultivation, falling within the fresh-water tidal flux zone required for the production of that grass. Rice culture required the controlled inundation of the fields several times during the growing season, and lands overrun by fresh water tides four to seven feet in depth were considered ideal. The process of hydraulically isolating tracts of land from the tidal river and installing drainage and flood control systems was lengthy and expensive. Dams were thrown up around rice lands to isolate them from the river, and floodgate structures called trunks regulated the inlet and outflow of water. The natural vegetation was removed from the tract, and smaller dams and ditches subdivided the tract into manageable plots.

The earliest use of the project area as a rice plantation may have been in the colonial period. Governor James Wright maintained a rice plantation called Cedar Hill east of the town, and the fields may have extended west as far as the town bluffs. In 1761 and 1762, Wright was granted title to over three dozen of the garden lots platted east of Savannah. The lots ranged south and east from the northeast corner of town, following the direction of the bluff line. Siege plans from the Revolution, however, do not depict the required dams in the area. Consequently, it is a moot point whether or not the eastern marshes were improved during the Colonial period.

4 Marion R. Hemperly, English Crown Land Grants in Christ Church Parish, Surveyor General Department, Georgia Department of State, 1973, p. 203.
The Antebellum Era in the Eastern Wharves

Clearly, by the early Federal period, rice culture had been introduced into the project area. Several early 19th century plats show a series of dams criss-crossing the area between the city bluffs and the high ground to the east at Deptford and Causton's Bluff. A survey plat recorded in November, 1800, illustrates a network of rice dams and fields in the eastern marsh, and attributes these structures to planter Hampton Lillybridge.\(^1\) The best of these maps, however, is a plat of 1805 drawn at the instance of Lachlan McIntosh detailing his rice lands as well as those of Hampton Lillybridge to the south and to the north, along the river, the lands of Charles Harris, Esquire (Figure 3).\(^2\) Formerly the plantation of John Peter Lange (deceased), the rice plantation at the northwest corner of the eastern marshes had been purchased at a Sheriff's sale by McIntosh. When Charles Harris married his daughter, Catherine McCauley McIntosh, in 1798 or 1799, Lachlan McIntosh transferred the Lange tract of 78 acres, 1 rod, and 18 perches to his son-in-law. It was not until March, 1805, that the general made a formal title over to Harris.\(^3\) Harris evidently inherited much of McIntosh's estate upon the general's death in 1806. Harris was prominent in local politics, having served three terms as mayor prior to his death in 1827.\(^4\)

Some development of wharf sites downstream from Savannah had occurred as early as 1798, when wharf lots near Five Fathom Hole had been laid out by Turnbull.\(^5\) Several town plans from the first decades of the 1800s indicate an early but evidently unsuccessful attempt to commercialize the river frontage immediately east of the town bluff, namely, the 1805 plat discussed above, showing the addition of a series of nine wharf lots occupying the waterfront from the creek at the foot of the bluff east to the lower creek draining the eastern marsh. This early eastern wharf initiative was apparently ephemeral. There were no structures built in the wharf area until the 1840s, by which time a new subdivision of the river frontage had been effected.

Although contributing substantially to the local economy, the presence of rice plantations in the immediate vicinity of the town was troublesome. From a public health standpoint, the wet lands were believed to contribute to the outbreak of malaria and other diseases. The institution of dry culture contracts with planters cultivating rice within one mile of the city limits was intended to eliminate the tidal marshes by providing a cash subsidy to finance the shift into dry culture crops such as cotton and corn. Rice cultivation in the area immediately east of the town may have been abandoned quickly after the dry culture ordinance of 1817.\(^6\)

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1 The plat is in Chatham County Deed Book V: 285.
2 Georgia Historical Society, map #5 SAV, neg. 3-H-3. The cartographer is unknown.
3 Chatham County Deed Book Z: 337-338. The deed plat describes the acreage as 78 acres, 1 rod, 22 perches.
4 "Charles Harris," unattributed paper, vertical file, Georgia Historical Society, Savannah. The year of his marriage to Catherine McIntosh is here given as 1798; in the deed above, the year 1799 is given.
5 Granger, Savannah River Plantations, p. 34.
6 "Plan of the City and Harbor of Savannah in Chatham County, State of Georgia, Taken in 1818," by I. Stouf and engraved by Hughes, Curzon and Company, denotes "old rice fields" in the vicinity, suggesting either that the rice cultivation in the area was of long standing or had ceased.
Figure 3. An 1805 plat of the eastern rice marshes, facing south. Charles Harris' rice plantation was criss-crossed with dams and ditches, but in this plan, the riverfront portion of the marsh was set off in wharf lots numbered 20-28. Nothing came of this early wharf subdivision, and the riverfront remained vacant and unimproved until the 1830s.
The growing tension between the United States and Great Britain in the early years of the 19th century prompted new attention to the protection of America's vital seaports. Fort Wayne, guarding the eastern approach to the city from the Front River, had been allowed to fall into ruins and was subdivided into lots and sold. As part of an initiative of the Federal Government to create an integrated system of coast defense, the national authorities in 1809 purchased land for a new fortification at the extreme northeast corner of the town bluff at the site of the Revolutionary period redoubt. Formerly in the possession of one James Lucena, portions of Trustee's Garden Lots 16, 17, 18, and 19 were purchased from heirs John C. and Joana Lucena through a local attorney. At his time there was little residential or commercial construction present on the bluffs bordering the rice marshes.

With increasing ship traffic to the port of Savannah, the need to create additional wharfage resulted in a new impetus to utilize the waterfront east of the town bluff. In the 1830s, a land speculation partnership was formed to merge their respective titles to holdings east of the town into an entity known as the Eastern Wharf Company. At the heart of the company was one Gazaway Bugg Lamar, one of antebellum Savannah's most successful entrepreneurs. Within a year of his arrival in Savannah in 1833, Lamar had financed the construction of the iron-hulled steamboat *John Randolph*. He also was a partner in the stock company that built the coastal steamer *Pulaski*. Tragically, Lamar lost his wife and five of his children when the ill-fated steamer exploded and sank off the North Carolina coast in 1838. His only surviving child, son Charles Augustus Lafayette Lamar, eventually assumed his father's business interests and acquired a reputation as a rich and reckless individual.

From deeds we infer that the Eastern Wharf Company was an unincorporated body composed, in 1836, of G. B. Lamar, Jacob P. Henry, Elias Bliss, George Hall, Francis M. Stone and William Williams. In that year, these individuals obtained title to two tracts of land on the east side of town. The first parcel was a 75 acre tract consisting of the late Charles Harris' rice lands east of the bluff, and the second, a three acre parcel on the high ground east of East Broad and north of President Street extended. Bought from Nicholas J. Bayard and his wife Sarah, and from George Glen, trustee in their previous marriage settlement, the three acre parcel contained a cotton press not conveyed in the purchase but set aside for the company in a purchase option agreement. The same day as this conveyance, in February, 1836, Nicholas J. Bayard entered the company by purchasing a 1/7 interest in the 75 and 3 acre parcels and by selling a 3/4 interest in a 23 acre parcel south of the 75 acre tract.

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1 Chatham County Deed Book 2B:369-371. Of Portuguese decent, the Lucenas had relocated to Great Britain. The overall size of the purchase was a block of land 110' wide (east-west) and 420' deep. This land had been granted to John Reynolds and later sold to Grey Elliot who partitioned the parcel into lots.
3 Chatham County Deed Book 2V:13-14; 16-18, and 14-16.
By 1837, the Eastern Wharves were more than a paper reality. In what may be a description of an early ship-building project of H. F. Willink, an advertisement from the Daily Georgian in July of that year announced:

FOR SALE The Hull of a Steam Boat now building, and can be completed in 20 days. The materials are of the best quality consisting of live oak and cedar frames, planked with Jersey oak, and yellow pine, iron fastened, and will be of a light draft of water. Said boat is 120 feet long, 24 feet beam, and 8 feet hold. For terms, apply to Watts & Corwin, on the new Eastern wharf, Savannah, Ga. 1

In 1838, the Eastern Wharves were outside the eastern limits of the city. Soon the municipality took steps to include this new industrial area into the corporate limits. In December, 1838, the City Council resolved to extend Bay Street of 30' width through the Eastern Wharves, at the owners' expense, pending its annexation into the city boundaries. 2 The act to annex the Eastern Wharves was sent for approval to the Georgia legislature in January, 1839. 3

In 1839, the Eastern Wharf Company consisted of Elias Bliss, J. P. Henry, Robert Hutchison, Gazaway B. Lamar, Francis M. Stone, and the Central Railroad and Banking Company of Georgia. G. B. Lamar was president of the firm. In May, 1839, a division of all or part of its holdings was made, and the members of the company exchanged quit claim deeds with each other to effect a partition in the joint holdings. One of the deeds was a warranty deed from Elias Bliss to G. B. Lamar for title to the front and back lots of Wharf Lot 2, a parcel granted to Bliss in the original partition. For the sum of $5,000, Lamar obtained fee simple title to a waterfront lot 164' 4'' wide on the Savannah River and 274' deep to the company street now known as the extension of Bay Street. 4 Also conveyed was the Back Lot 2 and a one-sixth interest in rice lands to the east. By 1842, Lamar had also obtained from the Eastern Wharf Company its interest in a 50' wide strip of land running along the east boundary of the Trustees Garden tract. 5 Most of the lots on the Eastern Wharves, as the area came to be known, had been purchased by 1839.

The new wharf lot divisions are shown on a plan of 1840 drawn by C. Stephens (Figure 4). 6 Paralleling the river was a street laid out by the wharf company separating the front and back wharf lots. Although not laid out at the insistence of the mayor and aldermen of the city, the city would later designate the lane as the extension of Bay Street. On the west side of Lot 1, between that lot and the shipyard on Lot 19, was a wide canal apparently representing the channelization of the part of the natural stream bed which had flowed there at the fringe of the bluff earlier in the century. A considerable amount of filling had likely taken place to raise the grade of tidally-inundated rice lands and convert them into usable industrial lots. Gone were all traces of the rice dams closest to the shore, but south of the wharf lots, beyond what would become St. Julian Street (now Harbor Street), the relict dams remained.

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1 Daily Georgian (Savannah): June 14, 1837, page 3, column 1.
3 Daily Georgian (Savannah): January 17, 1839, page 2, column 5.
4 Chatham County Deed Book 2Z: 12-14.
5 Chatham County Deed Book 2Z: 607-608. The consideration was $4,000. This tract had been bought in February, 1836.
6 "Map of the City of Savannah with the Extended Limits," (1840), by C. Stephens, City Surveyor. Waring Vol. 2 Plate 23; Georgia Historical Society Map Collection #9 SAV.
Figure 4. Stephens' 1840 Map of Savannah. This illustration is redrawn from the original. The plat shows property lines only. The shaded area covers the archeological site/hotel project area. It appears by this date that a uniform wharf line has been built along the Eastern Wharves.
The 1840 Stephens plat depicts no structures, but only property lines. The river front adjoining Wharf Lots 1-4 between East Broad and Reynolds Street, the wharf front of Lot 19, and that of Eastern Wharves Lots 1-6 are all drawn on the plan as hard, straight lines. This may be taken as evidence that in the period 1839-40, a uniform wharf line had been established east of the town bluff and the interior of the Eastern Wharves filled to a dry grade. Similarly, Lamar's Canal along the foot of the bluff was evidently channelized by 1840, with the exception of the east bank of the canal adjoining the back lot of Wharf Lot 1. The canal was bridged by the extension of Bay Street.

The official survey of the wharf line along the south bank of the Front River channel had been established by an act of the General Assembly of the State of Georgia in December 1833. H. F. Willink and the proprietors of the Eastern Wharf Company evidently petitioned the city in 1840 to extend the wharf lines on their properties further into the river, but the Mayor and Aldermen were unable to grant the request on their own authority.1

From his home in Brooklyn, New York, G. B. Lamar conveyed to son Charles, for a nominal sum, 75 acres of land bordering the Trustee's Garden area and bounded north "by a street laid out by the Eastern Wharf Company" and south by President Street.2 This 1847 transfer of title gave C. A. L. Lamar control over a sizeable parcel of land south of the commercial wharf frontage. In the following month, C. A. L. Lamar renegotiated the dry culture contract for cultivation in this area which his father had obtained in 1844 and for which the city was in default for nonpayment of the "inducement."3 The Mayor and Aldermen were obliged "to put down one large trunk on the River and two drain trunks and also renew the existing drain trunks if necessary and to put the ditches dams and canals in good condition." Lamar later quit claimed to the city rights to the land seized by them for the extension of President and Randolph streets through his Trustee's Garden holdings.4

G. B. Lamar built a cotton press and bale storage sheds on Lots 1 and 2 sometime in the 1840s or very early 1850s. Lamar's cotton press and sheds were destroyed by fire in April, 1852, with only some of the loss being covered by insurance.5 It is also probable that the storm of September, 1854, inundated the eastern wharves, as a similar storm in 1804 had washed all the low-lying lands including Hutchinson and Fig Islands.6 Supporting data for this conclusion is indirect at this point, however. Damage reports for the 1854 hurricane include the account that "The timber in Willink's ship-yard was floated off and the yard injured. Baldwin's cotton-press and the buildings at A. N. Miller's foundry were unroofed."7

Apart from the industry in the area, there was little activity on the eastern fringes of town by the middle of the 1800s. The Bancroft census of 1848 enumerated only 482 persons, of which 300 were slaves, living in the loosely-organized boroughs known as Carpenters' Row, the Trustees Garden, and Gilmerville. At that date, Lamar's cotton press and warehouses on Lots 1 and 2 had not yet been built, but the eastern wharves did have several important businesses, including the Hydraulit Cotton Press Company, the New

1 From an article, The Daily Georgian (Savannah), January 3, 1841, p. 2 c. 4.
2 Chatham County Deed Book 3E: 390.
3 Chatham County Deed Book 3E: 463.
4 Chatham County Deed Book 3L: 469. This quit claim was executed in 1853.
5 Daily Morning News (Savannah), April 12, 1852, page 1, columns 1 and 2; from the Waring Collection #1320.
7 F. D. Lee and J. L. Agnew, Historical Record of the City of Savannah, Printed and Published by J. H. Estill, Savannah, 1869, p. 79.
Eagle Steam Saw Mill, the Bullock and Winton Steam Saw Mill, and the iron foundry of A. N. Miller.1

Savannah at mid-century was the principal industrial and commercial city of the state. Most of the state's exports passed through its port, and of the commodities shipped to northern and foreign ports, cotton was by far the most important.2 The cotton presses and warehouses adjoining the eastern wharves were part of the state's most important trade. Cotton was hauled to Savannah on barges and steamboats plying the rivers and navigable creeks so numerous in the coastal flood plain. The ginned cotton was pressed into large, compact bales and stored awaiting shipment on ocean-going ships or by rail. The antebellum character of the Eastern Wharves is illustrated on Edward Vincent's 1853 map of Savannah (Figure 5).3

Lots 1 and 2 of the Eastern Wharves were occupied by the cotton press and warehouses of C. A. L. Lamar. On the front portions of the lots were two large warehouses approximately 45' in width and extending north-south roughly 185'. Two smaller buildings were situated on the Bay Street extension frontage of the rear lots. Neighboring Lots 3 and 4 were similarly utilized by the Hydraulic Cotton Press Company. A. N. Miller owned the front and back of Lot 5, with his foundry being situated on the back lot. On Lot 6 was Baldwin's Cotton Press and warehouse, having been erected on land bought from J. P. Henry and Robert Hutchison, et al., in May, 1839.4 A map of Savannah by John M. Cooper, 1856, essentially replicates the Vincent map, with the substitution of Tyler for Baldwin on Lot 6.5

Mayor Edward C. Anderson contracted with one Samuel N. Papot in 1854 to reconstruct the old wharf running between Robert's and Austin's saw mill east of Wharf Lot 6 and extending west to the shipyard of Henry F. Willink (see Appendix 3).6 This would have been the wharf built in the period 1839-40 at the opening of the Eastern Wharves. The contract between Anderson and Papot, besides providing a detailed description of wharf construction at the mid 1850s, suggests that the development of the Eastern Wharves was a joint public-private venture, with the wharf being public property. Lamar's Canal, on the other hand, was privately owned. The canal was likely used to moor small barges engaged in the local trade of transporting cotton to presses and warehouses such as Lamar's.

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1 Joseph Bancroft, Census of the City of Savannah, Edward C. Councell, Savannah, 1848, p. 22, 34, 35, 36.
3 "Vincent's Subdivision Map of the City of Savannah," by Edward A. Vincent, 1853.
4 From notes, Chatham County Deed Book 7G:117.
5 "Map of the City of Savannah," published by John M. Cooper and Company, 1856. This map shows only property lines, not structures, in the Eastern Wharves.
6 Wayne-Stites-Anderson Papers, Manuscript collection No. 846, Box 22, Folder 511, Georgia Historical Society.
Figure 5. Edward Vincent's "Subdivision Map of the City of Savannah," 1853, facing north. At top center in this image is the Lamar Canal, separating Willink's shipyard on Lot 19 (left) from C. A. L. Lamar's cotton press and warehouses on Wharf Lots 1 and 2 (right). Rice dams still remain in the area south of St. Julian (now Harbor) Street.
Creation of the historic Willink shipyard on Wharf Lot 19 of the Trustees Garden subdivision was the result of a forced sale conducted in January, 1835, by county sheriff John P. Dews. Sold at public auction to satisfy judgements against Richard Richardson and Company and R. and J. Bolton, the parcel included portions of Lots 15, 16, 17, 18, and 19. Henry Frederick Willink (senior) purchased the lots for the sum of $6825.\(^1\) Willink had arrived in Savannah by 1812 and was employed as a ship carpenter. Following his 1835 wharf lot purchase, he petitioned the city in 1840 for permission to extend the Lot 19 wharf 20 feet into the river in order to build a marine railway capable of hauling out 350-ton vessels. H. F. Willink Sr. advertised the property for rent in 1850, but by 1851, H. F. Willink Jr. had entered the business. The junior Willink had served an apprenticeship at a New York shipyard for nine years. The senior of the two Willink’s retired from the shipbuilding operation and was active in the real estate trade.\(^2\) The Stephens map of 1840 had depicted only one fairly shallow slip indenting the wharf frontage of Lot 19, while the Vincent plan documents that by 1853, a deep slip, probably housing a marine railway, had been cut east of the early, shallow slip.

H. F. Willink Jr. constructed a number of vessels for the regional trade, but one of the most noteworthy was the Robert Habersham, named for a prominent local merchant. The shallow-draft sternwheeler was designed specifically to collect the rice crops along the drainage of the Ogeechee River and transport them to the mills in Savannah.\(^3\) One of the largest, and longest-lived of these rice mills, was situated on Wharf Lots 9 and 10 just west of the East Broad Street landing on the river.

C. A. L. Lamar’s fortunes continued to grow in the 1850s. At some time between 1853 and 1856, he constructed a six-story steam-powered flour mill on a parcel of land south of his cotton press and warehouses on Lots 1 and 2.\(^4\) Shipwright Willink was also busy; in September, 1857, he was constructing the pilot boats Lamar and Cumming, as well as a schooner named the Cotton Plant. However, perhaps because of the general economic depression of 1857, H. F. Willink found himself in financial straits. On January 26, 1860, Willink Jr. sold his wharf holdings consisting of portions of Trustees Garden Lots 19, 18, 17, 16, and 15 to Gazaway B. Lamar for the price of $50,000.\(^5\) The transaction included his wharf lot and shipyard with a 330’ frontage on the Savannah River and an overall depth of 650’ running along Lamar’s Canal to the northern edge of Lot 14.

The Eastern Wharves During the Civil War

Savannah’s deepwater port took on new importance during the American Civil War, for the sea lanes were the Confederacy’s only link to vital materiel procurable abroad. Federal naval strategy dictated a blockade of all the south’s principal ports. After the events at Fort Sumter in Charleston harbor in April, 1861, Confederate authorities took steps to secure the port and town of Savannah from assault by sea. Once again, the many water approaches to the city, including the Ogeechee as well as the Savannah River, had to be protected. Fort Pulaski had been seized by state militia in January, 1861, and Fort Jackson, only two miles downstream from the town, was reactivated. A battery of guns was placed on the site of Fort Wayne, which overlooked the Eastern Wharves, and to the east on the fringes of the Deptford Plantation, the earthwork Fort Boggs was built to guard

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1 Chatham County Deed Book 2V: 175.
3 Courtesy, Judy Wood, Savannah District, Army Corps of Engineers.
4 The flour mill first appears on the 1856 Cooper map, cited above. Willink's shipbuilding activity is briefly described in "City Improvements," The Daily Georgian (Savannah), September 4, 1857, page 2, columns 2 and 3.
5 Chatham County Deed Book 3T: 24-25.
the eastern approaches to the city. Derelict ships were sunk at various choke points in the river channels opposite Savannah, and rock-filled cribs were also placed to obstruct passages.

It was during the Civil War that activities in the Eastern Wharves of Savannah propelled A. N. Miller and Henry F. Willink Jr. into historical prominence for their industrial contributions to the Confederacy. Miller was born in 1814 in New York, and had learned the shipbuilding trade there in the 1820s. He arrived in Savannah in the 1830s and by 1835 was superintendent of the Iron Steamboat Company. In 1839, he organized his foundry operation.

There was a financial connection between G. B. Lamar and A. N. Miller. In December, 1843, Miller's foundry was destroyed by fire, with only the carpenter's shed being saved. Miller had no insurance to cover his loss which was estimated at $7,000. Miller borrowed money from Lamar to finance the reconstruction of its brick buildings in 1844. The debt for $1800 was satisfied. At the time, the land seems to have been in the title of Francis M. Stone, and Miller was simply leasing the property. The foundry on Lot 5 of the Eastern Wharves supplied maritime and railroad interests in the community, but like Willink, by 1860, his economic position was strained. The start of the war renewed the viability of his enterprise. Miller received orders for, and began to produce, large caliber cannons and ammunition, fittings and fasteners for gun carriages, as well as other machined articles. In October, 1862, he launched the floating battery Georgia, a vessel used in the Confederate defense of Savannah. Although intended to be a self-propelled ironclad, the under-powered Georgia was in effect only a floating gun platform moored near Fort Jackson below the city. In 1863-4, Miller's operations were seriously limited by shortages of iron. His foundry, as a war industry, was burned by the evacuating Confederates on December 20, 1864.

The shipyard of Henry Frederick Willink Jr. suffered the same fate. The Lot 19 shipyard had been sold to G. B. Lamar in 1860, but this evidently did not preclude Willink's continued use of the property. During the war, Willink produced the Confederate ironclad Savannah, the gunboat Macon, and had completed the hull of the ironclad Milledgeville when the approach of General William T. Sherman's army forced the scuttling of the vessel in the river opposite the shipyard. The yards, ways, and shops were burned to prevent capture.

Cotton was considered a prize of war by the Federal forces, and any stores of it left at the Eastern Wharves would have been seized and sold to help finance the war. Clearly, the two long, narrow structures on Lots 1 and 2 illustrated on the Vincent map of 1853 are not those shown in a view from 1871 and in Sanborn plats of 1884 and on, but this does not demonstrate that the sheds were burned during the Confederate evacuation. Sherman's famous Christmas telegram to President Abraham Lincoln boasted the capture of Savannah, its large caliber guns, and 25,000 bales of cotton. Moreover, an official report to General Grant from General J. G. Foster noted that "The rebel iron-clads were blown up and the
navy-yard burned. All the rest of the city is intact ... 32,000 bales of cotton safely stored
in warehouses."¹ It is possible, then, that Lamar's property remained intact through the
evacuation and occupation.

Savannah was spared the destruction visited by Sherman's troops on other Rebel
centers. Ironically, Willink had been hired by the Confederacy to place obstructions in the
river channels around Savannah, and after the war, he was hired by the contractor awarded
the contract to remove the same.² Moreover, Willink continued to use the Lot 19 shipyard
until about 1871, when the property was advertised for sale by Lamar and King.³ At this
time, Willink constructed a marine railway facility on Hutchinson's Island and moved his
base of operations to the opposite shore of the river.⁴

Title to Lots 1 and 2 in the Eastern Wharves had passed from G. B. Lamar to his
son C. A. L. Lamar during the war. Unlike an earlier gift of 75 acres south of the wharf
lots in 1847, on this occasion, a considerable sum of money passed from son to father. In
May, 1855, G. B. Lamar gave a deed to his son for 75 acres of land including lots and
wharves, with a price tag of nearly $34,000. In addition to this sum, the deed was subject
cost to C. A. L. Lamar paying his father over $36,000 for improvements made to the property.
Finally, in December, 1863, the father executed another deed to his son for his lots and
wharves on the east side of the city, this time for a lump sum of $100,000.⁵

Reconstruction and Decline

In the postbellum era, there were few changes on the eastern wharves excepting the
erection of new structures on Lot 19 to replace those burned during the war. An 1868 city
plan of the town drawn by John B. Hogg names Lot 19 as Lamar's Wharf, Wharf Lots 1
and 2 as Lamar's Wharves and Cotton Press, and Lots 3 and 4, United Hydraulic Cotton
press Company. The front of Lot 5 was occupied by the Tyler Cotton Press but the rear
was still identified with Miller's Foundry, at this time, only a vacant lot. Lot 6 was in
possession of one Mrs. Marshall.⁶ There were few changes in the lower wharf area of the
city. West of the East Broad Street ramp to the river was the Lower Steam Rice Mill on
Lots 9 and 10. The four wharf lots between the East Broad Street ramp and that of
Reynolds were owned by Dillon, Telfair and Hobby, and Screven.

The aerial view of Savannah by A. Ruger, 1871, gives us our first perspective
image of the waterfront in its postbellum configuration (Figure 6).⁷ The two long, narrow
cotton sheds on the front of Lots 1 and 2 had been replaced by 1871. Lamar's new cotton
warehouses were large one story structures with an open central courtyard. The main
exterior walls were apparently solid masonry, but the interior courtyard walls were open
arcades. The warehouse on the front of Lots 1 and 2 had a two-story section fronting on
the river. The cotton compress and baling apparatus was housed in this unit. East of the
northern warehouse and compress were two adjoining storage sheds. Bordering Lot 1 on
the west was Lamar's Canal, depicted in the Ruger view as being revetted in wharf fashion
with piles and timbers. As it was in 1853, the canal was bridged for the extension of Bay

¹ The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies;
² ibid.
³ Savannah Morning News, May 25, 1871, p. 3 c. 8; courtesy Judy Wood, Army Corps of Engineers.
⁴ See Lawrence E. Babits and Julie A. Barnes, "Archaeological Investigation of the Marine Railway Site,
Hutchinson's Island, Savannah, Georgia," a report submitted the the U. S. Army Corps of Engineers,
Planning Division, Environmental Resources Branch, Savannah, Georgia, 1984.
⁵ Chatham County Deed Book 3Q: 511; 3W: 94.
⁷ A. Ruger, "Bird's Eye View of Savannah, Georgia, 1871," Georgia Historical Society, Map Collection,
#15 SAV, neg. 3-G-6.
Street. The Ruger view shows little on Wharf Lot 19 save one small structure near the shore, and only scattered buildings on Wharf Lots 1-4 between what would be Reynolds Street extended and the landing of East Broad Street.

The Sanborn fire insurance maps of 1884 and later provide the ground plan to many of the structures shown in perspective on Ruger's view, particularly the Lamar warehouses. On the front of Wharf Lots 1 and 2 were two structures: on the west was a pitched-roof warehouse 85' by 185', adjoining the open-centered cotton press facility (185' N-S by 200' E-W) with a roofed perimeter 50' wide. On the back lot of Wharf Lots 1 and 2 was a second open-centered warehouse 185' by 215' (E-W) with 60' wide perimeter roof. West of this warehouse was an open cotton yard (also see Figure 8). By 1884, the canal to the west of Wharf Lot 1 had been filled in, and only the right of way of Randolph Street continued to the shore.

On Lot 19 by 1884 was the wharf of the Merchants and Miners Transportation Company, and on the four small wharf lots further west (between Reynolds and East Broad) was John Rourke's Novelty Iron Works.¹ Judging from the 1884, 1888, and 1898 Sanborn maps, the Merchants and Miners Transportation Company continually rebuilt the structures on Lot 19 during that period. Gradually, a scattering of freight houses and offices on the lot were largely replaced by a massive open platform or dock stretching from the extension of Bay Street on the south to the wharf front on the north, and from Reynolds Street on the west to the boundary with Lot 1 on the east. Furnishing this platform were spur tracks of the Savannah, Florida and Western Railroad. With rail access and wagon access on three sides, commodities unloaded at the dock evidently did not long remain there, especially given the absence of storage buildings.

Time and incident winnowed the businesses on the Eastern Wharves. The "Lower Hydraulic Press" on Lots 3 and 4 was damaged in a storm of 1881, and in 1889, both the Hydraulic Press and Tyler's press, including five brick warehouses and 4,500 bales of cotton, were destroyed by fire. Tyler's press was said to have been the oldest in Savannah, and had been rebuilt only six years before.² Paint on the hulls of iron ships moored in front of the warehouses was blistered, but Lamar's warehouses were spared, being upwind of the conflagration.

² Savannah Morning News, October 5, 1881, page 4, column 1; October 9, 1889. From the Waring Collection #1320. Georgia Historical Society.
Figure 6. A. Ruger's "Bird's Eye View of Savannah," 1871, facing southwest. At left are the Eastern Wharves. Lamar's cotton warehouses and presses are immediately left of the canal just left of center in this image. To the right of the canal is Lot 19, by this date being vacated by H. F. Willink (although owned by Lamar).
By the late 1880s, the railroads finally found their way to the Eastern Wharves. The city map of Sugden and Howard in 1888 illustrates that by that date the River Street line had been carried east around the foot of the river bluff southwest of the wharf lots. A track spurred off east down the right of way of St. Julian to the south of the back wharf lots. Another spur curved north from this track and entered Lot 19, at that time, occupied by the Baltimore Steamship Wharf and the Merchants and Miners Transportation Company. Neither the 1884 or 1888 editions of the Sanborn maps show the extension of River Street tracks east into the project area, intimating that this particular rail line into the Eastern Wharves was short-lived. The 1898 Sanborn maps, however, illustrate that at that date the Savannah, Florida and Western Railroad entered the project area from the southeast and terminated in spurs within Lot 19 and along the western edge of Lot 1.

By 1884, Miller's Foundry was gone from the Eastern Wharves. A. N. Miller conveyed his foundry on the rear of Lot 5 to the United Hydraulic Cotton Press Company in May, 1868. The front of Lot 5 had passed to Daniel H. Baldwin thence, in December 1867, to A. P. Wetter for the Tyler Cotton Press Company. Eventually, Lots 5 and 6 were both occupied by the Tyler Cotton Press Company.1 By 1900, spur tracks entered Lot 19 from the west and south.2 Lamar's Canal, separating Wharf Lot 19 in the Trustees' Garden and Wharf Lot 1 in the Eastern Wharves, had been filled in between 1871 and 1884.

The view of 1891 produced by Augustus Koch illustrates the cluster of wharves and cotton warehouses present on the eastern wharves and its isolation from the otherwise vacant inland swamp (Figure 7). The Tyler Cotton Press Company of Savannah had consolidated ownership of Lots 5 and 6 in 1884-5, and had also acquired a 1/2 interest in a 13.77 acre parcel south of Lot 2 and St. Julian Street. These properties were conveyed to the United Hydraulic Cotton Press Company of Savannah in May, 1893, and this company continued its ownership of these lands until 1950.3 By 1898, the United Hydraulic Cotton Press Company controlled all of the warehouses on the Eastern Wharves with the exception of the Lamar structures on Lots 1 and 2. Figure 8 illustrates the project area in that year, as depicted on the Sanborn Insurance maps. Notes on the 1884 Sanborn maps indicate that Lamar's cotton press was no longer in operation as of that date, and between 1888 and 1898, the cotton press apparatus in the front lot warehouse had been removed along with its surrounding 2-story enclosure.

C. A. L. Lamar's cotton press and warehouse lots remained in the possession of his widow, Caroline A. Lamar until her death, after which her executor, T. M. Cunningham Jr., conveyed the wharf lots to the Atlantic Compress Company.4 In 1919, the Atlantic Compress Company sold Lots 1 and 2, front and back, to the Stewart-Morehead Company.5 In turn, the Mutual Warehouse and Compress Company of Savannah acquired Lots 1 and 2 in 1920, along with two irregular parcels at the intersection of St. Julian and Randolph Streets.6 This company's mortgage with Garfunkel Mortgage Bond Company was foreclosed upon, and in 1926, the mortgage company successfully bid on the property at a forced public sale.7

2 As shown on the 1900 "Map of the City of Savannah and Vicinity" by John W. Howard. Also Chatham County Deed Book 7G:117.
3 Chatham County Deed Book 7G:117
4 Chatham County Deed Book 10W: 284-285; see also 10W: 286-287; 289.
5 Chatham County Deed Book 14K: 240-41; see also 14K: 252-253; 312-315.
6 Chatham County Deed Book 17W: 346
7 Chatham County Deed Book 21T: 403; see also Book 17Y: 76, 21P: 228.
Figure 7. Detail from the Augustus Koch "Bird's Eye View of Savannah, Ga.," 1891. Facing southeast. The vessel behind the number "36" is tied up at the Baltimore Steamship Wharf, according to the key. The vessel is anchored in front of Lot 19, occupied by the Merchants' and Miners' Transportation Company. Lamar's cotton warehouses on Wharf Lots 1 and 2 are to the left.
Figure 8. The 1898 Sanborn-Perris insurance map. This illustration is redrawn from the original in the Georgia Historical Society. The G. I. Taggart Wood and Coal Yard (1) occupied the front portions of Lots 1-3, Trustees' Garden, while Rourke's Iron Works (2) occupied the front of Lot 4 and the rear of Lots 1-4. Lot 19 was occupied by the Merchants' and Miners' Transportation Company's dock (3) which was accessed by the rail lines of the Savannah, Florida and Western Railroad. On the western portion of Wharf Lot 1, Eastern Wharves, was the Domestic Coal and Wood Company (4). To the east and southeast were the Lamar Cotton Warehouses (5) and (6) and an open cotton yard (7). The Hydraulic Cotton Press Company (8) occupied the warehouses on Lots 3-6.
There is evidence that the economic viability of the compress and warehouse operation on Lots 1 and 2, and adjoining parcels, was seriously diminished by the late 1920s. It was after World War I that cotton prices fell dramatically, and the boll weevil damage to Georgia cotton after 1919 brought the market for that commodity to permanent new lows. To cap it all off, the Great Depression of 1929 hit. The Garfunkel Mortgage company had provided the Savannah Warehouse and Compress Company with a purchase option in 1928, but the latter did not make the buy. In 1929, Garfunkel Mortgage Bond Company filed for bankruptcy. Not until 1942 did bankruptcy trustee John J. Bouhan find a purchaser for the front and back of Wharf Lots 1 and 2, and the two parcels south of these lots off St. Julian and Randolph. James J. Rourke Sr. paid the sum of $20,750 for lands which two decades earlier sold for over $200,000. The diminution in value reflects the absence of improvements, i.e., buildings on the parcels. The cotton warehouses on Lots 1 and 2 had evidently been demolished by 1940.

Foundryman William Kehoe purchased the wharf property Lot 19 from Harriet C. Jones in April, 1904 and over the next decade began erecting a large iron-working complex on the river. As late as 1914, the bulk of the Lot 19 property was occupied by the Domestic Coal and Wood Company. Prior to 1914, Kehoe had built a marine railway at the foot of Randolph Street on the eastern portion of Lot 19. Judging from the 1916 Sanborn maps, this railway was roughly 52' (16m) wide and 345' (105m) deep from the harbor line. By 1916, construction of Kehoe's fabricating shops was well underway on the center of the lot. At the southeast corner of the lot, near the hoisting engine shop of the marine railway, was Kehoe's foundry and cupola.

Prior to World War I, on the four wharf lots numbered 1-4 between the landing of East Broad Street and Reynolds Street were the Rourke Iron Works and the wood and coal yard of G. I. Taggart and Company. The Rourke Iron Works expanded its operation and encompassed the four lots on either side of the extension of River Street between East Broad and Reynolds. At the foot of Reynolds Street, Rourke built a small marine railway about 45' (14m) in width and 218' (66m) in depth. Figure 9 shows a small yacht on the stocks at Rourke's slip. On the basis of the 1940 edition of the Sanborn maps, this slip was in a dilapidated state by that time, while the slip on the east side of Lot 19 was still in use.

The Liberty National Bank and Trust Company, holding a 1924 mortgage on the Lot 19 Kehoe property, foreclosed in 1934, obtaining the wharf lot (with its marine railway on the east side) as well as the eastern portion of Lots 16, 17, and 18 to the south. The trust company quickly turned around the marine railway portion of the property, selling it to the Marine Railway Company of Savannah in February, 1935.

By the 1950s, much of the waterfront at the eastern end of the River Street district had been vacated by industry. On the western portion of Lot 19 was the Merry Brothers Shipping Company freight terminal, with small retail businesses being sited along the sweeping curve of Bay Street. The marine railway at the foot of Randolph Street, on the eastern portion of Lot 19, was operated by the Savannah Machine and Foundry Company. The Atlantic Coastline Railroad Company assumed ownership of the remaining warehouses still standing south of Bay Street and east of Randolph.

1 Chatham County Deed Book 24R: 267.
2 Chatham County Deed Book 36V: 433.
4 Chatham County Deed Book 30I: 112.
5 Chatham County Deed Book 30G: 481.
The insurance maps of the project area detailed in the 1955 edition of the Sanborn Map Company, and revised with paste-ups to 1973, chronicle the disappearance of virtually all standing architecture in the project area during this period. General McIntosh Highway supplanted the former Central of Georgia Railroad right-of-way crossing on a northwest to southeast diagonal the tract of land immediately south of the Lot 1 and 2 back lots.  

In December of 1966, the vacant lands at the foot of the town bluff received a new tenant. Executors of the estate of James A. Rourke Sr. conveyed to Sayler Marine Construction Incorporated title to the front and back portions of Wharf Lots 1 and 2 including the triangular parcel south of St. Julian or Harbor Street and bounded south and west by McIntosh Boulevard. The Sayler company, in the following year, purchased the eastern portion of neighboring Lot 19 from the Marine Railways Company in addition to an irregular strip bordering it owned by the Liberty National Bank and Trust Company.  

2 Chatham County Deed Books 91F: 491; 91W: 345; 91W: 347.
off St. Julian and McIntosh Boulevard, and in 1974, secured from the City of Savannah title to the northern 40' (12m) of the former 100-foot wide right-of-way of Harbor Street, formerly St. Julian, bordering the south end of the Lots 1 and 2 parcel. This last purchase by Sayler Marine Construction Inc. consolidated title to the land later purchased by Columbia Sussex Corporation for its hotel project.

Sayler Marine Construction Inc. and the Sayler Manufacturing Corporation operated a marine construction business on the property and also was engaged in scrapping vessels. The company constructed an office at the northwest corner of the back portion of Lot 1, and on the front portion of Lot 2 erected a large metal prefabricated structure incorporating an overhead crane running north toward the riverbank. Metal light towers were placed in the yard, and the metal deck house from a scrapped World War II Liberty ship was placed on the site and used as small equipment storage. Much of the company's effort to improve the site focussed on the shoreline, which was extended north over 40' (12m) by filling and the construction of concrete and steel bulkheads (see Figure 1). The wharves themselves had been allowed to fall into disrepair around the middle of this century, and the shoreline had evidently been eroded. The Sayler company was a corporate offshoot of the Merry Brothers operation, a long-time tenant of Wharf Lot 19, and was engaged in marine construction, vessel scrapping and salvage, dredging, and other similar operations.

1 Chatham County Deed Books 94A: 50; 104E: 937.
Archaeological Testing

Two functions were performed on the project tract during the course of the archaeological fieldwork. These were (1) surface reconnaissance of the main hotel tract and river walk corridor, and mapping of extant foundations; and (2) subsurface testing by means of backhoe-excavated search trenches.

Pedestrian Survey

Most of the structures on the hotel tract had been removed when Sayler Marine left the site; however, several small structures and many concrete pads dotted the site, particularly the front portion of Wharf Lots 1 and 2 (see Figure 10). At the southern end of Lot 19 was an irregularly-shaped concrete pad that had once housed a boat repair and machine shop for the marine railway of the Savannah Machine and Foundry Company. On the front of Wharf Lot 1 was the metal deck house structure from a scrapped Liberty ship, reused on the site for small equipment storage by Sayler Marine. On the front of Wharf Lot 2 was a cluster of open timber-trussed roofs supported on wooden posts (Figure 11). These structures appear to be of post-1940 construction. These frame sheds adjoined a larger concrete pad formerly supporting a prefabricated metal building housing an overhead crane. In front of the crane building was a series of parallel foundations for crane towers leading toward the river. The crane shed and attendant structures was erected in the 1970s.

On the back portions of the wharf lots, the only architectural remnants were those associated with the headquarters building of Sayler Marine, a structure skirted by a brick wall and supported on driven creosoted posts. The triangular parcel south of St. Julian/Harbor Street was vacant with the exception of stacked concrete pipes and discarded creosoted utility poles. On all parcels the superficial soils contained construction rubble and a variety of cultural materials.

Of particular importance was the superficial reconnaissance of the shoreline from the main hotel tract west to the east end of Emmet Park. Also covering this zone, to the limits of the tidal flux, was the underwater archaeological survey team from Panamerican Consultants Inc. Panamerican conducted side scan sonar, proton magnetometer, and sub-bottom profiler surveys, along with a visual inspection of the waterfront. This crew had completed its fieldwork prior to the initiation of our own, and had informed the project sponsors that some ship remains and launching ways requiring additional investigation had been spotted on the shoreline of the hotel tract.

Our own efforts along the waterfront consisted mainly of a pedestrian survey or walkover of the shoreline conducted at low tides and the photographic recording of same. The present shoreline is the result of extensive shoreline improvements and filling undertaken by Sayler Marine in the last two decades, according to the former owner of the company (Jack Sayler, personal communication).

The eastern extreme of the hotel waterfront is marked by a massive concrete bulkhead extending out into the river to the edge of the harbor line. A second bulkhead extends into the river some 65m to the west. Running between is an east-west concrete bulkhead buttressing the existing shoreline. At the southeast corner of the concrete bulkheads is remnant of a heavy reinforced concrete pad (Figure 12). These reinforced concrete structures are dated to c. 1968, at which time Sayler Marine Construction was in the process of extending the shoreline of Lots 1 and 2 north toward the harbor line. Out from the shoreline bulkhead are the remains of heavy steel sheet piling marking the northernmost extent of wharf improvements undertaken by Sayler Marine.
The shoreline between the bulkheads projected out to the sheet piling on the harbor line by 1978, judging from the U.S.G.S. topographic map of that year. According to Jack Sayler, the heavy tie bars anchoring the sheet piling to the concrete bulkhead to its rear snapped, causing the sheet piling to bow out into the river and allowing the fill between the sheet piling and the concrete shoreline bulkhead to erode into the river, forcing the wharf extension to be abandoned.

When the concrete flooring of the wharf extension collapsed, it pinned down one of three large remnants of a ship hull composed of particularly heavy timbers. These remains were photographed and described in notes, but further excavation was not possible without a state permit. The hull is formed of heavy rib or frame timbers sealed on the outside with strakes 11cm (4 1/4") thick and on the inside with 9cm (3 1/2") ceiling planks (Figure 13). The frames exhibit a slight curvature and may represent futtocks or frames marking the curvature of the hull from the floor or bottom of the ship to the sides or gunwales. The frames are joined by bolts in pairs so that seams between the frame segments overlap for strength. The frame section measured 20cm by 30cm (9" by 12") with frames centered at 60cm (24") intervals, this leaving barely 20cm (9") between the 40cm (18") wide paired frames. The outside of the strake planking was not observable on any of the pieces of hull, but apparently strakes, frames, and ceiling planks were through-bolted with 1" planished round head bolts complete with washers and square nuts.
Figure 12. Metal sheet piling and concrete abutments on the eastern end of the project area shoreline. Facing east.

As far as the context of the hull pieces, it was the impression of our field team that:

1. The hull had been deliberately broken up by a process yielding pieces of similar size, 
e.g., by a clam-bucket dredge;
2. There was no immediate indication that the three observable pieces joined together into one larger mass;
3. There was no impression that these remains were part of a larger structure extending north out of the riverbank underneath the concrete abutment running parallel to the shore; and
4. According to Jack Sayler, the fill in front of the concrete abutment was deposited in the recent past to fill between the abutment and the sheet piling further out in the water. Thus, our tentative working hypothesis is that no hull remains were present in the area prior to the erection of the concrete bulkhead in the 1970s, and that the remains were introduced as fill. The alternative hypothesis, and one to be tested by further excavation, is that the hull was present and eroding out of the shoreline at the time the bulkhead was built and was truncated by the erection of same.
Figure 13. Overview of ship hull remains in the tidal flux zone. Facing south. Scale in 50cm zones.
Further west of the bulkhead and sheet piling is an inlet formed around the egress channel from a municipal storm sewer outfall abutment. Also according to Jack Sayler, when the property was purchased by Sayler Marine in 1966, the sewer outfall marked the northern limit of the riverbank at that time. The company filled the shoreline out to its present margin using any type of fill available, including dredge fill and construction and demolition debris. At the time of the survey, an abandoned barge was moored at the mouth of the creek, and although partially filled with water, still retained sufficient buoyancy to move freely in and out of the inlet with the tide. On the east side of the sewer inlet was a large steel tower, resting on its side near the base of a dredge spoil pile over 3m in height.

One of the largest features disclosed by the waterfront survey was the mouth of the marine railway slip built at the turn of the century on the eastern half of Lot 19 (Figure 14). Only portions of the west retaining wall remained standing at the time of our survey, and this massive concrete abutment rested on heavy sill timbers capping large diameter piles. This construction technique was not unlike that employed in the foundation piles and timber caps used in 1854 by Samuel Papot (see above and Appendix 3). The east wall of the marine railway slip had toppled off its pile and cap base. Filling the abandoned slip was soil and modern demolition rubble.

Figure 14. Mouth of the marine railway slip on the eastern portion of Lot 19. Facing west.
Dolphins or large pilings created by bundles of driven timber piles, were present along the harbor line at the western end of the hotel tract shoreline (Figure 15). West of the marine railway on the fringe of the hotel tract, along the shoreline of the parking lot owned by the Savannah Electric and Power Company, were the remains of a wharf constructed on driven piles. In the midst of this wharf was a ferry slip or loading ramp constructed of a metal framework and decked in wood. This ramp was hinged on the shoreline and hoisted up and down with the tide by an overhead crane. The wharf and floating ramp are of 20th century origin, and may be related to the use of Lot 19 by the Merry Brothers Shipping Company in the 1940s. Brick rubble revetted the shoreline adjoining Lot 19 as the result of dumping by the Merry Brothers Brick Company, a tenant on that property in the 1950s.

Panamerican Consultants (James and Mistovich 1989: 31) identified an assembly of piles, posts, and timbers west of the ramp as the remains of two ship launching ways (Figure 16). The date of construction of these ways has not been determined, and the underwater researchers have recommended additional historical research and field recording of the structures. Sanborn plans of that area from the 1950s illustrate the ramp, wharf platform, and other wharf improvements along the front of Lot 19 in detail, but do not depict launching ways. The Sanborn plats from 1884, 1888, and 1898 also do not depict ways along the west side of Lot 19. Additional research is required to date these structures. From the ways west to Emmet Park, the shoreline is unobservable due to the presence of heavy stone rip-rap along the shore.

Site plans provided by the project sponsor did not include all structural pads present on the property, nor marine features such as the sheet piling or pile dolphins. Archaeological trenches and structural pads above the high water line were mapped in by triangulating from points illustrated on the construction plans.
Figure 15. The waterfront adjoining the eastern portion of Lot 19, across the mouth of the marine railway slip.
Test Trenching

At the heart of the Phase I reconnaissance-level testing program was the machine excavation of several trenches placed on a grid pattern at various points in the three main areas of land comprising the main bowl project area. Practically speaking, subsurface testing along the riverwalk corridor was not feasible, given access problems and the presence of shoaling current.

The selection of test trench locations was based on two criteria: (1) proximity to known ground- andstarved profiles, and (2) presence of structures, where applicable. In particular, looking for clues and interpreting data are all part of the same process. Incorporating a visual, verbal, and spatial understanding of the site, one common denominator is the need to maintain a balance between thoroughness and efficiency. This is where the tool of the trade, the trench, comes into play.

All the open trenches were surrounded by safety flagging, string from metal posts and more backfilled sand after completion of the profile room. For safety reasons.

The location and orientation of the test trenches was determined by the necessity to obtain continuous sections through historically documented building footings and features. The trench lines were perpendicular to the shoreline, and parallel to the historically documented channel running along the west side of the project area. In all cases, these were considered to provide either northern or southern views of the main yard, west-west, and oppositely oriented or the project area. In some cases, building footings, structures, or other features were considered opportunistically placed.

Vertical control was maintained by a series of four more permanent trench lines, each running on survey stakes, and positioned to provide elevation data for all future trench sections. The horizontal elevation of each datum plane was determined from measured points of the building and the main yard. The vertical control was located on the steep sides of the building site, with the aid of the building plan. The elevation of the building was determined by the elevation of the adjacent ones of Winslow, Gav, Bell, and DeYoung. Not all structures were shown on the drawing, however, and these building and/or partial, along with archaeological trenching, were

Figure 16. Launching ways at the northwest corner of Lot 19. Facing west.
Test Trenching

At the heart of the Phase I reconnaissance-level testing program was the machine excavation of search trenches placed opportunistically at various points in the three main tracts of land comprising the main hotel project area. Practically speaking, subsurface testing along the river walk corridor was not feasible, given access problems and the presence, in many cases, of shoreline revetting.

Coastal soils are very sandy, with topsoils in particular lacking cohesion and stability. The upper portions of the site profiles are classified as man-made lands and are the result of intentional land filling incorporating a variety of soils, construction and demolition debris. The underlying natural soils are classified as Tidal Marsh-Capers association displaying dark organic surfaces and underlying greenish-gray clays (U.S. Department of Agriculture 1974). Ground water conditions were hostile to the observation and recording of profiles and features. Rapidly percolating through the porous soils, water quickly filled our excavations and caused considerable and virtually uncontrollable slumping of the profiles. In particular, deposits of clean white beach sand, locally known as sugar sand, eroded easily from vertical profiles. Our initial approach to the water accumulation problem was to divide the trench into small units and bail out the water by hand. Ultimately, an agricultural irrigation pump with 2" intake hose was procured, and this proved adequate for removal of large water accumulations. No amount of pumping, however, could prevent water from moving laterally through specific soils zones and running down the face of the profile.

These ground conditions resulted in extremely poor visibility in the recording of the lower portions of the profiles and made it difficult to obtain artifacts from discrete contexts. In archaeological parlance, the site had low visibility. The ability to make reliable provenience discriminations on artifacts exposed during the backhoe testing was severely limited.

Trenches ranged in length from 9m to 42m. Often excavating at depths of 2m below ground surface, the trench was usually cut to a width of 1.5m to 1.7m to provide working room on the trench floor. For safety reasons, a step or bench was cut on the off-profile face of the trench to a depth of a meter or more, facilitating inspection of the main trench face as well as relieving the amount of overburden impinging on the trench floor. All the open trenches were surrounded by safety flagging strung from metal posts and were backfilled soon after completion of the profile recording for safety reasons.

The location and orientation of the test trenches was determined by the tactical desire to obtain lateral sections through historically-documented building sites and features and by the concern to similarly section natural drainage profiles, that is, cut lines perpendicular to the shoreline and perpendicular to the historically-documented creek running along the west side of the project area. In all cases, these aims coincided to produce either north-south trenches or ones oriented East-west. Cumulatively speaking, large areas of the project area were obscured by concrete building pads, standing structures, heavy steel fabrications, or spoil piles. Consequently, test units were opportunistically placed.

Vertical control was maintained by a series of four semi-permanent transit stations erected on driven survey stakes and conveniently situated to provide elevations for one or more trenches. The absolute elevation of each datum plane was determined from readings on points of known elevation indicated on site plans. Horizontal control was based on use of the demolition sheet of the hotel site plans produced by the engineering consulting firm of Hussey, Gay, Bell, and DeYoung. Not all structures were shown on the demolition sheet, however, and these buildings and/or pads, along with archaeological trenches, were mapped in by triangulation from key points on the site plans, to an estimated accuracy of 0.2%. Along the profile face of each trench, a metric tape was stretched between driven survey stakes, and the horizontal position of trench features noted in relation to the metric interval.
Trench A

Excavation of the first test trench illustrated the unstable nature of the terrain, and the presence of considerable groundwater following now buried drainage patterns. Trench A approached within 2m of the west hotel tract property line and was carried east 42m to the edge of a modern gravel roadbed. Horizontal coordination of the profile was made from the 0.0m point near the west property line east.

Historically, this unit crossed the eastern portion of Trustees Garden Wharf Lot 19 and the western portion of Eastern Wharf Lot 1. Several key features were exposed in the test trench, including the turn-of-the-century marine railway slip and the apparent wharf front of the ante-bellum Lamar’s Canal on the west side of Wharf Lot 1.

In the extreme western end of the trench, projecting east-west out of the profile, was an apparent railroad crosstie at a depth of 1.0m below ground surface. Feature 13, as the tie was designated, is attributable to a spur line run through the eastern margin of Lot 19 about 1888. Slightly to the east and below the crosstie was Feature 12, a structural or architectural feature of unknown function consisting of a pair of wooden beams measuring, in the aggregate, 32cm wide and 20cm deep.

Of 20th century origin were the parallel reinforced concrete walls of the marine railway operated by William Kehoe as early as 1904. Marked by Feature 6 on the west and Feature 4 on the east, the reinforced concrete walls enclosed an interior roughly 15m wide or about 50’. Both foundations tapered up to a finished width of about 50cm. On the exteriors of both foundations were broad construction trenches. Having been filled with foundry debris and construction rubble after the 1940s, the soil profile between the two walls was particularly unstable, and the floor of the marine railway could not be exposed. West of the railway was a series of features situated on Wharf Lot 1.

A construction of heavy, squared timbers designated Feature 2 was exposed in the trench floor in the interval between 25m and 29m east (Figures 17 and 18). The easternmost element of the feature consisted of at least three intact and one fragmented 30cm square timbers stacked vertically into a north-south line. Running west from this line of “front timbers” was a tie member or land tie joined into the stacked timbers with a dovetail joint cut into the seam between two timbers. This tie member was in turn lap-notched over an anchor timber running north-south 3m west of the vertically-stacked timbers (see Figure 19). At the bottom of the north-profile, and not exposed in plan, was a second, deeper tie member also apparently dovetailed into the seam between a pair of front timbers (see Figure 17). Construction trenches for several of the elements were visible, but stratigraphic interpretation of the trenches indicates that some may be repair or removal trenches rather than primary construction cuts.

Feature 11, at the 40.0m east line, was similar in construction to portions of Feature 2. This feature was represented by at least five squared timbers stacked vertically into a north-south wall, three of the timbers being the usual 30cm square, and the lower two being 40cm on a side. There was no discernible builder’s trench noted for Feature 11, and the fills to the east of the feature were dominated by clays as opposed to the sandy fills associated with Feature 2. Between Features 11 and 2 fill deposits angled down east to west, suggesting that the intervening space was graded up from the east side. The fill zones were penetrated by a more modern cast iron pipe trench, Feature 1.
Figure 17. North profile of Trench A. (A) unconsolidated light brown soil with construction debris. (B) blackish gray soil with coal cinders and gravel. (C) dark gray sand with pebbles. (D) brownish gray soil mottled with black, with cinders, sand, wood, and gravel inclusions. (E) mixed tan, gray, and brown sands with shell and pebble inclusions. (F) dark gray soil with organic material and some pebbles; buried "A" horizon. (G) dark gray-brown mixed sand lenses. (H) tan to brown fine sand. (I) light gray sand with small pebble inclusions. (J) brown to gray-brown sand with pebble inclusions. (K) dark gray sand with small pebble inclusions. (L) mottled and streaked light brown sand. (M) grayish clayey-sand with wood debris. (N) Grayish clay with shell and wood debris.
Figure 18. Feature 2 in Trench A. Facing east.
The Feature 2 construction is thought to represent the west line of Lamar's Canal, a channelized natural creek which was revetted in wharf fashion in the antebellum period. Feature 11, in the extreme eastern end of the trench, represents the face of the east side of the canal revetting. Stacked vertical timbers formed the sealing face of the canal walls, and probably were stacked behind a line of driven piles not exposed by the trench. Descriptions of the dovetailing of the tie members into front timbers and the lap notching of tie members into anchor beams matches the 1854 Papot wharf construction contract discussed in the historical section of this report. The archaeological width of the canal, from the front timbers of Feature 2, to the front timbers of Feature 11, amounts to 10.7m or 35 feet, a measurement approximating the canal width as shown on historic plans. The canal falls on the Lot 1 side of the Lot 19/Lot 1 division line, which also corresponds to historic map placement of Lamar's Canal.

Because of profile instability, the basal portions of Features 2 and 11 could not be exposed. Consequently, we cannot assess how close Lamar's Canal was constructed to the idealized form of the Papot wharf as shown in Appendix 3. What is apparent is that the canal wharf front employed shorter land ties than the main wharf along the river. The tie-back member in the Feature 2 side of the canal was only 3.7m or 12' in length, in contrast to the shorter land ties in the Papot wharf measuring in at 18' in length. Lamar's canal may not have required the depth needed along the main wharf, and may have been dry at low tide. As suggested in the historical section, the canal was probably used to store flats of cotton awaiting processing at the cotton press.
Trench B

Continuing the Trench A line east, Trench B was excavated to an effective length of 22m and exposed a succession of brick and timber footings running north-south. Features were horizontally coordinated west to east. The trench exposed one modern feature, a large concrete storm drain running north-south. This pipe egressed at the head of the drainage swale shown on Figure 10.

Two sets of structural features were present in the unit. The earlier of the two structures included Features 15, 16, and 19, and these appear to have been erected on the surface of culturally-sterile sands. A timber footing, Feature 15, evidently had once supported a heavy plank flooring, Feature 16, which in turn provided the construction surface to a brick footing, Feature 19 (see Figure 20). At least three courses of the brick footing were present, the lowest resting on the planks of Feature 16. The courses were finished at one brick width (22cm). The span from the plank foundation line (Feature 15) to the brick foundation line (Feature 19) was approximately 7.5m or about 25'. A second brick footing, Feature 24, was partially exposed 2.8m east of Feature 19, and was in a similar early stratigraphic context.

The second set of structural features consisted of a series of timber planks and beams running north-south across the unit at irregular intervals of from 1.2m to 2.3m. The westernmost of these timbers, Feature 20, adjoined but was not connected to the brick footing, Feature 19, and was a cut timber 32cm wide and 24cm thick (Figure 21). The remaining planks in the later structure consisted of 7cm thick planks 20cm to 26cm in width, usually stacked in pairs or stepped tiers. These north-south lines of planks were generally at the same elevation in the trench, and had evidently supported a higher level of heavy timbers or floor joists running east-west. In the interval between Feature 23 and 25, several of these heavy flooring timbers were exposed by the backhoe.

The upper complex of timber footings rested on a layer of dense brick rubble and redeposited fills. Unfortunately, no datable artifacts were recovered from this rubble fill zone. Subjectively, the earlier structural features at the base of the profile may have been related to the antebellum warehouses present on the lot and depicted in the 1853 Vincent map illustrated above. The higher level of plank footings occur in the area of a postbellum pitched-roof structure identified on the 1884 Sanborn plats as Lamar's North Warehouse and situated immediately west of the open-centered warehouse and press structure on Lot 2.
Figure 20. North profile of Trench B. (A) gray and brown mixed sandy fill. (B) dark gray sandy fill. (C) dark gray and brown mixed sandy fill. (D) gray-brown and yellow brown mixed sandy fills with cinder and gravel inclusions; pipe trench fill. (E) light gray-brown sand. (F) light tan-brown sand. (G) dark gray and brown mixed sandy fill. (H) limestone rubble in dark gray to black sandy fill. (I) dark gray and yellow-brown sands, mixed. (J) dark gray to black sand with organic matter; buried "A" horizon? (K) mixed light brown clay and gray sand. (L) gray sand with crushed wood, shell, and gravel inclusions. (M) whitish-gray clay, decayed limestone. (N) light gray-brown sand with wood debris and gravel inclusions. (O) black gritty sand with gravel inclusions. (P) light gray-green clay. (Q) brick rubble in matrix of gray clay and gravel with wood inclusions. (R) gray sand. (S) white limestone rubble. (T) gray clay with gravel inclusions. (U) gray-black sand. (V) light tan sand.
Figure 21. Features 19 (brick) and 20 (timber) in Trench B. Facing east, scale in 10cm zones.
Trench C

Interrupted by standing architecture and modern concrete pads, the profile line of Trenches A and B was continued in Trench C to the eastern edge of Wharf Lot 2. The 9m trench abutted the pad of a Sayler Marine structure formerly housing an overhead crane. Three one-course wide (22cm) brick walls crossed the trenchline north to south, and were designated Features 30-32 (see Figure 22). Only two courses of each brick footing was present, and two of the footings rested on planks for additional load-bearing support in a matrix of pale brown sand. The three footings had originally supported floor joists, one of which was present in the confines of the test trench. Measured from center to center, the spans between the brick footings were 2.4m and 2.5m.

A heavy beam, Feature 33, spanned these three walls on an east-west line in the north profile of the trench. The west end of the beam had clearly been truncated by the construction trench for the Sayler Marine building footing, and had formerly extended west beyond its surviving 5.7m (18.7') length.

This beam was of unique construction, being formed of three layers of 7cm thick planks of 22cm width, set on edge and nailed together to produce a joist roughly 21-22cm in bearing surface. The middle layer of planks consisted of short spacer boards which, being nailed between solid outer planks, created vertical mortices in the composite beam, evidently to set tenons from upright posts. One complete mortice slot was observed to be of 26cm width. The planks were joined by nails driven through the planks from the off-profile face of the trench, consequently, only the tips of these nails could be discerned.

Narrow gaps between the tops of the brick footings and the lower edge of the joist beam were closed with wooden shims of varying thicknesses, and situated next to one of the footings was a stack of 7cm planks providing additional support for the joist. In the south profile of the cut, projecting board ends probably representing shims for another joist running behind the south profile were present and may indicate a joist interval of perhaps 1.1m to 1.3m or around 4'.

The debris layer above the foundations consisting of Features 30-33 was marked by the presence of high frequencies of domestic artifacts, mainly ceramics and glass, from the very late 19th century and early 20th century. Much of this debris showed evidence of intense fire scoring. One fragment of ironstone from this burned layer was marked, yielding a TPQ of 1902. Piercing this layer of demolition rubble and domestic trash were two concrete footings of truncated pyramid form, one of which had been set or poured in situ upon the upper surface of the Feature 33 beam. The piers, Features 34 and 35, had evidently supported posts either for internal ceiling supports in a structure or as piers in an open building.

The structure formed by the footings Features 30-32 and joist beam Feature 33 occur in that portion of the site historically occupied by the open-centered cotton warehouse and press structure erected after the Civil War. Specifically, the footings are hypothesized to represent the eastern side of the structure. The two concrete piers, Features 34 and 35, are not presently attributable to a specific structure, but may well have been piers for replacement roof supports set in the 20th century.
Figure 22. North profile and planview of Trench C. (A) modern concrete pad, Feature 29. (B) light brown sand. (C) mixed gray and brown sands; F-29 construction trench. (D) tan-brown sand. (E) dark brown sandy soil with small demolition debris inclusions. (F) light gray-brown soil with mortar and brick fragments. (G) dark gray sand soil with cinder inclusions. (H) tan-brown sand. (I) dark gray and tan sands with cinder inclusions. (J) reddish-brown and gray mixed clays with brick fragments and coal cinders. (K) gray sandy soil with cinder lensing. (L) gray sandy clay with brick rubble, ballast rock, and wood debris. (M) white to tan-brown sand.
Trench D

Not unlike Trench C, Trench D revealed a series of north-south brick footings crossing the width of the east-west unit. Situated on the east side of the back portion of Wharf Lot 2, the trench ran west 19m from the eastern property boundary. The trench adjoined a heavy concrete pad on Wharf Lot 3 erected earlier in this century to support cotton warehouses, and the upper layers of the trench profile consisted of demolition debris presumed to be from that structure. The terrain in the vicinity of the trench was the lowest on the property, measured in by Hussey, Gay, Bell, and DeYoung surveyors as around 1.8m or 6' above sea level. As such, the unit flooded readily, and the constant percolation of water through the sandy soils produced very unstable profiles.

The unit was sited specifically to intercept the east foundation line of the open-centered cotton warehouse known as Lamar's South Warehouse and built after the Civil War. Structurally, we hoped to encounter footings similar to those found to the north in Trench C. A series of four brick footings were recorded in Trench D, all running north-south, and three were supported by timbers to varying degrees. From east to west, the footings were numbered Features 36-39 (see Figure 23).

Feature 36, running along the east property line, was the most substantial. The finished one brick width of the wall was supported on two steps with the base course being of apparent two brick width. The lowest course rested on a heavy sawn beam 30cm thick. Interestingly, the upper line of the beam was not precisely level, requiring that the brickwork resting on its surface be "adjusted" to achieve level coursing. Like two of the other brick foundations, Feature 36 incorporated an edger course of bricks. In all, seven courses of brick were extant in the foundation. There was no substantial construction trench observed for the footing and its supporting timber, and this was the case for the remaining footings. All seem to have been laid on sterile greenish-gray clays without benefit of construction trenches. On the other hand, visibility was extremely poor, and narrow construction trenches may have been cut to seat the footings.

Feature 37 rested in part on a heavy square timber, and its profile was asymmetric. The Feature 38 brick footing was not stepped, nor did it appear to rest on wooden supports. Rather, it had been evidently framed in on one side with planks with the narrow interstice being filled with cement. To the west, the Feature 39 footing also had no apparent timber supports, but stepped at its base to two-and-a-half brick width.

The intervals between the footings ranged from 2.8m to 3.1m or from roughly 9' to 10'. These spans between footings are larger than those observed between parallel footings in Trench D. However, the width of the structure on the back of Wharf Lot 2 was about 60' in comparison to the 50' width of the warehouse on the front lot. Consequently, the spans between footings seems to be proportionally correct. It is thus assumed that these footings are in fact those erected before 1871 to support the perimeter structure of the cotton warehouse.

Debris in the upper levels of the trench was of very recent origin, and included domestic artifacts as well as architectural elements. A marked glass bottle from this debris provided a TPQ of 1947 on the deposit.
Figure 23. North profile of Trench D. (A) mixed sandy soils and demolition rubble. (B) dark brown sand and decayed vegetation. (C) structural and domestic debris in mixed sandy soil matrix; wood, brick, glass, tires, etc. (D) dark gray clayey-silt with organic layer; buried "A" horizon. (E) gray-green cohesive clay with vegetation inclusions. (F) gray-green clay with root mat; subsoil.
Trench E

The small triangular parcel at the southern end of the hotel project area was thought, on the basis of our historical research, to be devoid of any 19th century structures. The area was a portion of the former "cotton warehouse lot" and was north and east of the site of Lamar's antebellum six-story flour mill. East of the parcel, several modern warehouses had been built, but overall, we anticipated encountering no structures in the test trench. The parcel was littered with massive concrete pipe sections and heavy creosoted timbers. Nonetheless, a 13m trench was excavated to provide a stratigraphic view of this area of the project and to test for deeply-buried aboriginal components (see Figure 24).

As anticipated, no structural footings were located in the trench. To our surprise, the trench intersected a deposit of modern plastic-capped glass bottles, evidently having been dumped *en masse* in a ditch. Naturally, the glass-filled ditch made a highly efficient French-type drain, and the unit was quickly flooded with ground water. The bottles were of amber and clear glass, and a maker's mark on one specimen provided a *terminus post quem* for the deposit of 1924.

A cast iron pipe was noted in the floor of the trench, well below the level of the 20th century bottle deposit, but there was no construction trench discerned, suggesting that the profile has aggraded in the very recent past. Soils at the base of the profile consisted of grayish-green clays with organic inclusions (roots, tree trunks).
Figure 24. North profile of Trench E. (A) light brown sandy topsoil with brick and demolition rubble. (B) heavy cinders in brown sand with lensing of reddish brown clayey sand. (C) mottled gray-brown sand with gravel inclusions. (D) gray-black sand with cinders and glass bottle debris. (E) rusty brown sand with cinders, gravel, and dense bottle glass debris. (F) black sand and cinders with dense bottle glass debris; Feature 40 lens. (G) rusty brown sand with cinders, gravel, and dense bottle glass debris; Feature 40 lens. (H) medium to light brown sand with light construction rubble. (I) dark gray to dark brown sand with some cinders. (J) light maroon sand with cinders and clay inclusions. (K) medium gray to light brown sand and clays, mixed. (L) dark gray to black mixed sands and clays, with light construction debris. (M) whitish gray-green clay. (N) light brown clay with root mat.
Trench F

To obtain a profile of the site perpendicular to the shore a 39m trench was excavated north-south in Wharf Lot 2. It was our desire to carry the excavations well into sterile to try to observe early site features, in particular, evidences of rice dams running parallel to the shore. Unfortunately, soil stability was poor, and large sections of the trench collapsed prior to recording. Only the northern 19m of the unit was mapped (see Figure 25).

One brick footing, Feature 42, was encountered in the unit (Figure 26). This east-west foundation was of unique construction. Beginning with a layer of boards at the base of a construction trench, heavy limestone blocks followed by a layer of smaller stones formed the foundation for the brick footing which was of one-and-a-half brick width. Feature 42 may well have been the south footing of the two-story compress building sited in the northern wing of the postbellum cotton warehouse. A more modern trench-poured concrete footing (Feature 43) abutted the brick.

Of particular interest in the unit was a stratigraphically early trench feature noted in the west unit profile at the 31.2m north point. Evidently crossing the unit roughly east-west, a linear ditch or trench had been excavated into sterile sands to a depth of about 65cm. This trench, designated Feature 44, was stratigraphically earlier than the brick on stone foundation, Feature 42. The feature may be interpreted as a drainage ditch associated with rice cultivation in the early 19th century. Ditches were present inside the perimeter of dams surrounding fields. This interpretation of Feature 44 is only speculative, however.

Attempts to carry Trench F north to the edge of the modern riverbank failed as heavy concrete rubble of modern origin was encountered at increasing depths in the unit profiles. This fill was evidently that added by Sayler Marine to extend the shoreline north behind the sheet piling set on the harbor line. The profile in this was difficult to clean and hazardously unstable, and a closer approach to the modern shoreline was finally abandoned.
Figure 25. West profile of Trench F. (A) mixed light brown to yellow-brown sands. (B) and (C) dark gray to brown mixed sands with dense cinder debris, wood and brick fragments. (D) gray and tan sands with heavy construction debris. (E) coarse white and rust-brown sands, highly lensed. (F) deep reddish brown sand. (G) very coarse reddish brown to brown sands with gray clay inclusions. (H) cinders with dense pebble and brick inclusions. (I) cinder and rust-colored sand with brick fragments. (J) black cinders and river pebbles. (K) dark gray to black cinders with river pebbles. (L) coarse light gray sand with river pebbles. (M) light maroon sand with river pebbles and light construction debris. (N) light tan-brown fine sand. (O) fine black sand mottled with tan sand; Feature 44. (P) fine black sand lensed with fine tan sand. (Q) greenish-gray clay with ballast stone inclusions. (R) light brown sand with dark lensing and small brick rubble inclusions. (S) yellow-brown fine sand.
Figure 26. Features 42 and 43 in Trench F. Facing north.

**Trench G**

Like Trench F, this unit was sited in order to obtain a north-south section of the site perpendicular to the shoreline. The unit was west of the modern drainage swale and was commenced in an area thought to be principally modern fill. Excavated on the last day of the testing program, features in the unit could be accorded only cursory examination.

The northern limit of this 15m unit was marked by the presence of reinforced concrete building rubble of such large dimensions as to prevent removal by the backhoe. A cluster of ten driven, creosoted piles was exposed in the unit. The presence of pilings set at relatively close intervals prevented the trench from being carried into sterile and consequently it proved impossible to observe early site stratigraphy in this area.

Two of the creosoted piles impinged on portions of a substantial brick footing (Feature 45) running north-south in the west wall of the trench. The upper courses of the footing had been repaired and poorly relaid at one point, and the feature cannot be attributed at this time to any documented structure.
Synopsis of Architectural Remains

Early builders on the Lamar Cotton Warehouse lots faced a serious problem of obtaining sound footings in soil that was extremely unstable. The solution to this problem involved the use of timber as supports for masonry footings. Most of the footings encountered during the archaeological survey employed planks or timbers in some fashion as an underpinning to the brick footings, perhaps only serving to stabilize the bricks while the bonding mortar set. Figure 27 shows a collection of footing sections associated with the foundations of Lamar's cotton warehouses. What impresses one the most about these footings is their variability and irregularity. Since none of them would be visible, there was little care taken with cosmetics.

The footings Features 30-32, which support the floor joist, Feature 33, may be remains of the antebellum warehouse shown on the 1853 Vincent map, namely, a frame structure perhaps 45' wide and 185' long, running along the Lot 2 east boundary. Two of the three parallel footings rested on longitudinal planks, presumably to provide stability to the narrow one-brick wide footings. The unique floor joist, comprised of three planks nailed together, evidently supported a plank floor. This antebellum structure may have been incorporated as the east wing of the postbellum open-centered warehouse shown on the 1971 Ruger view; the width of both structures is similar.

The same system of light, parallel footings was repeated in Trench D. The footings, Features 36-39, probably supported the east wing of the postbellum open-centered warehouse probably erected immediately after the Civil War. These footings are somewhat more substantial than those in Trench C, but again, three of the four use timber or plank supports in some fashion, either as a base of the footing or as a lateral support. Three of the four walls finish at one-brick width, indicating light bearing loads. The warehouses, of course, were of one story height, and the roofs, judging from Sanborn plans, were supported on a system of perimeter brick piers. The outer curtain walls of these structures were evidently solid 16" (40cm) thick brick walls, principally for fire protection. The 1898 Sanborn-Perris maps indicate that the structures had brick floors, and these were probably laid over a joist and floor board system.

Feature 42 in Trench F is probably our only example of a heavy perimeter wall from the postbellum warehouse on Lot 2. This unique wall employed a layer of boards at the base, evidently to carry the weight of the stones used to support the upper brick footings of one-and-a-half brick width. In this area of the warehouse, the superstructure around the cotton press rose to two stories height, requiring additional support in the footings. The concrete footing poured adjacent to the brick and stone footing may have been a replacement wall set after removal of the cotton press machinery between 1888 and 1898.

Other types of structural elements were encountered in the excavations. In Trench B spoil dirt an example of plank sheet piling was uncovered. Figure 28 represents an idealization of the piece, illustrating the shallow tongue and groove configuration used to obtain a tight joint between piles. These wedge-tipped sheet piles were probably identical to the type used to seal the lower faces of the antebellum Papot wharf. Many of these sheet piles, and the front timbers and other elements of early wharves, undoubtedly remain in the Savannah River, preserved below the mean tide line.
Figure 27. Composite of foundation sections. All sections idealized. Trench D produced four brick foundations, two of which employed timber underpinnings (Features 36 and 39) and one with a lateral timber and cement brace (Feature 38). Three of the Trench D footings employed edger courses in addition to running stretcher bonding with header courses. Only Feature 38 did not employ header courses. Features 36, 37, 38, and 39 are thought to be 1865-1871 in construction date, as is Feature 42 in Trench F. This footing rests on a layer of planks set in the floor of a construction trench. Small and large limestone boulders, evidently discarded ship ballast stones, were mortared together to form a platform for a one-and-a-half brick wide brick footing which incorporated, in its lowest surviving course, fragmentary bricks and edgers. Two footings, which are probably antebellum in construction date, are Feature 19 in Trench B and Feature 32 in Trench C. Feature 19 is a conventionally-built stepped footing resting on a plank flooring. Feature 32 is a very light one-brick wide footing of headers and stretchers resting on a longitudinal line of planking for support.
Figure 28. Idealized representation of sheet piling recovered in Trench B, unassociated context.
Laboratory Analysis

Most of the profile drawings were field drafted by crew member Rick Leech, and were redrawn in final form by the Project Director. Text was prepared on an Apple McIntosh SE computer using the Microsoft Word program.

Artifact collections from the site were extremely limited due to the lack of contextual controls. The collections were washed by lab assistant Beth Fowler and classified by the Project Director. Although the contextual importance of the artifacts was limited, the assemblage contained some noteworthy items. Two aboriginal sherds were recovered on the site. The first example from the Trench A spoil was a very rough cord-marked sherd with sand and grit tempered paste. The second, from the surface of Wharf Lot 2, was a grog tempered paste with fine cordmarking.

The Trench A spoil produced several 18th century soft-paste earthenware ceramics of note. A buff-paste Pisano-style polychrome tile of Mediterranean origin was recovered, as were one piece each of French polychrome faience and polychrome delftware. These soft-bodied earthenwares also had in common extremely eroded and rounded edges, perhaps the result of a long history of redeposition. At the other end of the temporal continuum, the Trench A spoil also contained a large number of ferrous artifacts and a wedge-shaped foundry cupola brick, possibly discarded by one of the two nearby foundries, that of James Rourke or William Kehoe.

Unassociated artifacts from Trench B included several examples of 18th century Spanish olive jar sherds and one small fragment of delftware. Trench B also produced an interesting example of a wooden sheet pile. The pile was rectangular in section and measured 10cm in thickness by 20cm. The tip of the sheet pile tapered to an edge. One side of the pile was cut with a 6mm projecting rib, while the opposing side featured a shallow groove. Thus, when driven in close order, these piles formed a tongue and groove joint (see Figure 28, above). The rubble zone in Trench C produced the highest concentration of domestic debris on the site, the bulk of it from the late 19th century and burned. A ceramic mark indicates a TPQ of 1902 on this deposit.

Trench D encountered a substantial domestic trash deposit of 20th century origin, yielding a number of whole glass bottles. The intact bottles were recovered as samples of the deposit and to diminish the level of interest in the site by local bottle collectors. Most of the bottles were either made by one of the Knox companies or by Owens-Illinois. The TPQ on the deposit was 1947. As noted earlier, the glass bottle deposit in Trench E was dated after 1924 by the presence of a maker's mark attributing the bottles to the firm of Knox Glass Bottle Company of Knox, Pennsylvania (Toulouse 1971: 293).

Curation

The designated repository for the artifacts and excavation records generated by the testing program is the Center for Low Country Studies, Armstrong State College, Savannah, Georgia.
Conclusions and Recommendations

The challenges of wet-site archaeology are numerous. One of the most difficult aspects of excavation in poorly-drained soils is the recovery of artifacts from meaningful contexts. The lack of visibility can only be ameliorated by dewatering techniques which are costly, time-consuming to maintain, and frequently difficult to apply. Without the parallel chronology provided by artifact-derived dates associated with specific structural events, we cannot conclusively identify features with historically-derived events. No artifact collections from closed-context environments were recovered at the Radisson site, although scattered finds were able to provide useful terminus post quem data on 20th century fill events.

Two aboriginal sherds from uncertain stratigraphic contexts comprise the evidence for prehistoric occupation in the project area. Backhoe testing, however, is not the most sensitive technique to discern ephemeral prehistoric features. From a documentary standpoint, several prehistoric habitation sites are known from the immediate vicinity. An early Woodland component may be present on the site in stratigraphic contexts hard to observe. Components from the St. Simons Period (4200 to 3100 B.P.) and Refuge Period (3100 to 2400 B.P.) might be present in the project area; during these periods sea level fell at least 3m below present elevation. Our testing suggests, however, that it is more likely that aboriginal artifacts were brought to the site as inclusions in redeposited fills used to raise the grade of the waterfront.

Artifacts of Colonial and early Federal periods are present on the site, but are present only in redeposited fill contexts. One trench feature encountered near the shoreline (Feature 44 in Trench F) may have been associated with antebellum rice cultivation in the area, but proof of that association is not forthcoming. Features associated with the development of the Eastern Wharves after 1839 are present on the site. On the basis of locational data, and similarities between documentary descriptions of antebellum wharf construction, we conclude that we intercepted portions of the timber wharf fronts of the antebellum Lamar Canal. Construction of Lamar’s Canal appears to have been similar to that of the Papot Wharf, as discussed in Appendix 3. Based on the locations of intercepts of structural features and inter-trench structural similarities, we can conclude that we encountered in several instances footings associated with the postbellum cotton warehouses on Lots 1 and 2 that persisted well into this century.

The construction methods used at mid-19th century involved the joint use of timber and masonry for building foundations. Given the boggy ground conditions in this period, masonry footings were often supported on timber beams or on plank floors floating on soft soils. It is conceivable that the timber underpinnings of masonry footings were there only to provide a stable base until the mortar in the brick footings dried. Having dried into a monolithic mass, the brick footings may not have required additional support. The one-story wooden-framed warehouses probably did not place great loads upon their footings, and some wooden structural elements encountered in our testing, such as the series of timber sills in Trench B, probably only carried flooring surfaces of timber and/or brick.

Modern, 20th century activity on the site is well evidenced in the form of modern structural foundations and scatters of artifacts, as well as in the oral tradition and in newspaper clipping files. Extensive modifications along the shoreline have reduced accessibility to early stratigraphic components in those areas. The shoreline has been advanced toward the harbor line steadily throughout the history of the site. Continual projection of wharf fronts toward the navigation channel were probably balanced by periods of decay and shoreline erosion, particularly in the aftermaths of storms and unusually high tides. At the very least, the shoreline must be recognized as a dynamic interface between hydrological forces and cultural modifications.

The marine features encountered by Panamerican Consultants in the tidal flux zone and deemed potentially significant include hull remains near the northeast corner of Wharf
Lot 2 and the remains of ship launching ways situated on the shoreline at the northwest corner of Trustees Garden Lot 19. These features were only nominally observed in this study, and their significance remains to be assessed.

The Principal Investigator and Project Director/Principal Researcher conclude that further testing on the proposed Radisson Hotel construction site is unnecessary and that the archaeological remains on the terrestrial component are not eligible for inclusion to the National Register of Historic Places. A systematic, problem-oriented program of secondary testing would probably not yield significant new data on site formation processes, prehistoric or historic cultural components, or illuminate the life histories of persons historically associated with the site. Further excavation at this time would be redundant.

We also concur with Panamerican Consultants that additional documentary research and on-site recording is desirable to determine the significance of the hull remains and ship launching ways noted in the tidal flux zone. Well-preserved archaeological materials may be uncovered adjacent to Lot 19, the current Savannah Electric and Power Company parking lot. This is the site of the historic Willink shipyard. Approximately one-third of this lot was included in the main testing area of the hotel tract. However, construction of the Kehoe marine railway between 1904-16 obliterated any traces of the Willink operations on that lot. Many of the timber piles and beams present in the tidal flux zone may be those of the Papot wharf construction of 1854-8, and should be viewed with respect to the tentative reconstructions discussed within this report. During construction of the river walk along Lot 19 frontage, particularly if wide-scale earth removal is undertaken prior to construction, antebellum structures and artifacts may be encountered. We recommend that a qualified archaeologist monitor any such earth-moving.
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Toulouse, Julian Harrison

U. S. Department of Agriculture

Waring, Joseph Frederick

Williams, Stephen, editor

Wilms, Douglas C.
Appendix 1

Chain of Title, Wharf Lots 1 and 2, Eastern Wharves
<table>
<thead>
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<th>Grantee</th>
<th>Description</th>
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<tr>
<td>1790</td>
<td>John Peter Lange</td>
<td>Nathaniel Pendleton</td>
<td>tract on Savannah River including 108.5 acres of rice swamp and 45 acres of high ground</td>
<td>unavailable</td>
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<td>4 December 1798</td>
<td>Nathaniel Pendleton by Richard Watt, Sheriff</td>
<td>General Lachlan McIntosh</td>
<td>tract on Savannah River of 136 acres</td>
<td>CCDB V: 262</td>
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<td>16 March 1805</td>
<td>General Lachlan McIntosh</td>
<td>Charles Harris, Attorney</td>
<td>78 + acres on Savannah River</td>
<td>CCDB Z: 337-8</td>
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<tr>
<td>19 February 1836</td>
<td>George Glen, Trustee</td>
<td>G. B. Lamar et al.</td>
<td>75 acres of rice land and 3 acre tract on high ground with cotton press</td>
<td>CCDB 2U: 16-19</td>
</tr>
<tr>
<td>19 February 1836</td>
<td>G. B. Lamar et al.</td>
<td>Nicholas J. Bayard</td>
<td>1/7 interest in 75 and 3 acre tracts</td>
<td>CCDB 2U: 13-14</td>
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<td>19 February 1836</td>
<td>Nicholas J. Bayard, Adm. of Charles H. Ward, decd.</td>
<td>G. B. Lamar et al.</td>
<td>3/4 interest in 23.5 acre tract south of Harris rice lands</td>
<td>CCDB 2U: 14-16</td>
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<tr>
<td>24 December 1840</td>
<td>Elias Bliss</td>
<td>Gazaway B. Lamar</td>
<td>Wharf Lot 2 and 1/6 interest in 75 acre tract</td>
<td>CCDB 2Z: 12-14</td>
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<tr>
<td>13 October 1847</td>
<td>G. B. Lamar</td>
<td>Charles A. L. Lamar</td>
<td>75 acre tract bounded north by street laid out by Eastern Wharf Company, east by Bilbo Canal, south by Prendergrast and Bayard, west by lots of Henry and Bayard south of Presidents St.</td>
<td>CCDB 3E: 390</td>
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<tr>
<td>28 May 1855</td>
<td>G. B. Lamar</td>
<td>Charles A. L. Lamar</td>
<td>75 acre tract bounded east by Hydraulic Press south by street, west by Willink's and north by Savannah River also all lands lying east and south; subject to advance payment of sum for improvements made by G. B. Lamar</td>
<td>CCDB 3Q: 511</td>
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<tr>
<td>31 December 1863</td>
<td>G. B. Lamar</td>
<td>Charles A. L. Lamar</td>
<td>Same as above; subject to contract with Atlantic and Gulf Railroad</td>
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### Appendix 1. Chain of Title, Wharf Lots 1 and 2, Eastern Wharves (continued)

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<td>30 April 1912</td>
<td>Caroline A. Lamar et al. by T. M. Cunningham Jr., Ex.</td>
<td>Atlantic Compress Company</td>
<td>Lots 1 and 2 (front and rear)</td>
<td>CCDB 10W: 284</td>
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<td>30 July 1919</td>
<td>Atlantic Compress Company</td>
<td>Stewart-Morehead Company</td>
<td>Lots 1 and 2 (front and rear), with all wharves, etc.</td>
<td>CCDB 14K: 240-1</td>
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<td>17 June 1920</td>
<td>Stewart-Morehead Company of Savannah</td>
<td>Mutual Warehouse and Compress Company of Savannah</td>
<td>Lots 1 and 2 (front and rear) + 2 tracts to south</td>
<td>CCDB 17W: 346</td>
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<td>1 June 1926</td>
<td>Mutual Warehouse and Compress Company by Trustee, Harry Garfunkel at Sheriff's Sale</td>
<td>Garfunkel Mortgage Bond Company</td>
<td>Lots 1 and 2 (front and rear) + 2 tracts to south</td>
<td>CCDB 21T: 403</td>
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<td>22 January 1940</td>
<td>Garfunkel Mortgage Bond Company by Trustee John J. Bouhan, Trustee</td>
<td>United Hydraulic Cotton Press Company</td>
<td>Eastern 3' of Rear Lot 2</td>
<td>CCDB 37B: 248</td>
</tr>
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<td>16 January 1942</td>
<td>Garfunkel Mortgage Bond Company by Trustee John J. Bouhan</td>
<td>James A. Rourke</td>
<td>Lots 1 and 2 (front and rear) + 2 tracts to south</td>
<td>CCDB 36V: 433</td>
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<td>12 April 1962</td>
<td>E. Z. and A. L. Rourke, et al.</td>
<td>Mayor and Aldermen, City of</td>
<td>Street rights of way through rear of Lots 1 and 2</td>
<td>CCDB 80Q: 73</td>
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<tr>
<td>14 December 1966</td>
<td>E. Z. and A. L. Rourke, et al.</td>
<td>Sayler Marine Construction Inc.</td>
<td>Lots 1 and 2 (front and rear) + tract to south</td>
<td>CCDB 91F: 491</td>
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Appendix 2

Chain of Title, Wharf Lot 19, Trustees' Garden
### Appendix 2. Chain of Title, Wharf Lot 19, Trustee's Garden.

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<tr>
<td>unknown</td>
<td>John Reynolds</td>
<td>Grey Elliot</td>
<td>Lots in Trustee's Gardens</td>
<td>not available</td>
</tr>
<tr>
<td>unknown</td>
<td>Grey Elliot</td>
<td>James Lucena</td>
<td>Lots 16, 17, 18, and 19, Trustees Garden</td>
<td>not available</td>
</tr>
<tr>
<td>2 January 1809</td>
<td>John C. and Joana Lucena</td>
<td>United States of America</td>
<td>Parcel 110' by 420' on west side of Lots 16, 17, 18, and 19, Trustees Garden</td>
<td>CCDB 2B: 369</td>
</tr>
<tr>
<td>unknown</td>
<td>John C. and Joana Lucena (?)</td>
<td>parties unknown</td>
<td>Lots in Trustees Garden</td>
<td>not available</td>
</tr>
<tr>
<td>6 January 1835</td>
<td>John P. Dew, Sheriff of Chatham County</td>
<td>H. F. Willink</td>
<td>Lots 15, 16, 17, 18 and 19 of Trustee's Garden, by Writ of Fieri Fascias</td>
<td>CCDB 2V: 175</td>
</tr>
<tr>
<td>26 January 1860</td>
<td>H. F. Willink</td>
<td>Gazaway B. Lamar</td>
<td>Wharf Lot 19 and Lots 15, 16, 17, and 18</td>
<td>CCDB 3T: 24-5</td>
</tr>
<tr>
<td>lapse in chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 April 1904</td>
<td>Harriet C. Jones et al.</td>
<td>William Kehoe</td>
<td>Wharf Lot 19, subject to lease by Domestic Coal and Wood Company</td>
<td>CCDB 8U: 151</td>
</tr>
<tr>
<td>10 October 1934</td>
<td>Liberty National Bank and Trust Company of Savannah</td>
<td>Liberty National Bank and Trust Company</td>
<td>Wharf Lot 19 and eastern portions of Lots 16, 17, 18</td>
<td>CCDB 30L: 112</td>
</tr>
<tr>
<td>4 February 1935</td>
<td>Liberty National Bank and Trust Company of Savannah</td>
<td>Marine Railway Company of Savannah</td>
<td>Eastern Portion of Wharf Lot 19, with existing slip, dry docks, hoisting engine, boiler, machinery, etc.</td>
<td>CCDB 30G: 481</td>
</tr>
<tr>
<td>15 May 1939</td>
<td>Liberty National Bank and Trust Company</td>
<td>American Warehouse and Storage Company</td>
<td>Western Portion of Wharf Lot 19, and eastern portions of Lots 16, 17, and 18</td>
<td>CCDB 34B: 37-</td>
</tr>
</tbody>
</table>
### Appendix 2. Chain of Title, Wharf Lot 19, Trustee's Garden (continued).

<table>
<thead>
<tr>
<th>Date</th>
<th>Grantor</th>
<th>Grantee</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 May 1939</td>
<td>American Warehouse and Storage Company</td>
<td>Merry Brothers Brick and Tile Company</td>
<td>Northern Portion of Western Portion of Wharf Lot 19</td>
<td>CCDB 34A: 231-3</td>
</tr>
<tr>
<td>20 August 1951</td>
<td>American Warehouse and Storage Company</td>
<td>Kenneth H. Merry et al.</td>
<td>Southern Portion of Western Portion of Wharf Lot 19</td>
<td>CCDB 541: 183</td>
</tr>
<tr>
<td>27 April 1967</td>
<td>Liberty National Bank and Trust Company of Savannah</td>
<td>Sayler Marine Construction Inc. of Georgia</td>
<td>Irregular parcel at southwestern corner of Eastern Portion of Wharf Lot 19</td>
<td>CCDB 91W: 345</td>
</tr>
<tr>
<td>28 November 1969</td>
<td>Sayler Marine Construction Inc., formerly Merry Companies Inc.</td>
<td>Merry Brothers Brick and Tile Company</td>
<td>Quit Claim of Grantor's interest in Western Portion of Wharf Lot 19 in exchange for Grantee's interest in Eastern Portion of Wharf Lot 19</td>
<td>CCDB 96U: 527</td>
</tr>
<tr>
<td>2 December 1969</td>
<td>Merry Companies Inc., formerly Merry Brothers Brick and Tile Company</td>
<td>Merry Land and Investment Company Inc.</td>
<td>Western Portion of Wharf Lot 19</td>
<td>CCDB 96U: 509</td>
</tr>
<tr>
<td>2 December 1969</td>
<td>Merry Land and Investment Company Inc.</td>
<td>Savannah Electric and Power Company</td>
<td>Western Portion of Wharf Lot 19</td>
<td>CCDB 96U: 493</td>
</tr>
</tbody>
</table>
Appendix 3

Reconstruction of the 1854 Papot Wharf along Savannah's Eastern Wharves
Part 1

Transcription of

Eastern Wharves Construction Contract
Between Edward C. Anderson and Samuel N. Papot
Executed 1854

Wayne-Anderson-Stites Papers
Georgia Historical Society
Manuscript Collection 846 Box 22 Folder 511
Contract with Samuel N. Papot for Building Eastern Wharves

Chatham County
State of Georgia

Articles of agreement made and entered into this first day of November one thousand eight hundred and fifty four between Samuel N. Papot of Savannah in the County of Chatham and State of Georgia of the first part and Edward C. Anderson of the second part, the said Samuel N. Papot of the first part hereby covenants and agrees with the said Edward C. Anderson as follows, to wit: That he the said Samuel N. Papot will excavate and remove the old wharf at the Eastern extremity of the City of Savannah situate on the south bank of the Savannah River, between Roberts and Austins saw mill and the Willinks Ship Railway, and rebuild the same in accordance with the plan which has been shown to him by the party of the second part the whole work to be done in a substantial and workmanlike manner and the materials to wit southern pine timbers and iron to be of the best qualities for the consideration hereinafter named.

In accordance with the plan above mentioned and now in the hands of the said party of the second part the said Samuel N. Papot covenants and agrees to establish the foundations by driving piles along the front line of the proposed wharf at intervals of three feet six inches in the clear or four feet six inches from center to center and to drive each pile until the resistance is such as to ensure perfect stability in the superstructure, the piles to be cut with shoulder and tenons at the level of mean low water and capped with square timbers not less than fourteen inches to the side, let on with close fitting mortices. Having thus established the foundation piles and caps the latter will be secured by land ties eighteen feet in length and four feet apart in the clear dovetailed as represented in said plan and notched into an anchor timber resting behind a row of substantial piles driven at intervals of eight feet on a line parallel to the wharf front and fifteen feet from said front, each of said land ties to be further secured by iron bolts not less than 7/8 inch diameter. To prevent the mud from washing out from beneath these, the lowest land ties to drive a row of four inch plank or sheet pile immediately behind the foundation caps with their edges in contact with the adjacent ones and to lay a flooring of three and one half inch plank on top of the above described land ties for the purpose of supporting the ballast and earth to be used for filling the wharf. To build the front of the wharf with square logs of pine timber placed one on top of the other up as high as ten feet above mean low water level and secured there by iron bolts not less than 7/8 inch diameter at intervals of four and a half feet and by land ties at intervals of eight feet in the clear extending back in the bank twenty eight feet and there secured to a row of anchor piles as represented in the plan aforesaid. The series of land ties first above the foundation ties to be only eighteen feet in length and secured to the first row of anchor piles in same manner as the foundation ties. The land ties to be placed and secured as above described between every other course of logs forming the wharf front, the upper tiers or set of ties to have the additional security of anchor timbers placed on each side of the row of anchor piles nearest the wharf front and bolted in the manner represented in said plan. Every fifth anchor pile of the row nearest the wharf front to be long enough to extend three feet above the top of the wharf flooring for posts to fasten a line to. To place substantial fender piles at intervals eighteen feet along the front of the wharf with these points firmly secured in the bottom of the river and the tops well fastened with iron bolts to the main timbers.

In consideration of the full and faithful performance by the said Samuel N. Papot of the first part, of all the above described and as set forth in detail in the aforesaid plan Edward C. Anderson the party of the second part covenants and agrees to pay him the said Samuel N. Papot at the rate of fourteen dollars and seventy five cents
(14.75) per running foot measuring along the front line of said wharf partial monthly payments to be made in the following manner, to wit, at the end of each month the amount of work done as ascertained by reference to the time roll exhibiting the number of days labor performed and the materials applied during the month to be paid for by the said party of the second part withholding twenty five per centum of the amount found to be due at the end of each month, the said twenty five per centum to be held in the hands of the said party of the second part until the whole work herein covenanted and agreed upon between the parties to these presents shall be fully and faithfully executed in strict accordance with the terms and stipulations hereinbefore set forth. And it is further expressly understood and agreed by the parties to these presents that the whole work herein contracted for shall and will be completed within the period of Eleven months from the date of signing the presents and if the said work is at any time abandoned by the said Samuel N. Papot that he shall have no claim upon the said Edward C. Anderson for any pro rata compensation or upon any quantum merit [sp.?] for the work which is done, but the said work shall be forfeited and enurr to the benefit of the said Edward C. Anderson. In addition to the foregoing it is expressly understood, stipulated and agreed between the parties above named that the said Samuel N. Papot will at his expense and as a part of this contract fill in said wharf with earth and other materials in a solid and substantial manner up to the flooring of 3 1/2 inch plank so that the bottom ties and said flooring shall rest firmly and solidly upon said filling. In witness whereof the said Samuel N. Papot hath hereunto set his hand and seal and Edward C. Anderson hath set his hand and seal the day and year first above written.

Signed Sealed and Delivered

In presence of

A. C. Davenport
Tho. H. Harden

(seal) Saml N. Papot
(seal) Edwd C Anderson

In witness whereof the said Samuel N. Papot hath hereunto set his hand and seal and Edward C. Anderson hath set his hand and seal the day and year first above written.
Notes on Wharf Construction

The accompanying series of three illustrations is a hypothetical reconstruction of mid-19th century wharf construction in Savannah, Georgia, based on the interpretation of wording in the Papot-Anderson wharf construction contract of 1854 and on limited archaeological data gleaned from the excavations at the site of Lamar's Cotton Press and Warehouse. Many details of this reconstruction are speculative. All timbers are of pine. The Papot wharf extended from the bluff area of Lot 19 (Willink's Wharf) east into the reclaimed marshland in front of Wharf Lots 1-6, Eastern Wharves. The original riverbank contours in this area were much lower, the land being tidally flooded prior to filling for industrial land uses.

The wharf line was established by driving a series of one-foot diameter foundation piles (A) on 4.5' centers along the survey line of the wharf. These piles were driven until they were firmly anchored in the underlying geology. The wharf line extended into the river several feet at low tide, and the hypothetical tidal shore profile is drawn at an angle of repose of 15 degrees. At the mean low tide level the timbers were cut and tenoned to receive a capping beam or foundation cap (B), a square timber at least 14" on a side. The foundation piles and caps formed the load-bearing basis of the wharf front.

Sheet piling (C) consisting of 4" thick plank with tongue and grooved edges, (a detail provided by a recovered portion of piling), was driven behind the foundation cap and was cut off at the top of the cap beam. Anchoring the foundation caps to the shoreline were land ties (F) cut (we guess) with a simple half-lap dovetail, leaving the land tie flush with the top of the foundation cap. These land ties, situated every 4.5', extended 18' back into the river bank where they were lapped over a heavy line of beams running parallel to the wharf line. Based on an archaeological detail, the lap notch cut in the land tie would have been relatively shallow, and the joint was fastened by an iron bolt or drift pin 7/8" in diameter. Anchor timbers (E) were in turn secured in the bank with vertical posts or anchor piles (D) driven in front of the timbers at intervals of 9'. Seating of the anchor timbers would have required excavating shallow trenches along the shoreline at low tide. The sheet piling behind the foundation cap would necessarily have been custom cut to fit around the intersection of the cap and its land ties.

Water would have been evacuated from behind the sheet piling at low tide and the space between the riverbank and the top of the land tie filled with earth, this being the lower ballast (G). A ballast floor (H) of 3 1/2" plank covered this lower fill and provided a secure platform for the fill above. The face of the wharf was formed with front timbers (J) also square and probably also 14" in dimension. Stacked horizontally along the foundation cap, these front timbers rose to a height of ten feet above mean low tide. In the illustrations, we have shown eight 14" timbers. At intervals of 4.5' these front timbers were bolted together, although it is unclear how long these bolts were and how many timbers were joined at a time.

In pairs, the front timbers were anchored back to the riverbank by land ties keyed into them with dovetail mortise and tenon joints situated between the timbers. That is, half the mortise was cut in the top of the lower member of a pair of front timbers, and the upper half of the mortise was cut in the bottom of the upper member of the pair. Thus two front timbers could be secured with one land tie. This configuration is based on an archaeological detail and conforms with the Papot contract wording. The land ties above the foundation cap level were spaced at intervals of 9'. The two lowest land ties from the front timbers were only 18' in length, and articulating with respective anchor timbers set
behind the near row of anchor piles (D). The two higher tiers of land ties were 28' in length and lap notched into anchor timbers (L) buried in the upper riverbank behind an upper row of anchor piles (K). Reconstruction of the method of securing these upper land ties of 28' length to the upper anchor piles is completely speculative, and is merely represented as being the same as the lower anchoring scheme. In front of Wharf Lots 1-6, the upper anchor timbers (L) would not have been buried in undisturbed riverbank, but rather in fill dirt carted in to raise the grade of the former rice lands. The dotted line in the section of the wharf indicates the hypothetical profile of the land along the former marsh.

The entire lattice work of wharf anchoring timbers behind the wharf front was filled to the top of the highest level of land ties and capped with wharf flooring. The upper ballast (I) provided the mass necessary to prevent shifting in the fragile timber structures anchoring the wharf front. Although both the ballast floor (H) and wharf floor (M) are shown as single layers of 3 1/2" plank, two layers may have been employed for greater strength. Some cribbing boards (not shown) may have been used to support flooring adjacent to piles. Every fifth anchor pile in the first row (D) extended three feet above the wharf floor to provide tie-up posts. Fender piles (N) were driven along the wharf front at intervals of 18' and bolted to the wharf front timbers for stability. It is unclear if these fender piles extended above the top of the front timbers or were cut off at the level of the wharf floor.

Comments

Probably the most critical elements in the structure of the wharf were the sheet piling and the ballast floor. The sheet piling held back the riverbank underneath the foundation cap timbers, preventing the structure from being undercut by the movement of hydraulically-sucked sands at extreme low tides. The Papot wharf contract emphasized the importance of the lower ballast fill and the sturdy construction of the ballast floor. Upon this floor rested an enormous volume of fill dirt.

In contrast to free-standing piers supported wholly on open piling, the Papot wharf was primarily a land fill operation. This 1854 wharf extended from the foot of the town bluff along Lot 19 east toward the eastern marshes. There would have been a high river bank along Lot 19 into which to set the upper land ties and anchor timbers. This would not have been true in front of the Eastern Wharves, were the original land surface was very low and tidally inundated. In this area, all of the upper anchor timbers running parallel to the wharf front would have been suspended in fill.

Addenda to the contract noted that in 1858, part of the finished wharf "sloughed" and had to be rebuilt. Should the sheet piling fail, the lower ballast dirt would have been drawn out from under the ballast floor, in turn causing the floor to collapse and draw down the upper ballast fills. Without a matrix of supporting fill dirt, the Papot wharf was a spindly affair without substance. Although anchor timbers, anchor piles and land ties could be bolted and pinned together, it was the fill ballast that gave the structure mass to resist the stresses placed on it by ships and the tides.
Key to the Illustrations

A ANCHOR PILE
B FOUNDATION CAP
C SHEET PILING
D ANCHOR PILES
E ANCHOR TIMBERS
F LAND TIES
G LOWER BALLAST
H BALLAST FLOOR
I UPPER BALLAST
J FRONT TIMBERS
K UPPER ANCHOR PILES
L UPPER ANCHOR TIMBERS
M WHARF FLOOR
N FENDER PILE
Figure 29. Section through the Papot wharf.
Figure 30. Elevation of the Papot wharf.
Figure 31. Planview of the Papot wharf, lower tiers.
CURRICULUM VITA

Nicholas Holder, Ph.D.

GENERAL INFORMATION

Address: Department of Sociology & Anthropology
612 McCallie Avenue
University of Tennessee at Chattanooga
Chattanooga, Tennessee 37403

Telephone: (615) 731-4325, 4441

Born: Tennessee, 1953

Academic Positions:
- UC Foundation Associate Professor, Dept. of Sociology/Anthropology (1988-present)
- Associate Professor, Department of Sociology/Anthropology (1982-1988)
- Assistant Professor, Department of Sociology/Anthropology (1981-1982)
- Director, John E. Brown Institute of Anthropology (1980-present)
- University of Tennessee at Chattanooga

EDUCATION AND DEGREES

- Terry Parker High School, Jacksonville, Florida (1964-1968)
- Illinois State University, Normal, Illinois (1970)

PROFESSIONAL ACADEMIC EXPERIENCE

UC Foundation Professor, Department of Sociology & Anthropology, University of Tennessee, Chattanooga. One-quarter time faculty teaching on course. Taught courses on archaeology, archaeology community, Introduction to Anthropology, Cultural Anthropology, Introduction to Archaeology, Southeastern Indians, Tennessee Archaeology, Archeological Field Methods, U Wenner Field School, Archeological Laboratory Methods, Fundamentals of Environmental Law, General special topics courses (Southeastern Prehistory, Method and Theory in Historical Archaeology, Preservation and Conservation of Artifacts). Other duties include academic advisement, Department and University committee work, and community service (approximately one local presentation given to civic educational groups per month). January 1988 to present.

Assistant Adjunct Instructor, Department of Anthropology, University of Florida. Directed three archaeological field school sessions at Fort Frederica National Monument, St. Simons Island, Georgia. Taught excavation methods, 1972, 1973, and artifact analysis, spring, 1979.

Teaching Assistant, Department of Anthropology, University of Florida. Assisted instructor (Dr. Charles H. Fairbanks) in teaching World Prehistory course to undergraduates. Lectures, writing tests, grading. April-June 1977.
CURRICULUM VITA
Nicholas Honerkamp, Ph.D.

GENERAL INFORMATION
Address: 
Department of Sociology & Anthropology
615 McCallie Avenue
University of Tennessee at Chattanooga
Chattanooga, Tennessee 37403

Telephone: 
(615) 755-4325, 4411

Born: 
February 13, 1950
Cincinnati, Ohio

Academic Positions:
UC Foundation Associate Professor, Dept. of Sociology/Anthropology (1989-present)
Associate Professor, Department of Sociology/Anthropology (1985-1989)
Assistant Professor, Department of Sociology/Anthropology (1981-1985)
Director, Jeffrey L. Brown Institute of Archaeology (1980-present)
University of Tennessee at Chattanooga

EDUCATION AND DEGREES
Terry Parker High School, Jacksonville, Florida (1964-1968)
Illinois State University, Normal, Illinois (1970)

PROFESSIONAL ACADEMIC EXPERIENCE
UC Foundation Professor. Department of Sociology & Anthropology, University of Tennessee at Chattanooga. One-quarter to full-time, depending on contract archaeology commitments. Courses taught: Introduction to Anthropology, Cultural Anthropology, Introduction to Archaeology, Southeastern Indians, Tennessee Archaeology, Archaeological Field Methods (summer field school), Archaeological Laboratory Methods, Fundamentals of Environmental Law, several special topics courses (Southeastern Prehistory, Method and Theory in Historical Archaeology, Preservation and Conservation of Artifacts). Other duties include academic advisement, Departmental and University committee work, and community service (approximately one local presentation given to civic-educational groups per month). January 1981 to present.

Assistant Adjunct Instructor. Department of Anthropology, University of Florida. Directed three Archaeological Field School sessions at Fort Frederica National Monument, St. Simons Island, Georgia. Taught excavation methods, mapping, photography, and artifact analysis, night class on archaeological method and theory. April 1978-March 1979.

Teaching Assistant, Department of Anthropology, University of Florida. Assisted Instructor (Dr. Charles H. Fairbanks) in teaching World Prehistory course to undergraduates: lectures, writing tests, grading. April-June 1977.


PROFESSIONAL TRAINING AND EXPERIENCE

Director. Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga. Responsibilities include management of day-to-day operations of the Institute and staff (1 full-time, 2 part-time employees); supervise full-time archaeological conservation laboratory; curation of major documentary collection on industrial archaeology; write grant and competitive CRM contract proposals; supervise field and laboratory projects; write and produce contract reports. Contract and grant awards to date: $602,000. December 1980 to present.

Principal Investigator. Various duties on over 25 projects, including project administration, planning, and co-ordination (all projects); directing fieldwork and laboratory analysis/conservation programs; documentary research; writing, editing and producing draft and final reports. Highlights include:

- urban site survey and testing at the Raddison Hotel Site tract, Savannah, Georgia. Project Sponsor: Columbia Sussex Corporation.

- historic-site testing at the Hammer-Taylor House, Washington County, Tennessee. Project Sponsor: Tennessee Department of Transportation.


- documentary background search and historic overview on Ross's Landing, Chattanooga, Tennessee. Project Sponsor: RiverCity Company.

- landscape archaeology at antebellum Clifton Place Plantation, Columbia, Tennessee. Project Sponsor: Clifton Place Restoration Project.

- urban site testing on the Plaza Theater parcel, Pack Place Site, Asheville, North Carolina. Project Sponsor: City of Asheville.

- prehistoric survey, testing and data recovery of Mississippian burial ground at Chattanooga Riverpark. Project Sponsor: RiverCity Company, Inc.

- prehistoric and historic site testing program at Kings Bay Naval Base, St. Marys, Georgia. Project Sponsor: U.S. Navy.


- data recovery project at the Union Railyards Site, Chattanooga, Tennessee. Project Sponsor: TVA.

- Excavation of Bluff Furnace Site, Chattanooga, Tennessee (urban industrial site). Grant Sponsors: American Foundryman’s Society, Bluff Furnace of Chattanooga, Inc.

- Testing and data recovery at testing project of 18th/19th century urban site in Charleston, South Carolina. Project Sponsor: National Park Service.

Other professional experience:

Project Director. Department of Anthropology, University of Florida. Responsible for planning, coordinating, directing fieldwork, laboratory analysis, artifact conservation; carried out report writing, graphics and report production (dissertation research); also taught 3 field school sessions. Research carried out at 18th century British colonial site at Fort Frederica, St. Simons Island, Georgia, for the National Park Service. April 1978-November 1980.


Archaeological Survey, Excavation and Analysis. Numerous sites throughout the Southeast, including Kings Bay Naval Base, St. Marys, Georgia, (January-March 1978); Eagle Lake, Florida (March 1977); Williston, Vermont (August 1976); Monteith, Georgia (December 1975-April 1976); Fort Frederica National Monument, St. Simons Island, Georgia-thesis research (January-November 1975); Savannah, Georgia, riverfront (June-August 1974); Vogtle Nuclear Plant, Burke County, Georgia (May-June 1973 and December 1973-January 1974); Fort Caroline National Monument, Jacksonville, Florida (September 1973); St. Simons Island, Georgia (June 1973); St. Augustine, Florida (March-May 1973); Chattahoochee, Florida (January-March 1973); Alexander Springs State Park, Florida (August 1972); Ichtucknee Springs State Park, Florida (June-July 1972) St. Augustine, Florida (April-June 1972)
PROFESSIONAL CERTIFICATION & ASSOCIATIONS

Society of Professional Archaeologists (Field Research, Historical Archaeology, Teaching)
Society for American Archaeology
Society for Historical Archaeology
Society for Industrial Archaeology
Southeastern Archaeological Conference
American Anthropological Association
Tennessee Anthropological Association
Georgia Historical Society

PAPERS PRESENTED, SYMPOSIA, AND ETC.


1979 Social Status as Reflected by Faunal Remains From an 18th Century British Colonial Site. Presented at the 19th Annual Conference on Historic Site Archaeology, St. Augustine, Florida.


1982b Patterning in the Archaeological Record: Results from Charleston. Co-authors R. Bruce Council and M. Elizabeth Will. Presented at the 1982 meetings of the Society for Historical Archaeology, Philadelphia.


1984c Urban Archaeology in Savannah, Georgia: The Telfair Site. Produced, scripted, narrated, and assisted in editing 16 minute video film on urban archaeology research problems and methodology. Department of Sociology-Anthropology, University of Tennessee at Chattanooga.

1985a Urban Studies in the Southeast: Archaeological Approaches. Paper presented as part of the Southeastern Studies Colloquia, Department of Anthropology, University of Georgia.


Program Chair, 1987 meetings of the Society for Historical Archaeology, Savannah.

1987a Organizer and chair of plenary session entitled "Questions That Count in Historical Archaeology," 1987 meetings of the Society for Historical Archaeology, Savannah.

1987b Organizer and chair of session entitled "Research and Interpretation in CRM Archaeology," 1987 meetings of the Society for Historical Archaeology, Savannah.


1987d Archaeological Contributions Toward and Understanding of Coastal Georgia History. Presented as part of the Gilmor Lecture Series, Coastal Georgia Archaeological Society, Savannah.


1988 Archaeology at Clifton Place: Preliminary Results. Presentation before the Tennessee Historical Commission, Columbia, Tennessee.

1989 Did Soto Sleep Here? A Discussion. Presented at the first Southern Appalachian Program Speakers Luncheon, University of Tennessee at Chattanooga.


PUBLICATIONS

Council, R. Bruce and Nicholas Honerkamp
1984 The Union Railyards Site: Industrial Archaeology in Chattanooga, Tennessee. Tennessee Valley Authority Publications in Anthropology, Number 38.

Council, R. Bruce, Nicholas Honerkamp and M. Elizabeth Will

Honerkamp, Nicholas


Honerkamp, Nicholas (editor)
1988 Questions That Count In Historical Archaeology. Historical Archaeology 22(1):5-42.

Honerkamp, Nicholas and R. Bruce Council

Honerkamp, Nicholas and Charles H. Fairbanks

Honerkamp, Nicholas and Elizabeth J. Reitz

Honerkamp, Nicholas and Martha A. Zierden (editors)
1984 Archaeological Approaches to Urban Society: Charleston, South Carolina. South Carolina Antiquities 16(1,2).

Honerkamp, Nicholas and Martha A. Zierden

Hunt, William and Nicholas Honerkamp

Reitz, Elizabeth J. and Nicholas Honerkamp

1984 "Historical" Versus "Archaeological" Dietary Patterns on the Southeastern Coastal Plain. In Archaeological Approaches to Urban Society: Charleston, South Carolina. Published as
Volume 16(1,2) of South Carolina Antiquities. Nicholas Honerkamp and Martha A. Zierden, eds., pp. 67-85.

MANUSCRIPTS

Council, R. Bruce, M. Elizabeth Will, and Nicholas Honerkamp

Council, R. Bruce, Robin L. Smith, and Nicholas Honerkamp

Honerkamp, Nicholas


1984a "The Smouldering Ruin and the Iveyed Wall": Archaeology at the Oglethorpe Site, St. Simons Island, Georgia. Report on file, Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga.


1990a Survey Archaeology at the Citico Site (40HA65), Chattanooga, Tennessee. Report on file, Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga.

1990b Landscape Archaeology at Clifton Place Plantation, Maury County, Tennessee. Report on file, Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga.

Honerkamp, Nicholas, R. Bruce Council, and Charles H. Fairbanks

Honerkamp, Nicholas, R. Bruce Council, and Elizabeth J. Reitz
Honerkamp, Nicholas, R. Bruce Council, and M. Elizabeth Will

Honerkamp, Nicholas, Beth Fowler, Tracy Little, and Robbie Mantooth

Smith, Robin L., R. Bruce Council, Nicholas Honerkamp, and Lawrence E. Babits

Smith, Robin L. and Nicholas Honerkamp
1976 An Archaeological Assessment of the Cultural Resources at Mulberry Grove Plantation, Chatham County, Georgia. Manuscript, Georgia Department of Natural Resources, Atlanta.

GRANTS AND AWARDS


1987 An Interpretive Exhibit of Prehistoric Remains at the Chattanooga Riverpark. Anonymous grantor.


1989 NEH Summer Institute for College and University Faculty, "Spanish Explorers and Indian Chiefdoms: The Southeastern United States in the Sixteenth and Seventeenth Centuries." Institute Director: Charles H. Hudson.

PRINCIPAL FIELDS OF INTEREST

Historical archaeology
Urban/Industrial archaeology
Southeastern Indians
SPECIAL SKILLS

Extensive experience with several mainframe computer programs: SAS, SPSS, and SYMAP; microcomputer programs: Word, Overvue, Filemaker, Panorama, Hypercard, Statview, Superpaint, MacDraw, etc.

REFERENCES

Dr. Edward E. Cahill, Chair
Department of Sociology & Anthropology
University of Tennessee at Chattanooga
Chattanooga, Tennessee 37403
(615) 755-4411

Dr. Paul E. Gaston, Dean
College of Arts & Sciences
University of Tennessee at Chattanooga
Chattanooga, Tennessee 37403
(615) 755-4635

Dr. Kathleen A. Deagan, Chair
Department of Anthropology
Florida State Museum
Gainesville, Florida 32611
(904) 392-1721
Curriculum Vitae

Robert Bruce Council

July, 1990

Areas of Specialization: Historical and Industrial Archaeology

I. General Information

Address: 2584 Avalon Circle
Chattanooga, Tennessee 37415

Telephone: 615-265-6989

Date and Place of Birth: July 6, 1949 Tampa, Florida

Present Position: Research Instructor

The Jeffrey L. Brown Institute of Archaeology

104 Brock Hall, Campus

University of Tennessee at Chattanooga

Chattanooga, Tennessee 37403

Business Phone: 615-755-4325

II. Education

Master of Arts Awarded March, 1975, Department of Anthropology, University of Florida, Gainesville, Florida.

Bachelor of Arts with Honors Awarded March, 1971, Department of Anthropology, University of Florida, Gainesville, Florida.


III. Field Schools in Archaeology

Graduate Level

University of Florida Archaeological Field School, Spring 1972. Director: Dr. Charles H. Fairbanks, Professor of Anthropology. Duration: 10 weeks.

University of Florida Archaeological Field School, Spring 1971. Director: Dr. Charles H. Fairbanks, Professor of Anthropology. Duration: 10 weeks.
Undergraduate Level

University of Florida Archaeological Field School, Spring 1970. Director: Dr. Charles H. Fairbanks, Professor of Anthropology. Duration: 10 weeks.

IV. Professional Experience

Research Instructor The Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga. May 1980 to present. Immediate Supervisor: Dr. Nicholas Honerkamp, Director, Institute of Archaeology. Duties: proposal preparation, field direction, data recording, data analysis, historical/documentary research, report writing and report production. Major projects undertaken in this position:

Project Director for archaeological survey in Ooltewah, Hamilton County, Tennessee. Research: power auger survey of .75 mile section of Woltever Creek for Hamilton County Training and Development.

Project Director for archaeological survey of the proposed Radison Hotel Construction Site, Savannah, Georgia. Fall 1989. Research: documentary and archaeological survey of historic wharf properties for the Columbia Sussex Corporation.


Project Director for archaeological survey near Tracy City, Grundy County, Tennessee. Research: site survey for historic and prehistoric sites in a proposed reservoir for the Municipality of Tracy City (Grundy County, Tennessee) and Hendon Engineering Associates (Birmingham, Alabama).

Principal Researcher and Co-Principal Investigator for documentary historical study of Ross's Landing, Chattanooga, Tennessee. Research: primary historical research and synthesis of data on historic locality for The RiverCity Company, Chattanooga, Tennessee.

Project Director of Phase II archaeological testing and Phase III data recovery operations at the Tennessee Riverpark sites, Chattanooga, Tennessee, Summer, 1987. Research: systematic testing and intensive excavation of prehistoric site for The RiverCity Company, Chattanooga.

Project Director of Archaeological Survey of Phase I Riverpark Development, Chattanooga, Tennessee, Summer and Fall, 1986. Research: power auger survey of 1.5 mile corridor along Tennessee River, for RiverCity Company, Chattanooga.

Project Director of Secondary Testing and Evaluation of the McNish Site, Hunter Army Airfield, Savannah, Georgia, Winter 1985. Research: historical research and archaeological testing of early colonial historic site and prehistoric component, for Archaeological Services Branch, National Park Service.
Principal Researcher on Memphis Navy Yard documentary research and site reconnaissance, Memphis, Tennessee, Summer 1985. Research: historical research and archaeological testing feasibility study of antebellum naval construction facility, for Tennessee Department of Transportation.

Field Director of Heritage Place Site excavations, Chattanooga, Hamilton County, Tennessee, Spring 1985. Research: limited excavation of Mississippian housesite prior to construction impacts by private developer.

Field Director and Co-Principal Investigator of Kyker Mill Dam reconnaissance project, Washington County, Tennessee, Fall 1984. Research: Historical documentation and field recording of 19th-century mill dam for Tennessee Department of Transportation.

Field Director of Kings Bay Naval Submarine Base sites excavations, Camden County, Georgia, Summer 1984. Research: Secondary testing of two prehistoric sites for Department of the Navy.

Field Director of Hunter Army Aifield site HAAF-11 excavations, Savannah, Georgia, Spring 1984. Research: Secondary testing of Euroamerican domestic occupations ranging in date from mid-19th to mid-20th century.

Field Director of Kings Bay Naval Submarine Base sites excavations, Camden County, Georgia, Spring 1984. Research: Secondary testing of one historic and two prehistoric sites for the Department of the Navy.

Director and Co-Principal Investigator of Wilson Dam site reconnaissance testing, Polk County, Tennessee, Summer 1983. Research: Historical and archaeological documentation of water-powered mill site (mid-19th to mid-20th centuries) for Tennessee Department of Transportation.

Field Director of Telfair Site excavations, Savannah, Georgia, Summer 1982. Research: Urban archaeology at data recovery level of core block of Savannah occupied early 18th to mid-20th century, for Archaeological Services Branch - Atlanta, National Park Service.

Field Director of Bluff Furnace Site excavations, Chattanooga, Tennessee, Fall 1981. Research: historical documentation and industrial archaeological investigations of charcoal and coke-fired antebellum blast furnace, for Bluff Furnace of Chattanooga, Inc.

Field Director of Charleston Center Site excavations, Charleston, South Carolina, Spring 1981. Research: Urban archaeology (at secondary testing and data recovery levels) of block of Charleston occupied late 18th to mid-20th centuries, for Archaeological Services Branch - Atlanta, National Park Service.

Field Supervisor of Union Stockyards Site excavations, Chattanooga, Tennessee, Spring 1981. Research: historical documentation and archaeological investigation of 19th century stockyards/domestic habitation and 20th century industrial site, for the Tennessee Valley Authority.
Co-Director of Union Railyards Site excavations, Chattanooga, Tennessee, Summer 1980. Research: historical documentation and archaeological investigations (at secondary testing and data recovery levels) of railyards operated 1850 - 1978, for the Tennessee Valley Authority.


Research Technician Department of Anthropology, University of Georgia, September to October 1979. Immediate Supervisor: Dr. David J. Hally, Assistant Professor of Anthropology/Principal Investigator, Wallace Dam Historic Sites Project. Research: collection of primary historical documentation of mid-19th century water-power sites. Duties: collection and transcription of land deeds, wills, inferior court minutes, chain of title reconstruction, genealogy. Duration: 8 weeks.

Field Archaeologist Wallace Dam Historic Sites Mitigation Project, Department of Anthropology, University of Georgia. April 1978 to April 1979. Immediate Supervisor: Dr. David J. Hally, Assistant Professor of Anthropology/Principal Investigator of Wallace Dam Historic Sites Project. Research: Excavation of mid-to late-19th century industrial water-power sites and associated domestic components. Duties: Field direction, data collection and analysis, report writing and report production. Duration: 52 weeks.


Graduate Assistant in Archaeology Department of Social Sciences, Florida State Museum, Gainesville, Florida. September 1972 to June 1973. Immediate Supervisor: Dr. E. Thomas Hemmings, Acting Chairman, Department of Social Sciences.

Graduate Research Assistant Department of Anthropology, University of Florida, Gainesville, Florida. September 1971 to June 1972. Immediate Supervisor: Dr. Charles H. Fairbanks, Professor of Anthropology.


V. Manuscripts, Reports and Publications

Council, R. Bruce

Council, R. Bruce

Council, R. Bruce, Willis Stevens, Donald A. Harris and R. J. Morgan

Council, R. Bruce

Council, R. Bruce
1978 A Preliminary Site Report for Archaeological Salvage Undertaken at 9Pm239 (Ross' or Merrell's Gristmill). On file, Department of Anthropology, University of Georgia, Athens.

Bartovics, Albert F., and R. Bruce Council
1978 A Preliminary Site Report for Archaeological Salvage Undertaken at 9Ge37 (The Curtwright Factory Site). On file, Department of Anthropology, University of Georgia, Athens.

Council, R. Bruce
1979 A Preliminary Site Report for Archaeological Salvage Undertaken at 9Ge50 (Lawrence Shoals Site). On file, Department of Anthropology, University of Georgia, Athens.
Council, R. Bruce, Loretta Lautzenheiser and Nicholas Honerkamp

Council, R. Bruce

Honerkamp, Nicholas, and R. Bruce Council

Council, R. Bruce, and Nicholas Honerkamp


Honerkamp, Nicholas, R. Bruce Council and M. Elizabeth Will
1982 An Archaeological Assessment of the Charleston Convention Center Site, Charleston, South Carolina. A report prepared for the Archaeological Services Branch - Atlanta, National Park Service.

Council, R. Bruce, M. Elizabeth Will, and Nicholas Honerkamp


Council, R. Bruce

Honerkamp, Nicholas, R. Bruce Council and Charles H. Fairbanks

Council, R. Bruce, and Nicholas Honerkamp
1984 The Union Railyards Site: Industrial Archaeology in Chattanooga, Tennessee. Tennessee Valley Authority Publications in Anthropology, Number 38.

Honerkamp, Nicholas, and R. Bruce Council
Honerkamp, Nicholas, R. Bruce Council and Elizabeth J. Reitz

Smith, R. L., R. B. Council, N. Honerkamp, and L. E. Babits

Council, R. Bruce

Council, R. Bruce

Smith, Robin L., R. Bruce Council and Rebecca Saunders
1985 Three Sites on Sandy Run: Phase II Evaluation of Site 9Cam183, 184, and 185 at Kings Bay, Georgia. A report prepared for the United States Department of the Navy, Kings Bay, Georgia.

Council, R. Bruce, Robin L. Smith and Nicholas Honerkamp
1986 Secondary Testing and Evaluation of the McNish Site, 9CH717, Hunter Army Airfield, Chatham County, Georgia. A report prepared for the Archeological Services Division, Southeast Regional Office, National Park Service.

Council, R. Bruce
1986 Exploratory Archaeological Excavations at the Shelton Mill Site, Chattanooga, Tennessee. Research Contributions, Number One, Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga.

Council, R. Bruce

Council, R. Bruce

Council, R. Bruce

Council, R. Bruce
Council, R. Bruce

Council, R. Bruce

VI. Papers presented

Bartovics, Albert F., and R. Bruce Council
1978 Nineteenth Century Mill Communities on the Oconee River, Georgia. A paper read before the Southeastern Archaeological Conference, Knoxville, Tennessee.

Honerkamp, Nicholas, R. Bruce Council and M. Elizabeth Will

Honerkamp, Nicholas, and R. Bruce Council

Honerkamp, Nicholas, and R. Bruce Council

Council, R. Bruce

VII. Professional Activities


VIII. Special Skills

Field and Laboratory Photography
Drafting and Illustration

IX. Principal Fields of Interest

Historical Archaeology of eastern North America
Industrial Archaeology, particularly water-power technology
X. Professional Associations

- Society for American Archaeology
- Society for Historical Archaeology
- Society for Industrial Archaeology
- Southeastern Archaeological Conference

XI. References

Dr. Nicholas Honerkamp, Director
The Jeffrey L. Brown Institute of Archaeology
University of Tennessee at Chattanooga
Chattanooga, Tennessee

Dr. Edward Cahill
Department of Sociology and Anthropology
University of Tennessee at Chattanooga
Chattanooga, Tennessee

Dr. David J. Hally
Associate Professor of Anthropology
University of Georgia
Athens, Georgia