ARCHEOLOGICAL AND
ARCHITECTURAL INVESTIGATIONS
AT CAMDEN YARDS,
BALTIMORE, MARYLAND

Volume I

FINAL REPORT

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Frederick, Maryland

PREPARED FOR:
Maryland Stadium Authority
Suite 2450, World Trade Center
Baltimore, Maryland 21202
ARCHEOLOGICAL AND ARCHITECTURAL INVESTIGATIONS AT CAMDEN YARDS, BALTIMORE, MARYLAND
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with

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For

Maryland Stadium Authority
Suite 2450, World Trade Center
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Frontispiece

Aerial view south over the Camden Yards Industrial Park prior to demolition of structures during 1989 - 1990 (Photo: Harriet Wise)
ABSTRACT

This study presents the results of archival, archeological, and architectural investigations at Baltimore's Camden Yards. The 85 acre project area incorporated a 71-block portion of the former Camden Yards Industrial Park, the site of Oriole Park at Camden Yards, and of a planned professional football stadium. This study was undertaken by R. Christopher Goodwin & Associates, Inc., on behalf of the Maryland Stadium Authority, for Hellmuth, Obata, and Kassabaum (HOK Sport, Inc.). This project was conducted in compliance with Maryland Historic Preservation Legislation, Article 83B, Sections 617-618.

Based on data from archival research, a predictive model was designed utilizing a computerized Geographic Information System (GIS). This predictive model was used to determine moderate and high probability areas for historic archeological resources illustrative of the development of the Camden Yards area from its early rural/residential configuration, through a period of residential/commercial neighborhood use, to an industrial area. A sampling strategy for field investigations then was designed.

Field investigations, undertaken between October 1989 and March 1990, resulted in the identification of thirteen archeological sites within the project area. These included the remains of a variety of domestic, industrial, and commercial buildings dating from the late eighteenth century to the mid-twentieth century.

Several historic archeological sites (18BC80, 18BC85, 18BC90) contained features representative of the mid-nineteenth century semi-rural residential character of this portion of Baltimore. Other sites included several blocks of the remains of row houses from the late nineteenth and early twentieth centuries. These sites (18BC78, 18BC82, 18BC83, 18BC86, 18BC87, 18BC90) illustrate the architectural and spatial growth and development of Camden Yards, first as a suburban community, and then as a semi-urban and urban commercial/residential neighborhood influenced by the growth of the railroad and its associated services.

Several structures and features were subjected to intensive study. These included 18BC79, the Ruth Saloon; 18BC81, Privy 3; 18BC88, the Stoneware Kiln; and 18BC89, the J. S. Berry Pug Mill. These sites manifested an unusually high degree of preservation, and large quantities of historic archeological materials and data.

Privy 19A01, within site 18BC80, also was excavated completely. Study and comparison of the materials from this feature with those from Feature R-5, a privy within the Ruth Saloon site (18BC79), and from Privy 3 (18BC81), resulted in valuable insights into middle and late nineteenth century socioeconomic status and consumer behavior in Camden Yards.

The James Pawley Stoneware Kiln (18BC88) and the J. S. Berry Brickworks pug mill (18BC89) were representative of the early industrial development of Camden Yards. These sites are significant for their ability to provide information regarding the early industrial development of Baltimore.

Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) documentation was prepared for eight structural complexes. These built resources exemplified important construction and design techniques for commercial, industrial, religious, and public buildings dating from the late nineteenth through the mid-twentieth century. HABS short forms were prepared for the Diggs-Johnson School, a locally significant example of Neo-classical
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CHAPTER I
INTRODUCTION

Project Location and Description

This study presents the results of archival, archeological, and architectural investigations of Baltimore’s Camden Yards. The 85-acre (34.43 ha) project area incorporated a 71-block portion of the former Camden Yards Industrial Park (Figures 1 and 2), the site of Oriole Park at Camden Yards and of a planned professional football stadium. This study was undertaken by R. Christopher Goodwin & Associates, Inc., on behalf of the Maryland Stadium Authority, for Hellmuth, Obata, and Kassabaum (HOK Sport), Inc. The project was conducted in compliance with Maryland Historic Preservation Legislation, Article 83B, Sections 5-617 and 5-618. Site development plans included the demolition of all extant structures within the 71-block project area, and extensive sub-surface disturbance within the footprint of the baseball stadium.

Architectural recordation and archeological field investigations were conducted between July 1989 and March 1990; archival research for all aspects of the project was conducted from July, 1989, through March, 1991. Dr. R. Christopher Goodwin served as the Principal Investigator; April Fehr, M.A., A.B.D., and Suzanne Sanders, M.A., managed the project and directed field investigations. Architectural recordation was directed by Kathryn M. Kuranda, M. Arch. Hist., and archival research was conducted by David Hardin, M.A., A.B.D., and Martha R. Williams, M.A., M.Ed. Ms. Williams also arranged the Public Interpretation components of the project.

The objectives of the project were: (1) to identify and to document historic and prehistoric resources within the project area; (2) to evaluate the potential significance of those resources applying the National Register criteria (36 CFR 60.4 [a-d]); (3) to conduct mitigation of significant resources in the form of archeological data recovery and of Historic American Buildings Survey and Historic American Engineering Record (HABS/HAER) documentation of built resources; and, (4) to make management recommendations concerning the future treatment and interpretation of any identified resources. These objectives were addressed through a combination of archival, field, and laboratory investigations. Schedules for mitigative recordation of built resources and for archeological data recovery were developed in close consultation with the professional staff of the Maryland Historical Trust.

The prehistory and history of the project area were researched through an examination of the Maryland Historical Trust files, National Register files, previous cultural resources reports, historic period maps, interviews, and relevant primary and secondary sources located in both public and private repositories. Supplementary site-specific archival research was conducted in support of the archeological and architectural field work. Initial archival investigation was followed by the preparation of a series of predictive Geographic Information System (GIS) maps, delineating the historic locations of potentially significant residential, commercial, and industrial structures, and of potential historic archeological features, deposits, and activity areas. These GIS maps then were utilized in combination with a disturbance study and with an intensive ground truth effort, in order to select areas for archeological analysis and excavation. Architectural recordation of standing structures in the project area was undertaken in advance of the planned demolition schedule. In part because of the scope and success of this preservation project, the Maryland Stadium Authority, HOK Sport, and R. Christopher Goodwin & Associates, Inc. were awarded Baltimore Heritage’s Preservation Award.
MARYLAND ARCHAEOLOGICAL RESEARCH UNITS

COASTAL PLAIN PROVINCE

Unit 1 - Atlantic Drainage
Unit 2 - Pocomoke Drainage
Unit 3 - Nanticoke–Wicomico–Manokin–Big Annemessex Drainages
Unit 4 - Choptank Drainage
Unit 5 - Chester River–Eastern Bay Drainages
Unit 6 - Sassafras–Elk–Northeast–Bush–Susquehanna Drainages
Unit 7 - Gunpowder–Middle–Back–Patapsco–Magothy–Severn–South–Rhode–West Drainages
Unit 8 - Riverine Patuxent Drainage
Unit 9 - Estuarine Patuxent Drainage
Unit 10 - Estuarine Potomac Drainage
Unit 11 - Riverine Potomac Drainage

PIEDMONT PROVINCE

Unit 12 - Potomac Drainage
Unit 13 - Patuxent Drainage
Unit 14 - Patapsco–Back–Middle Drainages
Unit 15 - Gunpowder–Bush Drainages
Unit 16 - Susquehanna–Elk–Northeast Drainages
Unit 17 - Monocacy Drainage

APPALACHIAN PROVINCE

Unit 18 - Catoctin Creek Drainage
Unit 19 - Antietam Creek–Conococheague Creek Drainages
Unit 20 - Licking Creek–Tonoloway Creek–Fifteenmile Creek Drainages
Unit 21 - Town Creek Drainage
Unit 22 - Evitts Creek–Georges Creek Drainages
Unit 23 - Potomac–Savage Drainages
Unit 24 - Youghiogheny–Casselman Drainages

Figure 1. Location of the project area in Maryland
Figure 2. Excerpt of the USGS Baltimore East quadrangle, showing location of the project area.
Organization of the Report

This report is presented in two volumes. Volume I contains Chapters I - VII as well as the technical appendices. Volume II contains Appendix V, the artifact inventory for all sites in the project area. Chapter I contains a description of the project, and reviews the general research objectives of the study. The natural and cultural settings of the project area are described in Chapter II, and previous archeological and historical research conducted in the vicinity of the project area also is reviewed in that chapter. Chapter III reviews the specific research methodology applied to the project area. Chapter IV contains archeological and archival data pertaining to sites and properties inventoried in the project area. Chapter V contains the results of archeological and archival studies of Property 1, the B. Green Warehouse complex. Chapter VI describes investigations of sites documented in Property 15, the Parks Sausage Company complex. Chapter VII provides a summary of the project, and makes recommendations for future treatment and interpretation of the archeological and architectural resources identified in the study. Complete HABS/HAER documentation, including large scale archival photodocumentation, has been provided under separate cover to the Maryland Historical Trust.

Maryland State Site forms for the 13 archeological sites documented in the project area are contained in Appendix I. The results of faunal analyses from features located in Property 1 are contained in Appendix II. Appendix III presents elements of the public interpretation program undertaken as part of this project. Appendix IV contains resumes of key project personnel.
CHAPTER II

NATURAL AND CULTURAL SETTINGS

Natural Setting

The Maryland Stadium project area occupies a 71-block, 34.43 ha (85 ac) tract immediately west of the Camden Station and Warehouse Complex of the Baltimore and Ohio Railroad, in the City of Baltimore, Maryland (Figure 2). The tract is bounded by South Eutaw Street, Ostend Street, the Russell Street Expressway, and Camden Street; it also is bisected by the Martin Luther King Boulevard overpass. Prior to construction of the stadium complex, the project area was occupied by the Camden Industrial Park.

The project area is situated in a coastal plain estuarine environment, within Maryland Research Unit 7 (Wesler et al. 1981:Appendix C) (Figure 1). It is located immediately north of a portion of the Middle Branch of the Patapsco River, known during the eighteenth century as Ridgely's Cove. Historically, two tributaries of Ridgely's Cove -- Howard's Branch and Three Prong Branch -- bordered the eastern and western boundaries of the project area. The project area rises from approximately .61 m (2 ft) above mean sea level (msl) at its southern end near the tidal marshes of the Northwest Branch, to a maximum elevation of 3.04 m (10 ft) msl at its northern extremity.

Soils within the project area are mapped as undifferentiated urban land. Eighty per cent of the surface of these urban soils was covered either by paving or by built resources. However, several soil complexes are mapped for contiguous non-disturbed areas. These include the Urban Land-Sassafras complex to the north, the Joppa-Urban complex to the northeast, and the Christiana and Sunnyside complexes to the southwest (USDA 1990:Sheet 17).

Soil profiles within the project area reflected the removal of the A horizon and its replacement with sand and clay fill of varying depths. However, below approximately 50 cm (19.69 in), vestiges of the natural soil profile were found in some sections of the project area. This profile consisted of 10YR5/4 yellowish-brown sandy clay over a fine silty clay with chromatic values ranging from white (8/1) to dark gray (4/1). These clays are of marine origin, and are the result of the proximity of the project area to the Middle and Northwest Branches of the Patapsco River.

Prehistoric Setting

Previous Investigations

Because of Baltimore's urban setting, very few archeological investigations of prehistoric resources have been conducted within the city. Maryland State Archeological Site files contain records of only four prehistoric sites within the city limits. All of these sites were located on upland knolls within .5 km (.31 mi) of first and second order streams, close to their confluence with such larger watercourses as the Jones Falls and Gwynns Falls. All were located in the northern, less intensively developed, sections of the city, or in open park space. No prehistoric sites have been recorded in the immediate vicinity of the project area.
unaltered. Given the subsequent development history of the Camden Yards project area, the potential for finding intact prehistoric sites in the area appears to be low.

Cultural Sequence

Both the geographic location and the nature of prehistoric remains recovered from surveys in Baltimore suggest that environmental and cultural factors strongly influenced the type, location, and characteristics of prehistoric sites in Baltimore City. Prehistoric occupants of the region enjoyed ready access to both estuarine and upland environments; therefore, large village and base camp sites, and smaller upland resource exploitation sites, are likely to have been present during prehistoric times in the Greater Baltimore Metropolitan area. Moreover, because the upper Chesapeake Bay/Patapsco River was not isolated during prehistoric times, the characteristics of sites in the upper Chesapeake region can be expected to reflect broader cultural trends that developed in contiguous areas of the Middle Atlantic.

Middle Atlantic prehistory is divided into three time frames: the Paleoindian/Early Archaic period; the Archaic period; and, the Woodland period. The Paleoindian/Early Archaic period incorporates cultures that were present at the end of the Pleistocene. The Archaic period encompasses the people and lifestyles associated with mobile hunting and gathering in the Eastern deciduous forests. The Woodland period is associated with elaborated Archaic cultures that evolved into the maize-growing cultures encountered by the first European settlers during the early seventeenth century. Prehistoric sites representing all three periods have been recorded throughout northeastern Maryland; no Paleoindian sites have been reported within Baltimore City.

Paleoindian/Early Archaic Period. The Paleoindian period represents a prehistoric lifestyle associated with the terminal Pleistocene environment; the Early Archaic is associated with initial cultural adaptations to the emerging Holocene forests. Chronologically, these two periods span the time from about 12,000 to 6,500 B.C. Diagnostic artifacts of the period include lanceolate fluted projectile point styles (Clovis, Dalton, Mid-Paleo), and the side-notched and corner-notched points (Kirk, Palmer, Warren) traditionally assigned to the Early Archaic (Custer 1984:43; Gardner 1980:3).

The traditional Early Archaic has been included within the Paleoindian period because settlement and subsistence patterns seem not to have changed substantially during that time (Dumont 1981). Evidence of continuity in adaptive patterns throughout the Paleoindian/Early Archaic has been obtained from a number of areas in the Middle Atlantic, including Delaware (Custer 1984), the Shenandoah Valley (Gardner 1979, 1980, 1983), the Great Valley of Maryland and Pennsylvania (Stewart 1980), and the Susquehanna River Valley (Hatch et al. 1985).

The environmental setting during the Paleoindian/Early Archaic period was conditioned by the Late Pleistocene/Holocene transition. Pollen data from southeastern Pennsylvania support the view that upland areas were covered primarily by spruce-pine boreal forests between 15,000 and 8000 B.C. (Custer and Wallace 1982:145). During the subsequent Pre-Boreal/Boreal episode, warmer summer temperatures and continued wet winters prompted changes in vegetational patterns; boreal forest cover apparently decreased and grassland areas broadened in nearby Piedmont regions of southeastern Pennsylvania and northern Delaware (Custer and Wallace 1982:145).

Little direct evidence concerning subsistence strategies for the Paleoindian/Early Archaic period has been recovered in Maryland. However, data from many sites in the Mid-Atlantic region suggest that high-quality lithics were a focal point of the settlement system, and that hunting was
Woodland, into a collective entity called Woodland I, with a date range from 3000 B.C. to A.D. 1000. Custer’s model for Woodland I can be applied generally to the eastern United States: a gradual shift to economies focused on fewer resources; larger base camps with storage pits; and, the development of ceramics. There is no evidence that maize (and therefore extensive horticulture) formed any portion of the diet during the Woodland I period.

Popes Creek Net-Impressed and Mockley ceramics are the diagnostic ceramics of the Middle Woodland (ca. 500 B.C. - A.D. 1000) along the Coastal Plain. Middle Woodland sites also are associated with Fox Creek, Selby Bay, and Jack’s Reef projectile points. Some researchers have interpreted the appearance of net impressions on Middle Woodland ceramics as reflecting the increased importance of fishing during this period (Gardner 1982). The Late Woodland period encompassed tribal village-dwelling societies dependent to some extent on the cultivation of maize. On the Coastal Plain, the Townsend series of shell-tempered ceramics dominated after A.D. 900 (Clark 1980:18). Crushed-rock-tempered Potomac Creek ware appeared somewhat later, and was prevalent in the Inner Coastal Plain/Fall Line areas (Egloff and Potter 1982:112).

Wesler et al. (1981:109) have summarized the general Late Woodland pattern of the Western Shore as follows:

The basic subsistence pattern was one of staple agriculture, supporting large agricultural villages usually in floodplain settings. Hunting and gathering were not neglected, however, as upland campsites and estuarine shell middens are well known.

Custer and Wallace, in developing their regional model for the Piedmont, observed that upland processing sites remained in similar locations to those of earlier periods, while large villages containing storage facilities, houses, and fortifications were concentrated within major flood plains. The advent of agriculture necessitated a more sedentary lifestyle (Custer and Wallace 1982:159). Resources that derived from forest and aquatic environments remained important elements of Late Woodland subsistence patterns. It was this aboriginal subsistence pattern that seventeenth century European visitors first observed along the Chesapeake Bay and its tributaries.

Historic Setting

Previous Investigations

At the inception of the Maryland Stadium Project, fifty-nine historic-period archeological sites had been investigated in Baltimore City. Of these studies, 57.6 per cent (n = 34) have focused on late eighteenth and early nineteenth century sites, 33.2 per cent (n = 19) have studied sites dating from 1815 to 1870, and 10.2 per cent (n = 6) have dealt with sites dating later than 1870. No sites of the early settlement period (1668 - 1768) or of the modern era (1930 - present) have been investigated archeologically.

The archeological record for Baltimore City is biased in favor of domestic sites; 54.2 per cent (n = 32) of all recorded historic sites in the city have a major domestic component. However, commercial and industrial enterprises often have shared space with residential domestic sites; 32.2 per cent (n = 19) of all sites investigated could be classified as multi-functional. Sites associated with a variety of industries, including flour and wool mills, foundries, lumber yards, breweries, and pottery and pipe kilns, comprise 37.3 per cent (n = 22) of all recorded sites in the city. Commercial uses such as bakeries, taverns, and warehouses have been documented for 35.6 per cent (n = 21) of Baltimore’s sites. Other categories of historic sites represented include
Although tobacco had been the Baltimore region's primary commodity at the outset, more economically stable products such as wheat, iron, and lumber, assured the town's continued preeminence as a mercantile and manufacturing center. As eighteenth century farmers in Western Maryland and Southern Pennsylvania began to produce a surplus of grain for export, Baltimore became a point of shipment for inland producers. Commodities brought to Baltimore from outlying areas ultimately were exchanged in the West Indies for such luxury items as sugar and rum, and for slaves. Easy access to raw materials and control of their distribution represented the principal elements of Baltimore's early economic success.

Baltimore's growth during this period was fueled by international and domestic trade. Merchants, sea captains, and shipbuilders bought lots and constructed homes and businesses along the city's waterfront. The shoreline was extended; wharves and piers were built to accommodate larger-draft ships that had been unable to reach the original city docks, and numerous shipyards turned out mercantile vessels. By the mid-eighteenth century, Baltimore Town had a population of 200; the town supported 25 dwellings, a church, two taverns, a pottery, and a distillery (Papenfuse et al. 1976:353; Scharf 1881:57). In 1768, Baltimore Town had replaced Joppa as the seat of Baltimore County (Ruckert 1976:16).

The American Revolution further stimulated Baltimore's economic growth. Baltimoreans supported the American war effort by opposing the Townshend Acts (Papenfuse et al. 1976:354), by forming a local militia in 1774, by forging cannon and munitions for the Revolutionary Armies, and by outfitting vessels for the Continental Navy. The commercial and manufacturing boom attracted new city residents, and residential housing was expanded to accommodate these new arrivals. Merchants, millers, and manufacturers became the city's social and economic elite, as they benefitted from large wartime profits. One nineteenth century historian later observed that the town of Baltimore was "enriched with the spoils of war" (Scharf 1881:60).

Late in the war, the northern and western fringes of the city served as a camp site for Rochambeau's army. On their way north from the victory at Yorktown, the French troops camped in the Baltimore area for about one month beginning on July 24, 1782. Portions of those encampments affected the northern and western sections of the project area. Berthier's 1782 encampment map shows that artillery and infantry elements of the Third Division (Soissonnais Regiment), led by the Comte de Veirmeuil, and the Fourth Division (Saintonge Regiment), commanded by the Comte de Custine, occupied the extreme northeastern corner of the project area (Rice and Brown 1972:11, 153; Plates 80, 129). This was a small section of a large encampment that occupied an area from South Charles and Montgomery Streets, to west of Lexington Market.

Economic activity generated by the Revolution and its aftermath continued to stimulate Baltimore's growth after the end of the war. In 1798, the value of Baltimore's exports exceeded $121,000,000 (Ruckert 1976:25); by 1799, the city ranked as the third largest commercial port in the United States (Hall 1912:63). By 1804, 50 grist mills within an 18-mile radius of the city were producing flour for export (Beirne 1968:12). The renowned maneuverability and speed of the Baltimore Clippers, the fastest ships of the period, proved ideal for privateering during the War of 1812, and the shipbuilding industry flourished.

Exiled Acadian, German, Scottish, and Irish immigrants swelled the town's population. African Americans, both slave and free, also comprised a significant proportion of Baltimore's residents (Goldfield 1991:131). As a result of the post-Revolutionary surge of population, Baltimore was granted formal city status in 1792; a mayor was elected, and lotteries were utilized to fund churches, schools, and other civic improvements.
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<td>House</td>
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Figure 3. Excerpt of Warner and Hanna’s 1801 Plan of the City and Environs of Baltimore, showing limits of the project area.
link increased Baltimore's accessibility to producers in Western Maryland and Ohio; as a result, Baltimore became the most important commercial center in the southern Middle Atlantic region.

The Civil War temporarily interrupted Baltimore's economic progress. Many Baltimore citizens were Southern sympathizers. After a skirmish between Northern troops and crowds of Baltimoreans near the Camden Street Station in April 1861, the city was placed under martial law. Union troops patrolled Baltimore's streets, and the city remained relatively isolated during the war (Beirne 1968:35, Scharf 1881:788-791). Once the war ended, and roads and railroads had been repaired, Baltimore resumed its commercial expansion.

The social and economic history of the project area during this period mirrored broader city-wide trends. Between 1815 and 1870, the project area was transformed from a semi-rural suburb into an integral section of the mercantile city (Table 2). By 1810, the city directory listed at least 35 residents and businesses on South Eutaw Street (Fry 1810) -- in contrast to the five residents identified for all of Ridgely's Delight in 1799 (Wright 1984). Residents of the project area worked as innkeepers, carpenters, carters, bakers, brickmakers, and laborers (Fry 1810). Undoubtedly, many individual entrepreneurs carried on their businesses within their dwellings (Bernard 1974:42).

At the same time, a secondary community began to coalesce at the southern terminus of Howard and Eutaw Streets, around McMechin's Wharf on the Middle Branch. This area became known as "Spring Gardens," where a Mr. Fletcher, and later, John Pitt, kept a hotel. Fletcher advertised his establishment as "a place of resort for those fond of fishing, situated southwesterly about a mile from the city. On the other side of the river (Middle Branch), Mr. Fletcher has lately built a house for accommodating fishing parties..." (Warner and Hanna 1800-1801:Appendix 22). A reference to "Elizabeth Sherry, widow, dairy woman" who lived on Eutaw Street near the Spring Garden suggested that the southern portion of the project area remained rural at this time (Matchett 1824).

Residential areas continued to expand throughout the 1850s (Figures 4 and 5), as the number of local commercial and industrial establishments in the neighborhood increased. Local merchants, craftsmen, skilled laborers, and domestics commonly were listed in the city directories during these years. That portion of the project area as far south as Montgomery Street and west to Paca Street had been developed by the 1830s, and, by the 1850s, development had reached Hamburg Street, the southernmost limit of the project area's residential core.

The racial and ethnic composition of the area changed as job opportunities expanded. The African American population of Baltimore increased to over 25,000 by 1860 (Goldfield 1991:131), and many lived in the Camden neighborhood. Between 1847 and 1854, an influx of Irish and German immigrants began to crowd into the area, causing more affluent residents to move to newly developing residential districts on the outskirts of the city. Changing social institutions in the Camden neighborhood mirrored this ethnic shift. For example, St. Luke's German Lutheran Church, constructed in 1866, replaced the earlier Spring Garden Methodist church at the corner of Henrietta and Eutaw Streets (Wentz 1920) (Figure 6).

1852 marked a major turning point in the project area, with construction of the Baltimore and Ohio Railroad's Camden Station. Five blocks of row houses between Camden, Eutaw, and Howard Streets were razed. As the economic life of the project area became linked inextricably to the railroad, expansion at the southern end of the project area increasingly was dominated by the space requirements of the railroad and of the commercial and industrial operations that depended upon it. Two and three-story mixed residential/commercial and residential row houses filled the interstices that formerly had separated the factories and storage facilities of such larger
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Figure 4. Excerpt of Sidney and Neff's 1851 Plan of the City of Baltimore, showing location of the project area.
Figure 5. Streetscape with row houses, Ridgely's Delight (1989)
Figure 6. The former St. Luke’s German Evangelical Lutheran Church (ca. 1866), used as a storage building for the Inland-Leidy Chemical Company (Photo: Harriet Wise, 1989)
industries as the William Knabe Piano Factory and the J. S. Berry Brick Factory in the area south of Hamburg Street. North of Hamburg Street, previously middle-class single-family dwellings gradually were converted to multifamily row houses and apartments; these units now accommodated the families of unskilled and less affluent employees of the railroad and other large industrial enterprises within the project area. By the end of this period, large-scale industrial enterprises had begun to encroach on formerly residential blocks, and mixed-use dwellings, rather than individual residences, had become the norm in the project area (Table 2).

Analysis of land-use patterns for the 61 blocks developed by 1869 showed that industrial areas still were separated from residential zones; however, smaller commercial enterprises frequently shared space with multi-family residences. The extent of the railroad’s impact on land-use also was apparent; buildings and facilities associated with transportation occupied approximately 13 per cent of the 61-block developed area. Fifty-four per cent of the blocks evidenced mixed-residential/commercial development, while industry occupied all or part of 24.5 per cent of the developed blocks. Industrial and residential uses coexisted on 11.4 per cent of the blocks, but the industries involved tended to be small-scale operations such as canneries, can works, lumberyards, cooperages, and stone yards. Agricultural use of the area had disappeared entirely, and only three single-family dwellings survived by the 1870s. On the other hand, evidence of population growth in the area was provided by the fact that educational and/or religious establishments were located on at least four (6.5 per cent) blocks.

Period of Industrial Dominance (1870 - 1930). Baltimore grew rapidly during the post-Civil War era. The city became the industrial center of the State of Maryland, and much of that industrial growth was centered in neighborhoods around Camden Station. The installation of efficient public transportation systems within the city limits encouraged suburbanization. As recently arrived immigrants and newly-freed Southern slaves settled in the city’s urban core, more affluent city dwellers relocated to outlying residential suburbs. Outlying industrial and commercial enclaves also developed, because larger cargo vessels no longer could be accommodated by the wharves of the Inner Harbor. Railroads continued to transport goods into the city, and by the end of the nineteenth century, the railroad had become as vital to the city’s economic well-being as water transportation.

In 1904, the downtown core of Baltimore, between Fayette Street and the Inner Harbor east of the Jones Falls, was ravaged by the Great Fire of 1904 (Williams 1979:4). Before the fire was controlled, the flames had jumped across Jones Falls and destroyed a section of the Fells Point District (Ruckert 1976:72). Baltimore’s maritime economy, declining since the introduction of the railroad, all but collapsed with the destruction of the harbor facilities.

However, the growth of the Baltimore and Ohio Railroad during this period spurred industrial development in the project area. The Camden Station facilities were upgraded and expanded during the 1880s (Scharf 1881), the railroad’s warehouse capacity and trackage facilities were expanded, and a multi-story freight office building (Figure 7) was constructed at Camden and Eutaw Streets (Baltimore and Ohio Railroad 1903 - 1907). The late nineteenth and early twentieth century Hopkins (1876) and Sanborn Fire Insurance (1890 - 1914) maps depicted the growth of the railroad yards along South Eutaw Street, as well as the extent to which commercial and industrial development supplanted residential housing space. The number of dwellings increased in some blocks of the project area, while in others, residential townhouses were converted to commercial uses (Figure 8), or were replaced by industrial enterprises. City blocks that had been vacant in the southern portion of the project area prior to the 1870s gradually were filled by large-scale commercial and industrial operations, and by scattered clusters of residential row houses.
Figure 7. Baltimore and Ohio Freight Office (ca. 1905) and the Camden Warehouses in 1989 (Photo: Harriet Wise)
Figure 8. The William B. Cassell Office (ca. 1890) and warehouses in 1989 (Photo: Harriet Wise)
While small businesses, lumber yards, and warehouses were characteristic of the types of enterprises in the project area at the start of this period (Hopkins 1876), Sanborn Fire Insurance maps from 1890 to 1914 reflect the speed and scale of subsequent industrial conversion of the project area (Table 3). For example, William Knabe's Piano Factory had been established during the second quarter of the nineteenth century at the corner of Eutaw and Cross Streets (Matchett 1842; Woods 1858-1859). By 1890, that complex extended nearly two blocks along South Eutaw Street and one half-block west along West Street; it occupied three acres (American Publishing & Engraving Co. 1890:80). Expansion of that factory complex between 1901 and 1914 replaced several dwellings that formerly had stood along South Eutaw Street (Sanborn 1901-1902). However, at the same time, new residences and a large stable also were constructed west of Warner Street.

Demographic changes common to other Eastern cities, such as Philadelphia (Miller et al. 1983:10) took place in the project area after the Civil War. Until ca. 1860, while the area's residents had been mixed racially, native-born and immigrant whites had occupied dwellings located on main thoroughfares, while African Americans residents had occupied smaller dwellings lining the secondary alleys (Matchett 1824; Woods 1858-1859). However, by the 1880s, the African American population of the project area had increased substantially, fueled by an influx of freed slaves, primarily from Virginia (United States Bureau of the Census 1880b). A wave of "new" immigrants from Eastern and Southern Europe also entered the population. By the end of the nineteenth century, many multi-family dwellings along main thoroughfares were inhabited by these newly-arrived residents.

The amount of space in the project area dedicated to residential use had reached its zenith in the 1890s. By the early twentieth century, blocks that once had been entirely residential were held firmly in the grip of commerce and industry. Increasingly, row houses were converted into warehouses or small manufacturing establishments similar to the Cassell Company facility (Figure 8), or they were replaced by such large-scale commercial/industrial complexes as the Thermal Energy Complex (Figure 9). As available residential space contracted, more residential row houses were subdivided into flats and apartments, or were utilized as boarding houses (Table 3).

Analysis of property and block use as depicted on the Sanborn Fire Insurance maps for 1901 indicated that 64 city blocks had been developed in the project area. Of these, 75 per cent contained one or more residential dwelling units; the proportion of space allocated to religious and educational uses had increased slightly (10.9 per cent). However, only two blocks in the project area were entirely residential; 67 per cent of the residential blocks contained commercial establishments, while dwellings shared 12.5 per cent of the project area's blocks with industry. Transportation (14.4 per cent), commercial (89.1 per cent), and industrial (23.4 per cent) facilities clearly dominated the land-use picture at the turn of the century.

The introduction of the automobile intensified the process of neighborhood deterioration. Many small alley residences either were converted into or were replaced by garages. Because automobiles obviated the need for housing within walking distance of jobs, many Camden Yards residents who could afford it moved to the suburbs and commuted to work. As a result, more residential space was lost to parking lots, automobile service stations, and motor freight facilities.

The residents who remained behind in the Camden neighborhood increasingly were unskilled, poor, and African American. By the early 1930s, an Urban League survey of Baltimore's African American communities identified the project area as one of the six most blighted neighborhoods of the city. The report noted that population density in the neighborhood bounded by Fremont, Hamburg, South Eutaw, Camden, Paca, and Washington Streets ranged between 87
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<td>S. B. Sexton &amp; Son, stone foundry</td>
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<td>J. Robertson &amp; Co. - Baltimore Lead Works</td>
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<td>C. H. Euller &amp; Sons, paper box factory</td>
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Figure 9. The Southern Seafood Cold Storage facility (ca. 1928) and the Baltimore Thermal Energy complex (ca. 1911 - 1965) in 1989 (Photo: Harriet Wise)
and 172 persons per acre. The incidence of tuberculosis within the neighborhood was between 6 and 11 times higher than for the city as a whole, and infant mortality was double that of the rest of Baltimore (Reid 1934:28-29). Further evidence of the shifting racial and ethnic composition of the neighborhood during the twentieth century, and of its increasing poverty, was reflected by the fact that in 1920, the former St. Luke’s German Lutheran Church (Figure 6) became St. Monica’s Catholic Church, the smallest African American parish in the city of Baltimore (Reid 1934:183). In 1928, the Salvation Army moved its Industrial Mission for Men (Figure 10) to a new facility at the corner of Hamburg and Fremont Streets (Baltimore Evening Sun 1932).

Modern Period (1930 - Present). During the modern period, the economic base of Baltimore shifted once more. Raw materials for local manufacturers came from imported rather than domestic sources. The trend towards suburbanization continued; shopping centers and housing subdivisions were constructed outside of the city’s boundaries, and more of the city’s middle-class residents moved out. Those who remained within the inner city simply could not afford to escape their deteriorating surroundings. A few social institutions were developed to address the needs of those who lived in depressed neighborhoods such as Camden. Within the project area, perhaps the last new non-commercial building, the Digg-Johnson School (Figure 11), was erected in 1955 for African American students (Faculty of Diggins Johnson School 1984).

Baltimore’s urban core continued to function as the region’s educational, cultural, and social center; it housed such institutions as the Johns Hopkins University, the Enoch Pratt Library, and the University of Maryland Hospital, located immediately north of the project area. In the 1960s, concerned Baltimore entrepreneurs undertook initiatives to revitalize the city’s inner core, resulting in the development of projects such as the Charles Center, the Convention Center, and the Inner Harbor (Papenfuse et al. 1976:362).

The Modern Period saw the last phase in the conversion of the project area from residential to industrial. The railroad continued to play an important role in warehousing and in industry in the project area. Many of the last residences and social institutions, as well as older industrial complexes, were replaced by newer industries and warehouses. For example, by 1951 the Knabe Piano Factory and all but five dwellings had been removed from the two blocks along South Eutaw Street (Sanborn 1951). Maryland Paper Products produced matches there, and operated a print shop where the piano factory had stood. The Holtite Manufacturing Company, a producer of rubber products, replaced the dwellings and an empty lot along Warner Street. The vacant building on the corner of Warner and West Cross Streets, which had served as a Methodist Episcopal Church during the late nineteenth century, was replaced by an ice factory (Sanborn 1890, 1901-1902). Motor freight stations replaced the stables in the block between Warner Street and China Alley.

Elsewhere in the project area, similar changes occurred. The block along Eutaw Street between Henrietta and Hamburg, including the former St. Luke’s/St. Monica’s Church, was occupied by the Inland-Leidy Chemical Corporation, which had moved into the project area in 1942. The Baltimore Thermal/Southern Seafood complex (Figure 9), located on South Eutaw Street between Lee and Conway Streets, occupied the site of a nineteenth century African American school and residential enclave (Sanborn 1890).

The establishment of the Camden Industrial Park pushed the last inhabitants of the project area into other sections of the city. The final conversion of the project area into an “industrial park” was characteristic of the movement away from a balanced landscape to an efficient, but sterile, environment and architecture (Figure 12) similar to other industrial sections of Baltimore.
Figure 10. Maryland Office Interiors Building, formerly the Salvation Army Industrial Home for Men (ca. 1928) in 1989 (Photo: Harriet Wise)
Figure 11. The Diggs-Johnson School (1951 - 1952) in 1989 (Photo: Harriet Wise)
Figure 12. Monumental Hotel Supply Company (1955 - 1956) in 1989  (Photo: Harriet Wise)
CHAPTER III
RESEARCH METHODS

Procedures for consideration of the effects of the Maryland Stadiums project on cultural resources, and for compliance with Maryland Historic Preservation Legislation, Article 83B, Sections 5-617 and 5-618, followed those promulgated pursuant to the National Historic Preservation Act of 1966, as amended; Executive Order 11593; and, the Archaeological and Historic Preservation Act P.L.93-291, 1974. Those procedures call for sequential investigations, including reconnaissance survey, intensive survey, assessment of the significance of identified resources applying the National Register of Historic Places criteria (36 CFR 60.4 [a-d]), and mitigation. A phased approach to preservation planning and mitigation was developed in consultation with the Maryland Historical Trust. This process was tied closely to the larger project schedule, so that phased compliance could proceed in accordance with projected demolition and construction schedules.

Research Objectives

The initial research objectives of the Camden Yards project were to identify the major historical contexts that were represented by the development of the project area; to establish a basic chronology for the development of the project area; and, to identify, locate, classify, and evaluate those resources that historically had existed within the project area. This initial research generated a spatially referenced matrix of specific property types that had been present in the project area through from the eighteenth through the twentieth century (Tables 1-3, Chapter II).

This historical matrix was used to identify those modern properties that potentially contained cultural remains illustrative of the major trends, themes, and temporal periods in the history of the project area. The resultant property list was refined after disturbance studies had eliminated areas where archeological remains were unlikely to have survived subsequent urban development processes.

Phase I archeological testing in the project area was designed to assess the integrity of the archeological record, and to facilitate selection of specific properties and resources for further investigation. Properties were selected for more intensive study on the basis of their potential to provide a representative sample of the historic themes and periods identified during the initial background research, and based on the degree of their archeological integrity as revealed in Phase I testing. Architectural properties to be documented were selected by the Maryland Historical Trust; these property types represented industrial, commercial, educational, and religious buildings. The final list of structures and of properties studied archeologically, together with the themes and periods that each represents, are presented in Table 4.

Subsequent archival research provided site-specific data about those properties selected for intensive survey, and linked the cultural remains studied to the broader historical contexts developed during the initial research.
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Archival Methods

Preliminary background research was conducted to provide basic documentation of land use changes and of the complex historical development of the project area. Information was gathered from insurance records and maps, atlases, tax maps, property records, and from city directories housed in repositories throughout the Baltimore-Washington Metropolitan area. Major repositories utilized to develop the initial data base for the project area included the Baltimore City Archives, the Library of Congress, and the Maryland Historical Trust.

Additional primary and secondary documentation relating to specific sections of the project area was obtained from other repositories, including: the Maryland Hall of Records, the National Archives, the Baltimore Museum of Industry, the Maryland Historical Society, the Baltimore Center for Urban Archaeology, the Baltimore and Ohio Railroad Museum, the Babe Ruth Birthplace Museum, the Baltimore City Department of Education, and the Properties Division of the CSX Corporation. Personal interviews with business owners, former residents, and workers also provided insights into the daily life of the Maryland Stadium project area.

The Maryland Stadium Project Geographic Information System

Computer-generated documentation of land use patterns was developed using a Geographic Information System (GIS). These GIS maps documented changing land use patterns in the project area (Figure 13), and formed the basis for the development of models and of practical sampling strategies for archeological testing. A series of computer-generated overlays using data gathered during preliminary archival research identified the former locations of historic structures, features, and activity areas within the project area, and associated them with specific contemporary property parcels (Figures 14 - 16).

Following compilation and digitization, the data were assigned to temporal layers within the cartographic database. Data from maps and public records were used to classify structures by date of construction and function, i.e., residential, commercial, or industrial (Tables 1, 2, and 3). As a result, information gained from application of the GIS system documented patterns of land use and settlement in the project area over time; the types, locations, and distribution of potential historic archeological resources; and, the potential integrity of the archeological resource base in light of historic construction and demolition. This temporally and functionally categorized data base was used to design a sampling plan that would identify and evaluate potential archeological resources within the project area.

The Disturbance Study

A disturbance study then was undertaken to determine the extent to which the project area had been disturbed and, if disturbed, to ascertain the locations and categories of prehistoric or historic archeological resources that had been destroyed. Analysis of previously established data about the evolution of land-use patterns in the project area was the central element of the disturbance study.

A walkover of the project area augmented and verified assumptions about land use and site disturbance that had been formulated during background research, and that had been depicted graphically by the GIS. This pedestrian survey identified modern surface conditions and land-use patterns; it provided information on the preservation of archeological resources; and, it identified areas so heavily disturbed that no additional investigation was required. During this
Figure 14. Digitized Geographic Information System (GIS) map showing historic land use during the Revolutionary era.
Figure 15. Digitized Geographic Information System (GIS) map showing historic land use during the Antebellum Period.
Figure 16. Digitized Geographic Information System (GIS) map showing historic land use during the late eighteenth century.
disturbance study, the impact of the previously-identified successive phases of development within each block was assessed and recorded. Characteristics of development such as the presence of basements, of substantial surface alteration due to landscaping, and of major modifications such as those associated with the construction of the I-395 overpass and the right-of-way for the B&O Railroad, also were recorded. The nature of cover on each parcel (e.g., concrete, macadam, loose gravel, or lawn), the degree of surface visibility of, and access to, each property were mapped and assessed. Based on this disturbance study, several properties and blocks were removed from the list of high probability areas for historic archeological resources due to disturbance or to landscape modification (Figure 17). These areas will be discussed in Chapter IV.

The final sampling plan adopted for the project area incorporated the entire range of variables that had been delineated during preliminary research and reconnaissance. These included associations with significant themes of the Maryland Preservation Plan; dates of construction (age); function (residential, commercial, or industrial); socioeconomic and ethnic affiliation; degree of lot disturbance; and location. Important issues that pertained to the development and evolution of the urban environment were considered. The final selection of areas or features for test excavation was based on their ability to provide the most intact examples of each class of feature identified, and to facilitate adequate recordation of all types of features and sites in the project area.

Eighty-eight test trenches, and five excavation units were examined in the project area. Intensive archeological data recovery was conducted for six features, including three privy shafts, one pottery kiln, and one nineteenth century brickyard pug mill. The methods of excavation applied in each case were based on the type of feature and on the nature of associated artifact and soil deposits.

Site organization and provenience data for all features and artifacts recovered during the field investigations were coded to the Maryland Stadium Authority's acquisition numbers of specific properties within the project area (Figure 17). Test trenches were numbered sequentially across the project area; each trench number was appended to its appropriate property number, thus providing a dual code system for the field records, features, and artifacts.

Features were designated consecutively within individual trenches. Thus, P-9/T-77 refers to Property 9, Trench 77, and F-7701 refers to the first feature discovered within Trench 77. Numerical designation of excavation units also was tied to the specific property and to the trench designation within which the unit was excavated. Trenches and features associated with the Ruth Site, within Property 1, were designated with an R-prefix (e.g., T-R1, F-R5).

The 88 trenches excavated within the project area were placed in areas of moderate to high probability for historic archeological resources, as revealed by information drawn from preliminary archival investigations and from the disturbance study. All trenches were a minimum of 5 m (16.4 ft) long; width and depth varied based on the degree of subsurface disturbance, and on the nature and depth of associated cultural resources. Trenches were excavated mechanically, either following the natural stratigraphy or in 35 cm (13.78 in) levels. Soils were examined for cultural materials. The type and quantity of materials were recorded, and samples were retained for analysis (Table 5).

Complete archeological records were kept for each trench. Information recorded included the location and the dimensions of the trench, the nature of the soil matrices, and the type and number of features encountered. Both 35 mm black and white photographs and color slides were
<table>
<thead>
<tr>
<th>Provenience</th>
<th>% retained: Architectural</th>
<th>% retained: diagnostic</th>
<th>% retained: other</th>
</tr>
</thead>
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<tr>
<td>General</td>
<td>1%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Privy 3</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Privy 19A01</td>
<td>1%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Privy R5 (18BC79)</td>
<td>50%</td>
<td>100%</td>
<td>30% (floral)</td>
</tr>
<tr>
<td>Kiln Site (18BC88)</td>
<td>N/A</td>
<td>100% (wasters/vessels)</td>
<td>10% (kiln furniture)</td>
</tr>
<tr>
<td>Pug Mill (18BC89)</td>
<td>1%</td>
<td>100%</td>
<td>100%</td>
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</tbody>
</table>
Figure 17. Properties in the Maryland Stadium Project Area, showing numerical property designations, areas eliminated from the archeological study, and areas included in the archeological study (Base map courtesy of Maryland Stadium Authority).
taken of all features, and of the soil profiles within each trench. Scaled plans and profiles of each trench, showing the location and relationships of features and soil deposits, also were drawn.

When intact buried cultural resources were encountered, the features were defined and further excavated by hand before being drawn and photographed. When potentially significant features were encountered, hand-excavation of one or more test units was undertaken to test the extent and integrity of the deposits. These test units were excavated in 10 cm (3.94 in) levels, or in stratigraphic layers where possible. All hand-excavated soils were screened through 0.635 cm (.25 in) hardware mesh. Forms maintained on each excavation level contained information on the depth and thickness of the level, and on the color and texture of soils, using standard Munsell soil color terminology and the soil textural triangle. The presence or absence of additional features was indicated, along with the type and density of artifacts recovered. Notations concerning the matrix in which the feature was located included the presence and content of fill, or the nature of any undisturbed soils. Recordation also included 35 mm black and white prints and color slides, along with plan and profile drawings of features and stratigraphy.

Where appropriate, soil samples were taken from each excavation level. These samples were retained for additional analysis of features or their contents. These samples, a minimum of one liter for each ten centimeter level, were retained in clean plastic bags labeled with pertinent provenience data.

Upon completion of field work, all artifacts were transported to the laboratories of R. Christopher Goodwin and Associates, Inc., in Frederick, Maryland, where they were washed, sorted, and inventoried prior to analysis. Upon completion of this study, all artifacts will be curated by the Maryland Historical Trust.

Laboratory Methods and Artifact Analysis

Laboratory inventory of the artifacts for the Maryland Stadium project incorporated a four-tiered system for encoding provenience information, utilizing data derived from the previously discussed field coding system. The first classification was designed to recognize major property and site proveniences, including unit, trench, or surface provenience. The second level of classification denoted features within the major proveniences. The third classification was the level or stratum designation. The fourth classification was a horizontal designation denoting quadrant, or half or whole provenience designations. The use of this system allowed rapid segregation or recombination of data from proveniences or multiple fields, as well as examination of information at varying levels of specificity.

The coded catalog system also incorporated artifact attribute data, artifact counts, comments, and mean date chronological information. This catalog allowed manipulation of parts or all of the artifact data sets. The hierarchically-arranged artifact classification system also included four classification levels: the category; the functional group, based on Stanley South's (1977) functional classifications; the artifact type, which groups materials by their comparable diagnostic attributes; and, the subtype. For ceramics, types and sub-types were identified following classification systems based on the work of Miller (1980, 1991), Noel Hume (1969, 1973, 1985), Worthy (1982), and other recognized authorities on material culture.

Where possible, manufacturers' marks were used in conjunction with ceramic type identification to refine the temporal assessment of ceramic subassemblages. Dating of glass artifacts was predicated on the identification of the manufacturing techniques used to produce the
vessel, after models established in Jones and Sullivan (1985). Identification of bottle embossments also provided a significant diagnostic tool.

Special analytical techniques were employed for several artifact subassemblages obtained from privy features. Ceramic minimum vessel counts (MNV) were obtained by mending or grouping together mendable vessels. Sherds that did not mend with a vessel but that appeared, on the basis of fabric, decoration, and form, to be identical, were considered part of that vessel. Diagnostic sherds or vessel fragments that clearly had no possible match were considered to be separate vessels. Sherds that appeared to belong to previously identified vessels were counted and cataloged separately.

A minimum vessel count also was calculated for glass bottles from privy Feature 19A01. This count was obtained simply by counting all bottles that were whole or at least 50 per cent complete. No attempt was made to mend glass, nor was there an effort to match broken bases and finishes. The true minimum bottle count, therefore, is likely to be significantly greater than that derived from this procedure. Nonetheless, the count can be considered representative of the collection.

Ceramic artifacts from two privies (Features R-5 and 19A01) were analyzed to investigate status differences. Archeological analysis of socioeconomic status relies upon three variables related to ceramic choice, use, and discard: quantity, quality, and variety. As discussed previously, a minimum vessel count (MNV) was calculated for each deposit. The deposit from privy Feature R-5 also was analyzed to determine the quality of ceramic contents, utilizing Miller’s economic price-scaling process (Miller 1980, 1991). The percentages of different classes of wares from Miller’s index, and the number of matched sets in the Feature R-5 assemblage also were calculated. Similar analysis of the ceramics from privy Feature 19A01 was not conducted because Miller’s indexing figures do not apply to later nineteenth and twentieth century ceramic wares and, therefore, could not be used to analyze this subassemblage.

Intensive osteological analyses were conducted of bone materials recovered from Features R-5 and 19A01 (Appendix II). These analyses included determinations of the taxonomic composition of the subassemblages; surface modifications; age; body part; and butchering processes. On the basis of these analyses, conclusions were drawn concerning diet and patterns of consumption for the two households represented in these collections.

Selected soil samples were subjected to additional flotation and analysis. Flotation samples were processed using a modified system of tub flotation equipped with a 1/16 in mesh screen. The resultant materials were sorted into light and heavy fractions. Some of these were analyzed for their content, others were retained for future analysis. Those subjected to further analysis were passed through a 2 mm screen, producing two size fractions. Materials larger than 2mm were weighed (in grams), examined, and sorted into general categories (e.g. wood, pits, etc.) under low magnification (10X-30X). These categories of materials then were counted and weighed, and brief descriptions were recorded. The material in the smaller than 2mm size fraction was examined carefully at 10X to 30X magnification, and all seeds, seed fragments, and remains of cultivated plants were removed.

An attempt was made to identify all nutshell, pits, seeds, and seed fragments. Identifications were made with the aid of standard texts, and on the basis of one-to-one comparison to modern and archeological reference specimens. Identifications were made to the genus level in most cases, and to the species level only when a positive identification could be made.
Architectural Recordation

In addition to archeological investigations of sub-surface cultural remains, eight industrial and commercial structures in the Camden Yards Industrial Park were documented prior to their demolition. Architectural documentation was undertaken in partial fulfillment of Article 83B Section 5-618 of the Annotated Code of Maryland; the level of recordation appropriate for each property was prescribed by the Maryland Historical Trust. Documentation included archival research, on-site investigation, large format photography, and preparation of proportional building plans. These building plans were prepared under sub-contract to Cho, Wilks, and Benn of Baltimore, Maryland, a Maryland MBE. Architectural data were prepared in accordance with the guidelines of the Historic American Buildings Survey (HABS) and the Historic American Engineering Record (HAER). Documented properties included the Baltimore and Ohio Railroad Camden Station Freight Office (1905 - 1906); Southern Seafood Company Cold Storage Warehouse (ca. 1928); Baltimore Thermal Steam Generating Plant (ca. 1911 - 1965); the Diggs-Johnson School (1951-1952); Maryland Office Interiors (ca. 1928); Inland-Leidy Chemical Company (ca. 1930); W. B. Cassell Company (ca. 1900); and Monumental Hotel Supply Company (1955 - 1956).

Site-specific archival research was undertaken to establish the history, use, and construction chronology for each complex. On-site investigation included the preparation of detailed architectural descriptions of each building and surviving engineering features. Large format, black and white photography was executed to document contextual relationships between complexes, exterior elevations, and exterior and interior character defining features. Sketch plans were prepared for all buildings with the exception of the Diggs-Johnson School. Original building plans for that school were furnished by the Facilities Division of the City of Baltimore Public Schools. Photographs of these plans were included in the photographic record for the structure. The results of the architectural recordation project are contained in a separate volume; final HABS/HAER documentation was submitted as a separate deliverable to the Maryland Historical Trust.

Public Interpretation

A public interpretation program for the Maryland Stadium project area was based on recognition by the Maryland Stadium Authority that all phases of the archeological and architectural process should be presented to the public, and that the project should be understood as a preservation package. Two of the three major public interpretation initiatives undertaken during the course of active field work were designed to bring the public into direct contact with on-going archeological activities in the project area. Examples of materials prepared for public interpretation activities, and of the resulting press coverage, are contained in Volume I, Appendix III, of this report.

Components of the Public Interpretation Program

The first major public interpretation event was a "Public Open House" at the George Herman Ruth, Senior, saloon site, during January 1990 (Appendix III-A). This event was scheduled on a weekend to maximize opportunities for public visitation. Press releases announcing the open house were distributed to local media within the Baltimore Metropolitan area. City and state officials, and members of the local media, first received a brief private tour; members of the general public were admitted to the site for the remainder of the day. The staff of R. Christopher Goodwin and Associates, Inc., remained on site to present information about the history of the project area, the architectural recordation project, and the archeological work in progress on the
site. All media representatives received press packets containing information about the project; the general public received one-page flyers that focused on the site’s history and on the larger preservation project. Visitors were able to ask questions of project staff as work proceeded on the site. Approximately 1,000 people toured the site on this occasion.

Two School Press Days (Appendix III-B) for editors and advisors of school newspapers in the Baltimore Metropolitan Area were scheduled in March 1990; this event coincided with the excavation of the Pawley pottery kiln (18BC88) and the J. S. Berry Brick Company pug mill (18BC89). Arrangements for this event were made through the Language Arts curriculum specialists of the public and private secondary and intermediate schools in Baltimore City, and in Baltimore, Anne Arundel, Prince Georges, and Howard Counties. The local commercial media also covered this event.

The School Press Day had two components. Newspaper representatives and their advisors first attended a formal press briefing, during which officials from the Maryland Stadium Authority, the Babe Ruth Birthplace Museum, and R. Christopher Goodwin & Associates, Inc., made formal presentations about the stadium construction project and about the on-going archeological, architectural, and historical investigations. The presentations were followed by question-and-answer sessions, in a press conference format. After the press conference, students and their advisors toured the working sites, where photographic and interview opportunities were provided, and where site activities were explained (Figure 18). All students were furnished with press kits and badges, and a display of recently excavated material from the pottery site was available for students to view.

The third major public interpretation initiative involved the design and preparation of a brochure to accompany an exhibit about the Maryland Stadium Project sponsored by the Maryland Stadium Authority (Appendix III-C). The brochure explained all aspects of the archeological and architectural project; it received state-wide distribution through the Stadium Authority’s "Van Plan" program.

Other public interpretation activities undertaken by the Goodwin & Associates staff included presentations about the project to community and professional groups; preparation of a display of artifacts from the Ruth Saloon privy site at the Babe Ruth Birthplace Museum; the preparation of articles for the Maryland Stadium Authority’s newsletter, Opening Day; the preparation and distribution of press releases about the project; and interviews with local and national news media.

Results of the Public Interpretation Program

Despite cold and somewhat inclement weather, approximately 1000 members of the public attended the open house event on January 27, 1990. The audience included both adults and children, as well as former workers and residents of the project area. The level of attendance can be viewed as one measure of the success of the program. In addition, the public and the news media’s interest about the Babe Ruth portion of the site’s history generated large amounts of local and national press coverage (Appendix III-D), and it prompted calls for the stadium itself to be named in honor of the former baseball giant.

Between 80 and 100 students and their faculty advisors attended the school press days, on March 27-28, 1990. Schools and systems that sent representatives to the event included: Baltimore City public, private, and parochial schools; Baltimore County public, private, and
Figure 18. Dr. R. Christopher Goodwin briefs members of the press at the James Pawley brick kiln site during School Press Days
parochial schools; Howard County public schools; and Prince Georges County public schools. Participants were between 12 and 17 years of age.

No formal evaluation of the school program was attempted. However, one measure of the level of student interest was suggested by the length of the post-press conference question-and-answer session; while approximately one-half hour had been budgeted for this portion of the program, student questions generated by the presentation lasted for almost one hour. Both school staff and students later responded favorably to the experience through letters and articles in student newspapers (Appendix III-B).
CHAPTER IV
RESULTS

Introduction

Throughout its history, the Camden Yards section of Baltimore has been both home and workplace for its occupants. From its beginnings in the eighteenth century until the present, this section of the city has presented a constantly shifting panorama of both residential and commercial/industrial development. During its early period of growth, the area hosted some of the largest industrial operations of the late eighteenth and early nineteenth centuries: brickyards. Intensive residential development of the project area began during the first quarter of the nineteenth century, when property owners began to subdivide their large tracts into townhouse lots. Residential development never completely eliminated industrial and commercial enterprise, although such complexes remained relatively small until the middle of the nineteenth century.

The construction of the Baltimore and Ohio Railroad’s Camden Station and Warehouse complexes during the second half of the nineteenth century provided the economic catalyst for full industrialization. From the 1850s onward, the dynamics of commercial and industrial development first spawned, and later supplanted, residential space in the Camden Yards neighborhood.

The demography of Camden Yards population was equally dynamic. The racial and ethnic composition and the socio-economic status of the area’s residents progressed through several well-defined phases. During the first quarter of the nineteenth century, the large landowners and entrepreneurs who lived in the area were primarily native Marylanders whose forebears had been early English and German settlers in the region. These large landowners and entrepreneurs were replaced during the nineteenth century by less affluent Irish and German immigrants and African Americans. The newcomers lived on the subdivided lots, in rows of narrow townhouses; they paid rent to absentee landlords.

By the late nineteenth century, the racial and ethnic mix of the neighborhood had changed slightly, due to the influx of freed slaves from Virginia and the “new” immigrants from Eastern and Southern Europe. As industry and commerce expanded and the population of the area increased, living conditions deteriorated. By the mid-twentieth century, those who could afford to do so moved, leaving only the poorest of the poor to occupy the few dilapidated housing units remaining in the once-bustling residential neighborhood. Archeological and archival evidence relating to the specific properties investigated during this project provided documentation of the nature and direction of the project area’s social and economic development.

Results of the Disturbance Study

The disturbance study showed that portions of the project area underwent successive stages of development that had a major impact on subsurface cultural resources. Sections of the project area identified as possessing low probability for intact archeological remains included: the blocks at the extreme southeastern corner of the project area; the right of way of the B&O Railroad; and, the area associated with the I-395 overpass. These blocks, between the railroad right-of-way and South Sharp Street, were identified by their acquisition numbers as Blocks 17 through 22. These blocks had been developed completely, with little or no open space between
buildings. All of these buildings included deeply excavated basements, the construction of which would have impacted any buried cultural resources.

Property 11, the B&O Railroad right-of-way, and Properties 7 and 4, associated with the I-395 overpass, also were assessed as low probability areas due to large-scale landscape modifications undertaken during construction, enlargement, and modernization of these transportation routes.

The central portion of the project area, encompassing Properties 4, 7, 8, 13 and 14, was eliminated from consideration during this phase of investigations. These blocks were highly developed, with little open space; most of buildings included basements.

Archeological Results

18BC82: Property 2 (Donut Delight)

Archival Results. Property 2, which originally encompassed much of the south side of Conway Street between Little Green and Warner Streets, first was developed during the late 1820s and early 1830s. This block was a mixed residential and industrial area from its inception. In 1838, five two-story rowhouse dwellings, all with rear brick kitchens, were located at the northeastern end of the block. The lots measured 12 x 60 ft and extended to a back alleyway known as Homespun Alley (later called Wayne or Houser Street). Half of the units were occupied by their owners; the remainder had been rented to tenants (Tax Assessor's Records 1838:11/120).

However, the character of the block changed drastically at its western end near Warner Street. Two large lots dominated this end of the block. A 65 x 120 ft lot, at approximately mid-block, was the site of Thomas White's brick foundry and engine house. Carrick and Horne's brick and frame machine shop occupied the 30 x 120 ft lot on the corner of Warner and Conway Streets (Tax Assessors' Records 1838:11/120). The Conway Street blocks west of Warner Street were owned by Michael Warner and his brother-in-law, William Krebs. Sidney and Neff's city map (Figure 4) shows that this development pattern along West Conway Street remained essentially stable until the mid-nineteenth century.

The block configuration changed considerably in the post-Civil War era. By 1877, G. M. Hopkins' map showed that the earlier industrial enterprises at the western end of the block had been replaced by residential rowhouses. However, Hopkins identified an "Iron Foundry" that occupied several lots in the middle of the block. This undoubtedly was the S. R. Sexton Stove Foundry shown on Sanborn Fire Insurance maps from 1890 through the beginning of the twentieth century.

The S. R. Sexton Company manufactured "Sexton's Grand Heater, the most powerful fireplace heater in the market. . .furnished with nickel trimmings." The company also manufactured a variety of other furnaces, ranges, and cooking and heating stoves. Sexton's manufacturing facility occupied the space between 511 and 519 West Conway Street; their showroom was located at 23 East Lombard Street (Sheriff 1887:1495). After 1890, this business evidently expanded its manufacturing capabilities; by 1901, it occupied the premises between 511 and 527 West Conway. At the turn of the century, its facilities included at least five major buildings for casting, molding, and storing various iron products (Sanborn 1901:1,50). By the 1950s, the S. R. Sexton Company was out of business, and the mid-block lots previously occupied by the company had been taken over by commercial warehousing. Only the southwestern end of the block, bordering Warner Street, remained in residential use.
**Archaeological Results.** Property 2, located along the western edge of the project area, is bounded by Conway Street on the north, Briscoe Street on the east, West Lee Street on the south, and Russell Street on the west. Thirteen trenches were excavated in this area (T-28 - T-40) (Figure 19); six features were recorded. Four of these features were brick row house foundations filled with architectural debris, including bricks, mortar, cement, cast iron pipes, window glass, and electrical hardware. One feature was a brick and cement pier (F3501) associated with a brick foundation (F3502). The remaining feature (F3101) was a series of curb stones, marking the original edge of Conway Street.

Soils encountered in this area included urban fill composed of sand clay and architectural debris, along with natural subsoils comprised of yellowish-brown and grey sandy and silty clays. These predominated in the northern half of the site, in the historic location of the stove foundry and the adjacent row houses.

Although soils for this area are recorded as Urban Land (USDA 1990:Sheet 17), natural stratigraphy was noted in some areas. Soils typical of the natural stratigraphy on this site were found in Trench 39 (Figure 20). In this profile, light gray (10YR61) gravel and sand overlay very dark grayish brown (2.5Y3/2) sandy clay and strong brown (7.5YR5/8) sandy clay; below this lay gray 10YR5/1 clay representing sterile marine deposits. This type of profile was encountered in the southwestern portion of the property, historically occupied by the rear yards of nineteenth century row houses that originally fronted on Conway Street. Soil profiles encountered in Trench 37 (Figure 20, bottom) reflected the disturbed stratigraphy present in areas affected by construction or demolition. Generally, these were present in the form of irregular or sloping strata or isolated soil deposits.

A total of 189 items were retained from these trenches. These items included 85 samples of architectural material: brick fragments, nail fragments, hardware and plumbing items, roofing slate and asbestos shingles, and window glass. The sample reflects the range of materials utilized in construction of the historic row houses.

Kitchen-related items (n=96) comprised 51 per cent of the sample. Faunal materials (n=20) included 14 oyster or clam shells and 6 animal bones. Ceramics comprised 62 items; pearlware was the most prevalent ceramic type (n=23), followed by redware (n=16), whiteware (n=13), and creamware (n=10). Domestic brown or grey stoneware also was present (n=4 and 6, respectively), along with 4 fragments of porcelain. Other kitchen-related materials included 13 fragments of bottle glass, 8 of which were molded. A single fragment of lamp glass also was recovered. These items reflect the domestic character of the neighborhood, and they document its residential use between the second third of the nineteenth century and the early twentieth century.

Although remnant portions of row house foundations were present within the block, these remnants were not substantial enough to contain significant data about construction, occupation, or activities associated with these structures. The same may be said of the footprint of the S. R. Sexton Company furnace factory; remnant structural members were found within a disturbed area, and thus were out of their historical context. The artifacts observed and retained from these excavations reflect the nature of the deposits associated with these features: most resulted from the destruction of the row houses. Neither the domestic nor the industrial components of 18BC82 were found to retain the potential to contribute significantly to our knowledge or understanding.
Figure 19. Site plan of 18BC62 (Donut Delight) showing the testing locations and identified features.
Figure 20. Soil profiles from Trench 39 (top) and Trench 37 (bottom) showing natural and disturbed stratigraphy.
of domestic or commercial activities in the Camden Yards area in the late nineteenth or early twentieth centuries.

18BC83: Property 3 (RETS) and Property 5 (The Diggs-Johnson School)

Archival Results. Before the construction of the Diggs-Johnson School in 1951 substantially modified street patterns in this section of the project area, the major thoroughfares that crossed this site were Barre Street and Lee Street, both running east-west, and Warner Street, which formed the eastern boundary of the property. Welcome Alley partially bisected this block between Lee and Barre Streets (Figure 21).

Like most of the western and southern portions of the project area, the area that became the Diggs-Johnson School Site was not developed until the 1850s. Prior to that time, the major property owners in the vicinity were George Warner, Anthony Miltenerberger, and William Krebs (Tax Assessors' Records 1838). However, by the late 1850s, tax assessment records indicate that both Lee and Barre Streets had been developed; brick rowhouses located on long narrow lots lined both major streets (Figure 21). A slightly agrarian atmosphere apparently pervaded this section of the project area; Joseph Love, who occupied the dwelling at 189 West Lee Street, was taxed not only for his house and lot, but also for three cows (Tax Assessors' Records 1858).

An educational institution became a prominent feature of this neighborhood in 1870, when Primary School #12 was built on the southwest corner of Barre and Warner Streets (Sanborn 1914/51:1,28). This building remained at that location through the 1940s, when it was known as the Wendell Phillips PS #117. During the same period, the neighborhood remained essentially residential; however, several stores were established in previously all-residential buildings during the 1890s, and by the 1950s some dwellings on West Lee Street appear to have been converted to use as factories (Sanborn, 1890:1,15; Sanborn 1914/51:1,28).

The Diggs-Johnson School was built in 1951-1952 as a modern elementary school for southwest Baltimore. The school was named in honor of Josiah Diggs, a prominent African American Baltimore businessman, who owned and operated one of the largest theater chains in the country. During the early 1950s, overcrowded and substandard facilities in Baltimore City's African American schools constituted a major problem. School No. 106, one of the "parent schools" of No. 162, was one of the most severely crowded facilities in the Baltimore system.

In 1962, the Diggs Elementary School was consolidated with School No. 106, the Harvey Johnson Junior High School. The latter school had been named for the Rev. Doctor Harvey Johnson, the eminent minister of Baltimore's Union Baptist Church. That consolidation indicates the decline in population density in the Camden Yards neighborhood, as warehouse and industrial facilities supplanted residential areas (Faculty of Diggs-Johnson School 1984).

Archeological Results. Trenches 48-52 were excavated within Property 3 (RETS), at the northeastern corner of Site 18BC83 (Figure 22), to test for evidence of the rear yard dependencies associated with row houses that historically fronted Wayne Street and Russell Street. However, only one feature, 50A01, a shallow brick foundation, was recorded within this property.

Soil profiles reflected relatively shallow subsurface disturbance associated with the construction and later demolition of row houses in this area (Figure 23). These row houses had shallow foundations; none appeared to have had a full basement. Generally, 50 to 80 cm (19.69 - 31.45 in) of disturbed soils and fill (Levels 1, 2 and 3 in Figure 23) overlay gray (5Y6/1) clayey silt, and light brownish gray (2.5Y6/2) clay mottled with light yellowish brown (2.5YR6/4) clay. The
Figure 21. Excerpt from Sanborn (1914) Fire Insurance Maps of Baltimore showing historic occupation of 18BC83 (Rets and Diggs Johnson)
Figure 22. Site plan of Property 3.(Rets) showing the location of testing areas and identified features.
Figure 23. Soil profile from Trench 49 showing natural and disturbed areas

I: 10YR 5/3 BROWN LOAMY CLAY
II: 10YR 3/2 VERY DARK GRAYISH BROWN CLAYEY SAND
III: 7.5YR 4/6 STRONG BROWN SANDY CLAY
IV: 5Y 6/1 GRAY CLAYEY SILT
V: 2.5Y 6/2 LIGHT BROWNISH GRAY CLAY MOTTLED WITH 2.5 6/4 LIGHT YELLOWISH BROWN CLAY
VI: 5Y 6/1 GRAY CLAYEY SILT
lower strata represented sterile marine clays. This shallow disturbance was present throughout peripheral areas of the Diggs-Johnson and Rets properties; those areas not directly affected by the demolition of the Diggs Johnson school building.

One hundred fifty-nine artifacts were recovered from Trenches 48-52. Of these, 20 per cent (n=32) were samples of architectural materials, including 9 brick fragments, 2 mortar fragments, 2 roofing slate fragments, 4 nails, 11 window glass fragments, and 4 pipes or fixtures. Seventy-five per cent (n=118) of the items recovered were kitchen-related materials, including faunal remains, ceramics, and glass. Of the 24 faunal items, 17 were oyster or clam shells; the remainder were large mammal bones. Ceramic types recovered included redware (n=9), creamware (n=4), pearlware (n=15), whiteware (n=28), ironstone (n=2), porcelain (n = 6), stoneware (n=13), lusterware (n=2), and yellowware (n=5). Of the 10 glass fragments, 1 was table glass, and the remainder were unidentifiable. Eight items of miscellaneous modern debris, including styrofoam, plastic, felt, and coal, also were recovered. Most of the items recovered from the RETS property dated from the late nineteenth or early twentieth centuries, and were associated with domestic occupation of the block prior to the construction of the Diggs Johnson School. Materials from earlier time periods, such as creamware and pearlware sherds, were found in mixed contexts containing later and modern materials, as well as architectural debris.

Ten backhoe trenches (T-44-46, 48-52) also were excavated in the vicinity of the Diggs-Johnson School, which is bounded by West Lee Street on the north and by Russell Street on the west. Trenches 44-46, located within the eastern portion of the site, were designed to investigate the rear yard areas of dwellings along Welcome Alley, which historically had bisected this block along an east-west axis (Figure 24). These trenches also were placed to avoid the disturbance caused by the construction and later demolition of the school building.

Soil profiles within these trenches reflected several demolition and filling episodes (Figure 25). These were represented by 40 to 80 cm (15.75 - 31.50 in) of clay fill containing architectural debris which underlay the surface layers of macadam and gravel (Levels 1, 2 and 3 in Figure 25 [top]). Below these destruction and fill levels, either a buried A horizon, or sterile subsoil was present. Where the dark grayish brown (2.5Y4/2) sandy clay A horizon had been removed prior to filling, the sterile light olive brown (2.5YR5/4) sandy clay subsoil was immediately overlain by fill episodes. This subsoil graded into yellowish brown (10YR5/8) to dark gray (10YR4/1) silty clay at a depth of approximately 2.20 m (7.22 ft) below surface. The presence of this silty clay indicates the marine or marshland origins of this portion of the project area.

Three features (4501, 4701, 50A01) were identified as a result of these investigations. Feature 4501 was a deposit of organic soils containing cultural materials and architectural debris. Forty-four items were recovered from the trench level in which this feature was identified. These included two architectural items: a brick fragment, and a marble fragment. Thirty-nine items were kitchen-related: nine were faunal remains, including 2 bones and 7 shells (2 oyster, 5 clam); three were unidentifiable bottle glass; and the remainder were ceramic fragments. Ceramic types represented included whiteware (n = 20), pearlware (n = 1), porcelain (n = 1), and domestic gray stoneware (n=2). Three miscellaneous items consisted of two pieces of coal and one cement fragment.

Feature 4501 was tested further to determine its nature, extent, and integrity. Two 1 x 1 m test units (EU-1 and EU-2) were placed in the enlargement of Trench 45 (T-45A). Excavation Unit 1 yielded 32 artifacts: architectural items (one brick fragment and one window glass fragment); 15 kitchen-related items, including two shells, five bones, five sherds of whiteware, and one fragment of bottle glass; and miscellaneous items such as one rock and one fragment of unidentifiable metal. Twelve shoe leather fragments were recovered.
Figure 24. Site plan for property 5 (Diggs Johnson) showing the location of testing areas and any identified features.
Figure 25. Soil profile from Trench 42 (top) and Trench 45 and Test Unit 2 (bottom) showing fill and destruction material over natural strata.
Excavation Unit 2 yielded an additional 157 items from a single level. These items included 13 samples of architectural materials: six brick fragments, one mortar fragment, two nails, two window glass fragments, and two fragments of plumbing fixtures. The kitchen subassemblage from unit 2 contained 105 artifacts: 11 shell and 24 bone fragments; 68 sherds of ceramics (redware (n=6), creamware (n=1), pearlware (n=25), whiteware (n=22), yellowware (n=1), porcelain (n=8), buff-bodied earthenware (n=1), fragments of domestic grey and brown stoneware (n=4); and fragments of unidentifiable bottle glass (n=2). Nine items were miscellaneous fragments of rock, coal, wood, cement, flower pot, and unidentifiable metal. The remaining artifacts represented items of clothing, including 29 fragments of shoe leather and one bone bead. The unusual number of leather shoe fragments suggested that perhaps a cobbler had been active at this location. However, a sampling of occupations represented by residents of this block during the nineteenth century failed to identify a shoemaker, cordwainer, or cobbler in this vicinity.

The ceramics recovered from test units in this area indicated a date range of domestic occupation that spanned the mid-nineteenth through the early twentieth centuries. This period of residential occupation represented land use prior to the construction of the Diggs-Johnson School. However, the soil matrix from these excavation units showed mottled clays and sand over very dark gray clay, indicating that the deposit represented a fill episode as well as mixing from demolition activities (Figure 25).

Although sub-surface disturbance was minimal in the RETS portion of the site, no intact subsurface features were identified there with the exception of the foundation identified in Trench 50. No associated intact features or activity areas were identified. The nature of the stratigraphy recorded in the area of Welcome Alley indicates that materials resulting from several destruction episodes were spread in layers or lenses over the rear yards of homes along Welcome Alley. This is consistent with large-scale landscaping that would have accompanied the razing of rowhouses in this area, the realignment of the road grid, and site preparation prior to large-scale construction. The remainder of the Diggs-Johnson School site showed evidence of severe disturbance, and no intact subsurface features were identified.

Due to the lack of intact features, site 18BC83 did not possess the potential to contribute substantially to our understanding of urban domestic activities in the late nineteenth and early twentieth centuries. It did not retain significant research potential as defined by National Register of Historic Places criteria (36 CFR 60.4 [a-d]).

Property 6: Baltimore Sign and Site 18BC84 (Property 10): Southern Seafood

Archival Results. The Southern Seafood and Baltimore Sign Company properties represented some of the oldest commercial properties in the Maryland Stadium project area. This area retained its original street configuration. Eutaw Street formed the eastern boundary of the two properties, and Conway and Barre Streets represented the northern and southern perimeters, respectively. Wayne Street (known originally as Homespun Alley, and later Houser Street) split the two tracts, and historically demarcated a boundary between residential and commercial development.

Tax Assessors' Record Books for 1838 illustrate this point. William Gist, a long-time resident of the Camden Yards area, owned 126 ft of property frontage at the southwestern corner of Conway and Eutaw Streets, and two large contiguous lots with a total of 150 ft of frontage along the south side of Conway Street. The two Conway street lots were occupied by Gist's "Brick Chemical Factory, outhouses, machinery, etc.,” and by a "two-story frame dwelling with brick back
building" (Tax Assessors Record 1838:Ward 11,210). By 1858, the Eutaw Eagle Works Company occupied the formerly vacant southwestern corner of Eutaw and Conway Streets.

However, the Eutaw Street block between Homespun Alley and Barre Street was almost entirely residential (Figure 26). Twelve structures lined this portion of the street; not all of these conformed to the typical nineteenth century Baltimore townhouse pattern of a two to three story brick building with a rear ell. For example, Michael Warner's property, located three doors south of Homespun Alley, was described as a one-story brick and frame house; Jared Badger, a drayman who lived two houses further south, also lived in a frame dwelling (Tax Assessors’ Books 1838:Ward 11, 125). This discrepancy suggests that some of these residences may have been constructed before major development was initiated during the late 1820s.

By the late nineteenth century, several large warehouse buildings had been built on the former Gist tract at the corner of Conway and Eutaw; these warehouses stored agricultural implements, furniture, and flour and feed (Figure 26). The space on Gist's Conway Street lots was occupied by Aultman's Farm Machinery Company and a wood warehouse. Eventually, Baltimore City Cold Storage and the Eutaw Beef Company occupied the Eutaw Street warehouses; similar food and commodity storage establishments remained in this location until well into the twentieth century (Sanborn 1890:1,14; Sanborn 1901: 1,10/50; Sanborn 1914/51:1,6).

Domestic units remained on the Southern Seafood site until the early twentieth century. In 1911, the Baltimore city directory listed the occupant of 416-430 South Eutaw Street as the Baltimore Refrigerating and Heating Company. This firm manufactured approximately 250 tons of ice per day, and it supplied steam heat for major businesses in the center of Baltimore; their cold storage warehouses were advertised as "the largest plant in the city" (Polk 1911). The facility was acquired the following year by the Terminal Freezing and Heating Company, whose complex also included a cold storage warehouse and an engine room located on the former site of Gist's Brick Chemical Factory (Sanborn 1914:1,6). Rebuilt in 1928, the Eutaw Street refrigerated warehouse was acquired by Southern Seafood Corporation in 1977.

Archaeological Results. Six backhoe trenches (T-23 - T-27, including T-24A) were excavated within the northeastern portion of this property (Figure 27). The western portion of the property, occupied by the Baltimore Thermal Company, was eliminated from the high probability category during the initial disturbance study.

The soils encountered here were urban soils composed of clay and sand fill, and architectural debris (Figure 28). Two features (2401, 2501), both of which were stone foundations, were identified. The foundations and basements in this area were filled with brick rubble containing very little soil.

A sample of 72 artifacts was retained from these test trenches. Of these, 31 artifacts were architectural materials, including brick and mortar fragments, wire and cut nails, hardware items, window glass, and miscellaneous items such as electrical wiring, ceramic plumbing fixtures, roofing slate, and marble. These items reflect the commercial/industrial character of this portion of Camden Yards prior to the construction of Southern Seafood, Inc.

Thirty kitchen-related items also were recovered from tests within this site. These included clam or oyster shell fragments (n = 8), and bone (n = 1). Twelve ceramic fragments were recovered. Types of ceramics included creamware (n = 2), pearlware (n = 4), whiteware (n = 2), and porcelain (n = 3). Eight fragments of bottle glass, four unidentifiable and four machine made, constituted the remainder of the kitchen-related items. The 10 miscellaneous items included an ink bottle, a jackknife, tin foil, coal (n = 2), charcoal (n = 3), slag, and unidentifiable metal. All of these materials...
Figure 26. Excerpt from Sanborn (1914) Fire Insurance Maps of Baltimore showing historic occupation of Properties 6 and 10 (18BC84)
Figure 27. Site plan of 18BC84 (Southern Seafood) showing testing pattern and identified features
Figure 28. Profile of Trench 25 showing destruction disturbance
were associated with filling or destruction episodes, and had little value as indicators of historic occupation and use of this portion of the project area. Filling and construction associated with successive residential, commercial, and industrial uses of these portions of the Camden Yards area have impacted any subsurface features that may have been associated with earlier domestic occupations of the block. Due to these activities, neither Property 6 nor Property 10 retain the potential to contribute to our understanding and knowledge of nineteenth century development and occupation of the Camden Yards area.

18BC85: Property 9 (Ramcor)

Archival Results. Property 9, which included Site 18BC85, was bounded by Eutaw Street to the east, West Lee Street to the south and west, and Barre Street to the north. However, before Lee Street was realigned ca. 1900-1914, it formed only the southern boundary of this area, and Little Green Street extended south to bisect the Property 9 parcel. Excavations within Property 9 focused on a series of stone foundations fronting along Eutaw Street, and on Feature 7701, a stone foundation located approximately 18.29 m (60 ft) southwest of the original intersection of Little Green and Barre Streets. The location of Feature 7701 coincided with the premises at 505 and 507 (originally 136 and 138) West Barre Street; the specific history of these lots is reviewed below, after discussion of the trajectory of land use change in the Property 9 area.

Warner and Hanna’s 1801 map (Figure 3) showed that the property in this vicinity originally was occupied by a rope walk, an enterprise that manufactured lines and rigging for sailing vessels. George Warner, Jr., was listed as the major property-owner in the area in 1837; both maps and tax assessment records indicated that, as late as 1837, the area had not been developed. Sidney and Neff’s 1851 map (Figure 4) depicts a single structure at the southwestern corner of Little Green and Barre Streets; however, the level of cartographic detail is not sufficiently specific to indicate the type of structure that stood there.

By the mid-nineteenth century, development of the area around Property 9, especially along Eutaw Street, was well underway. Domestic residences had been constructed on most of the Eutaw Street lots by 1858; the single exception was George Warner’s four-story warehouse building at the northwestern corner of Eutaw Street and Welcome Alley. These dwellings appear to have conformed to the standard Baltimore townhouse plan: two or three story brick dwellings with back "ell" additions. However, several buildings along Eutaw Street were listed as frame structures (Tax Assessors’ Records 1858). Several dwellings apparently were unoccupied; crosschecking between property owners listed on the assessment rosters and city directory listings for the same year indicated that several lots and structures were owned by investors or absentee landlords (Woods 1858). The development of dwelling units as rental properties in this area is parallel to the trend that had occurred 20 years earlier along Conway Street.

By the late nineteenth century, commercialization of the Eutaw Street section of the block had displaced some residential properties and modified others. The businesses located along this block of Eutaw Street included several stores, a cooper shop, a stable, the J. Siehler Cabinet Factory, and A. J. McFredericks’ Stone Yard and Offices. Lemkuhl’s Bottling Works occupied George Warner’s ca. 1855 four story warehouse (Sanborn 1890:1,15). Ten years later, the Chesapeake Telephone Cable Company had appropriated the former stone yard premises as a storage and warehouse area, and the Schlitz Brewing Company had absorbed Lemkuhl’s earlier establishment (Sanborn 1901:1,50). Both the 1906 Bromley and the 1914 Sanborn maps showed that C. T. Kenny and Company, a wholesale grocer, occupied the lots between 520 and 526 South Eutaw Street, while A. A. Gassinger and Sons Table Factory occupied the northern section of the
block. By 1951, the Eutaw Street portion of this property was occupied almost entirely by the warehouses of the Consolidated Grocer's Corporation (Sanborn 1914/1951).

Late nineteenth to early twentieth century residents in the area mirrored both the economic and the demographic trends of the period. For example, 71 per cent of the families remaining in the 500 block of Eutaw Street by 1900 were first generation English, Irish, German, and Italian immigrants. Children in these families often remained single and lived at home, apparently to help support the family; some households also took in boarders, presumably to help financially. Sixteen (59.2 per cent) of the 27 offspring in the seven households along this section of Eutaw Street, ranging in age from 14 to 46, were employed. Their occupations represented both skilled jobs such as glassblower and telegraph operator, and unskilled jobs such as teamster and laborer. Six of the seven employed women worked in the needle trades (U.S. Census 1900).

As indicated above, one archeological feature (Feature 7701) appears to have been associated with a dwelling that stood at 505 West Barre Street. During the late 1830s, this area of vacant unimproved land was divided into three large parcels owned by Anthony Miltenberger, William Krebs, and Michael Warner (Tax Assessors Records 1838); interestingly, all were brickmakers and all were related by marriage.

By 1851, these major landholders apparently had subdivided and sold portions of their parcels; Sidney and Neff's map depicts a structure on the southwest corner of Barre and Green Streets. Tax assessment records indicate that at mid-century, the lot at 505 Barre Street was part of a larger parcel owned and occupied by W.H. Mayer, a grocer (Tax Assessors Records, 1858; Woods 1858-9). Improvements on the lot in 1858 consisted of a single three-story brick dwelling, probably Mayer's residence.

Mayer subsequently subdivided his property. Later detailed maps of the City of Baltimore (Figure 29) clearly show three dwellings on the former Mayer parcel. The dwelling at 505 West Barre is shown as a typical three-part Baltimore rowhouse: a 3-story main brick dwelling unit facing the street; a two story "ell" addition to the rear, and a single-story ell attached to the rear of the two-story addition.

By 1880, the entire block of Barre Street between Little Green and Warner Streets was lined by similar rowhouses. Their occupants were single families, often with many children. Seventy-five per cent of the block's residents were first-generation German immigrants. The 1880 census indicated that Francis Friedlin, a varnisher from Prussia, lived at 505 West Barre Street with his wife and four children (U.S. Census 1880). All of the structures between 501 and 507 West Barre Street were demolished prior to 1914, when a concrete access ramp to the Lee Street viaduct was constructed (Sanborn 1914:1,28).

Archeological Results. Eight trenches were excavated within Property 9, bounded by Properties 6 and 10 on the north, Eutaw Street on the east, and West Lee Street on the south and west (Figure 30). Of the five features recorded, three (7301, 7502, 7801) were brick foundations derived from row houses or commercial structures that stood in this area during the late nineteenth and early twentieth centuries. One feature (7501) consisted of brick paving from the historic location of Little Green Street. Soil profiles within these trenches showed essentially intact natural stratigraphy (Figure 31) interspersed with disturbed areas resulting from several episodes of demolition, filling, and construction.

Trench 77, a 5 m (16.40 ft) long trench running east-west from the southeastern corner of Property 9, north of West Lee Street, was one of the few excavations at the project area that exhibited an undisturbed stratigraphic sequence. In most cases, the nineteenth century structures
Figure 29. Excerpt of Sanborn (1890) map of project area, showing the boundaries of Property 9 (Ramcor), and the location of Feature 7701
Figure 30. Site plan for 18BC85 (Ramcor) showing the testing pattern and any identified features
Figure 31. Profile of the north wall of Trench 72 showing natural and disturbed stratigraphy

I: 10YR 5/3 BROWN SANDY CLAY
II: 10YR 5/8 BROWNISH YELLOW SANDY CLAY
III: 10YR 3/1 VERY DARK GRAY SANDY CLAY
IV: 2.5YR 7/0 LIGHT GRAY SANDY CLAY MOTTLED WITH 10YR 6/8 LIGHT YELLOWISH BROWN CLAYEY SAND
IVA: 10YR 7/8 YELLOW COARSE SAND
V: 7.5YR 6/8 REDDISH YELLOW COARSE SAND
that formerly stood in this area appear to have been razed, with the resultant debris having been used to fill the basement cavities. Thus, few data remained to provide information about early site formation processes or site use. The demolition of the buildings along Eutaw Street almost certainly occurred between 1901 and 1914, when the previously mentioned Lee Street vehicular viaduct across the Baltimore and Ohio Railroad yards was built. Excavation in Trench 77 revealed Feature 7701, a stone wall foundation with a plainly visible builder's trench (Figure 32).

Feature 7701, a stone foundation, merited further investigation because of its association with undisturbed primary cultural deposits. Three 1 x 1 m test units were excavated within Trench 77; these units extended to 1.85 m (6.07 ft) below ground surface. The profile of these test units showed the deposition of several layers of fill and architectural debris over the stone foundation. A builders' trench was recorded in association with the foundation. Materials recovered from these tests indicated late nineteenth century construction and occupation of the building.

A 1 x 1 m excavation unit was laid out to capture the builder's trench. The builders trench was excavated in three soil strata, referred to as Levels 4A, 5A, and 6A. The two uppermost levels, though they consisted of different soil types (Level 4A was described as 10YR4/6 dark yellowish brown mottled coarse sand, while Level 5A was 10YR5/4 yellow brown coarse sandy clay), shared the same terminus post quem, 1840, based on the presence of flow blue transfer printed ware. The deepest level of the builder's trench, Level 6A, exhibited the same soil description as Level 5A, but a slightly earlier terminus post quem of 1820 was derived from its latest datable object, plain whiteware. Since the builder's trench was filled no earlier than 1840, the building's construction occurred after that time.

Stratigraphy adjacent to the builder's trench, in Unit 3, included a 7.5YR5/8 strong brown coarse sand and gravel, with a date of at least 1820 based on the presence of plain whiteware. The deepest stratum in this excavation unit, described as 7.5YR6/0 gray clay, also contained plain whiteware and also dated from 1820 or later. The stratigraphy and the terminus post quem dates suggest that the strata in this area all were deposited at approximately the same time, and that they may represent ground surfaces that existed prior to the construction of the buildings.

The generally domestic nature of the artifact assemblage, consisting largely of ceramics, glass, and other household refuse (Appendix V), in conjunction with the archival data, suggested that Feature 7701 was associated with a residential occupation. It is probably that of the house at 505 West Barre Street, depicted on the 1890 Sanborn Fire Insurance map (Figure 29).

Kitchen wares, both table ware and utilitarian pieces, dominated the artifact collection; faunal remains, including oyster and clam shells, and beef jaws, also were recovered. The ceramics from the lowest strata included undecorated and handpainted creamware, overglazed Chinese export porcelain, and some transfer-printed pearlware. These pieces, indicative of an earlier nineteenth century occupation, may relate to the period during which Mayer owned the property. Ceramics recovered from upper levels included increasingly frequent shers of whiteware, coarse red earthenware, and salt-glazed stoneware. No modern material was recovered from these sealed contexts.

The range of ceramics present suggested that overall occupation of the site began during the second quarter of the nineteenth century, and continued through the later nineteenth century. The row houses in this area were built sometime after 1850; a post-1850 construction date corresponds closely to the date derived from the contents of the builders trench, which indicated a construction date after 1840.
Figure 32. Plan and profile of Trench 77

PLAN VIEW

TU-4

10YR7/3 VERY PALE BROWN MORTAR & ROCK

7.5YR6/8 BROWNISH YELLOW CLAYEY SAND WITH GRAVEL

SOUTH WALL

PROFILE

I MACADAM
II GRAVEL
III 5YR7/8 REDDISH YELLOW CLAYEY SAND
IV 10YR5/3 LOAMY SAND WITH RUBBLE
V MOTTLED 2.5Y6/6 and 2.5Y6/8 OLIVE YELLOW SILTY CLAY
VI 2.5Y6/6 OLIVE YELLOW SILTY CLAY
VII 2.5Y7/2 LIGHT GRAY SANDY CLAY
VIII 7.5YR6/6 REDDISH YELLOW SANDY CLAY
IX 10YR4/2 DARK GRAYISH BROWN SANDY CLAY
X MOTTLED 7.5YR5/8 STRONG BROWN CLAY and 10YR4/6 DARK YELLOWISH BROWN SAND
XI 2.5Y3/2 VERY DARK GRAYISH BROWN SANDY CLAY
XII 10YR4/4 DARK YELLOWISH BROWN SANDY CLAY
XIII 7.5YR6/0 GRAY CLAY
XIV 10YR7/3 VERY PALE BROWN SAND/MORTAR

SOUTH WALL

0 100 cm
Archival Results. This property included all of a block bounded by West Street on the north and Ostend Street to the south; Warner and Russell Streets formed the eastern and western perimeters of the property, respectively. Historically, Claret Alley bisected this block in a north-south direction between Warner and Russell Streets. Property 12 lies at the extreme southwestern corner of the project area; as such, it was one of the last sections of the Maryland Stadiums project area to be developed.

The first map depicting structures on this property is the G. M. Hopkins (1876) Atlas. This map suggests that townhouses may have been present along the West Street side of the two half-blocks. This map also portrayed an unnamed industrial complex in the extreme southwestern quadrant of the property. Late nineteenth and early twentieth century Sanborn Fire Insurance maps (1890, 1901) showed that residential development occupied the northern side of the property, but that the southern sections of the two half-blocks were occupied by various industrial complexes (Figure 33). In 1890, these included the A. Pfiel and Company Barrel Manufacturing Company, the F. M. Blume Moulding Company, and W. Rittler and Company (Sanborn 1890:1). At the turn of the century, the Rittler and Blume complexes had been taken over by the Feuss and Prather shoe factory (Sanborn 1901:1,60).

Property 12 was one of the few areas in Camden Yards where the normal developmental sequence present elsewhere in the neighborhood was reversed; e.g., industrial development was razed to make way for residential construction. Both Sanborn's 1914/51 Fire Insurance map, and the City Engineering Map of Baltimore (1940), suggested that most industrial development was removed from Property 12 during the early twentieth century. A church occupied the lot at the corner of Claret Alley and Ostend Streets. The single commercial enterprise that remained in this block was a motor freight station that occupied a large parcel in the middle of the Russell Street side of the property.

Archaeological Results. Eight trenches (T-64 through T-71), placed to test the extent and integrity of remains of row houses in this vicinity, were excavated within Property 12 (Figure 34). Artifacts were recovered from only two of these test trenches (T-66 and T-71). Two features were identified (F6601, F6701); both were brick foundations of row houses, found in association with rubble fill resulting from the destruction of the houses that once occupied this portion of the block (Figure 35).

Thirty-four artifacts were retained from Test Units 66 and 71. Of these, 23 per cent (n=8) were architectural, including brick, slate and window glass. Kitchen-related items (n=14) represented 41 per cent of the total assemblage recovered; non-diagnostic or machine molded container glass comprised most of the kitchen-related items, in addition to oyster shell, whiteware, and Bristol-glazed stonewares. Miscellaneous items (n=12; 34 per cent) included fragments of metal cans, shoes and stockings, and plastic fragments. The artifacts obtained from these test units underscored the relatively recent residential occupation of this section of the Camden Yards project area. The disturbed nature of the soils, as well as the nature of the artifact assemblage retained from test trenches, indicate that Property 12 (18BC86) retains little potential for intact resources that could add significantly to our knowledge and understanding of early commercial and residential development of Baltimore.
Figure 33. Excerpt from Sanborn (1914) Fire Insurance Maps of Baltimore showing historic occupation of 1880s (Heat and Power)
Figure 34. Site plan for 18BC86 showing the testing pattern and location of identified features
I: 10YR 5/3 BROWN SANDY LOAM
II: 10YR 5/8 YELLOWISH BROWN COARSE CLAYEY SAND
III: 10YR 4/4 DARK YELLOWISH BROWN COARSE LOAMY SAND (FILL)
IV: 10YR 7/3 VERY PALE BROWN SAND WITH >80% BRICKS, MORTAR AND MODERN DEBRIS
V: 7.5YR 2/0 BLACK COAL/ COAL ASH
VI: 7.5YR 5/8 STRONG BROWN COARSE SAND WITH GRAVEL

Figure 35. Profile of the south wall of Trench 67 showing natural and disturbed stratigraphy
CHAPTER V
RESULTS OF INVESTIGATIONS: PROPERTY 1

At the onset of this project, the B. Green Warehouse, a large grocery wholesaler (Property 1) occupied all of Block 688 and part of Block 862. Before the construction of the warehouse complex, these blocks were bounded by West Conway Street on the south, Paca Street on the north, Little Paca Street on the east, and Warner Street on the west; Little Green Street served as the division between these blocks. Both blocks also were bisected by Burgundy Alley, which ran in an east-west direction between Conway and Paca Streets. Intensive archeological testing and archival research were applied to this block, because it presented the optimum potential for revealing the sequence of social change in the project area.

Archeological investigations, which were undertaken just prior to and after demolition of the B. Green Warehouse, identified four archeological sites on Property 1. Three of these sites were associated with specific lots within Blocks 688 and 862: the Ruth Saloon Site, 18BC79 (406 West Conway Street); Privy R-3, 18BC81 (424/426 West Conway Street); and Privy 19A01, within Site 18BC80 (503/505 Burgundy Alley). The remainder of Property 1 was designated Site 18BC78. With the exception of the B. Green Warehouse, which was razed while archeologists were in the field, no structures were standing on the property at the time of archeological research.

General Archival Background

Blocks 688 and 862 originally lay within two tracts known as Ridgely's Delight and Lunn's Lot. Parts of these tracts were purchased by George Warner, and by John and Peter Albright, all brickmakers during the late eighteenth century (Baltimore County Land Records Index WG HH:117). Warner bought two four-acre parcels in this section of Ridgely's Delight in 1798 (Land Records WG 57:142-4); however, the area southwest of Eutaw and Conway Streets remained undeveloped at the beginning of the nineteenth century (Warner and Hanna 1801) (Figure 3).

By Warner's death in 1829, development of this section had begun, but the sequence of that development is somewhat unclear. Lucas' 1822 map of Baltimore indicated that Block 688 had been partially developed; however, contemporary city directories suggest that residential development was concentrated primarily along Eutaw Street, and on the streets and alleyways north and east of Conway Street (Matchett 1824). Most early nineteenth century residents of the area were unskilled workers, or individual entrepreneurs such as brickmakers, carpenters, laborers, grocers, inkeepers, or bakers (Fry 1810; Matchett 1824). Dwellings of African American residents clustered in Brandy Alley east of the project area, and along South Eutaw Street.

Warner's will divided his property between his wife and his children (Baltimore County Wills WG207:224-231). The portion containing Blocks 688 and 862 was inherited by his daughter, Dorothy, who married Anthony Miltenberger in 1811; Miltenberger was a cigar and tobacco manufacturer (Barnes 1978; Matchett 1838). By 1830, the Miltenberger household included six persons, including two free African American female servants (U.S. Census of Population 1830). Land records show that in 1831 Anthony Miltenberger obtained a 99-year lease on two two-story brick houses located on the northwest side of Conway (also called Jefferson) Street (Land Records WG 214:279). The 1837 Baltimore City Tax Assessors Records identified Anthony
Miltonberger as the largest property owner in Block 688 (Baltimore City Tax Assessors Records 1837:123).

After 1830, subdivided lots on the original four-acre Warner/Miltonberger tract were sold to a variety of owners, who apparently viewed their properties as investments. By 1837, two-thirds of the houses on Block 688 were occupied by tenants rather than by owners (Tax Assessors Records 1837:123). A profile of the occupants of these dwellings revealed a settlement pattern characteristic of a pre-industrial city, where town lots served as both home and workplace for artisans and merchants (Wall 1987:66).

The first house lots to be developed within Block 688 probably were those on South Paca Street. Most of these dwellings were substantial townhouses with basements. In 1837, the occupants were approximately evenly divided between owners and renters; however, judging from their listed occupations and from the tax assessors' records, all would have been considered upper middle class. They included Michael Warner, Jr., a brickmaker, and several other merchants and manufacturers, two of whom were slaveholders.

Most buildings in the 400 block of West Conway Street also were residential structures, except for the building at Green and Conway Streets, which contained both a dwelling and a retail store. While most lots on Conway Street were between 18 and 21 feet wide, and 115 feet deep, Anthony Miltonberger's mid-block lot was twice as wide. Most structures on these properties were two and one-half story brick dwellings with a "brick back building" (probably an ell addition); none had basements. A few lots also had stables, carriage houses, and/or brick dwellings on Burgundy Alley (Tax Assessors Records 1837). The owners of these properties were largely middle to upper-middle class entrepreneurs who owned businesses in other parts of town. Five property owners were women; three residents of the block owned slaves. Several dwellings were leased; tenants included a grocer, a lumber merchant, a broker, and another brickmaker (Tax Assessors Records 1837; Matchett 1837-1838).

Between 1837 and 1858, both the economic character of this neighborhood and the socio-economic status of its residents began to change. Several industrial enterprises were established on the northern and western fringes of the project area; these included the Washington Iron Foundry on West Conway Street, and the Eagle White Lead Works, William Gist's chemical factory, and the Eutaw Shot Tower, near the intersection of Eutaw and Conway Streets (Tax Assessors Records 1837, 1857). The occupational profile of the neighborhood's residents also changed; tenants in the area included tavern-keepers, produce brokers, bank tellers, varnishers, saddlers, druggists, clerks, a conductor on the Baltimore and Ohio Railroad, and a policeman (Matchett 1842).

African American occupation in the area also was increasing. By 1858, 22 small dwellings along Burgundy Alley were occupied by free African Americans. Nineteen percent of these African American residents were female, including two listed as heads of household; however, only four "family" groups were identified. African American residents were employed as brickmakers (28.6 per cent); laborers/porters (28.6 per cent); washerwomen (14.3 per cent); and as seamen/sailors (9.5 per cent); there also was one waiter, one drayman, one firefighter, and one grain measurer (4.7 per cent each) (Woods 1858-1859).

Large-scale commercial development began to encroach upon residential space on Conway Street at the end of the nineteenth century. Warehouses, stores, and major manufacturing enterprises faced the Baltimore and Ohio Railroad warehouse complex along Eutaw Street, and stood along the south side of Conway Street. Several dwellings in Block 688 were converted to commercial uses, including retail stores, a funeral parlor, paper and cigar box
factories, and a commercial bakery (Sanborn 1890:1,14). The small Burgundy Alley dwellings had been converted to or replaced by stables and other service structures. By 1914, only six structures on Burgundy Alley and eight properties on Conway Street continued to serve as dwelling units (Sanborn 1914:1,28). The remaining dwellings, formerly occupied by single families, were subdivided into apartments and rooming houses as residential space became scarce.

The racial and ethnic character of the neighborhood’s population shifted again during the late nineteenth century. “New” immigrants such as Italians, and increasing numbers of African Americans, moved into the neighborhood. Most of the population occupied multi-family dwellings, and most worked at poorly paid unskilled or semi-skilled jobs. For example, six African Americans--four males and two females--occupied the former undertaking establishment at 404 West Conway Street; all were employed in semi-skilled service-oriented occupations, such as waiter, day laborer, porter, drayman, laundress, and charwoman. Four second-generation Irish and German families lived at 422 West Conway Street; their occupations included can-capper, day laborer, errand boy, musician, and seamstress. Several recently arrived Italian families lived in the adjacent dwelling (U.S. Census 1900).

During the ensuing 25 years, commercialization of the Conway Street neighborhood replaced virtually all residential housing, and created ever more crowded living conditions. By 1928, the premises between 408 and 432 West Conway Street were occupied by the Baltimore Hanger Company, Benson Brothers Auto Repair, the Maryland Lacquer Company, the Kugler Furnace Company, the Walters Chemical Company, and the Hogan Food and Produce Company. Only twelve dwellings survived at the western end of the block (Polk 1928:pass/m).

In contrast, Block 862 (500 block of West Conway Street) remained almost entirely residential until its demolition. 1900 census data for this block suggested that the same demographic trends evident for Block 682 also occurred here: multiple or extended family occupancy; mixed racial and ethnic character; and employment in semi-skilled occupations. Most residents of the block did not own their homes (Polk 1928:pass/m). A few small-scale individual business enterprises, such as stores and beauty shops, were interspersed within the residential properties.

Site 18BC78: Property 1

Archival Results. Commercial warehouse and storage facilities occupied a large portion of the western side of South Eutaw Street during the nineteenth century; their construction was related directly to the establishment of the Camden Station and Warehouse complex. By 1867, at least four produce merchants and brokers operated businesses on Eutaw Street between Camden and Conway Streets (Woods 1867:pass/m). By 1914, the sites of these buildings had been taken over by large-scale corporate meat processors such as the Swift and Armour Packing Companies (Sanborn 1914:1,28).

Residential structures occupied the short block between Perry and Conway Streets until the early twentieth century; however, many of these structures also housed commercial enterprises. In 1890, five of the twelve structures between West Alley and Conway Streets were identified as stores (Sanborn 1890:1,14). The residence/retail business located on the northwestern corner of Conway and Eutaw Streets in 1900, a saloon operated by German immigrant John C. Miller, probably was typical of these commercial operations. Miller’s extended family, including his wife, his widowed sister, and her four children, lived on the upper floor of the two-story building (U.S. Census 1900). By 1914, only six of the original twelve townhouse
dwellings on this block remained, and 50 per cent of the remaining buildings incorporated retail establishments (Sanborn 1914:I, 28).

**Archeological Results.** The majority of Property 1 was designated as Site 18BC78 (Figure 36). Two groups of features were encountered within this site. The first group represented structural foundations and ancillary features for buildings that fronted on Eutaw Street between Camden and Conway Streets. The second group represented remains of structures that fronted on Conway Street.

Thirteen trenches (Trenches 1-9 and 13-17) were excavated within this site; 26 features were located within these trenches. Features encountered in Trenches 1-7 were associated with row house or warehouse foundations, and with related features such as pipe trenches and sewers, along Eutaw Street. Trenches 8-16 were placed to test for features associated with nineteenth century rowhouse foundations along the 400 block of Conway Street. Soils in these trenches consisted mainly of fill and redeposited soils typical of the Urban Land complex mapped for this section of Baltimore (USDA 1990:213).

Artifacts recovered from Trenches 1-9 represented three functional categories: Architecture (n=52; 30.6 per cent); Kitchen (n=88; 51.8 per cent); and, Activities (n=30; 17.6 per cent). Architectural items included the full range of building materials: nails, window glass, concrete, brick, mortar, sewer pipe, tar paper, and tile. Container glass (n=44), most of which displayed mold marks, dominated the kitchen subassemblage. Ceramic types included pearlware, redware, whiteware, yellow ware, and late nineteenth century porcelain; whiteware comprised 67 per cent of all ceramics recovered. The activities category was represented by miscellaneous fragments of plastic and metal, a single marble, and an automobile ball joint.

Similar functional categories also were recovered from Trenches 13-17. Architectural material (n=77) comprised 37 per cent of this subassemblage; bricks, mortar, plaster, window glass, nails and other hardware, roofing materials, and tiles were included within this category. Artifacts associated with activities occurred less frequently in this area; only 17 such items (8.2 per cent), including one ink bottle and quantities of coal and slag, were recovered. Kitchen-related materials (n=114; 54.8 per cent) comprised the bulk of this subassemblage; as in Trenches 1-7, whiteware accounted for 67.2 per cent of all ceramics found, and molded container glass was the dominant type.

In general, these two sets of test trenches yielded a mixed artifactual assemblage reflective of the area's initial development during the 1830s, and its use through the twentieth century. The slight difference between the distribution of functional categories of recovered artifacts appears to represent a difference in building use through time. The buildings that stood along Eutaw Street were utilized more frequently and consistently for commercial purposes than those along Conway Street. The more frequent occurrence in Trenches 1-7 of activities related material may be partially attributable to this historically documented difference in orientation between the two locations.

**Site 18BC79: The Ruth Saloon Site (406 West Conway Street)**

**Archival Results.** The first recorded owner/occupant of the 406 West Conway Street property was Frances Whittington (U.S. Census 1830, Land Records LWG 200:106). Mrs. Whittington probably was the wife of Thomas Whittington, an early nineteenth century Baltimore merchant. Administrative records for the Whittington estate specify that Thomas had been awarded damages by the Treaty of Ghent, the treaty that ended the War of 1812 (Baltimore
Figure 36. Portion of the Bromley 1906 Atlas of the City of Baltimore, Maryland, showing the locations of Property 1 (B. Green) (18BC78), and the Ruth Saloon (18BC79), Feature 19A01 (18BC80), and the Privy 3 (18BC81)
County Administration Accounts WK 1021:437). The fact that damages suffered by Americans during this conflict were the result of British interference with American mercantile shipping suggests that Whittington was a merchant.

By 1829, Frances Whittington was a widow. Sources differ on the composition of the Whittington household. The 1830 census listed four female members in the Whittington household; the relationship between the three adolescent residents and the adult female was not specified (U. S. Census 1830). However, land records of the same period suggest that Frances Whittington had only two children; Colonel John Berry had been appointed as the children's guardian, and the Conway Street dwelling apparently had been used as collateral to guarantee Berry's compensation of $350 (Baltimore County Land Records WI 234:401).

Tax assessment records for 1837 described the Whittington house as a two-story brick dwelling, with a two-story rear ell addition, a configuration that remained essentially intact through the nineteenth and early twentieth centuries (Figure 37). The house lot was 22 ft wide and 115 ft deep. After 1837, Frances Whittington no longer occupied the dwelling, although she continued to own the lot; city tax records list John George, a lumber merchant, as a tenant (Tax Assessors Records 1837:123; Matchett 1837).

By the end of the nineteenth century, the structure had become a multi-family dwelling, with a saloon on the ground floor. Its occupants rented the premises, and they tended to be either first generation German immigrants, or of German extraction. In 1880, Frederick Wendler and his wife, both first generation German immigrants, operated the saloon, and Henry Wolf, a German shoemaker, boarded upstairs with his wife. Henry Borcherding, also a first generation German immigrant, operated the saloon in 1900; the six members of the Borcherding family resided above the business (Census 1880:ED143,19; Census 1900:ED7).

George Herman Ruth, Sr., the next saloon proprietor, also was of German extraction. The Ruth family, including his wife, his son "Babe," and his daughter "Mamie," occupied the dwelling between 1906 and 1912. Boarders occasionally were taken in to supplement the family's income. "Babe" Ruth's sister recalled that the lunch clientele at the saloon was made up primarily of the industrial workers from the neighborhood (Mary Ann Moberly, personal communication 1990). The photograph of "Babe" and his father behind the bar at a later establishment on Lombard Street (Figure 38) provides a model for the appearance of a typical early twentieth century saloon.

Archaeological Results. Three trenches were excavated within Site 18BC79; these trenches were placed to intersect the foundations of the structure historically documented as the George Herman Ruth, Sr., Saloon (Figure 39). These trenches and associated features were designated with an R- prefix to distinguish them from other trenches excavated within Property 1. Trench R-1 ran parallel to Conway Street at the front of the lot; Trench R-2 was placed perpendicular to Trench 1 to follow the foundation wall. Features R-1 and R-2 were identified within these trenches. Trench R-3 was positioned near the rear of the lot to test for outbuildings or dependencies associated with the main structure; Feature R-3/5, was identified within this trench. An expansion of this trench northward towards the rear of the historic lot exposed Feature R-4.

Feature R-1 was the brick foundation of the main structure, the end house of a row of townhouses that had extended along the north side of Conway Street. The interior of this foundation was filled with destruction debris, including architectural debris, and clay and sand fill. Feature R-2 was a brick lined coal chute adjacent to the exterior of the foundation wall; it contained the remains of a wooden barrel that had been laid on its side over the chute (Figure 40). Both features were filled with mixed coal, sand, and clay fill. The 797 items recovered from this feature included architectural debris, bottle glass, ceramic fragments, bones, buttons, bedsprings,
Figure 37. Digitized GIS map of the 400 Block, West Conway Street (from Sanborn 1901), showing Ruth Saloon site (18BC79)
Figure 38. George Herman Ruth, Sr., and "Babe" Ruth in the saloon at Lombard and Eutaw Streets (ca. 1917)
Figure 39. Site Plan of the Ruth Saloon site (18BC79) excavations showing limit of investigations and identified features.
Figure 40. Feature R2, the coal chute, at the Ruth Saloon site (18BC79)
assorted toys, and plastic and rubber fragments. Feature R-4 consisted of the brick curb of the
alley at the rear of the lot.

A brick lined privy vault and the overlying two barrel privy uncovered in Trench R-3 were
designated Feature 3/5; Feature 3 designated the brick wall adjacent to the privy, while Feature
5 denoted the brick privy structure, including the original brick shaft, the overlying brick vault, and
the modifications made to accommodate the later two-barrel privy (Figures 41 - 44).

The primary deposit within Privy R-5 was contained within a brick lined oval vault that
measured 2.8 x 1.8 m (9.19 x 5.90 ft). Its base was formed by alternating layers of clay and sand,
and its fill of late nineteenth to early twentieth century artifacts was capped by sandy clay and by
brick and mortar rubble. A second privy had been constructed by setting a new wooden
foundation atop the brick vault; two barrels were placed above the wooden foundation. While
these barrels had decomposed to the extent that their fill had intermingled, they clearly
represented two separate privy holes. The barrel privies dated from the Ruth Saloon occupation;
however, they had been so thoroughly cleaned out after use that virtually no artifacts remained
for archeological analysis. Therefore, analysis of the material culture contained within Feature R-5
was confined to the subassemblage excavated from within the earlier brick-lined privy associated
with the Whittington family.

Artifact Analysis. Artifacts recovered from Feature R-5 have manufacturing dates ranging
from approximately 1780 to 1830. Given this date range, it is likely that this privy deposit
represented the period between 1829 and 1837, when Frances Whittington and her children
occupied the house either with two children, or with three females aged 10 to 15.

A wide range of ceramic wares was recovered from the Feature R-5 privy. These included
both refined wares (creamware, porcelain, pearlware, and whiteware), and utilitarian redware and
stoneware. The 3,836 ceramic sherds from the deposit represented approximately 496 table,
kitchen, and personal hygiene vessels (Table 6); there also were 57 sherds of flower pot fabric,
representing at least six flower pots and six flowerpot dishes. Assuming that only three people
occupied the house at the time the privy was filled, there was a very large number of vessels
(n=165.3) (excluding flowerpots) for each person; the ratio for refined tableware alone also was
very high (142.7 vessels per person). If Frances Whittington lived with three other people, as
suggested by the 1830 census, the number of vessels per person would be reduced slightly.
These numerical variations notwithstanding, the number, variety, and quality of the ceramics
recovered from Feature R-5 clearly reflects both the relatively high socio-economic status of the
Whittington family, and a set of behaviors characteristic of higher status nineteenth century
individuals.

Six major categories of vessels were recognized in the Feature R-5 ceramic
subassemblage; each category incorporated a broad range of vessel forms. Twenty-five distinct
forms were defined, producing an average of 20.3 vessels per form. Teawares, which constituted
the largest vessel category (n=229; 45.1 per cent), included cups, saucers, sugars and creamers,
and tea and coffee pots (Figures 45 and 46). Plates, ranging from 5 in (12.7 cm) "bread-and-
butter" types to 10 in (25.4 cm) diameter dinner plates; soup plates; mugs; and a single knife rest,
all were placed in the tableware category. These tablewares comprised the second highest vessel
type category represented in the collection (n=139; 27.4 per cent). Serving wares (n=71; 14.3
per cent) included refined white-bodied platters, tureens, bowls, pitchers, and 12 utilitarian redware
pieces (Figure 47) that could have been utilized for food service; bowls and tureens outnumbered
platters by a ratio of 8.4 to 1. Thirty-three chamberpots (Figure 48), and a creamware basin and
pitcher set, were placed in the personal hygiene category (6.9 per cent); storage jugs, jars, and
crocks were categorized under the heading of food storage (n=14; 2.7 per cent). The
Figure 41. Plan and profile of Feature R5, the Whittington/Ruth Privy.
Figure 42. Feature R5, the early twentieth century two-barrel privy, at the Ruth Saloon site (18BC79)
Figure 43. Brick wall (Feature R3) and brick-lined privy vault (Feature R5) at the Ruth Saloon site (18BC79), showing wood frame modifications.
Figure 44. Brick foundation wall (Feature R3) and empty privy vault (Feature R5) at the Ruth Saloon site (18BC79)
<table>
<thead>
<tr>
<th>FORM</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>bowl</td>
<td>39</td>
</tr>
<tr>
<td>chamber pot</td>
<td>33</td>
</tr>
<tr>
<td>coffee pot</td>
<td>3</td>
</tr>
<tr>
<td>creamer</td>
<td>3</td>
</tr>
<tr>
<td>crock</td>
<td>4</td>
</tr>
<tr>
<td>jar</td>
<td>8</td>
</tr>
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<td>jug</td>
<td>2</td>
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<tr>
<td>knife rest</td>
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</tr>
<tr>
<td>miniature</td>
<td>6</td>
</tr>
<tr>
<td>mug</td>
<td>6</td>
</tr>
<tr>
<td>plate</td>
<td>125</td>
</tr>
<tr>
<td>platter</td>
<td>5</td>
</tr>
<tr>
<td>pitcher</td>
<td>12</td>
</tr>
<tr>
<td>saucer</td>
<td>90</td>
</tr>
<tr>
<td>soup plate</td>
<td>7</td>
</tr>
<tr>
<td>sugar</td>
<td>6</td>
</tr>
<tr>
<td>tea cup</td>
<td>111</td>
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<td>tea pot</td>
<td>16</td>
</tr>
<tr>
<td>tureen</td>
<td>3</td>
</tr>
<tr>
<td>urn</td>
<td>1</td>
</tr>
<tr>
<td>utilitarian redware</td>
<td>12</td>
</tr>
<tr>
<td>wash basin</td>
<td>1</td>
</tr>
<tr>
<td>wash pitcher</td>
<td>1</td>
</tr>
<tr>
<td>unidentified</td>
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</tr>
</tbody>
</table>
Figure 45. Hand-painted polychrome refined white earthenware tea vessels from Privy Feature R5, the Ruth Saloon site (18BC79)
Top: Four matching tea bowls
Bottom: Two sets of matching tea bowls and saucers

Figure 46. Blue hand-painted pearlware tea set elements from Privy Feature R5, the Ruth Saloon site (18BC79)
(Clockwise): Clear lead-glazed engine-turned coffee or chocolate pot; unglazed flower pot and dish; dark brown glazed pitchers; lead-glazed slip-trailed dishes

Figure 47. Redware vessels from Feature R5 at the Ruth Saloon site (18BC79)
Figure 48. Redware and white earthenware chamberpots from Feature R5, the Ruth Saloon site
"miscellaneous" category (n=18; 3.6 per cent) included the previously mentioned flower pots, as well as an urn and several miniature pieces that might have functioned as toys for the children in the Whittington family.

Excluding unglazed or undecorated lead glazed vessels, 11 decorative techniques were observed on the ceramics recovered from this feature. Variations in the motifs or patterns applied by each technology permitted further differentiation between "sets" of ceramics. Transfer-printed refined white earthenwares occurred most frequently (n=129 vessels; 25.4 per cent). Pearlware tea vessels alone exhibited 41 separate motifs, including the popular "Willow" pattern; "Romantic" rural landscape scenes (Figure 49) that were popular during the 1820s and 1830s (Dyson 1982: 366-376); and other miscellaneous designs (Figure 50), including a Christmas Eve pattern manufactured by Clews (ca. 1817-1832) symbolic of pieces "intended as rack plates in a day when colorful pictures were rare in a working man's home" (Hughes n.d.:132). Handpainted refined white earthenwares, featuring both monochrome blue and polychrome floral patterns (Figure 45 and 46), comprised the second largest category (n=87; 17.1 per cent) of decoration.

Edged decoration appeared most frequently on table and serving wares (Figure 51). Six varieties of edge motifs were observed (Table 7), the most common of which was blue shell edged with impressed curved lines and buds (n=29;39.7 per cent). Miller and Hunter (1990) suggested that these variants were manufactured at slightly different times (Table 7); the date ranges for these types (ca. 1780 - 1840) conform closely to the period of the Whittington occupancy.

Remaining decorative techniques often were specific to certain types of wares. For example, overglaze enameling commonly was utilized on the porcelain teawares in the assemblage. Annular, mocha, and fingerpainted ("dipt") decorations were observed most frequently on serving vessels such as pitchers, mugs, and bowls (Figure 52). Handpainted cobalt floral motifs decorated stoneware storage vessels, while slip-trailed decoration occurred on redware serving vessels. One pearlware chamber pot had been hand-painted to resemble debased "scratch blue," a variety of white salt glazed stoneware commonly produced during the eighteenth century (Noel Hume 1985:118). Noel Hume (1985:148-150) observed that "so successful was the new [salt-glazed] chamber pottery that the pearlware potters copied the same designs." Scratch-blue pearlware was produced as late as the second quarter of the nineteenth century (Noel Hume 1969:395; 1985:150); similar examples have been found elsewhere in Baltimore, and in eighteenth century contexts in New Jersey (Louise Akerson, personal communication 1991; John Seidel, personal communication 1991).

The manipulation of data on ware types, vessel types, and decorative techniques permitted the application of Miller's economic scaling formula to the collection from Feature R-5. Considering the three principal elements of Miller's economic (value) scaling formula (e.g., tea wares, plates, and bowls) together, the assemblage from Feature R-5 yields a figure of 2.06 for the year 1825 (the closest year in Miller's index to 1829). This is considerably greater than the value for plain cream colored ware (1.0) upon which Miller's scale is based, and it clearly is indicative of an upper middle-class household.

Analysis of the largest category, tea wares, suggested that this category of ceramics must have been used not only to serve tea, but to demonstrate a certain degree of wealth and status. All of the teawares were decorated either by hand-painting or by transfer-printing. Miller's economic scaling index (1991) for the year 1825 yields a figure of 2.46 for teawares (based on the 81 tea cups which could be assigned to Miller's index). Comparing this number with the index for plates, 1.82 (see below), it is evident that more money was expended on tea sets than on plates. The statistically significant difference of 0.64 between the two economic index ratings
Top: Soup plate (center) and shallow tea saucers with "Romantic" motifs
Middle: Tea pots with "Romantic" and "Chinoiserie" designs
Bottom: Tea bowls and saucers with "Romantic" and floral motifs in matched sets

Figure 49. Transfer-printed refined white earthenware from Feature R5, the Ruth Saloon site
Figure 50. Brown transfer-printed pitcher with "Romantic" Italianate design: Feature R5, Ruth Saloon site
Top: Large platter
Middle: Three dinner plates, showing Rococo style, “curved line and bud”, and embossed motifs
Bottom: Matched sets of blue- and green-edged tablewares

Figure 51. Edged plates and serving vessels from Feature R5, the Ruth Saloon site.
<table>
<thead>
<tr>
<th>EDGE TYPE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>embossed edge</td>
<td>ca. 1820-1840</td>
</tr>
<tr>
<td>incised straight lines</td>
<td>ca. 1805-1830</td>
</tr>
<tr>
<td>incised curved lines</td>
<td>ca. 1800-1840</td>
</tr>
<tr>
<td>incised curved lines with buds</td>
<td>ca. 1800-1840</td>
</tr>
<tr>
<td>rococo</td>
<td>ca. 1780-1810</td>
</tr>
<tr>
<td>plain</td>
<td></td>
</tr>
</tbody>
</table>
Left: Engine-turned pitcher and fingerpainted mug
Right: Matching mocha-decorated and engine-turned serving bowls

Figure 52. Annular engine-turned "dipt" vessels from Feature R5, Ruth Saloon site
suggested that teawares played a more prominent role in display than did plates; perhaps serving tea to guests was common, but inviting them to dinner or supper was rare.

Forty-one varieties of blue transfer-printed pearlware teawares were recovered from the Feature R-5 deposit. Six tea cups had matching saucers, and one set had additional matching pieces. Four "sets" contained two or more matching pieces of the same form (e.g., two matching cups but no corresponding saucers). Of the four designs of blue transfer printed whiteware, three sets contained one matching cup and saucer, while two additional sets consisted of more matching pieces.

Thirty-eight varieties of hand-painted teawares were represented in the R-5 ceramic subassemblage. Eleven monochrome blue sets were represented by a single matching cup and saucer, while six sets included extra matched pieces. The 15 varieties with polychrome decoration produced three tea "sets" of a single matching cup/ saucer combination, while three sets contained more than one matched cup and saucer pair. Of the 79 different types of teaware decoration listed above, 40.5 per cent (32 examples) had decorative motifs forming sets consisting of at least a single matching cup and saucer or of two identical pieces (e.g., two matching cups). This high proportion of sets suggests strong purchasing power, and hence, an upper middle class household.

In contrast to the teawares, plates were dominated by minimally decorated pieces on the lower end of the price scale. Of the 125 plates recovered from Feature R-5, 58.4 per cent (N = 73) were green or blue shell edged wares. All five platters and two of the three tureens recovered with this assemblage also were shell-edged. Miller's (1991) economic scaling for 1825 yielded a value of 1.62 for the 89 plates for which index values could be calculated. This index figure exceeds that for basic cream-colored ware (1.0) by 0.82, but is 0.64 lower than the comparable figure for tea wares. As suggested above, it is apparent that this household chose to use basic tableware but more costly tea wares.

Most of the pieces within each shell edge category (for example, green edged with incised straight lines), exhibited considerable variety in detailing, indicating that they were purchased individually. However, in 12 instances, two to four plates did match, suggesting that these had been purchased as sets. The fact that some of the edged plates were purchased together indicated that this household could afford to buy several plates at a time, and suggested that their use of inexpensive shell edged plates was a matter of choice rather than of economic necessity.

Serving bowls constituted the only other category from this assemblage to which Miller's (1991) index could be applied. Fourteen of the bowls were of the least expensive category (excluding plain creamware), referred to as "dipt" or "dipped," a type that included annular, finger painted, and mocha decorated wares. Many of the "dipt" bowls also were engine turned. Four bowls were painted, with a slightly higher index value than the "dipt" vessels. The six transfer-printed bowls had the highest value. The two 16.51 cm (6.5 in) mocha decorated bowls matched, and may have been purchased at the same time (Figure 52).

Of the 39 bowls in the Feature R-5 assemblage, 24 could be used in Miller's index of economic scaling (1991), giving an index value of 1.62. The difference in index values between bowls and plates was 0.2, which is not significant; however, as was the case with the plates, the difference between the bowl and teaware indices was significant. The bowls, like the plates, seem to have served a utilitarian rather than a status or display-oriented function.

Objects of a more personal nature were not well-represented in the material recovered from Feature R-5. For example, only two kaolin tobacco pipes with preserved bowls were
included in the Feature R-5 artifact assemblage. One was a fluted example typical of the Federal period (ca. 1820), and the other was marked as an import from Bristol, a major English pipe manufacturing center. Several unmodified and unmarked pipe stems also were recovered. This relative lack of pipes may reflect the markedly female composition of the Whittington household.

The 39 buttons recovered from Feature R-5 displayed a moderate degree of decorative variation, although most could be classified as simple typical clothing types. These buttons were manufactured in almost equal numbers from bone (N = 16) and from metal (copper alloy) (N = 17). Several buttons fashioned from materials such as horn, shell, and wood, also were recovered.

Half of the bone buttons were single-hole button backs, and the remaining eight bone buttons were dish shaped sew-through buttons, one of which was slightly decorated with extra ridging. Of the 17 metal buttons, one was an octagonal sew-through button; five were ball-shaped shanked buttons; and 11 were flat shanked buttons similar to those commonly used on coats or vests. The three horn buttons included one button back, one dish shaped sew-through example, and one modified ink well type. Both of the shell buttons were sew-through types, and wooden buttons were represented by only a single button back. The markedly simple and undecorated nature of the buttons from this privy contrasts sharply with the high degree of variation and decoration displayed by the ceramic subassemblage.

Most of the identifiable toys from Feature R-5 were stone marbles; however, the collection also included a painted, wooden cut out end piece from a doll’s cradle, reflecting the presence of a female child within the household. Several of the miniature ceramics recovered from this deposit also may represent childrens’ toys. However, the relative paucity of toys suitable for younger children suggests that the children in the household may have been older.

Summary. The Privy R-5 artifact assemblage contained relatively few personal and decorative items. However, it presented a particularly abundant collection of early to mid-nineteenth century ceramics. The Whittington family appears to have enjoyed relatively easy access to certain products, particularly ceramics. With the exception of locally produced redwares and stonewares, mainly chamber pots and utilitarian vessels, all of the ceramics were English imports.

The high expenditure on teawares compared with other refined tablewares, such as plates and bowls, speaks to the importance of teawares in status and display. Owning matching sets to serve tea was clearly a priority for this household. In contrast, given the fact that plates and bowls had significantly lower economic indices than did teawares, it is unlikely that these tablewares were used for other than utilitarian purposes. Tea time appears to have offered the opportunity for the household to exhibit its wealth and style, while meal times seem likely to have been simpler, more family oriented occasions. The Feature R-5 deposit provides an outstanding insight into the lives of an early nineteenth century, upper middle class urban household in a Baltimore neighborhood populated by merchants, brokers, and manufacturers.

Faunal Analysis

Other categories of cultural materials from Feature R-5 also were examined and analyzed; the faunal material received special analysis (Appendix III). Three hundred seventeen bone fragments, representing five taxonomic classes, were recovered from Feature R-5. Mammals contributed the overwhelming majority (96.6 per cent) of the bones recovered; pork (19.0 per cent), beef (14.3 per cent), and chicken (14.3 per cent) were the species most frequently consumed by the residents of this household. The bones of a few wild animals also were present.
An analysis of the surface modifications and butchering techniques visible on the recovered bones was conducted. Classification of edible mammalian body parts suggests that rib and long bone sections, representing somewhat choicer cuts of meat, were consumed more frequently. Butchering marks on the bones indicated that earlier techniques such as scraping, cutting, chopping, or shearing, rather than sawing, were utilized more frequently in processing the mammalian carcasses. The more frequent use of these butchering techniques, which were characteristic of the early nineteenth century, correlates with the time frame assigned to the deposit on the basis of ceramic evidence. The lack of evidence of weathering and of carnivore or rodent activity indicated that the Feature R-5 bone assemblage represented a primary, rather than a secondary or tertiary, deposit. As noted above, a detailed zooarcheological analysis of faunal remains from Feature R-5 is contained below, in Appendix III.

Botanical Analysis

Analysis of the botanical sample from Feature R-5 indicates a great diversity of fruit and nut species. Table 8 presents sample weight (in grams) and fragment count for each of the specific taxa identified. Fruit pits were the most abundant class of plant remains, comprising 95.3 per cent of the total botanical sample. Over 73 per cent of the pits were members of the genus Prunus, with peach (Prunus persica), apricot (Prunus armeniaca), and black cherry (Prunus serotina) as the most numerous. This high representation of orchard fruits reflects ready access to local seasonal produce, as well as access to goods acquired through importation and trade.

Garden cucurbits, including watermelon (Citrullus vulgaris) and melon (Cucumis melo), comprised 11.77 per cent of the sample. Kitchen gardens, and local and regional seasonal produce would have been readily available to Baltimorians by this time. One large kernel of corn (Zea Mays) was included in the sample; this specimen represents the only starchy grain present in the sample.

Seeds of the persimmon (Diospyros virviniana) and blackhaw (Viburnum prunifolium), as well as black cherry (Prunus serotina) represent the exploitation of native forest products as a supplement to cultivated produce. The popularity and success of fruit orchards in the Chesapeake Bay region by the nineteenth century has been well documented (Hendrick 1972, Leighton 1976).

Nutshells from five species also were represented in the sample from Feature R-5. These comprised only 4.7 per cent of the total sample by count, weighing 63.9 grams in all. Hickory (Carya sp.) and Black Walnut (Jugulans nigra) were the most common nut species recovered. Hazel (Corylus sp.), English Walnut (Jugulans regia), and Almond (Prunus amygdalus) also were present in small quantities. Native mast-producing species such as Hickory and Black Walnut would have been common shade trees (as well as food bearers) in the back-lots of urban Baltimore. Non-native species such as Almond and English Walnut would have served similar purposes. In addition, commercial production of nut trees, and wild-harvest of native crops, would have furthered the availability of nutmeats as a common resource.

Although the excellent preservation of plant remains from Privy R-5 presents us with a good sample of food species, providing insight into the preferences and availability of these resources at the time the privy was in use, only minimal dietary reconstruction can be made. This is due to the preservational bias inherent in ethnobotanical samples. All of the plant species
<table>
<thead>
<tr>
<th>Taxa</th>
<th>N of Whole Specimens</th>
<th>N of Fragments</th>
<th>Total Count</th>
<th>Total Weight</th>
<th>% of Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUTSHELL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carya sp. (hickory)</td>
<td>3</td>
<td>10</td>
<td>13</td>
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<td>41.9 %</td>
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<tr>
<td>Corylus sp. (hazel)</td>
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<td>1</td>
<td>1</td>
<td>0.7 g</td>
<td>3.2 %</td>
</tr>
<tr>
<td>Juglans nigra (black walnut)</td>
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<td>10</td>
<td>11</td>
<td>37.0 g</td>
<td>35.5 %</td>
</tr>
<tr>
<td>Juglans regia (English walnut)</td>
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<td>3</td>
<td>3</td>
<td>4.4 g</td>
<td>9.7 %</td>
</tr>
<tr>
<td>Prunus amygdalus (almond)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1.1 g</td>
<td>9.7 %</td>
</tr>
<tr>
<td><strong>TOTAL NUTSHELL</strong></td>
<td>4</td>
<td>27</td>
<td>31</td>
<td>63.9 g</td>
<td>4.7 % *</td>
</tr>
<tr>
<td><strong>SEEDS AND PITS</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citrullus vulgaris (watermelon)</td>
<td>47</td>
<td>13</td>
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<td>Cucumis melo (melon)</td>
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<td>6</td>
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<td>.95 %</td>
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<tr>
<td>Diosyros virginiana (persimmon)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1.1 g</td>
<td>.48 %</td>
</tr>
<tr>
<td>Prunus armeniaca (apricot)</td>
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<td>1</td>
<td>32</td>
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<td>5.08 %</td>
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<tr>
<td>Prunus persica (peach)</td>
<td>34</td>
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<td>37</td>
<td>131.2 g</td>
<td>5.87 %</td>
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<tr>
<td>pit kernel</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7.6 g</td>
<td></td>
</tr>
<tr>
<td>Prunus serotina (black cherry)</td>
<td>378</td>
<td>17</td>
<td>395</td>
<td>41.1 g</td>
<td>62.70 %</td>
</tr>
<tr>
<td>Prunus sp.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>0.7 g</td>
<td>.63 %</td>
</tr>
<tr>
<td>Viburnum Prunifolium (black haw)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0.1 g</td>
<td>.32 %</td>
</tr>
<tr>
<td>Vitis sp. (grape)</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>1.8 g</td>
<td>12.22 %</td>
</tr>
<tr>
<td>Zea mays (maize)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.1 g</td>
<td>.16 %</td>
</tr>
</tbody>
</table>
present represent edible fruits. The absence of wood remains from the assemblage is not unusual based on the function of the feature as a privy and kitchen refuse dump. Wood and wood ash would have been dumped elsewhere, as would coal and coal ash.

Nutshell and pit material exemplify the most hardy plant parts, while starchy grains such as rye, wheat, or corn are less well preserved and show up less frequently in the archeological record. In addition, fleshy fruits, tubers, and foods purchased already processed, are invisible in archeobotanical samples of this kind.

Based on the vegetative remains present in the sample, it is apparent that the Whittington family enjoyed a diverse and plentiful array of fresh fruits and nuts year round. The remains of fruits from all seasons were well represented. Warm-season produce such as melons and peaches; autumn harvests including grapes and persimmons; along with easy winter keepers, specifically the nut crops, are all represented in the sample. In addition, black haw preserves, grape jelly, and canned peaches may have provided winter dietary supplements. The presence of plants from diverse habitats characterizes the R-5 assemblage. This mix of garden cultured cucurbits, orchard fruits, and woodland species indicates the ability of the occupants of this household to avail themselves of a variety of food sources. Similarly, fancy items and foods with high nutritional value were consistent dietary elements. This, combined with the prevalence of stone fruits and diverse nut species reflects the high socioeconomic status of this household.

Site 18BC81: Privy 3

This site comprised a small area at the central portion of Property 1, along the north side of Conway Street; it included the parcels on which the base of a privy, designated as Feature R-3 (Figure 53), was found. Construction activities had destroyed the upper portion of Feature R-3, leaving only the lowest 27 cm (10.63 in) intact. Therefore, cultural remains recovered from the privy were assigned to two proveniences: a related surface deposit, and the undisturbed privy fill, which extended to a depth of 27 cm (.88 ft). Despite the truncated nature of this deposit, this privy offered several distinctive insights into the lifestyles and socio-economic status of turn-of-the-century Baltimore residents.

Archival Results. Privy Feature R-3 represented the remains of a ca. 1900 privy deposit located in the rear lot of either 424 or 426 West Conway Street. These two lots, originally owned by Anthony Miltenberger, were the largest lots in the block. Mid-nineteenth century city directories show that these dwellings were occupied by single tenants beginning in the 1830s. However, by 1880, these buildings had been modified to create multi-family units or apartments. The dwelling at 426 Conway Street housed 13 people, 11 of whom were classified as "boarders." All of the residents were African Americans, and the males were employed either as porters or as laborers (U.S. Census 1880:ED143,19).

Census data for 1900 conflict with information contained on the 1901 Sanborn Fire Insurance map. The 1900 census listed no occupants for 426 Conway Street, but the two contiguous addresses (424 and 428) were indicated as multi-family residences. On the other hand, the Sanborn map designated the building at 428 West Conway Street as a "medicine compound" (possibly a patent medicine distributorship), while the structures on lots 424 and 426 were identified as dwellings. The discrepancy may have resulted from an error on the part of the census taker. The cultural material recovered from privy Feature R-3 appears to reflect most closely the three households that occupied 428 Conway Street: Julia Proffen, a widowed
Figure 53. Plan of Privy 3, Site 18BC81
seamstress with two sons; Alexander Haas, a plumber/gas fitter, and his wife; and Adolph Pfeffer, a day laborer, and his wife (U.S. Census 1900:ED4/10-11).

**Artifact Analysis.** Of the 148 artifacts recovered from the privy-related disturbed surface provenience, 93.2 per cent were kitchen related items. Ceramics comprised approximately 18 per cent of these kitchen related items, and included mid-to late nineteenth century transfer-printed, plain, and molded whitewares, as well as decal-decorated porcelains typical of the same era. Glassware from this surface context included tableware in the form of tumblers, and fragments of glass containers. Some glass vessels could be identified as late nineteenth century post-molded pharmaceutical or patent medicine bottles.

Within the undisturbed matrix of privy fill, kitchen related cultural material comprised 79.8 per cent of the recovered materials. Architectural materials such as bricks, plaster, and nails, accounted for 3.5 per cent of the cultural material recovered; clothing (2.2 per cent), furniture (1.7 per cent), personal (1.3 per cent), and other miscellaneous categories also were represented (Figure 54).

The kitchen related material deposited in Privy 3 contained a rich collection of ceramic vessels, container and table glass, and faunal material. Although most items in this deposit dated from the late nineteenth century, fragments of late eighteenth and early nineteenth century ceramics and glass also were found within the fill. The presence of these markedly earlier items could be ascribed to a variety of factors, including incomplete cleaning of the privy, routine household trash disposal, or redeposition from other areas within the house lot (LeeDecker 1991).

Kitchen-related materials represented six material groups, including ceramics, glass, floral, faunal, metal, and manufactured biological material. Temporally diagnostic ceramics (n=96) included redwares (Figure 55); stonewares; pearlwares; plain, transfer-printed, and molded whitewares (Figure 56 and 57); and porcelains. The presence of five fragments of well-executed late eighteenth century Canton porcelain suggests that this privy shaft may have been in continuous use since the earliest development of the block. Glass fragments (n = 147) represented both containers and table wares; vessel technologies spanned the period between the first quarter of the nineteenth century and the first decade of the twentieth century. Both blown and molded bottles and tumblers were recovered from this matrix, as were pressed table glass dishes and vases (Figure 58). Again, the presence of glass products formed by pre-industrial technologies suggest that this feature had a long use-life.

Privy R-3 also contained many floral and faunal remains. Nuts, including black walnuts, hickory nuts, and filberts, were present, as were pits or seeds from such fruits as plums, peaches, apricots, cherries, and watermelons, and several fragments of a coconut shell. The presence of these summertime fruits suggests that at least part of the privy deposit was formed during the summer; however, Henry's (1987) survey of turn-of-the-century urban subsistence patterns suggests that at least some items could have been purchased as commercially canned or preserved commodities.

These faunal remains provided insight into what foods the people in the household consumed and which cuts of meat they used. A few animals represented osteologically in the privy deposit, such as cat and rat, were unlikely to have been eaten. Fish and shellfish formed a minor portion of the diet, as evidenced by the small number of fish bones and small crab claws, one turtle, and a quantity of oyster and clam shells. The faunal assemblage also incorporated poultry bones, including the remains of at least one turkey and five chickens.
Figure 54. Bone items from Privy 3
Figure 55. Ceramic materials recovered from Privy 3
Figure 56. Examples of molded ironstone edge decorations from Privy 3
Figure 57. Sponge decorated chamberpot from Privy 3
Figure 58. Machine-made bottles from Privy 3
However, most of the faunal material represented cuts of beef, pork, and lamb or mutton. The most plentiful cut was beef shank, with at least 27 identifiable pieces (Wade Cooney, personal communication 1991). Shanks represented one of the least expensive, toughest cuts available in the late nineteenth century (Landon 1987:138), but they could have been served quite handily as individual portions following several hours of cooking or stewing. In fact, the presence of cheap cuts of meat does not always indicate low socioeconomic status because meat prices reflect the aggregate market, while individual purchases reflect personal choice (Landon 1987: 139-149). There were 21 bones from individual steaks, probably pork or lamb. The Privy 3 collection also contained sections of cow scapulae that had been cut for chuck blade steaks, and there were numerous medium and large ribs, both pork and beef spareribs, short ribs, and short plate. All of these cuts are on the lower end of the relative price list (Landon 1987: 138). A few T-bone steaks, which would have been comparatively expensive (Landon 1987:138), also were present. Several of the bones in Privy 3 exhibited marks from rodent gnawing.

While it appeared, based on the presence of meatless metatarsal (lower leg) bones, that the chickens may have been procured essentially whole and prepared on the premises, most of the meat seems to have been purchased already butchered into cuts for individual portions, such as the steak cuts and the beef shanks. These results are consistent with those obtained from other contemporaneous urban sites, and they support the hypothesis that the urban food procurement system was based primarily on the retail purchase of professionally butchered domestic meats (Henry 1987:19).

Four kaolin tobacco pipe fragments also were found in this feature. One, bearing a maker’s mark with a crown and the number “82,” provided a terminus post quem for the deposit. This mark appeared as a trademark in a ca. 1900 catalogue of the Goedewaagen firm, a major pipe manufacturer and exporter located in Gouda, Holland. The Goedewaagen firm manufactured pipes from the second half of the nineteenth century to the early twentieth century (Duco 1986:89-92).

The collection of sewing related items, including straight pins, buttons, and wooden thread spools, thread, and fabric, was of considerable interest. A fragmentary wicker basket with leather strap, which once may have contained the sewing implements, also was recovered. This deposit points rather directly to the presence of a seamstress within the dwelling, perhaps Julie Proffen, noted earlier. Other objects that reflected the activities of the household associated with this privy deposit included such children’s toys as stone marbles, doll dishes, doll parts, and a slate pencil (Figure 59).

Summary. Privy R-3 (at Site 18BC81) represented a boarding house or multiple family deposit, rather than a single family dwelling. The assemblage from this privy, especially the sewing materials and the faunal assemblage, seems to present a material culture profile consistent with the socio-economic status and the historically documented activities of the three families who occupied the dwelling at 428 (426?) West Conway Street in 1900. However, the eighteenth and earlier nineteenth century objects also recovered from this feature suggest that the original occupants of these premises enjoyed a far higher status than the residents of a century later.

Site 18BC80: Block 866

Site 18BC80 occupied the western portion of Property 1; trenches 18-22 were excavated within this area. A total of 11 features were identified. Ten of these features were brick foundation walls, and one was a concrete floor and cinder block wall; all were associated with row house
Figure 59. Toys from Privy 3
occupations during the late nineteenth and early twentieth centuries. The remaining feature, 19A01, was a brick lined privy shaft and an associated brick walkway (Figures 60 and 61).

Archival Results. Privy Feature 19A01 represented a second late nineteenth to twentieth century privy deposit located within the southern half of City Block 866. Before the B. Green Warehouse complex eliminated or modified street configurations, this half-block containing this feature was bounded by Burgundy Alley on the north, West Conway Street on the south, Little Green Street on the east, and Warner Street to the west.

Privy Feature 19A01 appears to have been associated with one of two small dwellings located at 503 or 505 Burgundy Street. The location and the configuration of the feature most closely conform to the 503 lot. However, because the house lots within this block were very narrow and the back lots of Conway Street and Burgundy Alley dwellings shared common lot lines, it is possible that privy shafts on adjoining lots could have been located within five feet of each other. Moreover, while certain elements of the artifact assemblage reflect more accurately the turn-of-the-century occupants of 505 Burgundy Alley, the presence of Irish "Home-Rule" pipes in the deposit recovered from Feature 19A01 presents the possibility that this feature actually was associated with a dwelling on Conway Street. In any event, the cultural remains recovered from this feature reflect the working-class character of the residents of this section of the project area at the turn of the twentieth century.

Residents of the southeastern quadrant of Block 866 at the turn of the century presented a racial and ethnic mix similar to that observed for the contiguous 400 block of West Conway Street. However, there were significant differences between the two blocks. Block 866 remained a residential/small business area until the 1930s (Polk 1928: passim). Moreover, the racially identifiable settlement pattern characteristic of the antebellum nineteenth century (e.g., African Americans living in small alley dwellings, and whites on the main streets) persisted into the twentieth century on this block. In 1900, the heads of household residing directly on the two main streets of the block were primarily first or second generation Irish and German semi-skilled and clerical workers; the residents of Burgundy Alley all were African American.

The economic status of Block 866's white residents appeared to be somewhat higher than that of their neighbors in the contiguous 400 block of Conway Street. White residents of the area held jobs as tailors, shirt salesmen, telephone linemen, cabinet makers, sign painters, and cigar manufacturers. On the other hand, occupations pursued by the African American residents of Burgundy Alley continued to represent such semi-skilled jobs as lumber teamster, bridge laborer, laundress, oyster shucker, coal trimmer, and servant. These distinctive demographic patterns characterized the block into the first decade of the present century.

The families who occupied the properties at 503 and 505 Burgundy Alley between 1900 and 1910 were representative of many African American households in this section of the project area. During the decade between 1900 and 1910, extended family members, including nieces, nephews, in-laws, and boarders shared the primary family's quarters. In addition, each household was headed by a widowed female at least once over the census years examined. All of the families accommodated boarders, including very young, apparently unrelated, children. All of the females in these households worked as laundresses, while the male residents held jobs as manual laborers, dock workers, and sailors. At no time did either household contain more than six residents, including boarders (Census 1900, 1910: passim).

Archaeological Results. Five trenches were excavated in the area west of the B. Green warehouse complex. Trenches 18, 20, 21, and 22, which were aligned along the western edge of the warehouse property, revealed nine features. These included the remains of six brick walls,
I. 2.5Y2/0 black coarse silty sand fill with inclusions of bricks, brick fragments, bone, window/bottle/table glass, nails, charcoal, coal, ceramic, and shell.

II. 10YR6/2 white sand mortar with 7.5YR5/6 strong brown coarse sandy fill with inclusions of 10 per cent gravel and very small amounts of glass and other historical artifacts, and shell.

III. 2.5Y5/2 grayish brown sandy clay with inclusions of bricks, brick fragments, mortar, bottles, bottle/window/table glass, ceramics, bone, nails, other historic artifacts, and shell.

IV. 10YR8/6 black coarse silty sand, probably biological waste, with peds of 10YR4/6 dark yellowish-brown rust, and 10YR3/3 dark brown coarse sand with gravel. 2.5Y3/0 very dark gray moist/wet clay with inclusions of brick, brick fragments, mortar, rubber, overshoes, bottles, bottle/window/table glass, ceramic, bone, shell, nail, and other historic artifacts typical of the late 1800s to early 1900s.

V. 7.5YR/6 gray clayey sand brick.
Figure 61. Photograph of Privy Shaft 19A01, Site 18BC80, showing brick vault and associated brick walkway
two trenches, and one concrete floor feature. Soils encountered within this area consisted primarily of successive layers of sandy or silty clay, with moderate to heavy lenses of gravel and architectural debris. These deposits were underlain by gray (10YR5/1) to light gray (10YR7/1) silty clays that constituted the natural sub-strata of the project area.

A total of 548 artifacts were recovered from these trenches. This sample included 93 architectural items (17 per cent), 406 kitchen-related items (74 per cent), and 49 miscellaneous items (9 per cent). Architectural items reflected the construction materials utilized in the row houses, including brick, window glass, wire nails, plumbing and sewer fixtures and pipes, roofing slate, and ceramic tiles. Kitchen-related materials reflected the entire span of occupation of these blocks of Conway Street. Whiteware and pearlware were the most prevalent ceramic types encountered, along with machine-made bottle glass. More items were associated with the foundations along Conway street, than with those that fronted the rear alleyways.

Trench 19, and its extension 19-A, revealed Feature 19A01, a rectangular brick privy feature with rounded corners, measuring 2.0 x 0.95 m (6.56 x 3.12 ft). The privy included 37 courses of brick and was 2.18 m (7.15 ft) deep. Two layers of coarse sandy fill, separated by a mortar lens, overlay a level of bricks, rubble, and other artifacts. Below the second rubble level, a thick layer of black loam, with a very high artifact density, was reached. The basal strata comprised a sand lens above clayey sand.

Manual excavation of the privy feature began at approximately 1 m (3.28 ft) below ground surface. The feature was bisected, and the northern and southern halves were excavated separately. The artifact-rich black loam layer was excavated in 10 cm (3.94 in) arbitrary increments; these arbitrary levels, which extended from 1.53 to 2.91 m (5.02 - 9.55 ft) in depth, contained many mendable ceramic fragments. There was one mend from the uppermost level to the middle of the black sandy loam stratum.

Approximately 143 vessels were represented by the 957 ceramic sherds recovered from Privy Feature 19A01; this was only 30 per cent of the minimum vessel count of Privy R-5. Table 9 presents the quantities of table, storage, and personal hygiene vessel forms recovered. In addition, 121 sherds were from flower pots and flower pot dishes.

Unlike Privy R-5, Feature 19A01 contained no distinct sets of tea cups and saucers. The collection did include both cups and saucers of undecorated ironstone, which could have been purchased either as sets, or as individual pieces. Ironstone, a white, thick-walled, hard-bodied, often semi-vitrified ware, was marketed under a variety of names, including ironstone, semi-china, and stone china. It first was imported from England, but, by the late nineteenth century, it also was manufactured in the United States.

Most of the tea cups from Feature 19A01 were quite large compared with those from Privy R-5, and probably represent cups described in contemporary documents as "Breakfast" or "Irish" cups (Miller 1991:15). All the 22 tea cups were handled, and most cups were of undecorated ironstone; this pattern is similar to results obtained from Lowell, Massachusetts, where teawares "served more in a functional capacity than as status display items" (Dutton 1989:96). Six examples were overglaze-decorated porcelains, and two were mustache cups, with small ledges inside the rim of the cup to shield a gentleman's mustache from being splashed by tea.

The 19 plates from Feature 19A01 all were ironstone, some with gilded and decalcomined decorations (Figure 62). Decal decoration was most popular from ca. 1880 to 1920, and it was most readily available after ca. 1900 (Majewski and O'Brien 1987:147). Gilding as a decorative technique was utilized most frequently after ca. 1855 (Majewski and O'Brien 1987:153).
<table>
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<tr>
<td>vegetable dish</td>
<td>4</td>
</tr>
</tbody>
</table>
Left: Whiteware Chelsea-type dinner plate with applied relief molded decoration
Center: Large whiteware plate with scalloped and molded rim, decalcomined central motif, and overglaze gilded swags
Right: Whiteware soup plate with overglazed purple lustre pattern on rim and in well

Figure 62. Representative tablewares from Privy 19A01 (Site 18BC80).
Ten plates from Feature 19A01 were represented by small shell-edged fragments. These wares were not included in the vessel count because their small size, their worn condition, and their early date compared with the rest of the Feature 19A01 assemblage suggest that they were not part of the primary deposit; a similar phenomenon was noted with the faunal materials. While most of the Feature 19A01 collection was deposited directly into the privy, some artifacts had been subjected to weathering and trampling before their disposal in the privy.

Privy 19A01 contained far fewer vessels per form than Feature R-5. Feature R-5 included an average of 20.3 vessels for each of 25 forms, but in 19A01, there were only 8.5 vessels for 18 different forms. For example, tea and coffee pots were not represented in Feature 19A01, though tea wares (cups, saucers, and sugars) made up 41.8 per cent of the collection (n=64). Tablewares, including plates, soup plates, and mugs, comprised 24.9 per cent (n=38) of the subassemblage. Twenty-nine of the 38 vessels were plates; of these, 10 were fragmentary shell edged wares, and the remaining 19 carried gilded and decaled decoration. The 35 serving pieces (22.9 per cent) included platters, bowls, vegetable dishes, and pitchers. Bowls and vegetable dishes occurred more frequently than platters, by a ratio of 5.4 to 1.

Non-kitchen related functions also were represented in the ceramic subassemblage from Feature 19A01. For example, personal hygiene vessels included six molded ironstone chamber pots (with one matching lid) and two spittoons, one of them a colorful flint enamel example. Another unusual vessel was an undecorated ironstone mortar. Utilitarian redware vessels were limited to flower pots and dishes, and to a small unglazed redware bank (Figure 63). Several pieces of unidentified stoneware, and a single crock also were recovered.

Eleven American, and four English, makers’ marks were identified on ironstone vessels from Feature 19A01. Production dates for those vessels bearing American marks clustered around the turn of the twentieth century (Table 10). Ceramics represented both American and foreign makers, including wares from local potteries. All represented makers ranging from the late nineteenth to the twentieth century. Identifiable American marks on fragments recovered from the feature fill included: Homer Laughlin, Newell, West Virginia (ca. 1900); East Liverpool Potteries Company, East Liverpool, Ohio (ca. 1900-1903); Severn (Crescent Pottery), Trenton, New Jersey (1881-1907;1910-1924); Smith Phillips Company, East Liverpool, Ohio (1901-1931); the Edwin Bennett Pottery, Baltimore, Maryland (1892-1896); and, possibly, the Imperial Porcelain Company, Zanesville, Ohio (1946-1960)(Lehner 1988:44,135,114,219,249,430).

All four of the English makers’ marks bore the word “England,” suggesting that they were manufactured after the McKinley Tariff Act of 1891 which mandated that all imported goods be stamped with the name of the country of origin. Since backmarks reading “Made in England” usually are dated to the twentieth century (Dutton 1989:105), the Feature 19A01 vessels most likely were produced during the last few decades of the nineteenth century. The presence of out-of-state and imported wares reflects the improved availability of consumer goods that resulted from mass-production and from more efficient transportation in the late nineteenth century.

Privy 19A01 contained fragments of at least 209 glass bottles. Ninety-five of these (45.4 per cent) were pharmaceutical bottles (Figure 64). Forty of the medicinal bottles were embossed either with the name of the product (n=18; 18.9 per cent) or of the druggist (n=22; 23.1 per cent). If containers for cosmetic preparations are added to the pharmaceutical assemblage, a total of 120 vessels (57.4 per cent of the total collection) can be classified as items used for personal health and hygiene. Most of the bottles marked with place of origin were from Baltimore; however, the collection also included containers from Philadelphia, New York, and St. Louis (Table 11). Such information again reveals the scope of Baltimore’s late nineteenth century transportation network. The predominance of Baltimore-produced items suggests that local products were less costly.
Figure 63. Unglazed redware bank from Privy 19A01, Site 18BC80
<table>
<thead>
<tr>
<th>MANUFACTURER</th>
<th>DATES</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwin Bennett Pottery Co. (Baltimore, MD)</td>
<td>post-1897</td>
<td>4</td>
</tr>
<tr>
<td>Cook Pottery (Trenton, NJ)</td>
<td>post-1894</td>
<td>1</td>
</tr>
<tr>
<td>Crescent Pottery (Trenton, NJ)</td>
<td>1881-1903</td>
<td>2</td>
</tr>
<tr>
<td>East Liverpool Potteries Co. (E. Liverpool, OH)</td>
<td>1900-1903</td>
<td>2</td>
</tr>
<tr>
<td>Homer Laughlin China Co. (E. Liverpool, OH)</td>
<td>ca. 1900</td>
<td>2</td>
</tr>
<tr>
<td>Maryland Queensware Co. (Baltimore, MD)</td>
<td>post-1888</td>
<td>2</td>
</tr>
<tr>
<td>Ohio China Co (E. Palestine, OH)</td>
<td>1896-1912</td>
<td>1</td>
</tr>
<tr>
<td>Prospect Hill Pottery (Trenton, NJ)</td>
<td>post-1880</td>
<td>1</td>
</tr>
<tr>
<td>Sevres China Co. (E. Liverpool, OH)</td>
<td>ca. 1900</td>
<td>1</td>
</tr>
<tr>
<td>Smith Phillips China Co. (E. Liverpool, Ohio)</td>
<td>ca. 1901</td>
<td>1</td>
</tr>
<tr>
<td>Taylor, Smith &amp; Taylor (E. Liverpool, Ohio)</td>
<td>ca. 1900</td>
<td>1</td>
</tr>
</tbody>
</table>
Top: Unmarked ink bottle; embossed "Louis F. Kornmann, Pharmacist, Baltimore"; unmarked aqua paneled bottle; embossed "Hay's Hair Health"


Figure 64. Representative machine-made pharmaceutical bottles from Privy 19A01 (18BC80)
<table>
<thead>
<tr>
<th>Maker/Product</th>
<th>Origin</th>
<th>Date of First Manufacture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kornmann Pharmacists</td>
<td>14 Milton Street Baltimore</td>
<td>1907</td>
</tr>
<tr>
<td>John Stewart, Druggist &amp; Veterinary Surgeon</td>
<td>1500 N. Bond Baltimore</td>
<td>1907</td>
</tr>
<tr>
<td>William Lotz, Druggist</td>
<td>556 West Conway Baltimore</td>
<td>1903-1907</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>665 West Saratoga 3 Falls Way Baltimore</td>
<td>1907-? 1916-1920</td>
</tr>
<tr>
<td>To-Ko Bottling Co.</td>
<td>426 W. Conway Baltimore</td>
<td>1910</td>
</tr>
<tr>
<td>WilMar Bottling Co.</td>
<td>426 W. Conway Baltimore</td>
<td>1916</td>
</tr>
<tr>
<td>Standard Brewery &quot;Bismarck Beer&quot;</td>
<td>Gay Street/ Patterson Park Baltimore</td>
<td>1903-1920</td>
</tr>
<tr>
<td>Gunther Brewery &quot;Baltimore Beer&quot;</td>
<td>3rd at Toone Street Baltimore</td>
<td>1903-1920</td>
</tr>
<tr>
<td>J. W. Bull's Pectoral Compound</td>
<td>Baltimore</td>
<td>ca. 1870s-1880s</td>
</tr>
<tr>
<td>Bromo-Seltzer</td>
<td>Baltimore</td>
<td>1889-1928</td>
</tr>
<tr>
<td>Schenck's Pulmonic Syrup</td>
<td>Philadelphia, PA</td>
<td>ca. 1830s</td>
</tr>
<tr>
<td>Schenck's Sea-Weed Tonic*</td>
<td>Philadelphia, PA</td>
<td>ca. 1830s</td>
</tr>
<tr>
<td>California Fig Syrup</td>
<td>San Francisco/ Louisville, KY/ New York</td>
<td>1897</td>
</tr>
<tr>
<td>Cranitonic Hair Food</td>
<td>New York</td>
<td>ca. 1890s-1920s</td>
</tr>
<tr>
<td>Hay's Hair Health</td>
<td>New York/Newark, NJ</td>
<td>ca. 1890s</td>
</tr>
<tr>
<td>Omega Oil</td>
<td>New York/Jersey City, NJ</td>
<td>ca. 1890s</td>
</tr>
<tr>
<td>Pompeian Massage Cream</td>
<td>Cleveland, O</td>
<td>1874</td>
</tr>
</tbody>
</table>

*an indented oval panel on the bottle held a small box of pills.

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and/or more readily available to Camden Yards' consumers. However, the presence of other remedies bottled in Philadelphia and elsewhere, suggests that these households participated in both regional and national trade networks. The druggists' bottles and commercial nostrums also indicate the extent to which the household was tied into both nineteenth century notions of health care and nineteenth century consumerism.

Beer bottles (n=45) comprised 21.5 per cent of the Feature 19A01 assemblage of glass containers; most were made of amber glass. All but two of the beer bottles were marked with the name of the brewery. While most were Baltimore brews, one Cincinnati brewery also was represented. Two local beers were favored by the occupants of this residence. "Baltimore Beer" was manufactured by the Gunther Brewing Company, located at 3rd and Toone Streets in the Canton District. The most popular product of the Standard Brewing Company, on Gay Street in the Patterson Park section of the city, was "Bismarck Beer." Both companies were in active production from at least the turn of the century until 1920 (R. L. Polk 1903-1920:passim), a time frame that correlates closely with the remainder of the materials contained within this feature.

Bottles representing at least three brands of carbonated beverages also were recovered from the fill of feature 19A01. All were bottled locally in Baltimore; two were products of Camden Yards businesses. Coca-Cola, represented by a non-waisted, pre-1915 container, initially operated a bottling works at 665 W. Saratoga Street; after 1916, their bottlery was located at 3 Falls Way (R. L. Polk 1907-1920:passim). Both the To-Ko Bottling Company and the WilMar Bottling Company were located in the building at 426 West Conway street; the former occupied these premises in 1910, while the latter is listed for the premises in 1916 (R. L. Polk 1903-1920:passim).

The bottle collection provides information about the kinds of beverages that people consumed, and about the pharmaceutical preparations they used. It also provides indicators of the availability of certain products and of consumer access, recognizing that it is likely that some bottles were returned rather than discarded. Soda, milk, and whiskey bottles often were returned, especially those with localized distribution embossed with such wording as "This Bottle Never Sold." Several complete examples of such bottles were included in the Feature 19A01 assemblage. These bottles were considered the legal property of the bottler, though some consumers sold them to junk dealers rather than returning them to their rightful owners (Bond 1989:137; Busch 1987:70).

A comparison of the faunal remains recovered from Privy 19A01 with those from Privy R5 indicated that a slightly larger proportion of the former showed modification due to weathering and rodent or carnivore gnawing. This evidence suggests that at least a portion of the bone assemblage derived from secondary or tertiary deposition. Three species of domestic mammals (pig [22.9 per cent], cow [10.2 per cent], and goat/sheep [8.5 per cent]), and two species of domestic fowl (chicken [21.2 per cent] and turkey [4.2 per cent]), provided most of the meat for the occupants of this property. Other edible species present included goose, duck, rabbit, and shellfish.

Most of the mammalian carcasses had been butchered using a saw; this technique was characteristic of the later nineteenth century. Meat cuts were characterized as "middle range," and included shoulder, rump, and round cuts; however, a noticeably higher incidence of vertebral bone also was present, perhaps denoting a greater reliance on cheaper cuts of meat. The protein diets of these households probably could be considered middle-class. All meat had been purchased in a prepared state; no major butchering appears to have taken place on site.

Eight complete tobacco pipe bowls were recovered from the excavation of privy 19A01. Two late nineteenth to early twentieth century Powhatan type pipes had fluted red stoneware.
bowls, and were designed to be used with reed or hard plastic stems. The remaining pipes were of white kaolin clay. One bowl was decorated with a basket and leaf motif datable to the late nineteenth century. The collection also contained one pipe with an impressed "TD" mark, a very common and inexpensive pipe at the turn of the twentieth century. In fact, clay pipes of this period often were referred to generically as "TDs" because of the ubiquity of these one- to two-cent TD Scottish pipes (Cook 1989b:219). Other pipes were more unusual. In one example, bearing the maker's mark "L'ETOILE," the kaolin bowl appears to be held by a claw. A second fanciful L'ETOILE pipe bears the figure of a bearded man in a hat on the bottom of the pipe, where the bowl meets the stem.

Perhaps the two most interesting pipes were those bearing the slogan "HOME RULE" surmounting an Irish harp, all surrounded by a wreath (Figure 65). These pipes bear witness to the political movement for Irish independence, which was active between 1870 and 1916. "Home Rule" pipes, and others with Irish slogans, were produced by a number of manufactories in Scotland, Ireland, Holland, and New York (Alexander 1986:69; Cook 1989a:199). Similar pipes have been recovered from late nineteenth century archaeological contexts along the Eastern seaboard, including sites in Lewes, Delaware (Alexander 1986:71), and Lowell, Massachusetts (Cook 1989a:199). These pipes are of particular interest in Baltimore because they sent an ethnically Irish, politically charged message that was significant in light of the city's Irish-German tension (Browne 1980:205).

One hundred twenty buttons and three collar studs were recovered from Feature 19A01; all of the collar studs and 85 per cent (n=103) of the buttons were porcelain. By the late nineteenth century, porcelain buttons were machine made and inexpensive (Zeising 1989:147). In addition to porcelain, Feature 19A01 included three glass, four bone, and 10 shell buttons. All of the bone and shell buttons were of the sew-through type, while two of the glass buttons were shank buttons. One heavy, decorated example may have come from a coat. All but one of the porcelain buttons were sew-through. Seventeen of the sew-through buttons, 16.7 per cent, were decorated. Most (64.7 per cent) were pie crust edged, with a few examples that were banded or incised, and one of light blue porcelain. Ninety-two (90.2 per cent) of the porcelain sew-through buttons were dish shaped, and eight (7.8 per cent) were saucer shaped; the two remaining buttons were ink-well shaped. The simplicity of the Feature 19A01 button assemblage is noteworthy. The two collections studied from Lowell, Massachusetts, revealed that over one-third of the buttons were decorated (Zeising 1989:165). Only 16.7 per cent of the buttons from Feature 19A01 were "fancy." Most were simple, standard shirtfront buttons.

Privy 19A01 contained a moderately large sample of children's toys. For example, 48 sherds of doll's dishes, represented at least 13 vessels; all but two were porcelain, including a teapot and a sugar bowl. At least seven dolls were in the collection; four of these were manufactured of bisque porcelain and three were of heavier, vitrified porcelain. Six dolls were represented by back, shoulder, neck, and head pieces, which probably were attached to cloth bodies; one of these was inscribed "Made in Germany." Another doll was represented by a small body only. In addition, four doll's arms and three legs were included in the assemblage. Like Feature R-5, Feature 19A01 also contained marbles, but these were of clay and glass rather than stone. Many of the clay marbles were brightly painted, and one large glass marble had the figure of an owl inside. An iron toy pistol, 7.62 cm (3 in) long, and an unglazed redware bank, 11.43 cm (4.5 in) high, were included in the toy category. Similar banks of redware or stoneware were common in the nineteenth century (Greer 1981:128).

Six unfinished bone dice found in Feature 19A01 constituted a special group of activities-related artifacts. Each of these dice had split or splintered during drilling. An examination of these objects revealed that, after the small cube had been shaped, an appropriate number of dots was
Figure 65. Clay tobacco pipes from Privy 19A01
etched into each side, and finally the faint dots were drilled. Making dice appears to have been a hobby of one of the household members.

Insights into modes of interior decoration at the turn of the twentieth century were revealed by the assemblage recovered from Feature 19A01. The artifact collection included both decorative urns or vases and figurines. One urn was a deep blue, two-handled porcelain vessel with an oval shaped tondo (circular sculpture) containing a gilt decorated female figure with raised arms; "1865," possibly a manufacturing or patent date, was impressed in the urn's base. A second urn was of chartreuse colored earthenware with floral decal decoration and gilt. A very small, floral molded, pink porcelain vessel decorated with gilt also may have been a vase of some kind. The eight figurines from the Feature 19A01 assemblage included: a white bisque figurine of a uniformed man with binoculars, standing on a pedestal elaborated with flowers and sashes; a bisque figurine depicting a youth in a purple hat with a gray cape; two dog figurines, including a possible bulldog dressed in a uniform and goggles, and a porcelain poodle; fragments of a chartreuse colored oyster shell; a gilded fragment that probably represented a skirt hem; the partial base of an unidentified figurine; and the head of a juvenile wearing a top hat.

Summary. By combining the dates of makers' marks, bottlers' marks, and other items from all levels of Feature 19A01, it was possible to determine a basic chronology for the deposition of the privy fill. The levels between 1.01 and 1.95 m were deposited after 1940, a terminus post quem provided by a Wheat pattern United States cent, and fragments of ceramic marked "Imperial" (ca. 1946). This level also contained much earlier material, including ceramics from the East Liverpool Potteries (1900-1903); Homer Laughlin (ca. 1900); and, the Crescent Pottery (1881-1907, 1910-1924) (Lehner 1988:passim). Gunther and Standard Brewery bottles (1903-1920) dominated the dateable glass collection.

Artifacts from levels between 1.95 and 3.00 m below surface provided a general date range of the early twentieth century; fragments of a "To-Ko" bottling works bottle (1910) provided a terminus post quem for these levels. Also found within these levels of fill were many pharmaceutical and patent medicine bottles, including some from Baltimore purveyors such as John Stewart (1907); Kornmann Pharmacies (1907); and, William Lotz (1903-1907). Ceramics carrying marks from the Smith Phillips Company (1901-1931) and the Edwin Bennett Pottery (1892-1896) also were recovered.

Of the marked wares obtained from these levels of Feature 19A01, those from William Lotz and the To-Ko Bottling Works are perhaps the most interesting, because they represent items from within the project area itself. Lotz, a druggist, maintained a pharmacy at 556 West Conway Street between 1903 and 1907; later, his son maintained a grocery store at two locations in the project area, at 415 W. Hamburg Street (1907) and at 936 South Fremont (1920) (R. L. Polk 1903-passim). The To-Ko Bottling Works occupied the former townhouse dwelling at 426 W. Conway Street in 1910.

The dateable artifacts obtained from those levels below approximately 3.0 mbs clearly represented a late nineteenth century occupation, and they also signify the earliest levels of deposition. A blue Bromo-Seltzer bottle could be dated to ca. 1889 or later, while J. Bull's Compound was manufactured as early as 1875 (Fike 1987:passim). The thinness of this layer, and its substantially earlier date, suggest that this basal layer was a remnant left behind from successive removals of privy fill.

The cultural material from Privy Feature 19A01 clearly illustrates that, by the turn of the twentieth century, American industry played a major role in consumption. The fact that the vast majority of the ceramics recovered from Feature 19A01 were American-made in production centers
like East Liverpool, Ohio, also testifies to the range and the importance of national railroad transportation networks.

The bottles from Feature 19A01 provide further evidence of industrialization: all were mass produced. While the majority were from Baltimore, bottles originating in Philadelphia, New York, and St. Louis again speak to some degree of regional distribution. The fact that similar pharmaceutical "cures" have been found at contemporary sites like Lowell, Massachusetts (Bond 1989), points out that the items recovered from Feature 19A01 do not represent merely a local phenomenon, but that they illustrate a larger pattern of late nineteenth century American consumerism.
Property 15, which was occupied by the Parks Sausage Company, encompassed the two city blocks (925 and 926) formerly bounded by Russell, South Eutaw, Hamburg, and Cross Streets. Before construction of the Parks Sausage Company complex and the widening of Russell Street substantially modified the original street pattern in the area, several other streets and alleyways also crossed this tract. Warner Street originally extended in a north-south direction midway between Russell and Eutaw Streets, forming two major city blocks. These blocks were subdivided further by intermediate north-south alleys. Claret Alley (later Briscoe Street) bisected the block between Russell and Warner Streets, and China Alley similarly bisected the Warner/Eutaw Street block. Fremont Street (formerly called Cove Street) ran from northwest to southeast diagonally through the Warner/Eutaw Street block (Figure 66).

Four archaeological sites were recorded within Property 15. Sites 18BC88, a stoneware potter’s kiln, and 18BC89, the J. S. Berry Brick Company pug mill, were located within Block 925 in the western half of Property 15. Sites 18BC87, a row of townhouse foundations, and 18BC90, the Eliza Dorsey site, were located within the eastern half of Property 15, on Eutaw and Hamburg Streets.

General Archival Results

Block 925

The J. S. Berry Brick Company (18BC89) and the stoneware pottery kiln site (18BC88) were located within Block 925. Before the construction of the Parks Sausage Company complex and the widening of Russell Street, Block 925 was bounded to the west by Russell Street and on the east by Warner Street; Hamburg and Cross streets formed the northern and southern perimeters of the block. Fremont Street abutted the extreme northeastern corner of the block, and Briscoe Street, originally known as Claret Alley, bisected the block from north to south between Russell and Warner Streets.

This section of Baltimore originally was part of a land grant known as Howard’s Timber Neck; it was annexed to the city in 1783 (Presbury 1783). Both Presbury’s map and Henry Hart’s 1792 “Map of Part of Ridgeley’s Delight and Howard’s Timber Neck” indicated that property lines and streets had been laid out in this area by the end of the eighteenth century. Hart’s survey also showed that at least two dwellings occupied lots within the eastern and western halves of Block 925 by the end of the eighteenth century. Warner and Hanna’s 1801 Map of the City of Baltimore (Figure 3) only peripherally dealt with those parts of the project area lying south and west of Fremont Street.

During the first half of the nineteenth century, ownership of the property in this section of the project area appears to have been speculative; very few lots were developed or improved. Sidney and Neff’s 1851 city map (Figure 4) depicted only three structures within Block 925, including one at the location of the potter’s kiln.

Tax assessors’ records for Ward 11 during the 1830s indicated that five individuals owned property on Block 925 in the year 1838. A majority of the eastern half of the block, lying between
Figure 66. Sanborn (1890) Fire Insurance Map of Blocks 925, 926, and 927, showing the J. S. Berry Brick Company complex and adjacent blocks.
Warner Street and Claret Alley, including the site of the pug mill, was owned by John W. Berry; a Mrs. McMechen owned one small (66 x 155 ft) parcel at the corner of Cross and Warner Streets. No improvements were shown on the Berry section of this parcel (Tax Assessors Records 1838:Ward 11, 60).

The western half of Block 925, lying between Claret Alley and Russell Street, was divided among three property owners. The heirs of Captain Nagle, who had been a major brick manufacturer in the Ridgely's Delight area during the late eighteenth century, controlled a 66 x 155 ft lot at the corner of Russell and Hamburg Streets. John W. Berry controlled a 155 x 264 ft lot in the mid-section of the half block; this parcel had been improved by the addition of a brick kiln and a shed. Interestingly, John W. Berry did not pay the taxes on this improved lot; instead, the assessment was charged against Col. John Berry, who had operated his own brickyards in the area beginning in about 1812 (Berry 1870:2; Tax Assessors' Record 1838:Ward 11, 60). The third property holder listed on this half-block was James W. Pawley, who owned a 66 x 155 ft lot at the corner of Russell and Cross Streets; the assessment record showed that the lot had been improved by the addition of a "brick pottery" (Tax Assessors Record 1838:Ward 11, 60).

By 1858, John and George Berry had acquired all of Block 925 except for the Pawley lot (Tax Assessors Record 1858-1859:491). By the 1870s, the Berry brickmaking enterprise dominated the block; tax assessment maps for 1876 show that the brickworks occupied the entire section east of Claret Alley, and that John, George, and William Berry controlled approximately two-thirds of the block west of Claret Alley. However, the lots on Russell Street were identified as "unimproved" (Tax Assessors Record 1876:265, 1655), indicating that the 1838 brick kiln had been removed. Fire insurance maps show that new bricksheds later were constructed on these lots (Sanborn 1890).

While the Berry enterprise controlled most of Block 925, the former Pawley property at Russell and Cross Streets was subdivided during the middle and late nineteenth century. In 1858, Herman Thaye controlled a 25 x 66 ft lot at the corner of Cross and Russell Streets. Ruth Ann Pawley owned the remaining 66 x 130 ft Cross Street lot, and had improved it with a 3-story brick dwelling (Tax Assessors Record 1858-1859:394). The 1838 stoneware pottery kiln probably was located at the rear of this lot (518 West Cross Street); however, the 1858 tax assessor's records do not mention a kiln on the property, thus providing an historical end date for the pottery's operation.

During the next decade, the Pawley lot was subdivided further into six single residential lots, and a single larger commercial lot at 536 West Cross Street. The commercial lot first was used as a wood yard (Sanborn 1890, 1901); it later was converted to an automobile service facility (Sanborn 1914). The remainder of Block 925 was developed as a residential neighborhood after the J. S. Berry Brick Company vacated the area between 1890 and 1901.

Most early twentieth century residents of the dwellings in Block 925 rented their homes, and worked in a variety of industrial occupations. The block contained both African American and white residents; whites primarily were first or second generation immigrants from Northern and Western Europe (U.S. Census 1900, 1910).

The Pawley Stoneware Kiln Site (18BC68)

Archival Results. By mid-eighteenth century, both earthenware and stoneware were produced in Baltimore. City directory listings for the first half of the nineteenth century show that the majority of Baltimore's potters worked in the Old Town and Fell's Point areas; the single
exception was Michael Grub, a stoneware potter listed on Conway Street opposite the Otterbein Church (Fry 1810). However, as Baltimore’s economy and population grew during the period, a second center of the industry was established on Lexington Avenue, north and west of the project area, where the Linton and Mauldin/Perrine potteries were located (Fry 1810; Matchett 1824, 1842; Woods 1858, 1866; Wright 1984).

By 1820, there were ten potters working within the City of Baltimore; however, only two produced stoneware. Most pottery manufactories were small individual operations. The Manufacturing Census of 1820 indicated that there were 12 pottery kilns, 41 wheels, and 15 horse-powered “pug” mills in the city; a total of 35 men and 12 boys, probably apprentices, were employed by the industry at that time (Pearce 1959).

James Pawley’s pottery kiln at Cross and Russell Streets was typical of these small, individually owned, single kiln potteries. Baltimore city directories of this period listed James W. Pawley in various ways: as the proprietor of a “China, Glass, and Queensware” store (Matchett 1834); proprietor of a “China” store (Matchett 1837-1838); and, as a “Crockery” merchant (Matchett 1842). All of Pawley’s retail outlets were located on Calvert Street, and his residence was on Lombard Street (Matchett 1834-1842). Both locations are north of the project area. Given this information, it is unlikely that Pawley operated the kiln at 18BC88. Rather, Pawley probably either built or bought the kiln, and employed a potter to supply products for his retail store. A similar relationship existed in Alexandria, Virginia, between merchant Hugh Smith and the various operators of the Wilkes Street stoneware pottery between 1825 and 1841 (Myers 1983:16-19).

By the 1830s, Baltimore’s pottery production was in decline, as methods changed from “handcraft to industry,” full-time potters replaced part-time craftsmen, and individual pottery shops were transformed into small industries (Myers 1983:29; Pearce 1959). Mold-making replaced hand-throwing by the 1840s (Myers 1983:25), as competition within the industry intensified during that decade. Nine documented Baltimore potteries vied with two potteries in Washington and one in Alexandria for shares of the regional market (Myers 1983:26).

By the last quarter of the nineteenth century, stoneware production in the United States had declined even further. Better methods of food packing had been developed and refined; furthermore, mass-produced glass containers, such as Mason jars, and refinements in the production of tin cans, reduced the need for heavier or less durable stoneware items. The establishment of the commercial dairy industry reduced the need for individual householders to have their own dairy storage and preparation containers. The cost of shipping the necessary clay and coal by railroad had increased, and high quality clays became more difficult to locate. Finally, potters with the necessary skills became rare, as the sons of skilled potters showed a reluctance to apprentice in their fathers’ craft (Faulkner 1982:232). Baltimore’s major ceramic producer of the late nineteenth century, the Edwin Bennett Company, located in the Canton Industrial District, provided mass-produced white-bodied earthenwares for general household use.

The technology employed by Pawley’s stoneware pottery in the Camden Yards area had a long history. The American domestic salt-glazed stoneware pottery tradition first was brought to this country from Europe, primarily England and Germany, where it had developed as early as the fifteenth century. This ceramic tradition in North America reached its zenith during the early and middle nineteenth century.

Because of its very hard body, stoneware was valued for its impermeability to water and acids, as well as for its utilitarian nature and sturdiness. To attain this hard body, stoneware was fired at temperatures of between 1200 and 1300° C., though some wares were fired at temperatures of up to 1390° C. (earthenwares generally are fired at 1000 to 1200° C.).
Some clays, especially those with a particular aluminum-silica ratio, were better suited than others to withstand this intense heat and to accept the salt glazing that often was applied to stonewares. The most suitable naturally occurring clays for stoneware production were obtained from deposits in Amboy, New Jersey, although potters often created their own clay mixtures by combining several clays and adding various tempering materials (Troy 1977:50). Clays often were processed in horse-operated pug mills, in which a horse or a mule walking in a circle would turn a shaft inserted into a vat of clay (Greer 1981:37). Clay pits in the project area probably provided the clay for the Pawley kiln.

Traditional stoneware potters fired their kilns from once a week to once a month (Greer 1981:225). Wares usually were thrown on a potter's wheel, and were produced in standard gallon measures. Raw clay was prepared for the potter by an apprentice, who measured the clay in standard amounts. For example, a five pound ball of clay would result in a one gallon jug or crock, worth five to 25 cents. An experienced potter could produce an average of 100 one gallon-capacity containers each day (Troy 1977:44).

After the vessels had been fashioned, various techniques were used to apply decorative motifs. Vessel interiors often were coated with Albany slip, which produced a dark brown gloss. Exterior decoration often was applied utilizing cobalt blue slips applied with a brush or with a slip cup, a small cup with a protruding straw used to trace decorative elements. Different potters and potteries employed distinctive decorative motifs or methods of decoration. In addition, the gallon capacity of crocks and jugs frequently was stamped or painted on the vessel, and the name of the potter or company sometimes was applied to the body of the vessel. Once formed and decorated, the vessels were ready for firing in the kiln.

The kiln excavated at Site 18BC88 was a round structure of the "updraft" type. In updraft kilns, heat rose through pottery stacked in the firing chamber, and exited through one or more openings in the kiln roof. Loading the pottery in the kiln was an art in itself, because vessels of various shapes and sizes had to be placed in order to waste as little space as possible, and to avoid having vessels stick to one another or to the kiln furniture.

There were two basic types of kiln furniture: preformed pieces, and pieces made during loading (Greer 1981:217). Premade kiln furniture included saggers, open forms with cut out sides to admit heat and salt vapor, and rings or discs (also called plats) upon which vessels were placed. Many more pieces of such furniture were created as the kiln was loaded: coils, spools or props, wads, and patties were used to keep vessels balanced (Faulkner 1982:224; Greer 1981:220; Troy 1977:47). Both types were found at the Pawley Kiln site. These items often were rolled in sand to prevent their adhesion to vessels (Faulkner 1982:222). A flat, triangular shaped piece of clay with a hole in one end, called a draw trial, served as a test for firing temperature and glazing conditions. The draw trial was withdrawn from the kiln during fire to check on its progress (Faulkner 1982:222).

The lenses of charcoal found in the 18BC88 kiln firebox suggest that this kiln was heated by a wood fire. The firing process began slowly at about 600 degrees C. to drive off excess water held in the clay. The heat gradually was increased to the "blast-off" period, during which the fire was stoked constantly to provide more intense heat. Salt-glazing usually occurred in several stages. The salt-glazing process involved pouring salt into holes in the top of the kiln called saltports, or throwing salt into the firebox. The intense heat of the kiln immediately vaporized the salt, which coated the ceramic pieces and sealed them with a glossy, clear glaze with the texture of an orange peel. After salting had been completed, the fire no longer was stoked, and all openings in the kiln were sealed. Two to six days later, the kiln usually had cooled enough to be opened (Greer 1981:224-225; Troy 1977:47).
The salt-glazing process tended to produce more wasters, or defective products, than other types of firing (Troy 1977:109). In addition, dangerous chlorine gas and hot water vapor also were produced by this process (Troy 1977:130). For these reasons, salt kilns usually were situated away from population concentrations (Greer 1981:22). The Pawley kiln conformed to this rule. Moreover, its presence re-emphasized the early industrial character of the project area.

In addition to a kiln and a pug mill, a variety of other features or structures were associated with the stoneware production process. For example, Swann's nineteenth century stoneware production manufactory in Alexandria, Virginia (1815-1820), included a potting house with four potters' wheels, a warehouse, and a millhouse where clay and glazes were readied for use (Myers 1983:11). However, little evidence of ancillary structures was obtained during the tests in this section of Property 15.

Archaeological Results. Excavation near the corner of Russell and Cross Streets revealed a circular stoneware kiln foundation, 3 m (9.84 ft) in diameter (Figures 67 and 68). Archaeological deposits in the kiln mouth, firebox, and within the interior of the kiln, included large quantities of kiln furniture, wasters (primarily stoneware), brick, and charcoal. Soil matrices consisted of various combinations of sand and clay. The brick floor of the kiln lay beneath these strata of debris and soil; the floor of the kiln mouth was characterized by a hard-fired sand surface.

Excavation of the kiln mouth revealed a lens of charcoal over a layer of fire-reddened sand with dark yellowish brown sandy clay. The sandy matrix contained large brick fragments, nails, and stoneware sherds. Below this level was a charcoal surface that sloped to the northeast towards the kiln mouth. This charcoal surface covered a stratum of compacted fire-reddened sand. Loose sand, also reddened by fire, was identified beneath the compacted sand level. Within the firebox, which held the fuel for firing the kiln through the kiln mouth, was a depression; its walls of fired sandy clay (Level 8) contained some bone and shell fragments.

On each side of the kiln mouth, some 0.80 m (2.62 ft) away, was a square post hole and mold (Figure 69). The post holes contained brick fragments. The post mold which represented the position of the decayed or extracted post, was filled with kiln furniture. This suggested that the post hole was dug when the kiln was constructed, and that it was partly filled in with construction debris from the kiln. The kiln furniture contained in the post mold indicated that the post may have decayed or been extracted sometime during the kiln's period of use. These posts may have supported a roof, to provide shelter near the kiln mouth for loading, unloading, and cooling vessels.

Analysis. The kiln contained such vast quantities of debris that only a 10 per cent sample of kiln furniture was retained. Kiln furniture refers to the containers, separators, and other objects used by the potter to support, separate, and protect the vessels while they are being fired in the kiln. Many of these items, such as saggers, rings and discs are premade and reused, while others, such as props and separators, are made from available materials as need warrants, usually as the kiln is being loaded. This sample contained 8,664 pieces of kiln furniture, including saggers, rings, discs, props, and other types of separators (Figure 70). Fifteen pieces of slag, 12 fragments of kiln brick, and 103 bisque fired sherds also were collected.

Artifacts included 588 fragments of wasters, or misfired or broken vessels; a 100 per cent sample of these items was retained (Table 12). A sample containing 398 fragments was analyzed for form and decoration. This sample was selected based on the amount of information concerning form, manufacture, and decoration each fragment contained. Each fragment was categorized according to the portion of the vessel it represented; in some cases, the form could not be determined precisely from the fragment available. As expected, body fragments comprised...
Figure 67. The J. S. Pawley stoneware kiln (18BC88) with surface overburden removed; orientation northeast
Figure 68. The J. S. Pawley stoneware kiln (18BC88), after completion of excavation; orientation southwest.
Figure 69. Plan view of J. S. Pawley stoneware kiln (18BC88)
Figure 70. Kiln furniture from Pawley stoneware kiln (18BC888). Fragment at top right is part of a sagger.
### TABLE 12: DESCRIPTION OF STONEWARE FROM THE J.S. PAWLEY KILN

**Nature of Variant:** American Gray Stoneware  
**Variant Type Site:** 18BC88, J. Pawley Stoneware Kiln, Baltimore, Maryland.  
**Other Sites:** Not Known  
**Chronological Position:** ca 1830-1850  
**Dating Derivatives:** The stoneware kiln was located at the former intersection of Russell and West Cross Streets, in Baltimore, Maryland. According to historic records, the kiln operated on these premises, manufacturing utilitarian wares for retail outlets, also owned by J. Pawley, that sold imported white-bodied wares along with the products of this operation.  
**Sample Size:** 588 fragments of broken or misfired vessels  
**Method of Manufacture:** All vessels appear to have been wheel-thrown, and fired in an updraft kiln.  
**Surface Treatment:**  
- **Exterior:** All fired vessels were salt glazed; some unfired vessels remained unglazed.  
- **Interior:** Some treated with iron oxide wash, all salt glazed.  
**Decoration:** Forty-seven fragments included some portion of decorative motifs including brushed or hand-applied cobalt alone, or combined with incised or molded lines. Three basic types of decoration were noted:  
  1) a combination of painted lines and waves, or lines and dashes around crock and jar lids;  
  2) various simple swag and wave motifs, found most frequently on pitchers and jars;  
  3) a floral motif comprised of stylized tulips and leaves found most frequently on pitchers and jars.  
**Form:** Eight vessel forms were represented: bottle, jar, crock, crock/jar lid, pitcher, chamber pot, bowl/pan, and pipe bowl.
the majority of the collection (n=237; 59.55 per cent), followed by base fragments (n=41; 10.30 per cent), and rim or lid fragments (n=27 and 23, respectively) (Table 13).

Forty-seven fragments evidenced some portion of a decorative motif, either brushed or hand-applied cobalt, or cobalt combined with incised or molded lines (Table 14). Three categories of applied motifs were noted. The first was a linear pattern that included variations of double cobalt stripes combined with zig-zag or wavy lines between the stripes. These were noted most often on crock and jar lids; others carried heavy dashes around the rim combined with a thin cobalt stripe. There were many variations of this motif, some more carefully executed than others (Figure 71).

The second design category included various simple swag or wave motifs that were observed most frequently on fragments of pitchers, usually around the collar, or around the shoulder of either pitchers or jars. This wavy line, when found on pitchers, appeared to have been hand-applied rather than brushed on; it usually was combined with a stylized tulip motif.

Thickly painted stemmed tulips with graduated leaves comprised the third design category. This design, or variations of it, was found on pitchers and jars; one pan/bowl sported the most complete example of this motif (Figure 72). When observed on pitchers, this motif usually was combined with a brushed wavy line around the collar/neck of the pitcher. One lid fragment was decorated with a variation of a floral motif, unlike the styled tulips found on some vessels.

A few pieces displayed rudimentary attempts to combine incised floral or foliate motifs with the brushed cobalt designs (Table 15). Jars and pitchers usually included an incised line around the widest part of the shoulder. Jars also included molded or incised decorative lines around the neck, just below the rim (Figure 73).

Eight distinct vessel types were identified at Site 18BC88. These included milk and dairy pans; bulbous storage jars with lug handles; large storage crocks with knobbed lids; collared pitchers with strap handles; chamber pots; and, at least three types of bottles (Figure 74). Vessel forms also included several sizes and types of saggars, and a press molded pipe bowl. The size range represented by the sagger fragments reflected the variety of wares that were fired in the kiln.

Most vessels were salt glazed, some in combination with iron oxide wash either on the interior or exterior of the vessel, or both. Some bottle neck fragments appeared to have been lead or alkaline glazed both on the interior and exterior. However, due to the small number of this type (n=2), it is unclear if these originated at the Pawley kiln, or elsewhere. In addition to these vessel types, one press molded pipe bowl was found. The decorative motif on this bowl appeared to be a stylized primitive face or mask. Again, only one example was recovered, and it is unclear if this form originated at the Pawley kiln. The same may be said for the few examples of slip decorated redware and American brown stoneware present at the site.

Of the 398 fragments, 224 (56.28 per cent) could be assigned a vessel form. Bottles in a variety of sizes made up the majority (n=114; 50.90 per cent), followed by saggars, jars and crock lids (Table 16). Twenty one sagger fragments in a variety of sizes were included in this sample. Some of these were fashioned by cutting the neck and lip from waster bottles and cutting holes in opposite sides of the neck. One pipe bowl also was included in the list of vessel forms. Aside from the saggars, the pipe bowl, and two fragments of chamber pots, the majority of forms represented were storage vessels, either crocks, crock lids, bottles, or jars (Table 17). Pitchers were the only serving vessels, and the fragments of a single stoneware pan/bowl, along with two redware pan rims and bases, were the only cooking vessels identified in the Pawley kiln sub-assemblage. Again, because so few fragments were found, it is unlikely that the redware was a
### TABLE 13: STONEWARE KILN VESSEL TYPES REPRESENTED

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottle</td>
<td>114</td>
<td>50.90</td>
</tr>
<tr>
<td>Jar</td>
<td>16</td>
<td>7.14</td>
</tr>
<tr>
<td>Lid</td>
<td>23</td>
<td>10.27</td>
</tr>
<tr>
<td>Pitcher</td>
<td>8</td>
<td>3.27</td>
</tr>
<tr>
<td>Chamber Pot</td>
<td>2</td>
<td>0.89</td>
</tr>
<tr>
<td>Bowl/Pan</td>
<td>5</td>
<td>2.23</td>
</tr>
<tr>
<td>Crock/Jar</td>
<td>9</td>
<td>4.02</td>
</tr>
<tr>
<td>Pipe Bowl</td>
<td>1</td>
<td>0.45</td>
</tr>
<tr>
<td>Sagger</td>
<td>22</td>
<td>9.82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>224</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

### TABLE 14: NUMBER AND TYPE OF DECORATED VESSELS FROM THE PAWLEY KILN SITE

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Percent of Decorated Vessels</th>
<th>Percent of Id. Vessels</th>
<th>Percent of Total Fragments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar</td>
<td>4</td>
<td>8.51</td>
<td>1.78</td>
<td>1.00</td>
</tr>
<tr>
<td>Lid</td>
<td>14</td>
<td>29.79</td>
<td>6.25</td>
<td>3.52</td>
</tr>
<tr>
<td>Body</td>
<td>20</td>
<td>42.55</td>
<td>8.92</td>
<td>5.02</td>
</tr>
<tr>
<td>Pitcher</td>
<td>5</td>
<td>10.64</td>
<td>2.23</td>
<td>1.25</td>
</tr>
<tr>
<td>Bowl</td>
<td>3</td>
<td>6.38</td>
<td>1.33</td>
<td>0.75</td>
</tr>
<tr>
<td>Pipe</td>
<td>1</td>
<td>2.13</td>
<td>0.44</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
<td><strong>100.00</strong></td>
<td><strong>20.9</strong></td>
<td><strong>11.80</strong></td>
</tr>
</tbody>
</table>
Figure 71. Stoneware storage crock lids from Pawley stoneware kiln site, showing distinctive wavy line motif and knobbed lid handles
Figure 72. Vessel waster from Pawley stoneware kiln site, showing typical floral tulip design
### TABLE 15: QUANTITY OF DECORATED FRAGMENTS AND TYPE OF DECORATION

<table>
<thead>
<tr>
<th>Type</th>
<th># Dec.</th>
<th>% of Sample</th>
<th>Type of Decoration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar</td>
<td>4</td>
<td>25.00</td>
<td>Molded neck/collar; Incised Lines; Cobalt Tulips</td>
</tr>
<tr>
<td>Lid</td>
<td>14</td>
<td>60.86</td>
<td>Incised Lines; Cobalt Lines, Dashes/Waves; Cobalt Floral</td>
</tr>
<tr>
<td>Body</td>
<td>20</td>
<td>8.43</td>
<td>Cobalt Tulip Motif</td>
</tr>
<tr>
<td>Pitcher</td>
<td>5</td>
<td>62.50</td>
<td>Incised Lines/Cobalt Tulip Motif, and Cobalt Waves</td>
</tr>
<tr>
<td>Bowl</td>
<td>3</td>
<td>60.00</td>
<td>Cobalt Tulip Motif</td>
</tr>
<tr>
<td>Pipe</td>
<td>1</td>
<td>100.00</td>
<td>Press Molded</td>
</tr>
<tr>
<td>Chamber Pot</td>
<td>-</td>
<td>-</td>
<td>Undecorated</td>
</tr>
<tr>
<td>Bottle</td>
<td>-</td>
<td>-</td>
<td>Undecorated</td>
</tr>
<tr>
<td>Sagger</td>
<td>-</td>
<td>-</td>
<td>Undecorated</td>
</tr>
</tbody>
</table>

### TABLE 16: STONEWARE KILN VESSEL FORMS

<table>
<thead>
<tr>
<th>Form</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>237</td>
<td>59.55</td>
</tr>
<tr>
<td>Base</td>
<td>41</td>
<td>10.30</td>
</tr>
<tr>
<td>Rim</td>
<td>27</td>
<td>6.79</td>
</tr>
<tr>
<td>Lid</td>
<td>23</td>
<td>5.78</td>
</tr>
<tr>
<td>Handle</td>
<td>17</td>
<td>4.27</td>
</tr>
<tr>
<td>Lip</td>
<td>12</td>
<td>3.01</td>
</tr>
<tr>
<td>Neck</td>
<td>12</td>
<td>3.01</td>
</tr>
<tr>
<td>Shoulder</td>
<td>7</td>
<td>1.76</td>
</tr>
<tr>
<td>Pipe</td>
<td>1</td>
<td>0.25</td>
</tr>
<tr>
<td>Sagger</td>
<td>21</td>
<td>5.28</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure 73. Drawing of decorative motifs from the Pawley kiln
Figure 74. Drawing of vessel forms represented in the stoneware kiln assemblage
<table>
<thead>
<tr>
<th>#</th>
<th>Type</th>
<th>Form</th>
<th>D¹</th>
<th>T²</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>3</td>
<td>6/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>3</td>
<td>6/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>3</td>
<td>5/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>3</td>
<td>5/16</td>
<td>Interior iron oxide wash; interior and exterior salt glazed</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>4</td>
<td>6/16</td>
<td>Interior iron oxide wash; interior and exterior salt glazed; incised line 6/16 above base</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Base</td>
<td>7</td>
<td>5/16</td>
<td>Interior and exterior salt glazed; incised line at base</td>
</tr>
<tr>
<td>1</td>
<td>Unid.</td>
<td>Base</td>
<td>12</td>
<td>7/16</td>
<td>Interior and exterior iron oxide wash and salt glaze</td>
</tr>
<tr>
<td>1</td>
<td>Crock</td>
<td>Lid</td>
<td>9</td>
<td>6/16</td>
<td>Cobalt brushed edge; deep foot/lip</td>
</tr>
<tr>
<td>1</td>
<td>Crock</td>
<td>Lid</td>
<td>7</td>
<td>7/16</td>
<td>Cobalt brushed edge</td>
</tr>
<tr>
<td>8</td>
<td>Unid.</td>
<td>Body</td>
<td>-</td>
<td>-</td>
<td>Undecorated</td>
</tr>
<tr>
<td>1</td>
<td>Unid.</td>
<td>Body</td>
<td>-</td>
<td>6/16</td>
<td>Brushed Cobalt</td>
</tr>
<tr>
<td>1</td>
<td>Unid.</td>
<td>Body</td>
<td>-</td>
<td>6/16</td>
<td>Brushed Cobalt</td>
</tr>
<tr>
<td>1</td>
<td>Unid.</td>
<td>Body</td>
<td>10</td>
<td>4/16</td>
<td>Interior iron oxide wash and salt glaze; exterior brushed cobalt</td>
</tr>
<tr>
<td>1</td>
<td>Unid.</td>
<td>Body</td>
<td>10</td>
<td>5/16</td>
<td>Interior and exterior salt glazed; brushed cobalt</td>
</tr>
<tr>
<td>1</td>
<td>Jar/ Pitcher</td>
<td>Base</td>
<td>4</td>
<td>7/16</td>
<td>Exterior Brushed cobalt; Interior and exterior salt glazed</td>
</tr>
<tr>
<td>1</td>
<td>Jar/ Pitcher</td>
<td>Base</td>
<td>-</td>
<td>4/16</td>
<td>Interior/exterior salt glazed; exterior brushed cobalt</td>
</tr>
<tr>
<td>#</td>
<td>Type</td>
<td>Form</td>
<td>D¹</td>
<td>T²</td>
<td>Comments</td>
</tr>
<tr>
<td>----</td>
<td>---------------</td>
<td>----------</td>
<td>------</td>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Pot/Bowl</td>
<td>Body</td>
<td>Rim: 10</td>
<td>5/16</td>
<td>Approximately 1/3 of the vessel is present; interior and exterior salt glazed; exterior cobalt tulip motif; Vessel height: 4 1/4&quot;</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Neck</td>
<td>1</td>
<td>4/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>2</td>
<td>Unid.</td>
<td>Base</td>
<td>-</td>
<td>5/16</td>
<td>Waster</td>
</tr>
<tr>
<td>28</td>
<td>Unid.</td>
<td>Body</td>
<td>-</td>
<td>4/16</td>
<td>Waster</td>
</tr>
<tr>
<td>3</td>
<td>Unid.</td>
<td>Body</td>
<td>-</td>
<td>-</td>
<td>Partially Fired Waster</td>
</tr>
<tr>
<td>2</td>
<td>Bottle</td>
<td>Lip</td>
<td>1 1/2</td>
<td>4/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>1</td>
<td>Bottle</td>
<td>Lip</td>
<td>1</td>
<td>4/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>1</td>
<td>Crock Lid</td>
<td>Cup</td>
<td>1 1/2</td>
<td>-</td>
<td>Unfired</td>
</tr>
<tr>
<td>8</td>
<td>Jar/Pitcher</td>
<td>Handle</td>
<td>-</td>
<td>-</td>
<td>Salt glazed, Strap-type</td>
</tr>
<tr>
<td>1</td>
<td>Jar</td>
<td>Rim</td>
<td>-</td>
<td>5/16</td>
<td>Unfired Waster</td>
</tr>
<tr>
<td>1</td>
<td>Jar/Pitcher</td>
<td>Base</td>
<td>6</td>
<td>4/16</td>
<td>Interior and Exterior Salt Glazed</td>
</tr>
<tr>
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<td>Chamber Pot</td>
<td>Rim</td>
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<td>5/16</td>
<td>Salt Glazed; Undecorated</td>
</tr>
<tr>
<td>1</td>
<td>Sagger</td>
<td>Rim</td>
<td>5</td>
<td>5/16</td>
<td>Salt Caked</td>
</tr>
<tr>
<td>1</td>
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<td>Body</td>
<td>-</td>
<td>5/16</td>
<td>Interior and Exterior Salt Glazed; Brushed Cobalt</td>
</tr>
<tr>
<td>2</td>
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<td>Body</td>
<td>6</td>
<td>5/16</td>
<td>American Brown Stoneware Interior and Exterior Salt Glazed</td>
</tr>
<tr>
<td>1</td>
<td>Jar/Pitcher</td>
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<td>6</td>
<td>5/16</td>
<td>American Brown Stoneware Interior and Exterior Salt Glazed</td>
</tr>
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<td>4/16</td>
<td>Manufactured from waster bottle neck/lip, with holes cut in opposite sides of neck</td>
</tr>
<tr>
<td>#</td>
<td>Type</td>
<td>Form</td>
<td>D¹</td>
<td>T²</td>
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</tr>
<tr>
<td>2</td>
<td>Bottle</td>
<td>Lip</td>
<td>1 1/2</td>
<td>5/16</td>
<td>Unfired</td>
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<tr>
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<td>Waster Body Fragment with Ear-handle</td>
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<td>Collar Rim; Interior and Exterior Salt Glazed; Incised Line and Brushed Cobalt Decoration</td>
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<td>3</td>
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<td>Collar Rim/Spout; Interior and Exterior Salt Glazed; Brushed Cobalt Decoration</td>
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<td>Lip</td>
<td>1 1/2</td>
<td>4/16</td>
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</tr>
<tr>
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<td>Lip</td>
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<td>Unfired</td>
</tr>
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<td>Lid</td>
<td>-</td>
<td>5/16</td>
<td>Salt Glazed; Brushed Cobalt Decoration</td>
</tr>
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<td>Strap-type Handles; Salt Glazed; Various Sizes</td>
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</tr>
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<td>Base</td>
<td>6</td>
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</tr>
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<td>Base</td>
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<td>5</td>
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<td>Interior and Exterior Salt Glazed; Exterior Brushed Cobalt Tulip Motif</td>
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<td>Rim</td>
<td>5</td>
<td>5/16</td>
<td>Interior and Exterior Salt Glazed; Exterior Brushed Cobalt Floral Motif</td>
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<td>5/16</td>
<td>Interior and Exterior Salt Glazed; Undecorated</td>
</tr>
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<td>5</td>
<td>5/16</td>
<td>Interior and Exterior Salt Glazed; Undecorated</td>
</tr>
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<td>#</td>
<td>Type</td>
<td>Form</td>
<td>D¹</td>
<td>T²</td>
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</tr>
<tr>
<td>5</td>
<td>Sagger</td>
<td>Body</td>
<td>:</td>
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<td>Unfired Fragments</td>
</tr>
<tr>
<td>1</td>
<td>Jar</td>
<td>Neck/Shldr.</td>
<td>1 1/4</td>
<td>4/16</td>
<td>Interior and Exterior Salt Glazed</td>
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<td>4</td>
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<td>Folded Rim; Interior and Exterior Fine Salt Glaze</td>
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<td>Straight Rim; Interior and Exterior Iron Oxide Wash and Fine Salt Glaze</td>
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<td>7/16</td>
<td>Salt Glazed; Undecorated</td>
</tr>
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<td>Lid</td>
<td>10</td>
<td>7/16</td>
<td>Salt Glazed; Exaggerated Brushed Cobalt Dashes At Rim</td>
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<tr>
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<td>Lid</td>
<td>7</td>
<td>6/16</td>
<td>Salt Glazed; Brushed Cobalt Dashes At Rim</td>
</tr>
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<td>Lid</td>
<td>7</td>
<td>6/16</td>
<td>Undecorated</td>
</tr>
<tr>
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<td>Rim</td>
<td>3</td>
<td>4/16</td>
<td>Interior and exterior Salt Glazed; Double Incised Lines Around Rim; Brushed Cobalt Decoration</td>
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<tr>
<td>1</td>
<td>Pan</td>
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<td>Lead Glazed Redware Rim With Spout; Numerals &quot;XV&quot; Scratched in Glaze</td>
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<td>Salt Glazed; Brushed Cobalt Edge Decoration Combination of Dashes and Wavy Line</td>
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<td>Crock/Jar</td>
<td>Body</td>
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<td>5/16</td>
<td>Interior and Exterior Iron Oxide Wash and Heavily Salt Glazed</td>
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<td>Body</td>
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<td>5/16</td>
<td>Interior and Exterior Iron Oxide Wash and Heavily Salt Glazed; Exterior Brushed Cobalt Decoration</td>
</tr>
<tr>
<td>#</td>
<td>Type</td>
<td>Form</td>
<td>D¹</td>
<td>T²</td>
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</tr>
<tr>
<td>4</td>
<td>-</td>
<td>Body</td>
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</tr>
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<td>Body</td>
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<td>4/16</td>
<td>Unfired Saggers formed from Bottle Neck/Lip With Holes Cut in Neck</td>
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<td>Alkaline or Lead Glazed Rimless Neck</td>
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<td></td>
<td></td>
<td>Shldr.</td>
<td>1 1/4</td>
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<tr>
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<td>Base</td>
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<td>3/16</td>
<td>Interior and Exterior Salt Glazed</td>
</tr>
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<td>Lid</td>
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<td>Shldr.</td>
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<td>Interior and Exterior Salt Glazed</td>
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<td>Body</td>
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<td>4/16</td>
<td>Interior and Exterior Salt Glazed; Interior Iron Oxide Wash, Exterior</td>
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<td>Brushed Cobalt Decoration</td>
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<td>-</td>
<td>4/16</td>
<td>Interior and Exterior Salt Glazed; Exterior Wavy Brushed Cobalt Line</td>
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<td>Neck</td>
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<td>3/16</td>
<td>Unfired</td>
</tr>
<tr>
<td>16</td>
<td>Bottle</td>
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<td>4/16</td>
<td>Unfired Body Fragments</td>
</tr>
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<td>Sagger</td>
<td>Body</td>
<td>-</td>
<td>5/16</td>
<td>Unfired Body Fragment</td>
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<td>Bottle</td>
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<td>3</td>
<td>4/16</td>
<td>Partially Fired Waster</td>
</tr>
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<td>4/16</td>
<td>Partially Fired Waster</td>
</tr>
<tr>
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<td>Bottle</td>
<td>Base</td>
<td>3</td>
<td>4/16</td>
<td>Partially Fired Waster</td>
</tr>
<tr>
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<td>Jar</td>
<td>Rim</td>
<td>4</td>
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<td>Unfired Folded Rim</td>
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<td>Salt Glazed</td>
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<td>2</td>
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<td>Lid</td>
<td>-</td>
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<td>Partially Fired Wasters; Brushed Cobalt Decoration</td>
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<td>14</td>
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<td>Partially Fired Wasters; Iron Oxide Wash Interior; Interior and Exterior</td>
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<td>#</td>
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<td>T²</td>
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<td>1</td>
<td>Crock/Jar</td>
<td>Lid</td>
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<td>Partially Fired; Brushed Cobalt Floral Decoration; No Footring</td>
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<td>Salt Glazed; Trailed Linear Border (Double Solid Lines With Wavy Line Between)</td>
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<td>Lid</td>
<td>10</td>
<td>5/16</td>
<td>Salt Glazed; Brushed Linear Border (Double Solid Lines With Wavy Line Between)</td>
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<tr>
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<td>Rim</td>
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<td>Interior and Exterior Salt Glazed; Brushed Cobalt Floral Decoration</td>
</tr>
<tr>
<td>1</td>
<td>Pipe</td>
<td>Bowl</td>
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<td>Salt Glazed; Press Molded Mask or Face Motif</td>
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<td>Body</td>
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<td>4/16</td>
<td>Salt Glazed; Partially Fired; Undecorated</td>
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<td>Body</td>
<td>6</td>
<td>4/16</td>
<td>Salt Glazed; Partially Fired; Possible Scratched Lines on Exterior</td>
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<td>Shldr.</td>
<td>-</td>
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<td>2</td>
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<td>1 1/4</td>
<td>3/16</td>
<td>Unfired Fragment</td>
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<td>Lid</td>
<td>11</td>
<td>9/16</td>
<td>Salt Glazed; Wide Brushed Cobalt Border</td>
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<td>-</td>
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<td>Body</td>
<td>1 3/4</td>
<td>3/16</td>
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</tr>
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<td>5/16</td>
<td>Iron Oxide Wash And Salt Glazed</td>
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<td>Shldr</td>
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<td>4/16</td>
<td>Salt Glazed</td>
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<td>Neck</td>
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<td>4/16</td>
<td>Interior Iron Oxide Wash, Interior and Exterior Salt Glazed</td>
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<td>Body</td>
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<td>4/16</td>
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<td>Body</td>
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<td>6/16</td>
<td>Interior and Exterior Salt Glazed; Partially Fired</td>
</tr>
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<td>Body</td>
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<td>Partially Fired and Unfired Fragments</td>
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<td>Body</td>
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<td>4/16</td>
<td>Interior and Exterior Salt Glazed; Brushed Cobalt Tulip Motif</td>
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<tr>
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<td>Sagger</td>
<td>Body</td>
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<td>6/16</td>
<td>Salt Caked; Wad of Clay from Stacking Attached to Rim</td>
</tr>
<tr>
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<td>Bottle</td>
<td>Lip</td>
<td>1 1/2</td>
<td>4/16</td>
<td>Salt Glazed</td>
</tr>
<tr>
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<td>Bottle</td>
<td>Lip</td>
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<td>4/16</td>
<td>Salt Glazed</td>
</tr>
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<td>Neck/ Shldr</td>
<td>2 1/2</td>
<td>4/16</td>
<td>Salt Glazed</td>
</tr>
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<td>Rim</td>
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<td>3/16</td>
<td>Salt Glazed</td>
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<td>-</td>
<td>Rim</td>
<td>3 1/2</td>
<td>3/16</td>
<td>Fine Salt Glaze; Folded Lip</td>
</tr>
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<td>Jar/ Pitcher</td>
<td>Handle</td>
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<td>Salt Glazed 1/4 x 3/4 Strap-type</td>
</tr>
<tr>
<td>#</td>
<td>Type</td>
<td>Form</td>
<td>D'</td>
<td>T²</td>
<td>Comments</td>
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<td>Sagger</td>
<td>Rim</td>
<td>7 1/2</td>
<td>5/16</td>
<td>Salt Glazed Body Fragments With Handle Scars: # V-Form and 1 Ball-Scar</td>
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<td>Body/Handle</td>
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<tr>
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<td>Chamber Pot</td>
<td>Rim</td>
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<td>5/16</td>
<td>Undecorated; Salt Glazed</td>
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<td>10</td>
<td>7/16</td>
<td>Salt Glazed Interior and Exterior; Brushed Cobalt Decoration</td>
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<td>1/4</td>
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<td>5/16</td>
<td>Interior Iron Oxide Wash; Interior and Exterior Salt Glazed; Exterior Brushed Cobalt Decoration</td>
</tr>
<tr>
<td>1</td>
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<td>Interior and Exterior Iron Oxide Wash and Salt Glaze</td>
</tr>
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<td>1</td>
<td>Bottle</td>
<td>Body</td>
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<td>Iron Oxide Wash Interior; Salt Glazed Exterior; Portions of Exterior Cobalt Speckled</td>
</tr>
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<td>1</td>
<td>Bottle</td>
<td>Body</td>
<td>2 1/2</td>
<td>1/4</td>
<td>Iron Oxide Wash Interior; Salt Glazed Exterior</td>
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<tr>
<td>1</td>
<td>Crock/Jar</td>
<td>Rim</td>
<td>4 1/2</td>
<td>5/16</td>
<td>Heavily Salt Glazed Waster</td>
</tr>
<tr>
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<td>1/4</td>
<td>Salt Glazed; Wide Brushed Cobalt Edge</td>
</tr>
<tr>
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<td>Crock/Jar</td>
<td>Lid</td>
<td>13</td>
<td>5/16</td>
<td>Salt Glazed; Brushed/Trailed Cobalt Border (Parallel Lines With Wavy Line Between)</td>
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<td>Waster Foot Fragment</td>
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<td>Lip</td>
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<td>Lead Glazed Interior</td>
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<td>Salt Glazed; Brushed Cobalt Decoration</td>
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<td>Body</td>
<td>8</td>
<td>1/4</td>
<td>Salt Glazed; Brushed and Incised Cobalt Tulip Motif</td>
</tr>
<tr>
<td>1</td>
<td>Jar/Pitcher</td>
<td>Body</td>
<td>9</td>
<td>1/4</td>
<td>Salt Glazed; Hand-Applied Cobalt Wave Motif</td>
</tr>
<tr>
<td>1</td>
<td>Crock/Jar</td>
<td>Lid</td>
<td>9</td>
<td>5/16</td>
<td>Salt Glazed; Undecorated</td>
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product of this kiln. Historic documentation indicates that one or more retail outlets also owned by Mr. Pawley sold imported English serving wares and tea wares. Kiln operations appear to have focused on the production of utilitarian wares to supplement the stock of imported white bodied wares and porcelains.

The J. S. Berry Firebrick Company Pug Mill Site (18BC89)

Archival Results. Due to its proximity to the Patapsco River and to the Chesapeake Bay, the Camden Yards area historically contained large deposits of marine and alluvial clays. These readily available clay deposits rendered the project area a prime location for brickmaking enterprises. Brickmaking was a major industry in the project area from the eighteenth through twentieth centuries; brickmaking families such as the Albrights, Berrys, Krebs, Nagles, Russells, and Warners originally controlled much of the real estate in this vicinity. Gurcke (1987:5) observed that "digging by hand in shallow pits seems to have been the common practice in both Great Britain and the United States during the nineteenth century." Clay pits and brick drying sheds were depicted on late eighteenth and early nineteenth century maps of the project area (Folie 1792, Warner and Hanna 1801) (Figure 3), particularly in Property 1.

Five principal stages were involved in the brick-making process: mining (known as "winning"); the preparation of the clays; molding (known as "forming"); drying; and, firing (known as "burning"). After the clay was mined from pits, it first was weathered by permitting it to lie exposed during the winter; this process removed soluble salts from the clay, and broke down the harder lumps in the matrix. Next, the clay was tempered to make it pliable and to give it an even consistency; various materials such as sand, grog, ash, or ground chalk could be added during this phase to reduce shrinkage of the final product. The tempering process was followed by molding; until the late nineteenth century, molding was done by hand in wooden or iron clad molds, and the process required skilled workers. The molded bricks then were dried, and, finally, fired in a kiln (Gurcke 1987:4-38). An understanding of this technology permits an accurate interpretation of archeological and archival data relating to this site.

According to the J. S. Berry Brick Company's own promotional literature, the Berry family's involvement in Baltimore's brick making industry dated to ca. 1812 (Berry 1870:2). An early nineteenth century directory listing for this company showed a J. and T. L. Berry, "fireproof brick man," located on South Sharp Street, near Hill Street, within the present Sharp-Leadenhall district (Matchett 1842). Although tax records indicated that John W. Berry operated a brick kiln at Russell and Hamburg Streets as early as 1838, the family's major brickmaking operation probably moved to its Russell Street location during the late 1850s (Woods 1866).

The J. S. Berry Brick Company manufactured specialized fire bricks, used for lining flues and chambers of furnaces and smelters, as well as tiles for lining commercial bake ovens; their principal competition came from English Stourbridge bricks. The company's products, stamped "Berry's PREMIUM Fire Proof," were marketed to iron furnaces, foundries, gas light companies, and glass works in the Baltimore-Washington metropolitan area (Berry 1870:6-16). The J. S. Berry Brick Company was a moderately large establishment that employed no more than 25 laborers in 1880; 60 per cent of its work force was under the age of 16. Skilled workers at the brickyard were paid $1.75 per day, and unskilled workers netted $1.12 as a daily wage. A ten-hour day was the norm. During 1880, when the operation was idle for eight months out of 12, the company produced 200,000 fire bricks and $500 worth of bake oven tile.

In contrast, the largest brick-making firm in Baltimore, Riers, Russell, and Company, maintained a work force of 265, all of whom were over 16. The Riers/Russell firm produced brick
during seven months of 1880, and its total output was valued at $102,000.00 (U.S. Census of Manufactures 1880:6-8).

The 1890 Sanborn-Perris Fire Insurance Map of the Berry Brick Works (Figure 66) shows that the complex included several unidentified single-story frame structures; two or three kilns, both wood and coal-fired; a brick oven; several single story brick sheds; a tool house; brick floors; and four clay pits (Sanborn 1890:Ill,115)(Berry 1870:3). Both horse-powered and steam-powered pug mills were used to temper the clays. Because the company manufactured fire brick, special care had to be taken to ensure that the final size and shape of the brick was uniform. Usually, ground brick known as grog was added to clays intended for fire brick to reduce shrinkage during drying; high quality fire brick also frequently used more than one type of clay (Gurcke 1987:13).

The company utilized several drying processes for its bricks; Sanborn's map (1890:Ill, 115) showed two single-story drying sheds on the Berry property between Claret Alley and Russell Street, as well as two "brick floors" adjacent to the main kilns. Drying sheds had hinged roofs and open sides to allow maximum air circulation in good weather; using this process, bricks could be dry enough for firing within two to three weeks. Brick "floors" were heated areas on which green bricks were stacked to speed up the drying process; heat was delivered to the floor by means of flues from the nearby kilns (Gurcke 1987:26).

**Archeological Results.** Trenches 82, 83 and 84 were placed in this area to test for evidence of row houses, or of the J. S. Berry Brickyard that preceded them. Two features were identified in Trench 82; these were the brick-lined, steam-powered pug mills shown on the 1890 Sanborn Fire Insurance Maps. Both features were filled with olive yellow (2.5Y6/8) sandy clay with brick rubble and slag, and they were overlain by 20-30 cm (7.87 - 11.81 in) of dark yellowish brown (10YR4/4) sandy loam topsoil. An additional feature also was exposed within Trench 84; this was a mortared stone wall, positioned parallel to Hamburg Street. The wall was interpreted as the foundation of a late nineteenth century row house constructed in this area of the property. These row houses had no basements, and had not impacted subsurface archeological remains of the Berry operation.

Excavation of Trench 83 exposed the remains of Feature 8301. Stratigraphy within Trench 83 consisted of 15-20 cm (5.90 - 7.87 in) of sandy loam topsoil over 30-60 cm (11.81 - 23.62 in) of mottled sandy clay fill. A large wooden structure was encountered at approximately 70 cm (27.56 in) below surface; it was designated Feature 8301 (Figures 75 and 76). Archival evidence showed this to be a horse-powered pug mill operated by the J. S. Berry Brick Company. Trench 83 subsequently was extended to expose one-quarter of this feature; the remainder of the feature was left undisturbed, and preserved in situ.

**Analysis.** Artifacts recovered from the overburden at Site 18BC89 represented the cultural remains associated with late nineteenth and twentieth century domestic occupations of the site, and from subsequent fill episodes. With the exception of 15 fragments of wood obtained from the upper strata of Trench 83, and a brick stamped "Berry's PREMIUM Firebrick," none of the material could be related directly to the operation of the J. S. Berry Brick Company.

Kitchen-related and architectural materials dominated the collection recovered from the upper fill strata of Trenches 82 - 84. Food-preparation and storage materials comprised between 30.4 per cent (n = 14; Trench 84) and 81.5 per cent (n = 44; Trench 83); architectural material represented between 11.1 per cent (n = 6; Trench 82) and 41.3 per cent (n = 19; Trench 84) of the artifacts recovered from these contexts. Although a few fragments of pearlware and nineteenth century domestic grey saltglazed stoneware were recovered from the overburden, whiteware and ironstone were found most frequently. Architectural materials obtained from the surface layers.
Figure 75. Plan view of Pug Mill site, Feature 8301 (Site 18BC89)
Figure 76. Portion of J. S. Berry's horse-powered pug mill (18BC89), showing detail of wood construction
included electrical wiring, bathroom tile, roofing or paving slate, brick, window glass, and cut nails. The overlying strata near the brickyard pug mill were associated with the occupation and destruction of the rowhouses that stood at this location.

The assemblage recovered from the pug mill (Feature 8301) replicated the artifact patterns observed within the overlying strata. Forty-three artifacts were recovered from Feature 8301; architectural (n=11; 21 per cent) and kitchen (n=41, 77 per cent) materials composed almost the entire assemblage. The kitchen category contained faunal material, ceramics, and glass; ironstone was the most common ceramic type encountered. The lack of artifacts that could be associated with the brickyard operation, and the late nineteenth century domestic character of the feature fill, suggest that the pug mill was filled in to level the area during the late nineteenth century. The origin of this fill was not identified, but the lack of brickyard-related materials indicated that its source was outside the immediate area of the brickyard.

Gurcke (1987:10) has explained the operation of a pug mill (also known as a mud mill) as follows:

*Early pug mills usually took the form of a wooden tub through which ran a vertical shaft of wood. To this shaft was attached a series of blades 'extending from the shaft in four directions, but so placed that one does not follow directly under the other. To trace the knives around the shaft would be like following the thread of a screw.' Clay and additives were cropped into the top of the container that also held the shaft. As the clay made its way down, it was thoroughly mixed by the rotating blades until it was ready to be removed at the bottom."

With a diameter of approximately 6.4 m (21.0 ft), and with portions of its wooden paddles intact, the J. S. Berry Brick Company pug mill represents a primary example of how American brickmakers adapted earlier technologies to meet the demands of a mass economy.

In the summary of his work on *Bricks and Brickmaking*, Gurcke (1987:148) notes that archeological research on brickmaking technology has been confined almost exclusively to the excavation of brick clamps and kilns, or to the analysis of the molding techniques utilized to form the bricks themselves. No archeological research concerning the other technological aspects of the brick industry has been presented. The J. S. Berry Brick Company pug mill certainly is the first such feature to be uncovered in the City of Baltimore; it possibly is the first feature of its kind to be examined archeologically within the continental United States.

Blocks 926 and 927: Site 18BC87 and Eliza Dorsey Site (18BC90)

Archival Results. Before the construction of the Parks Sausage Complex, Blocks 926 and 927 were bounded by Warner, Hamburg, Eutaw, and Cross Streets. Fremont Street (formerly Cove or Charles Street) bisected these blocks diagonally, and China Alley cut through the blocks mid-way between Warner and Eutaw Streets (Figure 77).

Late eighteenth century land ownership of these parcels was associated with the Howard's Timber Neck property (Presbury 1783), and possibly with the Dorsey family (Warner and Hanna 1801) (Figure 3). However, the specifics of ownership are confused. A 1792 survey of the adjacent Ridgeley's Delight tract indicated that Corn Garetson controlled a tract of approximately 2 ac (4.94 ha) at the northwestern corner of the intersection of Charles Street and John's Street, a southern extension of Eutaw Street (Hart 1792). The Warner and Hanna map depicted a structure on the Garetson property by 1801; a "Dorsey" residence was located on the opposite side of
Figure 77. Plan view of 18BC90, the Dorsey site
Cove/Fremont Street. Eliza Dorsey married Benjamin Berry in 1795 (Maryland Historical Society 1905), and may have moved out of the area sometime thereafter.

Knowledge of the Dorsey/Berry marriage explains why, in 1838, the lot at the southwestern corner of Hamburg and Eutaw Streets was listed in the tax assessors’ records as the property of "Benjamin Berry Heirs," while a contiguous 66 x 155 ft lot on Eutaw Street was the property of John W. Berry, one of Benjamin Berry’s children by his first wife, Eleanor Lane Forbes (Maryland Historical Society 1905). The remainder of the block, at the intersection of Cross and Fremont Streets, had been sold to Henry Warfield and Charles Sherry, both of whom had improved their lots by constructing brick dwellings and other structures (Tax Assessors Records 1837-1838).

Very little additional development of these blocks had occurred by 1858, although some of the lots had changed hands. George C. Rosz, a shoemaker and grocery store proprietor, occupied a 29 x 70 ft lot at the northeastern corner of Hamburg and Eutaw Streets on land formerly assigned to Benjamin Berry’s heirs. Rosz lived in a two-story brick dwelling with a two-story rear ell. The unimproved mid-section of the Eutaw street frontage was owned by the estate of Colonel John Berry; this L-shaped section also fronted on West Hamburg Street. Asa Needham, a grocer and commission merchant living on South Charles Street, and Daniel Banks, president of the Union Manufacturing Company, owned the remaining two parcels near the intersection of Fremont and Eutaw Streets (Tax Assessors’ Records 1858; Woods 1858-1859).

Intensive development of Blocks 926 and 927 began during the late 1870s and 1880s, as vacant parcels were subdivided into narrow townhouse lots (Tax Assessors Map 1876). From the beginning of this period of intensive development, the area was racially integrated. A “Colored Baptist Church” occupied a 33 x 87 ft lot near the corner of Eutaw and Fremont Street in 1876, suggesting that African Americans constituted a significant element of the community by that time. The 1880 Census listed five dwellings between 310 and 328 South Eutaw Street; one of these was a multi-family apartment unit occupied by three African American families from Virginia, while the remaining residents of the block were of German descent.

Commercial development in this area during the 1870s was relatively minor. Only one major industrial enterprise, the J. W. Wilson and Son Sash Factory, was located on the Warner Street side of Block 926. Retail stores, including a grocery, a notions and trimming shop, and a drugstore, lined Eutaw Street; the proprietors of these shops probably occupied the apartments above their establishments. Many of the remaining lots were vacant; two landowners, J. A. Rixey and C. Shipley, controlled these vacant lots (Tax Assessor’s Records 1876).

However, by one decade later, these blocks had been developed. Land use appeared to have been divided approximately evenly between commercial/industrial and residential use. Stores with attached warehouses fronted Eutaw Street, while dwellings lined Hamburg and Fremont Streets. There were two small manufacturing establishments, a cigar box factory on China Alley and a fruit packer at Fremont Street and China Alley; the Wilson Sash Factory site had been replaced by the Church and Sunday School buildings of the Benefit Memorial Methodist Church (Sanborn 1890:III, 115; I,27). Approximately 80 per cent of the 52 residents living in the 1000 block of Eutaw Street in 1900 were African American.

Commercial space continued to displace residential areas throughout the twentieth century, and the quality of life for the blocks’ remaining inhabitants deteriorated. Junk yards and shops, cotton and wool warehouses, and an automobile repair shop were located in the area by 1914 (Sanborn 1914:1, 36); the expansion of the Baltimore and Ohio Railroad’s facilities also intruded into this area. Photographic files at the Enoch Pratt Library contain ca. 1911 photographs.
of the intersections of Eutaw Street at Cross and Hamburg Streets. These pictures clearly show
the townhouses on the west side of Eutaw, with railroad tracks and service buildings occupying
the other side.

**Archaeological Results and Analysis.** Trenches 55 - 63 were located in the area of the Eliza
Dorsey site (18BC90), in Property 15 (Figure 77). The uppermost strata in each of these trenches
were characterized by sandy clay fill containing modern or very late nineteenth to early twentieth
century cultural refuse.

However, the depositional sequence for cultural materials from some deeper trenches
appeared to be stratigraphically intact. For example, Levels 1 and 2 of Trench 63A contained
mixed nineteenth century and modern artifacts, such as flow blue ceramics (dating to at least ca.
1840), part of a bakelite telephone receiver, and a ceramic insulator. Below those strata, Level 3
contained a machine made bottle with a *terminus post quem* of 1898. Level 4 dated from 1828
or later based on the presence of red transfer printed whiteware; Level 5 contained undecorated
whiteware dating from at least 1820. In basal Level 6, the latest datable object was pearlware,
which first was manufactured ca. 1780. Based on the location of several rowhouse foundations
uncovered in additional excavation trenches i.e., Features 5701, 5801, 5802, 63A01, and 6201,
(Figure 77), it is likely that Trench 63A was located in the former back lot of a rowhouse.

The other excavation trenches (T-52-63) at the Eliza Dorsey site contained similar artifacts,
ranging from the first quarter of the nineteenth century to the beginning of the twentieth century.
Few materials dated from the period of Eliza Dorsey's occupation, during the early nineteenth
century. Artifacts included a sample of 121 architectural items such as brick, mortar, wire and cut
nails, window glass (the largest quantity with 37 fragments) and plumbing and sewer fixtures. The
441 kitchen-related items constituted the highest percentage of materials from the site (72 per
cent). These materials include faunal remains, ceramics, and glass. Faunal materials included
bones and oyster shell. Ceramics retained from these tests represented a wide range of types
including redware (n=28) 5 fragments of which were slip-decorated; creamware (n=5); pearlware
(n=63); whiteware (n=76); ironstone (n=3); yellowware (n=5); and domestic gray stoneware
(n=42). The quantities of pearlware and whiteware reflect the nineteenth century character of
domestic occupation in this portion of the study area. Other kitchen related items, included
machine made bottle glass (n=68), pharmaceutical glass (n=3); and table glass (n=5).

While the potential for eighteenth or early nineteenth century occupation and activity levels
was thought to be present within this block, the construction and demolition episodes of the 1870s
apparently destroyed most archeological vestiges of that occupation. The architectural features
and cultural remains recovered from sites 18BC87 and 18BC90, the Eliza Dorsey site, primarily
represent occupations dating from the last quarter of the nineteenth century. The earlier
nineteenth century materials may have derived from the occupations of earlier residents such as
CHAPTER VII
SUMMARY AND RECOMMENDATIONS

Prior to the Maryland Stadium Project, no comprehensive cultural resources survey of a similar scope had been conducted within the City of Baltimore. The majority of previous archeological investigations instead focused on specific sites and complexes, rather than on entire neighborhoods or districts. As a result, the archeological record of Baltimore was skewed. Over half of the archeological investigations previously conducted in the city have concentrated on late eighteenth and early nineteenth century domestic sites. Moreover, the majority of previous archeological efforts had been concentrated in the Old Town and Fell's Point areas. Sites located in neighborhoods outside of Baltimore’s rapidly re-developing central business core had been investigated far less frequently. While architectural surveys and building-specific investigations had been undertaken on a broader scale than archeological investigations, few such projects had addressed industrial resources or the significance of related archeological cultural deposits. Archival, architectural, and archeological work conducted at Camden Yards represents one of the first comprehensive efforts to document fully the evolution and the dynamics of an entire Baltimore neighborhood.

Archival Summary

From its initial development, Baltimore’s Camden Yards area was, at least partially, an industrial neighborhood; its first occupants were full participants in the eighteenth century city’s developing economy. Baltimore’s early economic growth was spurred by international and domestic trade. The city’s easy access to raw materials and its control of distribution systems were the principal components of its early success. Merchants, sea captains, and shipbuilders bought lots, constructed homes, and established businesses along the city’s waterfront. The proprietors of the brickyards, sugar factories, and ropewalks located within the Camden Yards area profited from the city’s rapid eighteenth century growth.

During the early nineteenth century, manufacturing became as vital as commerce to Baltimore’s continuing economic expansion. Sugar refineries, fertilizer plants, cotton textile factories, coal and lumber yards, and oyster and vegetable processing plants all became important components of the regional economy. As residential sections near the city’s waterfront were transformed into warehouse and industrial areas, new blocks of row houses were built at the edge of the city’s mercantile district in order to accommodate the growing population. The first intensive residential development of the Camden Yards area occurred during this period. Industrial and commercial enterprises located in the area were small in scale, and were confined either to major arteries like Eutaw Street, or to peripheral areas near the Middle Branch of the Patapsco River.

The construction of the Baltimore and Ohio Railroad’s Camden Station and railyards during the 1850s initiated a period of major transformation in the character of the project area. The nature and pace of economic development, and the allocation of space within the project area, increasingly responded to the rapid expansion of the railroad facilities. Mixed-use dwelling units became the normal residential pattern for the area. Semi-skilled and unskilled workers employed in the surrounding industrial and transportation complexes rented these dwellings. By the turn of the twentieth century, large industrial complexes had begun to encroach into formerly residential blocks. As in late nineteenth century Philadelphia, factories, offices, and warehouses
coexisted with dwelling units (Miller et al. 1983:4-5), and the residential character of the neighborhood deteriorated as a result.

During the twentieth century, the automobile hastened neighborhood change. The automobile affected development patterns in the project area as severely as the railroad had during the nineteenth century. Much of the remaining residential space was replaced by parking lots, automobile service stations, and motor freight facilities. Former inhabitants of Camden Yards who could afford to do so moved to the suburbs and commuted to work by car. Increasingly, the typical occupant of the Camden Yards neighborhood was likely to be unskilled, poor, and black. By the early 1930s, the project area, with its crowded ancient multi-family dwellings, was rated as one of the six most blighted, overcrowded, and unsanitary neighborhoods in the city (Reid 1934:28-29).

The final transformation of the Maryland Stadium project area occurred during the post-World War II era. The remaining residences, institutional buildings, and older commercial and industrial complexes gradually were replaced by the newer industries and warehouses of the Camden Industrial Park. The last residents of the project area moved into other sections of the city. The final conversion of the project area into an "industrial park" was characteristic of the change in twentieth century American urban design from mixed use neighborhoods to specialized single use zones.

Conclusions

Methodological Conclusions

Archeological investigations at the Camden Yards site enabled large-scale testing of the applicability of an historical Geographic Information System (GIS) to a complex urban neighborhood. Based on research into the historical background of the Camden Yards area, and using information from 113 historic maps, the GIS generated comparative cartographic data in such a way that historically documented sites and locations could be relocated both on current maps and in the field.

The placement of archeological test trenches excavated during these investigations applied the GIS. In the majority of cases, these test trenches verified the location and character of features such as foundations, privies, roads, trolley tracks, and sewers. Thus, they validated the level of accuracy that could be achieved using a GIS system as an investigative tool. Another planning tool that proved unusually successful in this case was interpretation of historic sewer, water, and utility line locations. The placement of these lines on construction plans in many cases indicated the historic locations of streets, alleys, and individual domestic hook-ups where above-ground evidence of these features had been removed by later demolition or construction. The locations of these features, especially unused gas or water lines, was useful in pinpointing the location of historic alleys. This strategy, combined with GIS-generated information, enabled more precise delineation of rear yard areas associated with row houses, as well as the relocation of outbuildings such as stables or privies. Testing then could be concentrated in these areas.

The field strategy of excavating test trenches placed with reference to historic map and GIS data proved to be a most effective approach to testing a large area in an urban environment. Shovel testing in these areas would have produced limited information; the maximum possible depth of a shovel test could not have penetrated the fill episodes present over most of the project area. Similarly, long transect-like trench excavations would have failed to recover a representative sample of the features, activities, and periods of Camden Yards' history. The use of test trenches
enabled exposure of a large profile of both natural and cultural stratigraphy, and of the location and orientation of foundations. In turn, this permitted a more lucid understanding of the formation processes involved in creation of the natural and cultural landscape of the neighborhood.

**Architectural Conclusions**

Documentation of eight extant properties was undertaken as part of cultural resources investigations at the Camden Yards. The purpose of this effort was to provide a permanent record of significant structures within the project area prior to their demolition. This record is included in the collection of the Maryland Historical Trust for future use by scholars and by the public.

The eight recorded properties documented the most recent phase of land use history prior to redevelopment of the site by the Maryland Stadium Authority. The architecture of Camden Yards, as represented by the eight properties, reflected the urban history of the area from the late nineteenth through the late twentieth centuries through building style, scale, materials, patterns of building, addition, alteration, and reuse. The industrial buildings documented the evolution of increased specialization of the area. Architectural design was inseparable from the functional requirements of use. As a consequence, the buildings of Camden Yards embodied the activities that they housed through their design. The properties stood as monuments to the increased diversity, complexity, and sophistication of daily pursuits. They presented a cross section of the Baltimore work place during the first half of the twentieth century.

The William B. Cassell Company (ca. 1890, 1910, 1940, 1950) illustrated the area's transition from mixed use to light industrial specialization. The core structure of the property originally was constructed as a rowhouse and stable complex. The dwelling was modified in the early twentieth century by the William B. Cassell Company, a commission broker of processed food products. Cassell Company was one of several food processing and storage companies located in the Camden Yards area. These companies capitalized on the area's proximity to rail service that enabled the receipt of bulk shipments of food stuffs. In the case of the Cassell Company, for example, lard and oil railroad tanker cars were off loaded from the company's rail spur on Howard Street. Cassell Company products were marketed to institutional customers in the Washington/Baltimore area.

The importance of freight transportation and warehousing to the project area during the early decades of the twentieth century was reflected in the Camden Station complex. That complex occupied approximately 25 ac (10.12 ha) that encompassed the Camden Passenger Station, the Camden Station Office Building, the Camden Warehouses, a Produce Terminal, and four freight handling platforms. The Camden Station Office Building was constructed in 1905-1906 to house support services associated with freight shipments and railroad operation. The building housed the offices of the freight agent, warehouse manager, accountants, railroad police, and stationary storekeeper. The construction of the office building was part of a site improvements program undertaken by the Baltimore & Ohio Railroad between 1903 and 1907. During this period, the railroad yards were expanded, the warehouses were extended, freight houses were constructed, and gantry cranes were erected. Significantly, the decline of the railroad as a primary means of freight shipment was reflected in the declining use of the complex.

Industrial diversity and specialization were reflected by four of the recorded complexes: the Southern Seafood Complex, Baltimore Thermal Energy Corporation, Inland-Leidy Chemical Company, and Monumental Hotel Supply Company. The Southern Seafood Complex and Baltimore Thermal Energy Complex incorporated monumental scale industrial structures.
The Inland Leidy Chemical Corporation consolidated several existing structures into its industrial complex. Included among these were the shell of the former St. Luke's German Evangelical Lutheran Church (1866), a commercial office building occupied by the American Sales Company Wholesale Beer distributorship (ca. 1930), and two walls from a movie theater. This commercial/industrial complex was an example of the warehousing and light industrial activities associated with the recent period of development in the project area.

The Southern Seafood Cold Storage Warehouse was constructed in 1928-1929 by the Consolidated Gas and Electric Company. Operation of the refrigerated storage facility was reorganized in 1943 under the Consolidated Cold Storage Company; the complex was acquired by the Southern Seafood Company in 1977. The principal component of the complex was an eight-story cold storage building utilizing a reinforced concrete slab structural system.

The Baltimore Thermal Energy complex was a monumental scale steam heat generating complex constructed between 1911 and 1965. The architectural components of the steam generating plant reflected the structural systems needed to house complex equipment. Commercial steam generation includes three steps: fuel combustion, steam generation, and reheating. The essential components of the steam-generating plant included steam drums and tubes; fuel-burning equipment and furnaces; draft systems for air supply and for gas removal; blowers, fans, and stacks; pumps for water circulation, and fuel and refuse handling systems.

In contrast to the Southern Seafood and Baltimore Thermal Complexes, Monumental Hotel Supply Company was a modest, cinder block industrial structure built between 1955 and 1956. The company fabricated hamburger patties for distribution in the Baltimore area. The design of the structure was practical and austere. The interior was divided into three functional zones; office, processing and storage areas, and a loading area.

The social and educational history of the area was illustrated by two properties: the Diggs-Johnson School and the Maryland Office Interiors Building. The Diggs-Johnson School was a locally significant example of stripped classical school architecture constructed in 1951-1952. The building was known as the Southwest Baltimore Colored Elementary School #162 during the planning stages; it was christened the Josiah Diggs Elementary School, in honor of the prominent Baltimore businessman, at the official ground breaking in 1951. In 1962, the school was consolidated with School #106, the Harvey Johnson Junior High School. The latter school was named for Reverend Doctor Harvey Johnson, the eminent minister of Baltimore’s Union Baptist Church. This consolidation suggested that the population density was declining in the Camden Yards neighborhood, as warehousing and industrial facilities supplanted residential areas.

The Maryland Office Interiors building was constructed ca. 1900 as Miller’s Safe Manufactory; the structure was operated by the Salvation Army as an "Industrial Home" for destitute men between 1927 and 1981. The Salvation Army established its first post in the south of Baltimore in 1880. Their complex in the Camden Yards incorporated a dormitory and warehouse.

Archaeological Conclusions

Through the nineteenth century, many changes occurred in the Camden Yards neighborhood. As the century progressed, the area’s transformation to a more working class, less affluent community coincided with the introduction of the railroad, with the industrial development of Camden Yards, and with the fact that increasingly more houses were rented rather than owned.
The material culture recovered from the Camden Yards represents a microcosm not only of nineteenth century Baltimore, but of urban America.

The progressive development from north to south within the project area, in combination with the decline of the economic status of residents from affluence to working class, was evident in the architectural materials recovered and recorded during the study. As construction progressed from north to south, residential buildings became less substantial. Those at the northern end of the project area, along Conway and Paca Streets, universally had substantial brick basements. In the central portion of the project area, developed during the mid-nineteenth century, full basements were less frequent and not as well constructed. In the southern portion of the project area, late nineteenth and twentieth century row house foundations often consisted of shallow footers with no associated basements. As a result, these latter features had little effect on below-ground cultural resources such as the Berry Brick Works pug mill, and the James Pawley stoneware kiln.

The slowly declining economic status of the residents of Camden Yards over time was documented archeologically through analysis of the contents of the three temporally discrete privy deposits found on Property 1. Analysis of the ceramics from these deposits focused on the variables of quantity, quality, and variety. The early nineteenth century component of Privy R-5 contained 30 per cent more ceramic vessels than the early twentieth century deposit from privy Feature 19A01. Privy R-5 produced from 107 to 165.3 vessels per person, while privy Feature 19A01 contained only 25.6 to 28.6 vessels per person. Examining the variable of quality was more difficult; the two collections differed so greatly that they were not directly comparable. However, it was evident that Privy R-5 contained a far greater number of decorated vessels than did privy Feature 19A01; this discrepancy probably reflected both changing ceramic technology and differing economic status. Moreover, Privy R-5 contained many matched sets of ceramics, while privy Feature 19A01 had very few. This difference served as another indication that, with the privy Feature 19A01 assemblage, less money was spent on ceramic purchases at any one time than was the case with Privy R-5. When the variable of variety was considered, there was not a great discrepancy in the number of forms: Privy R-5 had 25 forms, while privy Feature 19A01 had 18 forms, or a difference of only 11.3 per cent. However, privy Feature 19A01, had only 41.9 per cent as many vessels per form as Privy R-5.

The relative quantity and quality displayed by the ceramic wares in these two collections appear to reflect differences in socio-economic status. Although the implications of the variable of variety are mixed, similar results were obtained in the analysis of ceramic assemblages from Alexandria, Virginia, where quantity and quality were found to reflect socio-economic status, while variety did not (Shephard 1987:177). In Lowell, Massachusetts, quantity was considered the most reliable variable for socioeconomic status (Dutton 1989:103).

The faunal remains recovered from Privies R-5 and R-3 reflected the impact of industrialization and mass production on methods of food procurement in an urban environment, as well as the difference in socio-economic status between the two households. Privy R-5's faunal assemblage displayed the use of butchering techniques indicative of a pre-industrial system of food procurement and merchandising: scraping, cutting, chopping, or shearing. The meat cuts represented by the Privy R-5 faunal assemblage also reflected a somewhat greater consumption of choicer parts such as ribs and rumps. In contrast, the greater frequency of sawed bones and the uniformity of portions exhibited by faunal remains from Privy R-3 suggested the mass processing and marketing techniques that first were applied in the meat-processing industry during the late nineteenth century. The Privy R-3 faunal subassemblage also reflected the generally lower socio-economic status of this household's residents, who "made do" with less expensive cuts of meat.
Comparison of the material culture evidenced at Privies R-5, R-3, and privy Feature 19A01 also provided a glimpse into the broader changes that took place in Baltimore during the nineteenth century. In particular, the growth of American industrial technology was evident. During the early part of the century, as represented by the collection from Privy R-5, all ceramics were English imports with the exception of locally produced redwares and some stonewares. However, by the close of the century, the vast majority of the ceramics were of American manufacture, and had been acquired through a fully developed nationwide distribution system. Artifacts from privy Feature 19A01 provided tangible evidence that this household was tied into typical late nineteenth and early twentieth century patterns of consumer behavior with regard to the use of commercially prepared nostrums, as well as for toys and decorative figurines. The presence of "Home Rule" tobacco pipes hinted at the involvement of Camden Yards residents in the political and cultural issues of the day. It would seem that while the household associated with privy Feature 19A01 participated in newly established national and regional trade networks, they continued to maintain strong ties to their city, their neighborhood, and even to their country of origin.

While the data from Property 1 presented evidence of the social and economic status of the residents of Camden Yards, the archeological record from the J. S. Berry Brick Kiln complex and the James Pawley Pottery represented the early economic and technological development of the project area. In a sense, the archeological features and finds from these sites completed the continuum whose twentieth century terminus was anchored by the architectural recordation component of the Maryland Stadium Project.

The Pawley stoneware kiln site yielded evidence of the technology and the products of a previously unidentified nineteenth century Baltimore stoneware potter. This pottery kiln and its artifacts represented the non-mechanized individual operation characteristic of the earliest industrial enterprises in the project area; the kiln was anachronistic, because it was in operation during a period when Baltimore's potting industry was becoming mechanized. The various motifs on the pieces produced at the kiln and the quality of the wares illustrated the level of technical skill and the artistic sensitivity of this craftsman. Because a reasonably tight date range (1838-1858) has been established for this particular pottery operation, samples of previously unidentified stoneware with identical motifs recovered from other sites in the region now can serve as temporal markers for those sites.

The J. S. Berry Pug Mill site represented a highly significant industry in the project area. Two pug mills, one horse-powered and one steam-powered, were found on Property 15. These features represent a technological watershed for the brick-making industry, because they document the change from manual to mechanized production in this basic industry.

Public Interpretation

The regional news media maintained a consistently high level of interest in and coverage about the preservation work being undertaken at the Camden Yards. Through this media coverage, a broad segment of the public became acquainted with the methods and the objectives of historical archeology. One measure of the amount of public interest in the project was the enthusiastic turnout of approximately 1000 people for the open house held at the Ruth Saloon Site, "Babe's" boyhood home.

The public interpretation component of the Maryland Stadium Project also showed the effectiveness of interagency cooperation. Particular emphasis was laid on establishing links with other departments, institutions, and agencies. These attempts to interface with other agencies...
resulted in the successful School Press Day, (Figure 78), and in the close cooperation between the consultants and the Babe Ruth Museum. The high profile of the stadium itself will continue to generate opportunities for public interpretation of the material culture and the history of the Camden Yards project area.

Recommendations

Archeology

Due to completion of archeological and architectural field work, and to the construction of Oriole Park at Camden Yards in the northern half of the project area, no further archeological work is needed or can be conducted in that section of the complex. However, two sites in the southern portion of the project area have been preserved in place, and merit further consideration prior to their destruction. The James Pawley stoneware kiln site (18BC88) and the site of the horse-powered pug mill associated with the J. S. Berry Brick Works (18BC89) lie within the planned area of future construction for a new football stadium. Steps were taken during construction of the baseball stadium, and associated parking areas to preserve these sites. These steps included modification of construction plans in order to raise the level of the parking lots in the area of the kiln and the pug mill, rather than lowering the grade, as originally had been planned. In addition, upon completion of test excavations, both the kiln and the pug mill were backfilled with clean sand, and covered with a layer of fill. These measures served to protect both sites from damage during the completion of construction associated with the baseball stadium.

Both sites retain high potential for producing valuable data related to the manufacture of brick in the case of the pug mill, and the manufacture of stoneware, in the case of the kiln. Both of these sites are locally significant because they represent the growth and development of industry in the Camden Yards project area during the nineteenth century, the principal era of rapid industrial and commercial growth. The stoneware kiln represents the establishment and growth of commercial enterprises during early expansion into the area. As a component of a larger manufacturing facility, the pug mill is representative of the type of independent enterprise that flourished in the project area after the establishment of the rail lines and Camden Station.

The stoneware kiln has a larger significance because the decorative motifs used by the potter on the products of the kiln, having been dated and documented, will be universally identifiable. These dated motifs can be used as chronological markers, and products of this potter can be used to establish historically important regional trade and mercantile networks. Information from the kiln site not only adds to the data base for manufacturing materials and techniques, but also to the scope of analytical and interpretive studies.

The results of the archeological testing and archival research undertaken for Property 15 suggest that other buildings or facilities probably were associated with both manufacturing operations, and that other intact features associated either with the operation of the brick works, or with the stoneware manufactory still are extant, but were not identified during this study. If future construction is undertaken in this area, these features would require either avoidance or mitigation. In order to avoid a potentially costly delay in construction due to a discovery situation, it is recommended that more intensive investigation of this area be undertaken prior to construction of the new football stadium.

The form of mitigative efforts in these areas should include an intensive survey of the area after the overlying fill layers have been mechanically removed. Any features associated with the
Figure 78. Dr. R. Christopher Goodwin explains excavations at the J. S. Berry Brick Company pug mill site during School Press Day (March 25, 1990)
operations of the stoneware kiln or the J.S. Berry Brick works should be documented through extensive mapping, and archeological testing. The level of testing should be sufficient to document the horizontal and vertical extent of any features, their relationship to one another, and their temporal and social/economic associations.

Public Interpretation

The abundance of cartographic, photographic, archival, and artifactual data generated by this project, and the enthusiastic reception of the public interpretation initiatives already implemented, clearly indicate that more public interpretation of this project should be considered. Two potential audiences—the general public and pre-college students—would constitute the target audiences for an expanded public interpretation program.

To disseminate basic information about the Maryland Stadium Project to a broader general audience, the previously developed brochures could be reprinted and distributed to ticket holders. These brochures also might be included in mailings to all potential season ticket buyers. The cost of pursuing this initiative would be minimal, since the brochure already has been developed.

A popularly written, attractively-illustrated version of the technical report also should be developed for sale to the general public; plans for this volume are underway, and should be finalized soon. This publication would be more detailed than the previously mentioned brochure, but it would contain a minimal amount of technical data and analysis. Such a publication would present, in non-technical terms, the rationale for implementing the Maryland Stadium Project; the methods employed in conducting the project; the results of historical research; full coverage of the architectural recordation component of the project; and, the archeological discoveries documenting the social and economic history of the project area. Distribution might be arranged through museums, libraries, and other cultural institutions within the Baltimore Metropolitan area.

Publicly accessible displays are another means by which the results of the project can be disseminated. Photographic and/or graphic displays, installed in kiosks around the stadium grounds, could inform both stadium patrons and general visitors about the architectural and industrial heritage of the Camden Yards. An enclosed indoor display featuring excavated artifacts also could be utilized to develop the theme of the neighborhood’s social history. This display could be installed permanently in the public areas of the warehouse/office complex, similar to the present exhibit at the Federal Reserve Bank. The expansion of the Baltimore Orioles/Babe Ruth Museum presents another good opportunity for the display of artifacts and data from this project.

Finally, the archival and archeological data could be incorporated into an educational unit for use in secondary schools. Components of this educational unit should be developed in cooperation with social studies, science, and language arts teachers and curriculum specialists from the Baltimore Metropolitan area. The unit might focus on the "detective work" undertaken to unravel the history of a particular site. In this type of approach, teachers are provided with selected documents, maps, archeological graphics, and reproductions of artifacts; students then use the data supplied to generate and support hypotheses about the site. A very effective similar approach to archeology and history has been developed by the State of Louisiana for use in its classrooms. A set of slides with narrative text, utilizing slides taken during the course of the project, also might circulate with the educational unit. Grant funds should be available to help subsidize such an undertaking.

In many ways, the archeology, architecture, and history of Camden Yards reflect the social and economic growth and development both of Baltimore and of our nation. Through this effort,
the Maryland Stadium Authority has preserved the history of generations of Baltimoreans about whom little was known, and less was written. Camden Yards, the new home of Oriole Park, now serves as a monument to those who lived and worked in that neighborhood, and who laid the foundation for America's favorite pastime.
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John Seidel, 1991
ACKNOWLEDGEMENTS

This project succeeded in large measure because of the assistance and support of numerous individuals and agencies. R. Christopher Goodwin & Associates, Inc., would like to recognize and thank Mr. Bruce Hoffman, Ms. Kim McCalla, Ms. Carol Salmon, Nolan Rogers, Esq., and the staff of the Maryland Stadium Authority for their support during the entire project. Mr. Steve Evans of Hellmuth, Obata, and Kassabaum (HOK Sport), also gave generously of his time and expertise to facilitate the successful completion of the archeological work.

Archival research was conducted in a variety of repositories. We acknowledge with gratitude the assistance rendered by the staffs of the Maryland Historical Trust; the Baltimore City Archives; the Maryland Room of the Enoch Pratt Free Library; the Baltimore Center for Urban Archaeology; the Baltimore Museum of Industry; the Maryland Historical Society; the Maryland Hall of Records; the Geography and Maps Division of the Library of Congress; the National Archives; the Babe Ruth Birthplace Museum; the Library of Gettysburg College; and the Baltimore & Ohio Railroad Museum. Personal insights into the history of the corporations, institutions, and residents of the Camden Yards area also were shared generously by the following individuals: Major Charles Nowell, of the Salvation Army; Mr. William Cassell; Mr. Pat Pscherer of CSX Corporation; Louise Akerson; Wade Cooney; John Seidel; and, Mary Ann Ruth Moberly.

The public interpretation initiatives undertaken during the Maryland Stadium archeological project owed their success to the cooperation of the Maryland Stadium Authority, the Babe Ruth Museum, and members of the media establishment in Baltimore. In particular, we wish to thank the language arts supervisors, teachers, and student journalists from the private and public schools in the City of Baltimore, and in Baltimore, Howard, and Prince Georges County, Maryland, for helping to arrange and for participating in the School Press Days.

The Maryland Historical Trust provided guidance, support, and consultation throughout the life of this project. In particular, Ms. Elizabeth Cole and Mr. William Pencek should share the credit for the positive aspects of this study. Dr. Ethel Eaton of the Virginia Department of Historic Resources, formerly of the Maryland Historical Trust, provided technical guidance during the early phases of the project.

At Goodwin & Associates, Inc., Dr. R. Christopher Goodwin served as Principal Investigator for this effort. April Miller Fehr, M.A., A.B.D., served as the project manager through completion of field work. Her efforts and dedication helped to assure the successful completion of the project. Suzanne Sanders, M.A., served as Crew Chief. They were ably assisted by Dr. Thomas Neumann, Colby Child, Pamela Crane, Kathy Federtine, Peter Morrison, and Beth Akers. Martha Williams, M.A., M.Ed., historian, David Hardin, M.A., A.B.D., cultural geographer, and Michelle Moran, historian, conducted the map and archival research. Dr. Elizabeth Peña and Theresa Reimer conducted laboratory analyses of the archeological artifacts. Kathryn Kuranda, M. Arch. Hist., supervised recordation of buildings to HABS/HAER standards. Floor plans were prepared under the direction of David Benn, of Cho, Wilks, and Benn. Edie Wallace, Martha Williams, Sue Sanders, and Harriet Wise took the photographs included in this report. We also would like to thank Dr. David Landon for his cogent analyses of faunal data, and Justine Woodard for her ethnobotanical analyses. Cyd Goodwin, Shirley Rambeau, and Sue Sanders prepared the graphics for the report; Sharon Little and Marcalene Moxley produced it.
APPENDIX I

MARYLAND STATE ARCHEOLOGICAL SITE FORMS
Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore

2. Site Number: MSA-01

3. Site Name: 

4. Site Type (check all applicable):
   - Prehistoric
   - Historic
   - Unknown

5. Maryland Archeological Research Unit Number: 14 Patapsco-Middle-Back Drainage

B. Location

6. USGS 7.5' Quadrange(s): Baltimore East

   (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site Zone:

8. Easting:

9. Northing:

10. Physiographic Province (check one):
    - Allegheny Plateau
    - Ridge and Valley
    - Great Valley
    - Blue Ridge
    - Lancaster/Frederick Lowland
    - Eastern Piedmont
    - Western Shore Coastal Plain
    - Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch, Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 

Order
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - X Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.80 meters (or 1000 feet)

17. Topographic Settings (check all applicable):
   - X Floodplain
   - Interior Flat
   - Terrace
   - Low Terrace
   - High Terrace
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - January 1990

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
   - Plowed
   - Eroded
   - Graded/Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:
   - January 1990

23. Additional Comments on Environment:
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial</td>
<td>Underwater</td>
<td>Both</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paleoinian</td>
<td>17th century</td>
<td></td>
</tr>
<tr>
<td>Archaic</td>
<td>1630-1675</td>
<td></td>
</tr>
<tr>
<td>Early Archaic</td>
<td>1675-1720</td>
<td></td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>18th century</td>
<td></td>
</tr>
<tr>
<td>Late Archaic</td>
<td>1720-1780</td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td>1780-1820</td>
<td></td>
</tr>
<tr>
<td>Early Woodland</td>
<td>19th century</td>
<td></td>
</tr>
<tr>
<td>Middle Woodland</td>
<td>1820-1860</td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1860-1900</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X 1900-1930</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X post 1930</td>
<td></td>
</tr>
</tbody>
</table>

27. State Plant Themes:

28. Site length: 167.64 meters (or 550 feet)

29. Site width: 121.92 meters (or 400 feet)

30. Is site confined to plowzone?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

31. Does site have subsurface integrity?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- Prehistoric
- Historic
- Submerged
- Shipwreck

33. Ownership:

- Private
- Public
- Unknown

34. Owner: Maryland Stadium Authority
   Address: Suite 2450, World Trade Center, Baltimore MD 21202
   Phone: 301-330-1560
   Date: January 1991

35. Tenant:
   Address: ________________________________
   Phone: ________________________________
   Date: ________________________________

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?

- Yes
- No
- Unknown

39. If YES, type and location:

40. Collections?

- Yes
- No
- Unknown

41. If YES, give owner and location:

42. Artifact Conservation?

- Yes
- Partial
- No
- Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

45. Informant:
   - Suzanne Sanders
   - Address: see below
   - Phone: 301-694-0428
   - Date: March 1991

46. Site visited by:
   - Suzanne Sanders
   - Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   - Phone: 301-694-0428
   - Date: January 1991

47. Form filled out by:
   - Suzanne Sanders
   - Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   - Phone: 301-694-0428
   - Date: March 1991

48. Additional Comments:
   - For Division of Archeology Use Only

49. Form transcribed by:
   - Date:

50. Form checked by:
   - Date:

51. Entered on computer by:
   - Date:

52. Form updated by:
   - Date:

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC78

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a.  x domestic 
      X industrial 
      ___ transportation 
      ___ military 
      ___ sepulchre 
      ___ unknown

   b.  x urban 
      ___ rural 
      ___ unknown

   c. standing structure:  
      ___ yes 
      x no 
      ___ unknown

   d. above-grade/visible ruin:  
      ___ yes 
      x no 
      ___ unknown

2. Site Type (check all applicable):
   X artifact concentration 
   ___ possible structure 
   ___ post-in-ground structure 
   X frame structure 
   X masonry structure 
   ___ farmstead 
   ___ plantation 
   ___ townsit 
   ___ mill (specify: __________________) 
   ___ raceway 
   ___ quarry 
   ___ furnace/forge 

3. Ethnic Association:
   ___ Native American 
   ___ Afroamerican 
   ___ Angloamerican 
   ___ other Euroamerican 
   ___ other: __________________

4. Categories of material remains present (check all applicable):
   X ceramics 
   ___ bottle/table glass 
   ___ other kitchen artifacts 
   X architecture 
   ___ furniture 
   ___ arms 
   X clothing 
   X personal items 
   X tobacco pipes 
   ___ activity items 
   ___ human skeletal remains 
   X faunal remains 
   ___ floral remains 
   ___ organic remains 
   ___ unknown 
   ___ other:

5. Diagnostics (choose from manual and give number recorded or observed):
   yellow ware 
   machine-made brick 
   machine-made bottle 
   blue and brown transfer-printed whiteware 
   ___ mold blown bottle 

(sample only)
6. Features present:
   - yes
   - no
   - unknown

7. Types of features present:
   - construction feature
   - foundation
   - cellar hole/storage cellar
   - hearth/chimney base
   - posthole/postmold
   - paling ditch/fence
   - privy
   - well/cistern
   - trash pit/dump
   - sheet midden
   - planting feature
   - road/drive/walkway
   - depression/mound
   - burial
   - railroad bed
   - earthworks
   - raceway
   - wheel pit
   - unknown
   - other:

8. Method of sampling (check all applicable):
   - non-systematic surface search
   - systematic surface collection
   - non-systematic shovel test pits
   - excavation units
   - mechanical excavation

   extent/nature of excavation: 17 5-meter x 1 meter trenches

9. Flotation samples collected:
   - yes
   - no
   - unknown

10. Soil samples collected:
    - yes
    - no
    - unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Associates, Inc., 337 E. 3rd St., Frederick, MD
    Date: Mar 91

For Division of Archeology Use Only
14. Form transcribed by: 
15. Date: 
16. Form checked by: 
17. Entered on computer by: 
18. Date: 
19. Form updated by: 
20. Date: 

Maryland Geological Survey, January 1989
MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 BC79

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore
2. Site Number: MSA-02
3. Site Name: 
4. Site Type (check all applicable):
   - Prehistoric
   - Historic
   - Unknown
5. Maryland Archeological Research Unit Number: 14 Patapsco-Middle-Back Drainage

B. Location

6. USGS 7.5' Quad-Range(s): Baltimore East

(Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site
   Zone: 
8. Easting: 
9. Northing: 

10. Physiographic Province (check one):
    - Allegheny Plateau
    - Ridge and Valley
    - Great Valley
    - Blue Ridge
    - Eastern Piedmont
    - Western Shore Coastal Plain
    - Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 

Order

Order

Order

Order
### Basic Data Form

#### C. Environmental Data

15. Closest Surface Water Type (check all applicable):
- Ocean
- [x] Estuarine Bay/Tidal River
- [ ] Tidal or Marsh
- [ ] Freshwater Stream/River
- [ ] Freshwater Swamp
- [ ] Lake or Pond
- [ ] Spring

16. Distance from closest surface water: 304.80 meters (or 1000 feet)

#### SCS Typology

18. Topographic Settings (check all applicable):
- [ ] Floodplain
- [x] Interior Flat
- [x] Terrace
- [ ] Low Terrace
- [ ] High Terrace
- [ ] Hillslope
- [ ] Hilltop/Bluff
- [ ] Upland Flat
- [ ] Ridgetop
- [ ] Rockshelter/Cave
- [ ] Unknown
- [ ] Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked (check all applicable):
- [ ] Plowed/Tilled
- [ ] No-Till
- [ ] Wooded/Forested
- [ ] Logging/Logged
- [ ] Underbrush/Overgrown
- [ ] Pasture
- [ ] Cemetery
- [x] Commercial
- [ ] Educational
- [ ] Extractive
- [ ] Military
- [ ] Recreational
- [ ] Residential
- [ ] Ruin
- [ ] Standing Structure
- [ ] Transportation
- [ ] Unknown
- [ ] Other: Construction Site

22. Condition of Site (check all applicable):
- [ ] UNDISTURBED
- [ ] DISTURBED
- [ ] Plowed
- [ ] Eroded
- [ ] Graded/Contoured
- [ ] Collected
- [ ] Vandalized
- [ ] Dredged
- [ ] Other:

23. Additional Comments on Environment:

---

**Date:** January 1990
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td>X urban</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>rural</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
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<td></td>
<td>Military</td>
<td></td>
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<td></td>
<td>Religious</td>
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<td></td>
<td>Water Transportation</td>
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<td>Other:</td>
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<tr>
<td></td>
<td>Commercial (urban)</td>
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</tbody>
</table>

25. Site Type B (check one):

- X Terrestrial
- Underwater
- Both

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
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<th>HISTORIC</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Paleoindian</td>
<td>17th century</td>
<td></td>
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<tr>
<td>Archaic</td>
<td>1630-1675</td>
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<tr>
<td>Early Archaic</td>
<td>1675-1720</td>
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<tr>
<td>Middle Archaic</td>
<td>18th century</td>
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<tr>
<td>Late Archaic</td>
<td>1720-1780</td>
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<td>Woodland</td>
<td>1780-1820</td>
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<td>Early Woodland</td>
<td>19th century</td>
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<td>Late Woodland</td>
<td>X 1900-1930</td>
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<tr>
<td>X post 1930</td>
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<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td>X 1900-1930</td>
<td></td>
</tr>
<tr>
<td>X post 1930</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan Themes:

28. Site length: 2338 meters (or 80 feet)

29. Site width: 3657 meters (or 120 feet)

30. Is site confined to plowzone?

- Yes
- X No
- Unknown

31. Does site have subsurface integrity?

- Yes
- X No
- Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   - Submerged
   - Shipwreck

33. Ownership:
   - Private
   - Public
   - Unknown

34. Owner:
   Name: Maryland Stadium Authority
   Address: Suite 2450 World Trade Center, Baltimore, MD 21202
   Phone: 301-333-1560
   Date: January 1991

35. Tenant:
   Address: 
   Phone: 
   Date: 

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   - Unknown

39. If YES, type and location:

40. Collections?
   - Yes
   - No
   - Unknown

41. If YES, give owner and location:

42. Artifact Conservation?
   - Yes
   - Partial
   - No
   - Unknown
BASIC DATA FORM

43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: see below
   Phone: Date: Mar 91

46. Site visited by: Suzanne Sanders
   Address: R. C. Goodwin & Associates, Inc., 337 E 3rd St., Frederick, MD 21701
   Phone: 301-694-0428 Date: January 1990

47. Form filled out by: Suzanne Sanders
   Address: R. C. Goodwin & Associates, 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428 Date: March 1991

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by:
   Date: 

51. Form checked by:
   Date: 

52. Entered on computer by:
   Date: 

54. Form updated by:
   Date: 

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC79

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. X domestic
   _ industrial
   _ transportation
   _ military
   _ sepulchre
   _ unknown
   X commercial
   b. X urban
   _ rural
   _ unknown
   c. standing structure:
      _ yes
      X no
      _ unknown
   d. above-grade/visible ruin:
      _ yes
      X no
      _ unknown

2. Site Type (check all applicable):
   _ artifact concentration
   X possible structure
   _ post-in-ground structure
   _ frame structure
   X masonry structure
   _ farmstead
   _ plantation
   _ townsite
   _ mill (specify:)
   _ raceway
   _ quarry
   _ furnace/forge
   _ road/railroad
   _ wharf/landing
   _ bridge
   _ ford
   _ battlefield
   _ military fortification
   _ military encampment
   _ cemetery
   _ unknown
   X other:
   _ privy

   _ Native American
   _ Afroamerican
   X Angloamerican
   _ other Euroamerican
   (specify):
   _ Hispanic
   _ Asian-American
   _ unknown
   _ other

4. Categories of material remains present (check all applicable):
   _ ceramics
   X bottle/table glass
   _ other kitchen artifacts
   _ architecture
   _ furniture
   _ arms
   _ clothing
   _ personal items
   _ tobacco pipes
   _ activity items
   _ human skeletal remains
   _ faunal remains
   _ floral remains
   _ organic remains
   _ unknown
   _ other.

5. Diagnostics (choose from manual and give number recorded or observed):
   Blue transfer-printed pearlware
   polychrome hand-painted pearlware
   undecorated creamware
   gray salt-glazed stoneware with cobalt decoration
   blue and green shell-edged pearlware
   annular pearlware and creamware
   (sample only)
HISTORIC DATA FORM

6. Features present:
   X yes
   no
   unknown

7. Types of features present:
   construction feature
   X foundation
   cellar hole/storage cellar
   hearth/chimney base
   posthole/postmold
   paling ditch/fence
   X privy
   well/cistern
   X trash pit/dump
   sheet midden
   planting feature
   road/drive/walkway
   depression/mound
   burial
   railroad bed
   earthworks
   raceway
   wheel pit
   unknown
   other:

8. Method of sampling (check all applicable):
   non-systematic surface search
   systematic surface collection
   non-systematic shovel test pits
   excavation units
   X mechanical excavation
   extent/nature of excavation: 5 by 1 meter trenches
   hand excavation within features

9. Flotation samples collected:
   X yes
   no
   unknown
   analyzed:

10. Soil samples collected:
    X yes
    no
    unknown
    analyzed:

11. Other analyses (specify): faunal

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R.C. Goodwin & Assoc., Inc. 337 E. 3rd St., Frederick, MD 21701
    Date: March 1991

Maryland Geological Survey, January 1989
MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 BC80

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore

2. Site Number: MSA-03

3. Site Name: 

4. Site Type (check all applicable): 
   - X Prehistoric
   - Historic
   - Unknown

5. Maryland Archeological Research Unit Number: 14 Patapsco-Middle-Back Drainage

B. Location

6. USGS 7.5' Quad-range(s): Baltimore East

   (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site: 
   Zone: 

8. Easting: 

9. Northing: 

10. Physiographic Province (check one):
    - _____ Allegheny Plateau
    - _____ Ridge and Valley
    - _____ Great Valley
    - _____ Blue Ridge
    - _____ Eastern Piedmont
    - X Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch of Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 

### BASIC DATA FORM

#### C. Environmental Data

15. Closest Surface Water Type (check all applicable):
- [ ] Ocean
- [X] Estuarine Bay/Tidal River
- [ ] Tidal or Marsh
- [ ] Freshwater Stream/River
- [ ] Freshwater Swamp
- [ ] Lake or Pond
- [ ] Spring

16. Distance from closest surface water:
- [ ] meters (or blank feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
- [ ] Floodplain
- [X] Interior Flat
- [X] Terrace
- [ ] Low Terrace
- [ ] High Terrace
- [ ] Hillside
- [ ] Hilltop/Bluff
- [ ] Upland Flat
- [ ] Ridgetop
- [ ] Rockshelter/Cave
- [ ] Unknown
- [ ] Other:

19. Slope:

20. Elevation:
- [ ] meters (or blank feet) above sea level

21. Land use at site when last field checked:
- (check all applicable)
- [ ] Plowed/Tilled
- [ ] No-Till
- [ ] Wooded/Forested
- [ ] Logging/Logged
- [ ] Underbrush/Overgrown
- [ ] Pasture
- [ ] Cemetery
- [ ] Commercial
- [ ] Educational
- [ ] Extractive
- [ ] Military
- [ ] Recreational
- [ ] Residential
- [ ] Ruin
- [ ] Standing Structure
- [ ] Transportation
- [ ] Unknown
- [X] Other:
- [ ] Construction

22. Condition of Site (check all applicable):
- [ ] UNDISTURBED
- [ ] DISTURBED
- [ ] Plowed
- [ ] Eroded
- [ ] Graded/Contoured
- [ ] Collected
- [ ] Vandalized
- [ ] Dug/Excavated
- [ ] Dredged
- [ ] Other:
- [ ] January 1991
- [ ] Date
- [ ] DESTROYED
- [ ] minor (0-10%)
- [ ] moderate (10-60%)
- [ ] major (60-99%)
- [X] total (100%)
- [ ] % unknown
- [ ] Unknown

23. Additional Comments on Environment:

---

Date: January 1991
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

X Terrestrial

| Underwater | Both |

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Unknown</td>
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</tr>
<tr>
<td>Paleoindian</td>
<td>17th century</td>
<td>1630-1675</td>
</tr>
<tr>
<td>Archaic</td>
<td>1675-1720</td>
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<tr>
<td>Early Archaic</td>
<td>18th century</td>
<td>1720-1780</td>
</tr>
<tr>
<td>Middle Archaic</td>
<td></td>
<td>1780-1820</td>
</tr>
<tr>
<td>Late Archaic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Woodland</td>
<td>19th century</td>
<td>1820-1860</td>
</tr>
<tr>
<td>Middle Woodland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan
Themes:

28. Site length: 75.0 meters (or 246 feet)
29. Site width: 63.70 meters (or 209 feet)

30. Is site confined to plowzone?

X No

31. Does site have subsurface integrity?

X No
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   X Submerged
   - Shipwreck

33. Ownership:
   - Private
   X Public
   - Unknown

34. Owner: Maryland Stadium Authority
   Address: World Trade Center, Suite 2450, Baltimore, MD 21202
   Phone: 301-333-1560
   Date: 26 Mar 91

35. Tenant:
   Address:
   Phone:
   Date:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   X Unknown

39. If YES, type and location:

40. Collections?
   X Yes
   - No
   - Unknown

41. If YES, give owner and location:
   Maryland Stadium Authority
   World Trade Center, Suite 2450, Baltimore, MD 21202
   301-333-1560

42. Artifact Conservation?
   - Yes
   X Partial
   - No
   - Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
    Address: see below
    Phone: 301-694-0428
    Date: Mar 91

46. Site visited by:
    Suzanne Sanders
    Address: R. C. Goodwin & Associates, Inc., 337 E. 3rd St., Frederick, MD 21701
    Phone: 301-694-0428
    Date: March 1991

47. Form filled out by:
    Suzanne Sanders
    Address: R.C. Goodwin & Assoc, Inc., 337 E. 3rd St, Frederick, MD 21701
    Phone: 301-694-0428
    Date: March 1991

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by:
50. Date:

51. Form checked by:

52. Entered on computer by:
53. Date:

54. Form updated by:
55. Date:

**MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM**

**Site Number 18 BC80**

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   - **a. X** domestic
     - industrial
     - transportation
     - military
     - sepulchre
     - unknown
   - **b. X** urban
     - rural
     - unknown
   - **c. standing structure.**
     - yes
     - **X** no
     - unknown
   - **d. above-grade/visible ruin:**
     - yes
     - **X** no
     - unknown

2. Site Type (check all applicable):
   - **X** artifact concentration
   - possible structure
   - post-in-ground structure
   - frame structure
   - **X** masonry structure
   - farmstead
   - plantation
   - townsit
   - mill (specify ________________)
   - raceway
   - quarry
   - furnace/forge
   - other industrial (specify):
     - road/railroad
     - wharf/landing
     - bridge
     - ford
     - battlefield
     - military fortification
     - military encampment
     - cemetery
     - unknown
     - **X** other.

3. Ethnic Association:
   - Native American
   - **X** Afroamerican
   - **X** Angloamerican
   - **X** other Euroamerican
   (specify): ________________
   - **X** Hispanic
   - **X** Asian-American
   - unknown
   - **X** other.

4. Categories of material remains present (check all applicable):
   - **X** ceramics
   - **X** bottle/table glass
   - other kitchen artifacts
   - **X** architecture
   - furniture
   - **X** arms
   - **X** clothing
   - **X** personal items
   - **X** tobacco pipes
   - **X** activity items
   - human skeletal remains
   - **X** faunal remains
   - **X** floral remains
   - organic remains
   - unknown
   - **X** other:

5. Diagnostics (choose from manual and give number recorded or observed):
   - machine-made bottle
   - gilt & decal decorated ironstone
   - milk glass
   - "Home Rule" tobacco pipe
   - gilt & decal decorated porcelain
   - pressed glass
   - white glass mason jar liner
   - yellow ware

   (sample only)
6. Features present:
   - Yes
   - No
   - Unknown

7. Types of features present:
   - Construction feature
   - Foundation
   - Cellar hole/storage cellar
   - Hearth/chimney base
   - Posthole/postmold
   - Paling ditch/fence
   - Privy
   - Well/cistern
   - Trash pit/dump
   - Sheet midden
   - Planting feature
   - Road/drive/walkway
   - Depression/mound
   - Burial
   - Railroad bed
   - Earthworks
   - Raceway
   - Wheel pit
   - Unknown
   - Other:

8. Method of sampling (check all applicable):
   - Non-systematic surface search
   - Systematic surface collection
   - Non-systematic shovel test pits
   - Excavation units
   - Mechanical excavation

   Extent/nature of excavation: 6 five-meter trenches

9. Flotation samples collected:
   - Yes
   - No
   - Unknown

10. Soil samples collected:
    - Yes
    - No
    - Unknown

11. Other analyses (specify): Faunal
    - Analyzed: Yes, by
    - No
    - Unknown

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., 337 E. 3rd St., Frederick, Md 21701
    Date: March 1991

Maryland Geological Survey, January 1989
### A. Designation

1. County: **Baltimore**
2. Site Number: **MSA-04**
3. Site Name: 
4. Site Type (check all applicable):
   - [x] Prehistoric
   - [ ] Historic
   - [ ] Unknown
5. Maryland Archeological Research Unit Number: 14 Patapsco-Back-Middle Drainage

### B. Location

6. USGS 7.5' Quadrange(s): **Baltimore East**
   (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site
   - Zone: 
   - Easting: 
   - Northing: 

10. Physiographic Province (check one):
    - [x] Eastern Piedmont
    - [ ] Eastern Shore Coastal Plain
    - [ ] Lancaster/Frederick Lowland
    - [ ] Western Shore Coastal Plain
    - [ ] Allegheny Plateau
    - [ ] Ridge and Valley
    - [ ] Great Valley
    - [ ] Blue Ridge

11. Nearest Water Source: **Middle Branch of Patapsco River**
12. 2nd Nearest Water Source: 
13. 3rd Nearest Water Source: 
14. 4th Nearest Water Source: 
BASIC DATA FORM

C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - X Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.80 meters (or 1029 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - X Floodplain
   - X Interior Flat
   - X Terrace
   - Low Terrace
   - High Terrace
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other:
   - Construction site

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
   - X Plowed
   - Eroded
   - Graded/Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:
   - DESTROYED
   - minor (0-10%)
   - moderate (10-60%)
   - major (60-99%)
   - total (100%)
   - X % unknown

23. Additional Comments on Environment:
### D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
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<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
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<td>Shell Midden</td>
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<td>Other:</td>
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</tr>
</tbody>
</table>

25. Site Type B (check one):

- [X] Terrestrial
- [ ] Underwater
- [ ] Both

26. Cultural Affiliation (check all applicable):

<table>
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<tr>
<th>PREHISTORIC</th>
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</thead>
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<td>17th century</td>
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<td>Paleolithic</td>
<td>1630-1675</td>
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<td>Archaic</td>
<td>1675-1720</td>
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<td>Early Archaic</td>
<td>18th century</td>
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<td>Middle Archaic</td>
<td>1720-1780</td>
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<tr>
<td>Late Archaic</td>
<td>1780-1820</td>
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<tr>
<td>Woodland</td>
<td>19th century</td>
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<td>1820-1860</td>
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<td>1860-1900</td>
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<tr>
<td></td>
<td>1900-1930</td>
<td></td>
</tr>
<tr>
<td></td>
<td>post 1930</td>
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</tr>
</tbody>
</table>

27. State Plan

Themes:

28. Site length: **24.3** meters (or **80** feet)

29. Site width: **12.19** meters (or **40** feet)

30. Is site confined to plowzone?

- [ ] Yes
- [X] No
- [ ] Unknown

31. Does site have subsurface integrity?

- [ ] Yes
- [X] No
- [ ] Unknown
BASIC DATA FORM

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   - Submerged
   - Shipwreck

33. Ownership:
   - Private
   - Public
   - Unknown

34. Owner:
   - Maryland Stadium Authority
   - World Trade Center, Suite 2450, Baltimore, MD 21202
   - Phone: 303-333-1560
   - Date: 26 Mar 91

35. Tenant:
   - Address:
   - Phone:
   - Date:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   - Unknown

39. If YES, type and location:

40. Collections?
   - Yes
   - No
   - Unknown

41. If YES, give owner and location:

42. Artifact Conservation?
   - Yes
   - Partial
   - No
   - Unknown
BASIC DATA FORM

43. Maryland Register Status:

- Listed on register
- Nomination pending
- Determined eligible (formal)
- Considered eligible (consensus)
- X — Not eligible
- Insufficient data

44. National Register Status:

- Listed on register
- Nomination pending
- Determined eligible (formal)
- Considered eligible (consensus)
- X — Not eligible
- Insufficient data

45. Informant:

Suzanne Sanders
Address: see below
Phone: Date: Mar 91

46. Site visited by:

Suzanne Sanders
Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
Phone: 301-694-0428 Date: January 1991

47. Form filled out by:

Suzanne Sanders
Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
Phone: 301-694-0428 Date: Mar 1991

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by:

50. Date:

51. Form checked by:

52. Entered on computer by:

53. Date:

54. Form updated by:

55. Date:

1 Site Class (check all applicable, check at least one from each group):
   a. domestic
   ___ industrial
   ___ transportation
   ___ military
   ___ sepulchre
   ___ unknown
   b. urban
   ___ rural
   ___ unknown
   c. standing structure:
   ___ yes
   X no
   ___ unknown
   d. above-grade/visible ruin:
   ___ yes
   X no
   ___ unknown

2 Site Type (check all applicable):
   X artifact concentration
   ___ possible structure
   ___ post-in-ground structure
   ___ frame structure
   X masonry structure
   ___ farmstead
   ___ plantation
   ___ townsite
   ___ mill (specify: ____________________________)
   ___ raceway
   ___ quarry
   ___ furnace/forge
   ___ other industrial (specify):
   ___ road/railroad
   ___ wharf/landing
   ___ bridge
   ___ ford
   ___ battlefield
   ___ military fortification
   ___ military encampment
   ___ cemetery
   ___ unknown
   ___ other:

3 Ethnic Association:
   ___ Native American
   ___ Afroamerican
   ___ Angloamerican
   ___ other Euroamerican
   ___ Hispanic
   ___ Asian-American
   ___ unknown
   ___ other:

4 Categories of material remains present (check all applicable):
   X ceramics
   X bottle/table glass
   ___ other kitchen artifacts
   ___ architecture
   ___ furniture
   ___ arms
   X clothing
   ___ personal items
   ___ tobacco pipes
   X activity items
   ___ human skeletal remains
   ___ faunal remains
   X floral remains
   ___ organic remains
   ___ unknown
   ___ other:

5 Diagnostics (choose from manual and give number recorded or observed):
   blue transfer-printed whiteware (8)
   green & blue shell-edged pearlware (2)
   yellow ware (9)
   ___ undecorated whiteware
   patent/prescription lip glass (13)
   Rickett's Type 3 piece molded glass (7)
<table>
<thead>
<tr>
<th>HISTORIC DATA FORM</th>
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<tbody>
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<td>6. Features present: X yes</td>
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</tr>
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</tr>
<tr>
<td>7. Types of features present:</td>
</tr>
<tr>
<td>construction feature</td>
</tr>
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<td>foundation</td>
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<td>hearth/chimney base</td>
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<td>other:</td>
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<td>8. Method of sampling (check all applicable):</td>
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<td>non-systematic surface search</td>
</tr>
<tr>
<td>systematic surface collection</td>
</tr>
<tr>
<td>non-systematic shovel test pits</td>
</tr>
<tr>
<td>excavation units</td>
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<tr>
<td>X mechanical excavation</td>
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<td>extent/nature of excavation: mechanized stripping exposed base of feature</td>
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<td>9. Flotation samples collected: X yes</td>
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<tr>
<td>no</td>
</tr>
<tr>
<td>unknown</td>
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<tr>
<td>10. Soil samples collected: X yes</td>
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<tr>
<td>no</td>
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<tr>
<td>11. Other analyses (specify):</td>
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</tr>
<tr>
<td>no</td>
</tr>
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<td>unknown</td>
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<td>12. Additional Comments:</td>
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<tr>
<td>13. Form filled out by: Suzanne Sanders</td>
</tr>
<tr>
<td>Address/Affiliation: R. C. Goodwin &amp; Assoc., Inc., 337 E. 3rd St., Frederick, MD 217</td>
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<tr>
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</tr>
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<td>20. Date:</td>
</tr>
</tbody>
</table>

Maryland Geological Survey, January 1989
MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18  BC82

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County:  Baltimore

2. Site Number:  MSA-05

3. Site Name:  

4. Site Type (check all applicable):
   Prehistoric
   Historic  X
   Unknown

5. Maryland Archeological Research Unit Number:  14 Patapsco-Back-Middle Drainage

B. Location

6. USGS 7.5' Quad-range(s):  Baltimore East
   (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site  Zone:

8. Easting:  

9. Northing:  

10. Physiographic Province (check one):
   Allegheny Plateau  
   Ridge and Valley  
   Great Valley  
   Blue Ridge  
   Eastern Piedmont  X
   Lancaster/Frederick Lowland  
   Western Shore Coastal Plain  
   Eastern Shore Coastal Plain  

11. Nearest Water Source:  Middle Branch of Patapsco River  
   Order

12. 2nd Nearest Water Source:  
   Order

13. 3rd Nearest Water Source:  
   Order

14. 4th Nearest Water Source:  
   Order
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - Estuarine Bay/Tidal River [X]
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - Interior Flat [X]
   - Terrace [X]
   - Low Terrace
   - High Terrace
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.08 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other: Construction site

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
     - Plowed
     - Eroded
     - Graded/Contoured
     - Collected
     - Vandalized
     - Dredged
     - Other:
   - Destroyed
     - minor (0-10%)
     - moderate (10-60%)
     - major (60-99%)
     - total (100%)
     - % unknown
   - Unknown

23. Additional Comments on Environment:
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>_ Lithics</td>
<td>_ Cemetery</td>
<td>______</td>
</tr>
<tr>
<td>_ Ceramics</td>
<td>_ Domestic:</td>
<td>______</td>
</tr>
<tr>
<td>_ Shell Midden</td>
<td>X urban</td>
<td>______</td>
</tr>
<tr>
<td>_ Unknown</td>
<td>_ rural</td>
<td>______</td>
</tr>
<tr>
<td>_ Other:</td>
<td>_ Educational</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Industrial:</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ urban</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ rural</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Military</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Religious</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Water Transportation</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Unknown</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ Other:</td>
<td>______</td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

<table>
<thead>
<tr>
<th>Terrestrial</th>
<th>Underwater</th>
<th>Both</th>
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</thead>
<tbody>
<tr>
<td>______ X</td>
<td>______ ___</td>
<td></td>
</tr>
</tbody>
</table>

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
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<td>_ Unknown</td>
<td>______</td>
</tr>
<tr>
<td>_ Paleoindian</td>
<td>_ 17th century</td>
<td>______</td>
</tr>
<tr>
<td>_ Archaic</td>
<td>_ 1630-1675</td>
<td>______</td>
</tr>
<tr>
<td>_ Early Archaic</td>
<td>_ 1675-1720</td>
<td>______</td>
</tr>
<tr>
<td>_ Middle Archaic</td>
<td>_ 18th century</td>
<td>______</td>
</tr>
<tr>
<td>_ Late Archaic</td>
<td>_ 1720-1780</td>
<td>______</td>
</tr>
<tr>
<td>_ Woodland</td>
<td>_ 1780-1820</td>
<td>______</td>
</tr>
<tr>
<td>_ Early Woodland</td>
<td>_ 19th century</td>
<td>______</td>
</tr>
<tr>
<td>_ Middle Woodland</td>
<td>_ X 1820-1860</td>
<td>______</td>
</tr>
<tr>
<td>_ Late Woodland</td>
<td>_ X 1860-1900</td>
<td>______</td>
</tr>
<tr>
<td>_ CONTACT</td>
<td>_ 20th century</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ X 1900-1930</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>_ post 1930</td>
<td>______</td>
</tr>
</tbody>
</table>

27. State Plan
Themes:

28. Site length: 68.58 meters (or 225 feet)

29. Site width: 59.70 meters (or 196 feet)

30. Is site confined to plowzone?
   | Yes  | No  | Unknown |
   | _____ | ______ | ______ |
   | ______ X |        | ______ |

31. Does site have subsurface integrity?
   | Yes  | No  | Unknown |
   | _____ | ______ | ______ |
   | ______ X |        | ______ |
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   - Submerged
   - Shipwreck

33. Ownership:
   - Private
   - Public
   - Unknown

34. Owner: Maryland Stadium Authority
       Address: World Trade Center, Suite 2450, Baltimore, MD 21202
       Phone: 301-333-1560
       Date: 26 Mar 91

35. Tenant:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   - Unknown

39. If YES, type and location:

40. Collections?
   - Yes
   - No
   - Unknown

41. If YES, give owner and location:

42. Artifact Conservation?
   - Yes
   - Partial
   - No
   - Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: Mar 91

46. Site visited by: Suzanne Sanders
   Address: R.C. Goodwin & Associates, Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: 26 Mar 1991

47. Form filled out by: Suzanne Sanders
   Address: R.C. Goodwin & Associates, Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: Mar 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by:
   Date: 
50. Form updated by:
   Date: 
51. Form checked by:
   Date: 
52. Entered on computer by:
   Date: 
53. Date: 
54. Date: 
55. Date: 

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC82

(Shaded areas are for Division of Archeology use only)

1 Site Class (check all applicable, check at least one from each group):
   a. X domestic
   ___ industrial
   ___ transportation
   ___ military
   ___ sepulchre
   ___ unknown

   c standing structure:
   ___ yes
   X no
   ___ unknown

   d above-grade/visible ruin:
   ___ yes
   X no
   ___ unknown

2 Site Type (check all applicable):
   ___ artifact concentration
   ___ possible structure
   ___ post-in-ground structure
   ___ frame structure
   ___ masonry structure
   ___ farmstead
   ___ plantation
   ___ townsite
   ___ mill (specify )
   ___ raceway
   ___ quarry
   ___ furnace/forge

   ___ other industrial (specify):

   ___ road/railroad
   ___ wharf/landing
   ___ bridge
   ___ ford
   ___ battlefield
   ___ military fortification
   ___ military encampment
   ___ cemetery
   ___ unknown
   ___ other:

3 Ethnic Association.
   ___ Native American
   ___ Afroamerican
   X Angloamerican
   X other Euroamerican
   (specify):

   ___ Hispanic
   ___ Asian-American
   ___ unknown
   ___ other.

4 Categories of material remains present (check all applicable):
   ___ ceramics
   ___ bottle/table glass
   ___ other kitchen artifacts
   ___ architecture
   ___ furniture
   ___ arms
   ___ clothing
   ___ personal items

   ___ tobacco pipes
   ___ activity items
   ___ human skeletal remains
   ___ faunal remains
   ___ floral remains
   ___ organic remains
   ___ unknown
   ___ other:

5 Diagnostics (choose from manual and give number recorded or observed):
   ___ machine-made brick
   ___ green & blue shell-edged pearlware
   ___ blue transfer-printed pearlware
   ___ annular ware (creamware)
   ___ gray salt-glazed stoneware
   ___ hand-painted polychrome whiteware
   ___ sponged whiteware
   ___ machine-made bottle

(sample only)
6. Features present:
   - yes
   - no
   - unknown

7. Types of features present:
   - construction feature
     - foundation
   - cellar hole/storage cellar
   - hearth/chimney base
   - posthole/postmold
   - paling ditch/fence
   - privy
   - well/cistern
   - trash pit/dump
   - sheet midden
   - planting feature
   - road/drive/walkway
   - depression/mound
   - bural
   - railroad bed
   - earthworks
   - raceway
   - wheel pit
   - unknown
   - other:

8. Method of sampling (check all applicable):
   - non-systematic surface search
   - systematic surface collection
   - non-systematic shovel test pits
   - excavation units
     - mechanical excavation
     - extent/nature of excavation: 13 5-meter trenches

9. Flotation samples collected:
   - yes
   - no
   - unknown

10. Soil samples collected:
   - yes
     - analyzed: yes, by
     - no
     - unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
    Date: 26 Mar 91

Maryland Geological Survey, January 1989
MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore
   MSA-06

2. Site Number: MSA-06

3. Site Name: Diggs-Johnson

4. Site Type (check all applicable):
   - Prehistoric
   - Historic X
   - Unknown

5. Maryland Archeological Research Unit Number: 14 Patapsco-Back-Middle Drainage

B. Location

6. USGS 7.5’ Quad-
   range(s): Baltimore East
   (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site Zone:

8. Easting: 

9. Northing: 

10. Physiographic Province (check one):
    - Allegheny Plateau
    - Ridge and Valley
    - Great Valley
    - Blue Ridge
    - Eastern Piedmont X
    - Western Shore Coastal Plain
    - Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch of Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 

Site Number 18 BC83
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - X Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - X Interior Flat
   - X Terrace
   - Low Terrace
   - High Terrace
   - Hillslope
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
    (check all applicable)
    - Plowed/Tilled
    - No-Till
    - Wooded/Forested
    - Logging/Logged
    - Underbrush/Overgrown
    - Pasture
    - Cemetery
    - Commercial
    - Educational
    - Extractive
    - Military
    - Recreational
    - Residential
    - Ruin
    - Standing Structure
    - Transportation
    - Unknown
    - Other:
    - Construction site

22. Condition of Site (check all applicable):
    - UNDISTURBED
    - DISTURBED
    - Plowed
    - Eroded
    - Graded/Contoured
    - Collected
    - Vandalized
    - Dredged
    - Other:
    - DESTROYED
    - minor (0-10%)
    - moderate (10-60%)
    - major (60-99%)
    - total (100%)
    - % unknown

23. Additional Comments on Environment:

   January 1990

   Date

   January 1990

   Date

   January 1990

   Date
### D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
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</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
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<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td>X urban</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>rural</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>X urban</td>
<td></td>
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<td>rural</td>
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<td>Military</td>
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</tr>
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<td></td>
<td>Religious</td>
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<td></td>
<td>Water Transportation</td>
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</tr>
<tr>
<td></td>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

- **X** Terrestrial
- Underwater
- **Both**

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
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<tbody>
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<tr>
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<td>1630-1675</td>
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<tr>
<td>Early Archaic</td>
<td>1675-1720</td>
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</tr>
<tr>
<td>Middle Archaic</td>
<td>18th century</td>
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<tr>
<td>Late Archaic</td>
<td>1720-1780</td>
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</tr>
<tr>
<td>Woodland</td>
<td>1780-1820</td>
<td></td>
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<tr>
<td>Early Woodland</td>
<td>19th century</td>
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<td>Middle Woodland</td>
<td>1820-1860</td>
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<tr>
<td>Late Woodland</td>
<td>X 1860-1900</td>
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<td>CONTACT</td>
<td>20th century</td>
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<td></td>
<td>X 1900-1930</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X post 1930</td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan

Themes:

28. Site length: 121.90 meters or 400 feet

29. Site width: 152.4 meters or 500 feet

30. Is site confined to plowzone?

- **X** No
- **Unknown**

31. Does site have subsurface integrity?

- **X** No
- **Unknown**
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   ___ Prehistoric  
   ___ Historic   
   ___ Submerged 
   ___ Shipwreck  

33. Ownership:
   ___ Private  
   ___ Public  
   ___ Unknown

34. Owner:  Maryland Stadium Authority  
             World Trade Center, Suite 2450, Baltimore, MD 21202  
             301-333-1560  
             Date: 26 Mar 91

35. Tenant:  
             Address:  
             Phone:  
             Date:  

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   ___ Yes  
   ___ No  
   ___ Unknown 

39. If YES, type and location:

40. Collections?
   ___ Yes  
   ___ No  
   ___ Unknown

41. If YES, give owner and location:

42. Artifact Conservation?
   ___ Yes  
   ___ Partial  
   ___ No  
   ___ Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428 Date: 26 Mar 91

46. Site visited by:
   Address: See #45 above
   Phone: Date: January 91

47. Form filled out by:
   Address: see #45 above
   Phone: Date: March 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: 50. Date:

51. Form checked by: 53. Date:

52. Entered on computer by: 54. Form updated by:

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC83

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. X domestic
   b. X urban
   _____ industrial
   _____ transportation
   _____ military
   _____ sepulchre
   _____ unknown
   c. standing structure:
   _____ yes
   _____ no
   _____ unknown
   d. above-grade/visible ruin:
   _____ yes
   _____ no
   _____ unknown

2. Site Type (check all applicable):
   _____ artifact concentration
   _____ possible structure
   _____ post-in-ground structure
   _____ frame structure
   X _____ masonry structure
   _____ farmstead
   _____ plantation
   _____ townsite
   _____ mill (specify, __________)
   _____ raceway
   _____ quarry
   _____ furnace/forge
   _____ other industrial (specify):
   _____ road/railroad
   _____ wharf/landing
   _____ bridge
   _____ ford
   _____ battlefield
   _____ military fortification
   _____ military encampment
   _____ cemetery
   _____ unknown
   _____ other:

3. Ethnic Association:
   Native American
   X Afroamerican
   X Angloamerican
   X other Euroamerican
   (specify):
   Hispanic
   _____ Asian-American
   _____ unknown
   _____ other:

4. Categories of material remains present (check all applicable):
   X ceramics
   _____ bottle/table glass
   _____ other kitchen artifacts
   X architecture
   _____ furniture
   _____ arms
   _____ clothing
   _____ personal items
   _____ tobacco pipes
   _____ activity items
   _____ human skeletal remains
   X _____ faunal remains
   _____ floral remains
   X _____ organic remains
   _____ unknown
   _____ other

5. Diagnostics (choose from manual and give number recorded or observed):
   flow blue pearlware
   yellow ware
   coal
   decal whiteware
   blue transfer-printed whiteware
   red transfer-printed whiteware
   machine-made brick
   gray salt-glazed stoneware
   (sample only)
**6. Features present:**

<table>
<thead>
<tr>
<th></th>
<th>yes</th>
<th>no</th>
<th>unknown</th>
</tr>
</thead>
</table>

**7. Types of features present:**

<table>
<thead>
<tr>
<th>Feature Type</th>
<th>yes</th>
<th>no</th>
<th>unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>construction feature</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>foundation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cellar hole/storage cellar</td>
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<tr>
<td>hearth/chimney base</td>
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<tr>
<td>posthole/postmold</td>
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<td>paling ditch/fence</td>
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<tr>
<td>planting feature</td>
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</tbody>
</table>

**8. Method of sampling (check all applicable):**

- non-systematic surface search
- systematic surface collection
- non-systematic shovel test pits
- X excavation units
- X mechanical excavation

**extent/nature of excavation:** 11 5-meter trenches, 2 1x1 meter excavation units

**9. Flotation samples collected:**

<table>
<thead>
<tr>
<th></th>
<th>yes</th>
<th>no</th>
<th>unknown</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**analyzed:**

- yes, by ____________
- no          unknown

**10. Soil samples collected:**

<table>
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<tr>
<th></th>
<th>yes</th>
<th>no</th>
<th>unknown</th>
</tr>
</thead>
<tbody>
<tr>
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<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**analyzed:**

- yes, by ____________
- no          unknown

**11. Other analyses (specify):**

<table>
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<th>analyzed:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**12. Additional Comments:**

**13. Form filled out by:** Suzanne Sanders

**Address/Affiliation:** R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701

**Date:** March 1991

**For Division of Archaeology Use Only**

<p>| | |</p>
<table>
<thead>
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<tbody>
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</tbody>
</table>

Maryland Geological Survey, January 1989
**MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM**

Maryland Department of Natural Resources  
Division of Archeology  
Maryland Geological Survey  
2300 St. Paul Street  
Baltimore, Maryland 21218

(Shaded areas are for Division of Archeology use only)

**A. Designation**

1. County:  
   - Baltimore

2. Site Number:  
   - MSA-07

3. Site Name:  

4. Site Type (check all applicable):  
   - Prehistoric
   - Historic  
   - Unknown

5. Maryland Archeological Research Unit Number:  
   - 14 Patapsco-Middle-Back Drainage

**B. Location**

6. USGS 7.5' Quad-  
   - Baltimore East

7. UTM Coordinates at Center of Site  
   - Zone:
    - Northing: 
    - Easting: 

10. Physiographic Province (check one):  
    - Allegheny Plateau  
    - Ridge and Valley  
    - Great Valley  
    - Blue Ridge  
    - Eastern Piedmont  
    - Western Shore Coastal Plain  
    - Eastern Shore Coastal Plain

11. Nearest Water Source:  
    - Middle Branch of Patapsco River

12. 2nd Nearest Water Source:  

13. 3rd Nearest Water Source:  

14. 4th Nearest Water Source:  

Order
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - X Estuarine Bay / Tidal River
   - X Tidal or Marsh
   - Freshwater Stream / River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 804.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - X Floodplain
   - Interior Flat
   - Terrace
   - Low Terrace
   - High Terrace
   - Hillslope
   - Hilltop / Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter / Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked: (check all applicable)
   - Plowed / Tilled
   - No-Till
   - Wooded / Forested
   - Logging / Logged
   - Underbrush / Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other:

   Date: January 1990

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
   - Plowed
   - Eroded
   - X Graded / Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:

   Date: January 1990

   DESTROYED
   - minor (0-10%)
   - moderate (10-60%)
   - major (60-99%)
   - total (100%)
   - % unknown

   Date: January 1990

23. Additional Comments on Environment:
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
</tr>
<tr>
<td>Ceramics</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

| x | Terrestrial |
|   | Underwater  |
|   | Both        |

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Paleoindian</td>
<td>17th century</td>
</tr>
<tr>
<td>Archaic</td>
<td>1630-1675</td>
</tr>
<tr>
<td>Early Archaic</td>
<td>1675-1720</td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>1720-1780</td>
</tr>
<tr>
<td>Late Archaic</td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td>1780-1820</td>
</tr>
<tr>
<td>Early Woodland</td>
<td>1820-1860</td>
</tr>
<tr>
<td>Middle Woodland</td>
<td>1860-1900</td>
</tr>
<tr>
<td>Late Woodland</td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan Themes:

<table>
<thead>
<tr>
<th>59.13 meters (or 194 feet)</th>
</tr>
</thead>
</table>

28. Site length: 59.13 meters (or 194 feet)

29. Site width: 45.40 meters (or 140 feet)

30. Is site confined to plowzone?

| x | Yes |
|   | No  |
|   | Unknown |

31. Does site have subsurface integrity?

| x | Yes |
|   | No  |
|   | Unknown |
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   - Submerged
   - Shipwreck

33. Ownership:
   - Private
   - Public
   - Unknown

34. Owner:  
Maryland Stadium Authority
Address:  
World Trade Center, Suite 2450, Baltimore, MD 21202
Phone:  
301-333-1560
Date:  
26 Mar 91

35. Tenant:
Address:
Phone:
Date:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   - Unknown

39. If YES, type and location:

40. Collections?
   - Yes
   - No
   - Unknown

41. If YES, give owner and location:
   Maryland Stadium Authority (see #34 above)

42. Artifact Conservation?
   - Yes
   - Partial
   - No
   - Unknown
43. Maryland Register Status:
- Listed on register
- Nomination pending
- Determined eligible (formal)
- X Considered eligible (consensus)
- Not eligible
- Insufficient data

44. National Register Status:
- Listed on register
- Nomination pending
- Determined eligible (formal)
- X Considered eligible (consensus)
- Not eligible
- Insufficient data

45. Informant:
- Address: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
- Phone: 301-694-0428

46. Site visited by:
- Suzanne Sanders
- Address: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
- Phone: 301-694-0428
- Date: January 1991

47. Form filled out by:
- see # 46 above
- Address: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
- Phone: 301-694-0428
- Date: March 1991

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: 
50. Date: 

51. Form checked by: 
52. Entered on computer by: 
53. Date: 

54. Form updated by: 
55. Date: 

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC84

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. ☒ domestic
      ☐ industrial
      ☐ transportation
      ☐ military
      ☐ sepulchre
      ☐ unknown
   b. ☑ rural
      ☐ urban
      ☐ unknown
   c. standing structure:
      yes
      ☒ no
      ☐ unknown
   d. above-grade/visible ruin:
      yes
      ☐ no
      ☐ unknown

2. Site Type (check all applicable):
   ☐ artifact concentration
   ☐ possible structure
   ☐ post-in-ground structure
   ☐ frame structure
   ☐ masonry structure
   ☐ farmstead
   ☐ plantation
   ☐ townsite
   ☐ mill (specify: ________________________)
   ☐ raceway
   ☐ quarry
   ☐ furnace/forge
   ☐ other industrial (specify):
   ☐ road/railroad
   ☐ wharf/landing
   ☐ bridge
   ☐ ford
   ☐ battlefield
   ☐ military fortification
   ☐ military encampment
   ☐ cemetery
   ☐ unknown
   ☐ other:

3. Ethnic Association:
   Native American
   ☐ Afroamerican
   ☐ Angloamerican
   ☐ other Euroamerican
   ☐ Hispanic
   ☐ Asian-American
   ☐ unknown
   ☐ other:

4. Categories of material remains present (check all applicable):
   ☐ ceramics tobacco pipes
   ☐ bottle/table glass activity items
   ☐ other kitchen artifacts human skeletal remains
   ☐ architecture ☐ faunal remains
   ☐ furniture ☐ floral remains
   ☐ arms ☐ organic remains
   ☐ clothing unknown
   ☐ personal items other:

5. Diagnostics (choose from manual and give number recorded or observed):
   machine-made brick (5)
   machine-made bottle (4)
   whiteware (2)
   pearlware (3)
   salt-glazed stoneware (1)
   creamware (2)
6. Features present:
   - Yes
   - No
   - Unknown

7. Types of features present:
   - Construction feature
   - Foundation
   - Cellar hole/storage cellar
   - Hearth/chimney base
   - Posthole/postmold
   - Paling ditch/fence
   - Privy
   - Well/cistern
   - Trash pit/dump
   - Sheet midden
   - Planting feature
   - Road/driveway
   - Depression/mound
   - Burial
   - Railroad bed
   - Earthworks
   - Raceway
   - Wheel pit
   - Other:

8. Method of sampling (check all applicable):
   - Non-systematic surface search
   - Systematic surface collection
   - Non-systematic shovel test pits
   - Excavation units
   - Mechanical excavation

   Extent/nature of excavation: 6 5-meter trenches

9. Flotation samples collected:
   - Yes
   - No
   - Unknown

10. Soil samples collected:
    - Yes
    - No
    - Unknown

11. Other analyses (specify):
    - Analyzed: yes, by
    - Analyzed: no
    - Analyzed: unknown

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21704
    Date: March 1991

For Division of Archeology Use Only

14. Form transcribed by: ____________________________ 15. Date: ____________________________
16. Form checked by: ____________________________ 17. Date: ____________________________
17. Entered on computer by: ____________________________ 18. Date: ____________________________
19. Form updated by: ____________________________ 20. Date: ____________________________

Maryland Geological Survey, January 1989
MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18 BC85

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore
2. Site Number: MSA-08
3. Site Name: Historic
4. Site Type (check all applicable):
   - [X] Prehistoric
   - [ ] Historic
   - [ ] Unknown
5. Maryland Archeological Research Unit Number: 14 Patapsco Middle-Back-Drainage

B. Location

6. USGS 7.5' Quad-range(s): Baltimore East
   (Photocopy section of quad(s) on page 4 and mark site location)
7. UTM Coordinates at Center of Site
   Zone:  
   Easting: 
   Northing: 
10. Physiographic Province (check one):
   - [X] Allegheny Plateau
   - [ ] Ridge and Valley
   - [ ] Great Valley
   - [ ] Blue Ridge
   - [ ] Eastern Piedmont  
   - [ ] Western Shore Coastal Plain
   - [ ] Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch of Patapsco River  
12. 2nd Nearest Water Source:  
13. 3rd Nearest Water Source:  
14. 4th Nearest Water Source:  

Order
Order
Order
Order
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - [X] Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - [X] Interior Flat
   - Terrace
   - Low Terrace
   - High Terrace
   - Hillside
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:

   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Positive
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other:

22. Condition of Site (check all applicable):

   [X] UNDISTURBED
   - DISTURBED
   - Plowed
   - Eroded
   - Graded/Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:

23. Additional Comments on Environment:

January 1990

Date

December 1989

Date

DESTROYED

minor (0-10%)
moderate (10-60%)
major (60-99%)
total (100%)
% unknown

UNKNOWN
D. Description

24. Site Type A (check all applicable):

PREHISTORIC
- Lithics
- Ceramics
- Shell Midden
- Unknown
- Other:

HISTORIC
- Cemetery
- Domestic:
- Urban
- Rural
- Educational
- Industrial:
- Urban
- Rural
- Military
- Religious
- Water Transportation
- Unknown
- Other:

25. Site Type B (check one):

- X Terrestrial
- Underwater
- Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC
- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Woodland
- Early Woodland
- Middle Woodland
- Late Woodland
- CONTACT

HISTORIC
- Unknown
- 17th century
- 1630-1675
- 1675-1720
- 18th century
- 1720-1780
- 1780-1820
- 19th century
- 1820-1860
- 1860-1900
- 20th century
- 1900-1930
- post 1930

27. State Plan
Themes:

28. Site length: 111.2 meters (or 365 feet)

29. Site width: 75.0 meters (or 246 feet)

30. Is site confined to plowzone?
- Yes
- X No
- Unknown

31. Does site have subsurface integrity?
- Yes
- X No
- Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- [ ] Prehistoric
- [X] Historic
- [ ] Submerged
- [ ] Shipwreck

33. Ownership:

- [ ] Private
- [X] Public
- [ ] Unknown

34. Owner: Maryland Stadium Authority
   Address: World Trade Center Suite 2450, Baltimore, MD 21202
   Phone: 301-33-1560
   Date: 26 Mar 91

35. Tenant:
   Address:
   Phone:
   Date:

36. Known Investigations:


37. Reports (Author & year):


38. Other Records?

- [ ] Yes
- [ ] No
- [X] Unknown

39. If YES, type and location:


40. Collections?

- [X] Yes
- [ ] No
- [ ] Unknown

41. If YES, give owner and location:


42. Artifact Conservation?

- [ ] Yes
- [X] Partial
- [ ] No
- [ ] Unknown
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- Prehistoric
- Historic
- Submerged
- Shipwreck

33. Ownership:

- Private
- Public
- Unknown

34. Owner: Maryland Stadium Authority
   Address: World Trade Center Suite 2450, Baltimore, MD 21202
   Phone: 301-33-1560
   Date: 26 Mar 91

35. Tenant: 
   Address: 
   Phone: 
   Date: 

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?

- Yes
- No
- Unknown

39. If YES, type and location:

40. Collections?

- Yes
- No
- Unknown

41. If YES, give owner and location:

42. Artifact Conservation?

- Yes
- Partial
- No
- Unknown
BASIC DATA FORM

43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc. 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428 Date: Mar 26, 1991

46. Site visited see #45 above
   by:
   Address: Phone: Date: Jan 91

47. Form filled out by: see #45 above
   Address: Phone: Date: Mar 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: 50. Date:
51. Form checked by:
52. Entered on computer by: 53. Date:
54. Form updated by: 55. Date:

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18BC85

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. **x** domestic
   - industrial
   - transportation
   - military
   - sepulchre
   - unknown
   b. **x** urban
   - rural
   - unknown
   c. standing structure:
   - yes
   - no
   - unknown
   d. above-grade/visible ruin:
   - yes
   - no
   - unknown

2. Site Type (check all applicable):
   - **x** artifact concentration
   - possible structure
   - post-in-ground structure
   - frame structure
   - **x** masonry structure
   - farmstead
   - plantation
   - townsite
   - mill (specify)
   - raceway
   - quarry
   - furnace/forge

   __ other industrial (specify)
   - road/railroad
   - wharf/landing
   - bridge
   - ford
   - battlefield
   - military fortification
   - military encampment
   - cemetery
   - unknown
   - other:

3. Ethnic Association:
   - Native American
   - Afroamerican
   - Angloamerican
   - **x** other Euroamerican
   - (specify):

   __ Hispanic
   __ Asian-American
   __ unknown
   __ other:

4. Categories of material remains present (check all applicable):
   - **x** ceramics
   - bottle/table glass
   - other kitchen artifacts
   - **x** architecture
   - furniture
   - arms
   - **x** clothing
   - personal items

   __ tobacco pipes
   __ activity items
   __ human skeletal remains
   - faunal remains
   - **x** organic remains
   - unknown
   __ other

5. Diagnostics (choose from manual and give number recorded or observed):
   - Wire nail
   - machine-made brick
   - machine-made bottle
   - blue transfer-printed whiteware
   - celluloid clothing strap
   - bakelite

   (sample only)
6. Features present:
   - X yes
   - no
   - unknown

7. Types of features present:
   - X construction feature
   - X foundation
   - cellar hole/storage cellar
   - hearth/chimney base
   - posthole/postmold
   - paling ditch/fence
   - privy
   - well/cistern
   - trash pit/dump
   - sheet midden
   - planting feature
   - road/drive/walkway
   - depression/mound
   - burial
   - railroad bed
   - earthworks
   - raceway
   - wheel pit
   - unknown
   - other:

8. Method of sampling (check all applicable):
   - non-systematic surface search
   - systematic surface collection
   - non-systematic shovel test pits
   - excavation units
   - X mechanical excavation

   extent/nature of excavation: 7 five-meter trenches

9. Flotation samples collected:
   - yes
   - X no
   - unknown

10. Soil samples collected:
    - yes
    - X no
    - unknown

11. Other analyses (specify): analyzed:

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
    Date: March 1991

14. Form transcribed by:
    Date:

15. Date:

16. Form checked by:
    Date:

17. Entered on computer by:
    Date:

18. Date:

19. Form updated by:
    Date:

20. Date:

Maryland Geological Survey, January 1989
**MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM**

Maryland Department of Natural Resources  
Division of Archeology  
Maryland Geological Survey  
2300 St. Paul Street  
Baltimore, Maryland 21218

(Shaded areas are for Division of Archeology use only)

**A. Designation**

1. County:  
   - Baltimore

2. Site Number:  
   - MSA-09

3. Site Name:

4. Site Type (check all applicable):
   - Prehistoric
   - Historic
   - Unknown

5. Maryland Archeological Research Unit Number:  
   - 14 Patapsco-Back-Middle Drainage

**B. Location**

6. USGS 7.5' Quad-range(s):  
   - Baltimore East
   - (Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site  
   - Zone:

8. Easting:

9. Northing:

10. Physiographic Province (check one):
    - Allegheny Plateau
    - Ridge and Valley
    - Great Valley
    - Blue Ridge
    - Eastern Piedmont
    - Western Shore Coastal Plain
    - Eastern Shore Coastal Plain

11. Nearest Water Source:  
    - Middle Branch of Patapsco River

12. 2nd Nearest Water Source:

13. 3rd Nearest Water Source:

14. 4th Nearest Water Source:
BASIC DATA FORM

C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology

18. Topographic Settings (check all applicable):
   - Floodplain
   - Interior Flat
   - Terrace
   - Low Terrace
   - High Terrace
   - Hillside
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope: 3.04 meters (or 10 feet) above sea level

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
    (check all applicable)
    - Plowed/Tilled
    - No-Till
    - Wooded/Forested
    - Logging/Logged
    - Underbrush/Overgrown
    - Pasture
    - Cemetery
    - Commercial
    - Educational
    January 1990
    - Extractive
    - Military
    - Recreational
    - Residential
    - Ruin
    - Standing Structure
    - Transportation
    - Unknown
    - Other: Construction

22. Condition of Site (check all applicable):
    - UNDISTURBED
    - DISTURBED
    - Plowed
    - Eroded
    - Graded/Contoured
    - Collected
    - Vandalized
    - Dredged
    - Other:
    DESTROYED
    - minor (0-10%)
    - moderate (10-60%)
    - major (60-99%)
    - total (100%)
    - % unknown

23. Additional Comments on Environment:
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
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<tr>
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<td>Other:</td>
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25. Site Type B (check one):

- [X] Terrestrial
- ______ Underwater
- ______ Both

26. Cultural Affiliation (check all applicable):

<table>
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<td>19th century</td>
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<td>20th century</td>
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</tr>
<tr>
<td>Late Archaic</td>
<td></td>
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<td>X 1860-1900</td>
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<td>Late Woodland</td>
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</tr>
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</table>

27. State Plan Themes:

28. Site length: 100.5 meters (or 330 feet)

29. Site width: 61.56 meters (or 202 feet)

30. Is site confined to plowzone?

- [X] Yes
- [ ] No
- [ ] Unknown

31. Does site have subsurface integrity?

- [X] Yes
- [ ] No
- [ ] Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
32. Accompanying Data Form(s):

<table>
<thead>
<tr>
<th></th>
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<th>Shipwreck</th>
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33. Ownership:

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<th></th>
<th>Private</th>
<th>Public</th>
<th>Unknown</th>
</tr>
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</table>

34. Owner: Maryland Stadium Authority

Address: World Trade Center, Suite 2450, Baltimore, MD 21202

Phone: 301-333-1560

Date: 26 Mar 91

35. Tenant:

<table>
<thead>
<tr>
<th></th>
<th>Address</th>
<th>Phone</th>
<th>Date</th>
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36. Known Investigations:

<p>| | |</p>
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37. Reports (Author & year):

<p>| | |</p>
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38. Other Records?

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39. If YES, type and location:

<p>| | |</p>
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</thead>
</table>

40. Collections?

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<th>No</th>
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</table>

41. If YES, give owner and location:

<p>| | |</p>
<table>
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</thead>
</table>

42. Artifact Conservation?

<table>
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<th>Yes</th>
<th>Partial</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
</table>
BASIC DATA FORM

43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: March 1991

46. Site visited by:
   Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: January 1991

47. Form filled out by:
   see #46 above
   Address: see #46 above
   Date: March 1991

48. Additional Comments:

F. For Division of Archaeology Use Only

49. Form transcribed by: 
   Date: 

51. Form checked by: 
   Date: 

52. Entered on computer by: 
   Date: 

54. Form updated by: 
   Date: 

### MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

**Site Number 18 BC86**

(Shaded areas are for Division of Archeology use only)

1. **Site Class (check all applicable, check at least one from each group):**
   - [X] domestic
   - [ ] industrial
   - [ ] transportation
   - [ ] military
   - [ ] sepulchre
   - [ ] unknown
   - [X] urban
   - [ ] rural
   - [ ] unknown
   - [ ] standing structure:
     - [X] yes
     - [ ] no
     - [ ] unknown
   - [ ] above-grade/visible ruin:
     - [X] yes
     - [ ] no
     - [ ] unknown

2. **Site Type (check all applicable):**
   - [X] artifact concentration
   - [ ] possible structure
   - [ ] post-in-ground structure
   - [X] frame structure
   - [ ] masonry structure
   - [ ] farmstead
   - [ ] plantation
   - [ ] townsite
   - [ ] mill (specify ____________)
   - [ ] raceway
   - [ ] quarry
   - [ ] furnace/forge
   - [ ] other industrial (specify):
     - [ ] road/railroad
     - [ ] wharf/landing
     - [ ] bridge
     - [ ] ford
     - [ ] battlefield
     - [ ] military fortification
     - [ ] military encampment
     - [ ] cemetery
     - [ ] unknown
     - [ ] other:

3. **Ethnic Association:**
   - [X] Native American
   - [ ] Hispanic
   - [X] Afroamerican
   - [ ] Asian-American
   - [X] Angloamerican
   - [ ] unknown
   - [ ] other
   - (specify):

4. **Categories of material remains present (check all applicable).**
   - [X] ceramics
   - [ ] bottle/table glass
   - [ ] other kitchen artifacts
   - [X] architecture
   - [ ] furniture
   - [ ] arms
   - [ ] clothing
   - [ ] personal items
   - [X] tobacco pipes
   - [ ] activity items
   - [X] human skeletal remains
   - [ ] faunal remains
   - [ ] floral remains
   - [ ] organic remains
   - [ ] unknown
   - [ ] other

5. **Diagnostics (choose from manual and give number recorded or observed)**
   - brown stoneware, blue sponge decoration (1)
   - red transfer-printed whiteware (1)
   - machine-made bottle (4)
   - blue plastic (4)
   - steel can (2)
HISTORIC DATA FORM

6. Features present:
   - X yes
   - no
   - unknown

7. Types of features present:
   - construction feature
     - X foundation
     - cellar hole/storage cellar
     - hearth/chimney base
     - posthole/postmold
     - paling ditch/fence
     - privy
     - well/cistern
     - trash pit/dump
     - X sheet midden
     - planting feature

   - road/drive/walkway
   - depression/mound
   - burial
   - railroad bed
   - earthworks
   - raceway
   - wheel pit
   - unknown
   - other:

8. Method of sampling (check all applicable):
   - non-systematic surface search
   - systematic surface collection
   - non-systematic shovel test pits
   - excavation units
   - X mechanical excavation

   extent/nature of excavation: 8 five-meter trenches

9. Flotation samples collected:
   - yes
   - X no
   - unknown

10. Soil samples collected:
    - yes
    - X no
    - unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
    Date: March 1991

Maryland Geological Survey, January 1989
### A. Designation

1. County: Baltimore

2. Site Number: MSA-10

3. Site Name: 

4. Site Type (check all applicable):
   - [X] Prehistoric
   - [ ] Historic
   - [ ] Unknown

5. Maryland Archeological Research Unit Number: 14 Patapsco-Back-Middle Drainage

### B. Location

6. USGS 7.5' Quad-Range(s): Baltimore East

7. UTM Coordinates at Center of Site: 

8. Easting: 

9. Northing: 

10. Physiographic Province (check one):
   - [ ] Allegheny Plateau
   - [X] Ridge and Valley
   - [ ] Great Valley
   - [ ] Blue Ridge
   - [X] Eastern Piedmont
   - [ ] Western Shore Coastal Plain
   - [ ] Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch of Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - Interior Flat
   - Terrace
   - Low Terrace
   - High Terrace
   - Hillslope
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other: Construction site

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
   - Plowed
   - Eroded
   - Graded/Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:

23. Additional Comments on Environment:
BASIC DATA FORM

D. Description

24. Site Type A (check all applicable):

PREHISTORIC
- Lithics
- Ceramics
- Shell Midden
- Unknown
- Other:

HISTORIC
- Cemetery
- Domestic:
  - urban
  - rural
- Educational
- Industrial:
  - urban
  - rural
- Military
- Religious
- Water Transportation
- Unknown
- Other:

25. Site Type B (check one):

- Terrestrial
  - Underwater
  - Both

26. Cultural Affiliation (check all applicable):

PREHISTORIC
- Unknown
- Paleoindian
- Archaic
- Early Archaic
- Middle Archaic
- Late Archaic
- Woodland
- Early Woodland
- Middle Woodland
- Late Woodland
- CONTACT

HISTORIC
- Unknown
- 17th century
- 1630-1675
- 1675-1720
- 18th century
- 1720-1780
- 18th century
- 1780-1820
- 19th century
- 1820-1860
- 20th century
- 1860-1900
- 1900-1930
- post 1930

27. State Plan
Themes:

28. Site length: 146.3 meters (or 480 feet)

29. Site width: 97.5 meters (or 320 feet)

30. Is site confined to plowzone?
- Yes
- No
- Unknown

31. Does site have subsurface integrity?
- Yes
- No
- Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- Prehistoric
- Historic
- Submerged
- Shipwreck

33. Ownership:

- Private
- Public
- Unknown

34. Owner:

Maryland Stadium Authority

Address: World Trade Center, Suite 2450, Baltimore, MD 21202

Phone: 301-333-1560

Date: 26 Mar 91

35. Tenant:

Address:

Phone:

Date:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?

- Yes
- No
- Unknown

39. If YES, type and location:

40. Collections?

- Yes
- No
- Unknown

41. If YES, give owner and location:

- Maryland Stadium Authority

see #34 above

42. Artifact Conservation?

- Yes
- Partial
- No
- Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: Mar 91

46. Site visited by:
   Address: see #45 above
   Phone: see #45 above
   Date: Jan 91

47. Form filled out by:
   Address: see #45 above
   Phone: see #45 above
   Date: Mar 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by:
   50. Date:

51. Form checked by:
   52. Entered on computer by:
   53. Date:

54. Form updated by:
   55. Date:

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18BC87

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. X domestic
   X industrial
   ____ transportation
   ____ military
   ____ sepulchre
   ____ unknown

c. standing structure:
   ____ yes
   X no
   ____ unknown

d. above-grade/visible ruin:
   ____ yes
   X no
   ____ unknown

2. Site Type (check all applicable):
   X artifact concentration
   ____ possible structure
   ____ post-in-ground structure
   X frame structure
   X masonry structure
   ____ farmstead
   ____ plantation
   ____ townsite
   ____ mill (specify:______________________)
   ____ raceway
   ____ quarry
   ____ furnace/forge

3. Ethnic Association:
   Native American
   X Afroamerican
   X Angloamerican
   X other Euroamerican
   (specify):

4. Categories of material remains present (check all applicable):
   X ceramics
   X bottle/table glass
   X other kitchen artifacts
   X architecture
   ____ furniture
   ____ arms
   X clothing
   X personal items
   X tobacco pipes
   X activity items
   ____ human skeletal remains
   X faunal remains
   ____ floral remains
   ____ organic remains
   ____ unknown
   ____ other:

5. Diagnostics (choose from manual and give number recorded or observed):
   wire nails
   cut nails
   creamware
   pearlware
   whiteware
   yellow ware
   milkglass lidliner
   machine-made bottle glass
6. Features present:
   - yes  
   - no  
   - unknown

7. Types of features present:
   - construction feature  
   - foundation  
   - cellar hole/storage cellar  
   - hearth/chimney base  
   - posthole/postmold  
   - paling ditch/fence  
   - privy  
   - well/cistern  
   - trash pit/dump  
   - sheet midden  
   - planting feature

8. Method of sampling (check all applicable):
   - non-systematic surface search  
   - systematic surface collection  
   - non-systematic shovel test pits  
   - excavation units  
   - mechanical excavation

9. Flotation samples collected:
   - yes  
   - no  
   - unknown

10. Soil samples collected:
    - yes  
    - no  
    - unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R. C. Goodwin & Assoc., Inc., 337 E. 3rd Street, Frederick, MD
    Date: March 1991

For Division of Archeology Use Only

14. Form transcribed by:  
15. Date:
16. Form checked by:  
17. Entered on computer by:  
18. Date:
19. Form updated by:  
20. Date:

Maryland Geological Survey, January 1989
![MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM](image)

**Maryland Department of Natural Resources**  
**Division of Archeology**  
**Maryland Geological Survey**  
2300 St. Paul Street  
Baltimore, Maryland 21218

| Site Number 18 BC88 |

(Shaded areas are for Division of Archeology use only)

### A. Designation

1. **County:** Baltimore
2. **Site Number:** MSA-11
3. **Site Name:**
4. **Site Type (check all applicable):**
   - Prehistoric
   - Historic
   - Unknown
5. **Maryland Archeological Research Unit Number:** 14 Patapsco-Back-Middle Drainage

### B. Location

6. **USGS 7.5' Quad-Range(s):** Baltimore East  
   (Photocopy section of quad(s) on page 4 and mark site location)
7. **UTM Coordinates at Center of Site**  
   - **Zone:**
   - **Easting:**
   - **Northing:**
8. **Physiographic Province (check one):**
   - Allegheny Plateau
   - Ridge and Valley
   - Great Valley
   - Blue Ridge
   - Eastern Piedmont
   - Western Shore Coastal Plain
   - Eastern Shore Coastal Plain
9. **Nearest Water Source:** Middle Branch of Patapsco River
10. **2nd Nearest Water Source:**
11. **3rd Nearest Water Source:**
12. **4th Nearest Water Source:**
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - Estuarine Bay/Tidal River [X]
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - Interior Flat [X]
   - Terrace [X]
   - Low Terrace
   - High Terrace
   - Hillside
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope:

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown [X]
   - Other: Construction/Industrial

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
   - Plowed
   - Eroded [X]
   - Graded/Contoured
   - Collected
   - Vandalized
   - Dredged
   - Other:

23. Additional Comments on Environment:
**D. Description**

24. Site Type A (check all applicable):

<table>
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<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
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</thead>
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<tr>
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<td>Cemetery</td>
<td></td>
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<tr>
<td>Ceramics</td>
<td>Domestic:</td>
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<tr>
<td>Shell Midden</td>
<td>urban</td>
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<tr>
<td>Unknown</td>
<td>rural</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>Educational</td>
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</tbody>
</table>

25. Site Type B (check one):

- **X** Terrestrial
- Underwater
- Both

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
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<td>18th century</td>
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<tr>
<td>Late Archaic</td>
<td>19th century</td>
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<td>Woodland</td>
<td>1920-1860</td>
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<td>1860-1900</td>
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</tr>
<tr>
<td>Middle Woodland</td>
<td>20th century</td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td>post 1930</td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan
Themes:

28. Site length: 42.67 meters (or 140 feet)

29. Site width: 48.76 meters (or 160 feet)

30. Is site confined to plowzone?

- **X** Yes
- No
- Unknown

31. Does site have subsurface integrity?

- **X** Yes
- No
- Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

   ____ Prehistoric
   ____ Historic
   ____ Submerged
   ____ Shipwreck

33. Ownership:

   ____ Private
   ____ Public
   ____ Unknown

34. Owner:  Maryland Stadium Authority
            World Trade Center, Suite 2450, Baltimore, MD 21202
            Phone: 301-333-1560
            Date: 26 Mar 91

35. Tenant:

            Address:  
            Phone:  
            Date:

36. Known Investigations:


37. Reports
   (Author & year):


38. Other Records?

   ____ Yes
   ____ No
   ____ Unknown

39. If YES, type and location:

            Maryland Stadium Authority (see # 34 above)

40. Collections?

   ____ Yes
   ____ No
   ____ Unknown

41. If YES, give owner and location:


42. Artifact Conservation?

   ____ Yes
   ____ Partial
   ____ No
   ____ Unknown
BASIC DATA FORM

43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - X Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - X Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: Mar 91

46. Site visited by: see #45 above.
   Address: Date: Jan 91
   Phone:

47. Form filled out by: See #45 above.
   Address: Date: Mar 91
   Phone:

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: 50. Date:

51. Form checked by:

52. Entered on computer by:

53. Date:

54. Form updated by:

55. Date:

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18 BC88

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. domestic
   x industrial
   ___ transportation
   ___ military
   ___ sepulchre
   ___ unknown

   b. x urban
   ___ rural
   ___ unknown

   c. standing structure:
      x yes
      no
      unknown

   d. above-grade/visible ruin:
      x yes
      no
      unknown

2. Site Type (check all applicable):
   x artifact concentration
   ___ possible structure
   ___ post-in-ground structure
   ___ frame structure
   x masonry structure
   ___ farmstead
   ___ plantation
   ___ townsite
   ___ mill (specify:______________)
   ___ raceway
   ___ quarry
   ___ furnace/forge

   x other industrial (specify):
      ___ kiln
      ___ road/railroad
      ___ wharf/landing
      ___ bridge
      ___ ford
      ___ battlefield
      ___ military fortification
      ___ military encampment
      ___ cemetery
      ___ unknown
      ___ other:

3. Ethnic Association:
   ___ Native American
   ___ Afroamerican
   ___ Angloamerican
   ___ other Euroamerican
   ___ (specify):

   ___ Hispanic
   ___ Asian-American
   x unknown
   ___ other:

4. Categories of material remains present (check all applicable):
   x ceramics
   x bottle/table glass
   ___ other kitchen artifacts
   x architecture
   ___ furniture
   ___ arms
   ___ clothing
   ___ personal items
   ___ tobacco pipes
   ___ activity items
   ___ human skeletal remains
   x faunal remains
   ___ floral remains
   ___ organic remains
   ___ unknown
   x other:
      ___ kiln furniture

5. Diagnostics (choose from manual and give number recorded or observed):
   cut nails - sample
   domestic blue & gray stoneware - sample
   kiln furniture - sample
   whiteware
HISTORIC DATA FORM

6 Features present:
  __X__ yes
  __no
  __unknown

7. Types of features present:
   __construction feature
   __foundation
   __cellar hole/storage cellar
   __hearth/chimney base
   __posthole/postmold
   __paling ditch/fence
   __privy
   __well/cistern
   __trash pit/dump
   __sheet midden
   __planting feature
   __road/drive/walkway
   __depression/mound
   __burial
   __railroad bed
   __earthworks
   __raceway
   __wheel pit
   __unknown
   __other
   __kiln base

8 Method of sampling (check all applicable):
   __non-systematic surface search
   __systematic surface collection
   __non-systematic shovel test pits
   __X__ excavation units
   __X__ mechanical excavation

   Extent/nature of excavation:

9. Flotation samples collected
   __yes
   __X__ no
   __unknown

10 Soil samples collected:
   __yes
   __unknown

11. Other analyses (specify)

12 Additional Comments

13 Form filled out by. Suzanne Sanders
   Address/Affiliation: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Date March 1991

14 Form transcribed by
15 Date
16 Form checked by
17 Date
18 Entered on computer by
19 Date
20 Date

Maryland Geological Survey, January 1989
MARYLAND ARCHAEOLOGICAL SITE SURVEY: BASIC DATA FORM

Maryland Department of Natural Resources
Division of Archeology

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218

Site Number 18BC69

(Shaded areas are for Division of Archeology use only)

A. Designation

1. County: Baltimore

2. Site Number: MSA - 12

3. Site Name: 

4. Site Type (check all applicable):
   - Prehistoric
   - Historic
   - Unknown

5. Maryland Archeological Research Unit Number: 14 Patapsco-Back-Middle Drainage

B. Location

6. USGS 7.5' Quad-range(s): Baltimore East

(Photocopy section of quad(s) on page 4 and mark site location)

7. UTM Coordinates at Center of Site

8. Easting: 

9. Northing: 

10. Physiographic Province (check one):
    - Allegheny Plateau
    - Ridge and Valley
    - Great Valley
    - Blue Ridge
    - Lancaster/Frederick Lowland
    - Eastern Piedmont
    - Western Shore Coastal Plain
    - Eastern Shore Coastal Plain

11. Nearest Water Source: Middle Branch of Patapsco River

12. 2nd Nearest Water Source: 

13. 3rd Nearest Water Source: 

14. 4th Nearest Water Source: 

Order

Order

Order

Order
C. Environmental Data

15. Closest Surface Water Type (check all applicable):
   - Ocean
   - X Estuarine Bay/Tidal River
   - Tidal or Marsh
   - Freshwater Stream/River
   - Freshwater Swamp
   - Lake or Pond
   - Spring

16. Distance from closest surface water: 304.8 meters (or 1000 feet)

17. SCS Typology:

18. Topographic Settings (check all applicable):
   - Floodplain
   - X Interior Flat
   - X Terrace
   - X Low Terrace
   - X High Terrace
   - Hilltop/Bluff
   - Upland Flat
   - Ridgetop
   - Rockshelter/Cave
   - Unknown
   - Other:

19. Slope: 3.04 meters (or 10 feet) above sea level

20. Elevation: 3.04 meters (or 10 feet) above sea level

21. Land use at site when last field checked:
   (check all applicable)
   - Plowed/Tilled
   - No-Till
   - Wooded/Forested
   - Logging/Logged
   - Underbrush/Overgrown
   - Pasture
   - Cemetery
   - Commercial
   - Educational
   - Extractive
   - Military
   - Recreational
   - Residential
   - Ruin
   - Standing Structure
   - Transportation
   - Unknown
   - Other: Industrial/Construction

22. Condition of Site (check all applicable):
   - UNDISTURBED
   - DISTURBED
     - Plowed
     - Eroded
     - Graded/Contoured
     - Collected
     - Vandalized
     - Dug
     - Dredged
     - Other:
     - DESTROYED
       - minor (0-10%)
       - moderate (10-60%)
       - major (60-99%)
       - total (100%)
       - % unknown

23. Additional Comments on Environment:
### D. Description

**24. Site Type A (check all applicable):**

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td>urban</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>rural</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>Educational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industrial:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>rural</td>
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<tr>
<td></td>
<td>Lake</td>
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<td></td>
<td>Military</td>
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<td></td>
<td>Religious</td>
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<td></td>
<td>Water Transportation</td>
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<tr>
<td></td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

**25. Site Type B (check one):**

- X Terrestrial
- Underwater
- Both

**26. Cultural Affiliation (check all applicable):**

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Paleoinian</td>
<td>17th century</td>
<td></td>
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<tr>
<td>Archaic</td>
<td>1630-1675</td>
<td></td>
</tr>
<tr>
<td>Early Archaic</td>
<td>1675-1720</td>
<td></td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>18th century</td>
<td></td>
</tr>
<tr>
<td>Late Archaic</td>
<td>1720-1780</td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td>1780-1820</td>
<td></td>
</tr>
<tr>
<td>Early Woodland</td>
<td>19th century</td>
<td></td>
</tr>
<tr>
<td>Middle Woodland</td>
<td>X 1820-1860</td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td>X 1860-1900</td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td>20th century</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X 1900-1930</td>
<td></td>
</tr>
<tr>
<td></td>
<td>post 1930</td>
<td></td>
</tr>
</tbody>
</table>

**27. State Plan**

Themes:  

**28. Site length:** 42.67 meters (or 140 feet)

**29. Site width:** 48.76 meters (or 160 feet)

**30. Is site confined to plowzone?**

- X No
- Unknown

**31. Does site have subsurface integrity?**

- X Yes
- No
- Unknown
Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):

- Prehistoric
- Historic  [X]
- Submerged
- Shipwreck

33. Ownership:

- Private  [X]
- Public
- Unknown

34. Owner: Maryland Stadium Authority
   Address: World Trade Center, Suite 2450, Baltimore, MD 21202
   Phone: 301-333-1560
   Date: Mar 26, 1991

35. Tenant:
   Address: ____________________________
   Phone: ____________________________
   Date:______________________________

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?

- Yes  [X]
- No
- Unknown

39. If YES, type and location:

40. Collections?

- Yes  [X]
- No
- Unknown

41. If YES, Maryland Stadium Authority (see #34 above)
   give owner and location:

42. Artifact Conservation?

- Yes  [X]
- Partial
- No
- Unknown
BASIC DATA FORM

43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - X Considered eligible (consensus)
   - Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - X Considered eligible (consensus)
   - Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428 Date: Mar 91

46. Site visited by:
   Address: 
   Phone: 
   Date: Jan 1991

47. Form filled out by:
   Address: 
   Phone: 
   Date: Mar 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: 
   50. Date: 

51. Form checked by: 
   52. Entered on computer by: 
   53. Date: 

54. Form updated by: 
   55. Date: 

MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM

Site Number 18  BC89

(Shaded areas are for Division of Archeology use only)

1. Site Class (check all applicable, check at least one from each group):
   a. domestic
   X industrial
   ____ transportation
   ____ military
   ____ sepulchre
   ____ unknown

   c. standing structure:
      ____ yes
      X no
      ____ unknown

2. Site Type (check all applicable):
   ____ artifact concentration
   ____ possible structure
   ____ post-in-ground structure
   ____ frame structure
   ____ masonry structure
   ____ farmstead
   ____ plantation
   ____ townsite
   X mill (specify: pug mill)
   ____ raceway
   ____ quarry
   ____ furnace/forge

3. Ethnic Association:
   ____ Native American
   ____ Afroamerican
   ____ Angloamerican
   ____ other Euroamerican
   (specify):
   ____ Hispanic
   ____ Asian-American
   X unknown
   ____ other:

4. Categories of material remains present (check all applicable):
   X ceramics
   X bottle/table glass
   ____ other kitchen artifacts
   X architecture
   ____ furniture
   ____ arms
   ____ clothing
   ____ personal items
   X tobacco pipes
   X activity items
   ____ human skeletal remains
   X faunal remains
   ____ floral remains
   X organic remains
   ____ unknown
   ____ other:

5. Diagnostics (choose from manual and give number recorded or observed):
   cup-bottom mold bottle (1)
   ironstone - sample
   whiteware - sample
   cut nails - sample
6. Features present:
   - X yes
   - ___ no
   - ___ unknown

7. Types of features present:
   - ___ construction feature
   - ___ foundation
   - ___ cellar hole/storage cellar
   - ___ hearth/chimney base
   - ___ posthole/postmold
   - ___ paling ditch/fence
   - ___ privy
   - ___ well/cistern
   - ___ trash pit/dump
   - ___ sheet midden
   - ___ planting feature

road/drive/walkway
depression/mound
burial
railroad bed
earthworks
raceway
wheel pit
unknown
X other:
___ partial mill

8. Method of sampling (check all applicable):
   - ___ non-systematic surface search
   - ___ systematic surface collection
   - ___ non-systematic shovel test pits
   - X ___ excavation units
   - X ___ mechanical excavation

extent/nature of excavation:

9. Flotation samples collected:
   - ___ yes
   - X ___ no
   - ___ unknown

analyzed:
   - ___ yes, by
   - ___ no
   - ___ unknown

10. Soil samples collected:
   - ___ yes
   - X ___ no
   - ___ unknown

analyzed:
   - ___ yes, by
   - ___ no
   - ___ unknown

11. Other analyses (specify):

___

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
Address/Affiliation:
   R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Date: Mar 91

For Division of Archeology Use Only
14. Form transcribed by:
15. Date:
16. Form checked by:
17. Entered on computer by:
18. Date:
19. Form updated by:
20. Date:

Maryland Geological Survey, January 1989
**MARYLAND ARCHEOLOGICAL SITE SURVEY: BASIC DATA FORM**

**Maryland Department of Natural Resources**
**Division of Archeology**
**Maryland Geological Survey**
2300 St. Paul Street
Baltimore, Maryland 21218

(Shaded areas are for Division of Archeology use only)

### A. Designation

1. County: **Baltimore**
2. Site Number: **MSA-13**
3. Site Name: **Dorsey**
4. Site Type (check all applicable)
   - [ ] Prehistoric
   - [X] Historic
   - [ ] Unknown
5. Maryland Archeological Research Unit Number: **14 Patapsco-Back-Middle Drainage**

### B. Location

6. USGS 7.5' Quad-range(s): **Baltimore East**
   (Photocopy section of quad(s) on page 4 and mark site location)
7. UTM Coordinates at Center of Site Zone: 
8. Easting: 
9. Northing: 
10. Physiographic Province (check one).
    - [ ] Allegheny Plateau
    - [X] Ridge and Valley
    - [ ] Great Valley
    - [ ] Blue Ridge
    - [ ] Eastern Piedmont
    - [ ] Western Shore Coastal Plain
    - [ ] Eastern Shore Coastal Plain
11. Nearest Water Source: **Middle Branch of Patapsco River**
12. 2nd Nearest Water Source
13. 3rd Nearest Water Source
14. 4th Nearest Water Source
### Basic Data Form

#### C. Environmental Data

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Selections</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Closest Surface Water Type (check all applicable)</td>
<td>Ocean, Estuarine Bay/ Tidal River, Tidal or Marsh</td>
<td>X Estuarine Bay/ Tidal River</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Distance from closest surface water:</td>
<td></td>
<td>304.8 meters (or 1000 feet)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Topographic Settings (check all applicable):</td>
<td>Floodplain, Interior Flat, Terrace, Low Terrace, High Terrace, Hillslope</td>
<td>X Interior Flat, X Low Terrace, X Hillslope</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Slope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Elevation:</td>
<td></td>
<td>3.04 meters (or 10 feet) above sea level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Land use at site when last field checked: (check all applicable)</td>
<td>Plowed/Tilled, No-Till, wooded/forested, Logging/Logged, Underbrush/Overgrown, Pasture, Cemetery, Commercial, Educational</td>
<td>X Other: Industrial/construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Condition of Site (check all applicable):</td>
<td>UNDISTURBED, DISTURBED, Plowed, Eroded, Graded/Contoured, Collected, Vandalized, Dredged, Other</td>
<td>DESTROYED minor (0-10%), moderate (10-60%), major (60-99%), total (100%), % unknown</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Additional Comments on Environment:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Description

24. Site Type A (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithics</td>
<td>Cemetery</td>
<td></td>
</tr>
<tr>
<td>Ceramics</td>
<td>Domestic:</td>
<td></td>
</tr>
<tr>
<td>Shell Midden</td>
<td>X  urban</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>rural</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>Educational:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Site Type B (check one):

<table>
<thead>
<tr>
<th>Terrestrial</th>
<th>Underwater</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Cultural Affiliation (check all applicable):

<table>
<thead>
<tr>
<th>PREHISTORIC</th>
<th>HISTORIC</th>
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</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>17th century</td>
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</tr>
<tr>
<td>Paleoindian</td>
<td>1630-1675</td>
<td></td>
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<tr>
<td>Archaic</td>
<td>1675-1720</td>
<td></td>
</tr>
<tr>
<td>Early Archaic</td>
<td>18th century</td>
<td></td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>X  1720-1780</td>
<td></td>
</tr>
<tr>
<td>Late Archaic</td>
<td>X  1780-1820</td>
<td></td>
</tr>
<tr>
<td>Woodland</td>
<td>19th century</td>
<td></td>
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<tr>
<td>Early Woodland</td>
<td>X  1820-1860</td>
<td></td>
</tr>
<tr>
<td>Middle Woodland</td>
<td>X  1860-1900</td>
<td></td>
</tr>
<tr>
<td>Late Woodland</td>
<td>X  1900-1930</td>
<td></td>
</tr>
<tr>
<td>CONTACT</td>
<td>20th century</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X  post 1930</td>
<td></td>
</tr>
</tbody>
</table>

27. State Plan Themes:

28. Site length: 24.40 meters (or 80 feet)

29. Site width: 24.40 meters (or 80 feet)

30. Is site confined to plowzone?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
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</thead>
<tbody>
<tr>
<td>X</td>
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</tbody>
</table>

31. Does site have subsurface integrity?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Photocopy section of quadrangle map(s) and mark site location with heavy dot or circle and arrow.
E. Support Data (Use additional sheets if needed)

32. Accompanying Data Form(s):
   - Prehistoric
   - Historic
   - Submerged
   - Shipwreck

33. Ownership:
   - Private
   - Public
   - Unknown

34. Owner: Maryland Stadium Authority
   Address: World Trade Center, Suite 2450, Baltimore, MD 21202
   Phone: 303-333-1560
   Date: Mar 91

35. Tenant:
   Address: 
   Phone: 
   Date:

36. Known Investigations:

37. Reports (Author & year):

38. Other Records?
   - Yes
   - No
   - Unknown

39. If YES, type and location:

40. Collections?
   - Yes
   - No
   - Unknown

41. If YES, give owner and location:

42. Artifact Conservation?
   - Yes
   - Partial
   - No
   - Unknown
43. Maryland Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

44. National Register Status:
   - Listed on register
   - Nomination pending
   - Determined eligible (formal)
   - Considered eligible (consensus)
   - X Not eligible
   - Insufficient data

45. Informant: Suzanne Sanders
   Address: R. C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Phone: 301-694-0428
   Date: Mar 91

46. Site visited by:
   Address: see # 45 above
   Phone:
   Date: Jan 91

47. Form filled out by:
   Address: see #45 above
   Phone:
   Date: Mar 91

48. Additional Comments:

F. For Division of Archeology Use Only

49. Form transcribed by: ____________________________ 50. Date: ____________________________

51. Form checked by: ____________________________ 52. Entered on computer by: ____________________________ 53. Date: ____________________________

54. Form updated by: ____________________________ 55. Date: ____________________________

**MARYLAND ARCHEOLOGICAL SITE SURVEY: HISTORIC DATA FORM**

**Site Number 18 BC90**

(Shaded areas are for Division of Archeology use only)

1. **Site Class (check all applicable, check at least one from each group):**
   - a. **X** domestic
   - **X** unknown
   - **X** urban
   - **X** rural
   - **X** unknown
   - **X** industrial
   - **X** transportation
   - **X** military
   - **X** sepulchre
   - **X** unknown
   - **X** standing structure:
     - yes
     - no
     - **X** unknown
   - **X** above-grade/visible ruin:
     - yes
     - **X** no
     - unknown

2. **Site Type (check all applicable):**
   - **X** artifact concentration
   - **X** possible structure
   - **X** post-in-ground structure
   - **X** frame structure
   - **X** masonry structure
   - **X** farmhouse
   - **X** plantation
   - **X** townsite
   - **X** mill (specify: ________________)
   - **X** raceway
   - **X** quarry
   - **X** furnace/forge
   - **X** other industrial (specify):

3. **Ethnic Association:**
   - Native American
   - Afroamerican
   - Angloamerican
   - other Euroamerican
   - **X** Hispanic
   - **X** Asian-American
   - unknown
   - other:

4. **Categories of material remains present (check all applicable):**
   - **X** ceramics
   - **X** bottle/table glass
   - **X** other kitchen artifacts
   - **X** architecture
   - **X** furniture
   - **X** arms
   - **X** clothing
   - **X** personal items
   - **X** tobacco pipes
   - **X** activity items
   - **X** human skeletal remains
   - **X** faunal remains
   - **X** organic remains
   - unknown
   - **X** other:

5. **Diagnostics (choose from manual and give number recorded or observed):**
   - plastic
   - pearlware
   - decal porcelain
   - wire nails
   - whiteware
   - machine-made bottle glass
   - cut nails
   - Rockingham ware
   - bakelite plastic
   - creamware
   - lidliner
   - blow-pipe pontil
   - Depression glass
   - kiln furniture
6. Features present:
   X yes
   ___ no
   ___ unknown

7. Types of features present:
   ___ construction feature
   ___ foundation
   ___ cellar hole/storage cellar
   ___ hearth/chimney base
   ___ posthole/postmold
   ___ paling ditch/fence
   ___ privy
   ___ well/cistern
   ___ trash pit/dump
   ___ sheet midden
   ___ planting feature

8. Method of sampling (check all applicable):
   ___ non-systematic surface search
   ___ systematic surface collection
   ___ non-systematic shovel test pits
   ___ excavation units
   X mechanical excavation

   extent/nature of excavation:

9. Flotation samples collected:
   ___ yes
   ___ no
   X unknown

10. Soil samples collected:
    ___ yes
    ___ no
    X unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
   Address/Affiliation: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
   Date: March 1991

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14. Form transcribed by:
15. Date:
16. Form checked by:
17. Entered on computer by:
18. Date:
19. Form updated by:
20. Date:

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HISTORIC DATA FORM

6. Features present:
   X yes
   ___ no
   ___ unknown

7. Types of features present:
   ___ construction feature
   X foundation
   ___ cellar hole/storage cellar
   ___ hearth/chimney base
   ___ posthole/postmold
   ___ paling ditch/fence
   ___ privy
   ___ well/cistern
   ___ trash pit/dump
   ___ sheet midden
   ___ planting feature
   ___ road/drive/walkway
   ___ depression/mound
   ___ burial
   ___ railroad bed
   ___ earthworks
   ___ raceway
   ___ wheel pit
   ___ unknown
   ___ other:

8. Method of sampling (check all applicable):
   ___ non-systematic surface search
   ___ systematic surface collection
   ___ non-systematic shovel test pits
   ___ excavation units
   X ___ mechanical excavation

   extent/nature of excavation:

9. Flotation samples collected:
   ___ yes
   X ___ no
   ___ unknown

10. Soil samples collected:
    ___ yes
    X ___ no
    ___ unknown

11. Other analyses (specify):

12. Additional Comments:

13. Form filled out by: Suzanne Sanders
    Address/Affiliation: R.C. Goodwin & Assoc., Inc., 337 E. 3rd St., Frederick, MD 21701
    Date: March 1991

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14. Form transcribed by: ____________________________ 15. Date: ____________________________
16. Form checked by: ____________________________ 17. Date: ____________________________
17. Entered on computer by: ____________________________ 18. Date: ____________________________
19. Form updated by: ____________________________ 20. Date: ____________________________

Maryland Geological Survey, January 1989
APPENDIX II

FAUNAL ANALYSIS
Zooarchaeological Evidence for Diet and Urban Foodways in 19th- and Early-20th-century Baltimore:
The Faunal Remains from Features R5 and 19AØ1

by David B. Landon, Ph.D.

Introduction

This report details the results of the analysis of two faunal assemblages from Baltimore, Maryland. Both these assemblages are from filled privies that were associated with 19th-century households. The smaller of the two assemblages is from Feature R5 and dates to c. 1824-1837. The larger assemblage is from Feature 19AØ1 and dates to the end of the 19th to the beginning of the 20th century. In both instances the vast majority of the faunal material appears to represent secondary deposition of food consumption refuse in the privies. As a result, analysis of this material provides insight into the diet and other aspects of 19th- and early-20th-century foodways in Baltimore.

Several different topics are discussed below. To start, the procedures used for the analysis are briefly outlined. The focus then shifts to an examination of the taxonomic composition of the assemblages and the frequency of various surface modifications to the bones. This is followed by an investigation of the pattern of body part representation, butchery practices, and the ages of domestic animals at death. Finally, the results of the analysis are used to draw conclusions about the diet and household purchasing patterns.

Procedures

The analysis of the faunal material from Features R5 and 19AØ1 began with sorting by provenience unit and body part. All of the bones from Feature R5 were part of a single provenience unit. Feature 19AØ1 was excavated in two separate halves, each of which were subdivided into a number of levels. This contextual information was recorded during the analysis, but the bones from all contexts of Feature 19AØ1 are considered as a single group for the purposes of this report.

A printed spread sheet was used to record specific information about the identified bone fragments. Groups of less diagnostic material, such as long bone shaft, vertebral, cranial, rib and unidentified fragments (NID), were often
grouped together. Species identifications were based on a variety of written references and comparative faunal material at Boston University and in the collection of the author (Ballinger and Lynch 1983; Boessneck 1970; Chomko 1980; Gilbert 1980; Olsen 1968; Prummel and Frisch 1986). Mammalian remains that could not be identified to particular genus or species were assigned to a size category.

**Size Categories**

- **Size 1** - Small. Smaller than a rabbit.
- **Size 2** - Small/Medium. Rabbit to medium dog.
- **Size 3** - Medium. Large dog to medium pig.
- **Size 4** - Medium/Large. Large pig to small domestic cattle.
- **Size 5** - Large. Small domestic cattle and larger.

The body part and portion represented by each fragment were recorded using the coding system of Gifford and Crader (1977). Whenever possible the proximal and distal fusion stages of each bone were noted, as was the side of the body from which the bone came. For cattle, pig, and caprid (sheep and goat) dentition, approximate ages were assigned based on the stage of tooth eruption and wear (Hillson 1986: 202-210, 331-336). All of the bones were also weighed using an Ohaus Triple Beam Balance.

The information described so far was recorded for all of the bones. A variety of different surface modifications to the bones were also recorded for all of the bones from Feature R5. Surface modifications to the bones were recorded only for the faunal material from the south half of Feature 19A01, with two exceptions. Butchery mark plates, as described below, were recorded for all of the bones in Feature 19A01. In addition, the rabbit and muskrat bones in both halves of the privy were examined very carefully to try to detect surface modifications, especially butchery marks, that might have provided clues to how the animals were utilized.

Surface modification categories were rodent damage, carnivore damage, collection/curation breakage, root damage, burning, butchery marks, and bone weathering. In addition, staining from iron contact, blue discoloration, and blue surface crystals were observed and recorded during the analysis. Rodent, carnivore, root, and collection/curation damage, were recorded solely on a presence/absence basis. Burn stages were assigned to the burned bones following criteria in Crader (1984). Five different types of butchery marks were
defined based on morphological characteristics. For each bone the total number of each type of butchery mark was recorded.

**Butchery marks**
- scrape- A straight mark on the bone that does not gouge.
- cut- A straight mark on the bone that gouges the surface.
- chop- A cut that removes a section of the bone.
- shear- A chop going through part of the bone leaving a straight edge.
- saw- A series of parallel striations caused by a toothed cutting tool.

Only a saw definitely implies the use of a different tool, as all the other marks could conceivably be made by the same tool applied with differential force or skill. For each cow, pig, sheep, or goat bone with butchery marks, the location, orientation, and type of the mark were recorded on line drawings of the different elements (Lyman 1977). These line drawings were used to reconstruct the patterns of division of specific body parts and the overall patterns of carcass apportionment.

The final type of surface modification that was recorded was bone weathering. As bone is exposed to the elements it begins to progressively disintegrate based on the severity of the exposure. For each fragment the maximum weathering stage was recorded based on Behrensmeyer (1978). For the purposes of this report, bones are reported only as being weathered or unweathered.

**Taxonomic representation and bone surface modifications**

The basic composition of the assemblages by taxonomic class is shown in Table 1. Both assemblages are clearly dominated by mammal remains. In Feature R5, mammal bones comprise two-thirds of the sample by fragment count and over 96% of the sample by weight. Similarly, in Feature 19AØ1, mammal bones comprise just under three-fourths of the total sample by fragment count and just over 93% of the sample by weight. Bird and fish remains together make up approximately one-quarter of each assemblage by fragment count, though only a very small percentage of the total weight. In each assemblage there were very few fragments that could not be identified to taxonomic class. In general, these fragments are extremely small and lack diagnostic attributes. The small size of these fragments in reflected by the
Table 1. Basic composition of the assemblages by taxonomic class.

<table>
<thead>
<tr>
<th>Class</th>
<th>TNF*</th>
<th>% of TNF</th>
<th>Weight (g)</th>
<th>% of Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammal</td>
<td>211</td>
<td>66.6</td>
<td>5202.0</td>
<td>96.6</td>
</tr>
<tr>
<td>Bird</td>
<td>35</td>
<td>11.0</td>
<td>105.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Reptile</td>
<td>23</td>
<td>7.3</td>
<td>71.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Amphibian</td>
<td>2</td>
<td>0.6</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Fish</td>
<td>44</td>
<td>13.9</td>
<td>7.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Unidentified</td>
<td>2</td>
<td>0.6</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>317</td>
<td>100.0</td>
<td>5386.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Feature 19AØ1

<table>
<thead>
<tr>
<th>Class</th>
<th>TNF*</th>
<th>% of TNF</th>
<th>Weight (g)</th>
<th>% of Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammal</td>
<td>1886</td>
<td>73.0</td>
<td>21596.1</td>
<td>93.5</td>
</tr>
<tr>
<td>Bird</td>
<td>378</td>
<td>14.6</td>
<td>977.0</td>
<td>4.2</td>
</tr>
<tr>
<td>Amphibian</td>
<td>6</td>
<td>0.2</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Fish</td>
<td>217</td>
<td>8.4</td>
<td>78.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>1.2</td>
<td>433.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Unidentified</td>
<td>66</td>
<td>2.6</td>
<td>7.1</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2583</td>
<td>100.0</td>
<td>23093.4</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Table 2. Surface modifications to the bones.

<table>
<thead>
<tr>
<th>Modification</th>
<th>Feature R5</th>
<th>Feature 19AØ1†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weathered §</td>
<td>TNF*</td>
<td>percent</td>
</tr>
<tr>
<td>Burned</td>
<td>8</td>
<td>2.5</td>
</tr>
<tr>
<td>Butchered</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Rodent gnawed</td>
<td>120</td>
<td>37.8</td>
</tr>
<tr>
<td>Carnivore gnawed</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Root etched</td>
<td>6</td>
<td>1.9</td>
</tr>
<tr>
<td>Fresh break</td>
<td>14</td>
<td>4.4</td>
</tr>
<tr>
<td>Iron stained</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>Blue stained</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Surface crystals</strong></td>
<td>-</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*TNF is the total number of fragments.
† Only the bones in south half of feature were examined for surface modifications.
§ Following criteria of Behrensmeyer (1978).
weight. In neither assemblage is the average weight of unidentified fragments greater than 0.15 grams.

Both assemblages derive from sealed privy deposits, but the surface modification data suggest that there were some differences in the assemblage formation processes (Tab. 2). The faunal material from R5 all seems to have been dumped straight into the privy and thus protected from the effects of weathering and the activities of carnivores and rodents. Less than 3% of the fragments in R5 showed signs of surface weathering, less than 2% of the bones had rodent gnaw marks, and less than 2% of the bones had carnivore gnaw marks. Some of the faunal material in Feature 19AØ1 appears to have had more exposure. More than 11% of the bones were weathered, and 7% of the bones had carnivore gnaw marks on them. It does not seem likely that these modifications occurred after the bones had been deposited in the privy. As a result, it appears that some of the faunal material in Feature 19AØ1 was deposited in open exterior areas, where some of the bones were chewed by dogs and exposed to the elements, before being redeposited in the privy. The faunal material in Feature 19AØ1 is therefore probably a mix of secondary and tertiary deposition. This does not seem to have introduced a significant preservation bias because the vast majority of the faunal material does appear to have been dumped straight into Feature 19AØ1. More than one-quarter of the fragments in the assemblage had rodent gnaw marks on their surfaces, but a significant portion of the rodent damage probably took place after material had been dumped into the privy. Thirty-eight bones of at least six rats were identified in the assemblage from Feature 19AØ1, and it is likely that these animals were living in and around the privy.

More detailed information about the representation of different taxa is presented in Table 3. A number of different types of animals are represented, especially in Feature 19AØ1, but both assemblages are clearly dominated by the remains of domestic mammals and birds. More than half of the bones and individuals in each assemblage come from four species: *Bos taurus* (cow), *Ovis/Capra* (sheep and goat), *Sus scrofa* (pig), and *Gallus gallus* (chicken). These four types of animals undoubtedly provided most of the meat consumed. It is very difficult to distinguish sheep and goat bones, but at least one goat was present in the assemblage from Feature 19AØ1. All of the other caprid (sheep or goat) bones in both assemblages that could be positively identified were sheep. Other domestic animals included *Meleagris gallopavo* (turkey) and *Felis*
Table 3. Taxonomic representation by fragment counts and numbers of animals.

Feature R5

<table>
<thead>
<tr>
<th>Taxon</th>
<th>TNF*</th>
<th>%†</th>
<th>MNI</th>
<th>% of MNI</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bos taurus</em></td>
<td>80</td>
<td>25.2</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td><em>Ovis/ Capra</em></td>
<td>34</td>
<td>10.7</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td><em>Ovis aries</em></td>
<td>[13]</td>
<td>[4.1]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>Sus scrofa</em></td>
<td>73</td>
<td>23.0</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td><em>Rattus rattus</em></td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Medium mammal</td>
<td>4</td>
<td>1.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Large mammal</td>
<td>10</td>
<td>3.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Columbidae</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><em>Meleagris gallopavo</em></td>
<td>5</td>
<td>1.6</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td><em>Gallus gallus</em></td>
<td>11</td>
<td>3.5</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td><em>Branta canadensis</em></td>
<td>2</td>
<td>0.6</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Anatidae</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Unidentified bird</td>
<td>11</td>
<td>3.5</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><em>Malaclemys terrapin</em></td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Testudinata</td>
<td>22</td>
<td>6.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Salientia</td>
<td>2</td>
<td>0.6</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>258</td>
<td>81.4</td>
<td>21</td>
<td>100.2</td>
</tr>
</tbody>
</table>

* TNF is the total number of fragments.
† These percentages are of the total sample.
§ MNI is the minimum number of individuals.

Numbers in brackets [#] are a subset of a preceding category.
Table 3, continued.

**Feature 19A01**

<table>
<thead>
<tr>
<th>Taxon</th>
<th>TNF*</th>
<th>%†</th>
<th>MNI §</th>
<th>% of MNI</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bos taurus</em></td>
<td>cow</td>
<td>385</td>
<td>14.9</td>
<td>12</td>
</tr>
<tr>
<td><em>Ovis/ Capra</em></td>
<td>sheep/goat</td>
<td>140</td>
<td>5.4</td>
<td>10</td>
</tr>
<tr>
<td><em>Ovis aries</em></td>
<td>sheep</td>
<td>[37]</td>
<td>[1.4]</td>
<td>-</td>
</tr>
<tr>
<td><em>Capra hircus</em></td>
<td>goat</td>
<td>[3]</td>
<td>[0.1]</td>
<td>-</td>
</tr>
<tr>
<td><em>Sus scrofa</em></td>
<td>pig</td>
<td>594</td>
<td>23.0</td>
<td>27</td>
</tr>
<tr>
<td><em>Felis domesticus</em></td>
<td>cat</td>
<td>1</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Rattus sp.</td>
<td>rat</td>
<td>38</td>
<td>1.5</td>
<td>6</td>
</tr>
<tr>
<td><em>Rattus norvegicus</em></td>
<td>Norway rat</td>
<td>[3]</td>
<td>[0.1]</td>
<td>-</td>
</tr>
<tr>
<td><em>Ondatra zibethica</em></td>
<td>muskrat</td>
<td>25</td>
<td>1.0</td>
<td>6</td>
</tr>
<tr>
<td><em>Sylvilagus sp.</em></td>
<td>rabbit</td>
<td>21</td>
<td>0.8</td>
<td>3</td>
</tr>
<tr>
<td>Small mammal</td>
<td></td>
<td>20</td>
<td>0.8</td>
<td>-</td>
</tr>
<tr>
<td>Small/ medium mamal</td>
<td></td>
<td>2</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td>Medium mammal</td>
<td></td>
<td>316</td>
<td>12.2</td>
<td>-</td>
</tr>
<tr>
<td>Medium/large mamal</td>
<td></td>
<td>6</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>Large mammal</td>
<td></td>
<td>33</td>
<td>1.3</td>
<td>-</td>
</tr>
<tr>
<td><em>Meleagris gallopavo</em></td>
<td>turkey</td>
<td>43</td>
<td>1.7</td>
<td>5</td>
</tr>
<tr>
<td>Gallus gallus</td>
<td>chicken</td>
<td>222</td>
<td>8.6</td>
<td>25</td>
</tr>
<tr>
<td>Branta canadensis</td>
<td>goose</td>
<td>14</td>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td>Anas sp.</td>
<td>duck</td>
<td>10</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>Anatidae</td>
<td>small wild duck</td>
<td>1</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Unidentified bird</td>
<td></td>
<td>85</td>
<td>3.4</td>
<td>1</td>
</tr>
<tr>
<td><em>Rana cf. catesbeiana</em></td>
<td>probable bullfrog</td>
<td>3</td>
<td>0.1</td>
<td>1</td>
</tr>
<tr>
<td>Salientia</td>
<td>small frog or toad</td>
<td>3</td>
<td>0.1</td>
<td>1</td>
</tr>
<tr>
<td>Unidentified fish</td>
<td></td>
<td>217</td>
<td>8.4</td>
<td>12</td>
</tr>
<tr>
<td><em>Callinectes sapidus</em></td>
<td>blue crab</td>
<td>6</td>
<td>0.2</td>
<td>3</td>
</tr>
<tr>
<td><em>Crassostrea virginica</em></td>
<td>Eastern oyster</td>
<td>19</td>
<td>0.7</td>
<td>-</td>
</tr>
<tr>
<td><em>Mercenaria mercenaria</em></td>
<td>Northern quahog</td>
<td>4</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>cf. Naticidae</td>
<td>prob. moon snail</td>
<td>1</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>2209</td>
<td>85.5</td>
<td>118</td>
</tr>
</tbody>
</table>

* TNF is the total number of fragments.
† These percentages are of the total sample.
§ MNI is the minimum number of individuals.

Numbers in brackets [#] are a subset of a preceeding category.
domesticus (cat) as well as the possible domestic birds Branta canadensis (Canada goose) and Anas sp. (duck).

Both assemblages also contained wild animals, some of which were probably eaten. In Feature R5, the wild animals that might have been eaten include the passenger pigeon or rock dove, the unidentified small wild duck, and the diamondback terrapin. Fish were probably the most important wild meat source in both assemblages, but no attempt was made to identify the fish bones. In Feature 19AØ1, at least three different types of fish were present, and at least twelve fish were represented in the assemblage (based on counts of dentary bones). Other wild animals in Feature 19AØ1 that might have been eaten include Sylvilagus sp. (rabbit), Ondatra zibethica (muskrat), Rana cf. catesbeiana (probable bullfrog), and a variety of shellfish including crabs, oysters, and quahogs. It is difficult to determine if all of these animals were definitely eaten, but their presence in the privy is probably the result of some type of cultural use of these animals. None of the rabbit, muskrat, or bullfrog bones had any butchery marks on them. It is possible that the rabbit and muskrat were trapped solely for their furs and not actually consumed, but it is not possible to determine this conclusively. Given the proximity of the Patapsco River to the area where these privies were found it seems very likely that some of the animals, including possibly the turtle, muskrat, rabbit, wild duck, and some of the fish, were trapped or caught by members of the household. As is discussed below as part of the body part representation, the majority of the domestic animal material seems to have been the result of purchase of specific portions of animals at market as opposed to home raising of animals.

Body part representation and butchery practices

The distribution of bones by animal and body part is shown for mammals in Table 4 and birds in Table 5. It is clear from both of the assemblages that most of the bones of the domestic mammals were parts of specific portions that had been butchered prior to being brought to the sites. The body part representation of domestic mammals in both assemblages is clearly dominated by meaty portions of the body. Cranial bones are not well represented in either of the assemblages. Feature R5 did contain two small fragments of a single cow skull and one complete pig skull. The pig skull was from a fairly young animal, probably about six to eight months of age, and might represent the purchase of a complete young pig. Feature 19AØ1 contained only a single
Table 4. Mammal body part representation.

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</table>
Table 5, continued.

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<th>Branta c.</th>
<th>Anas sp.</th>
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<td>Body part</td>
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<td>goose</td>
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<td>6</td>
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<tr>
<td>fibula</td>
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<td>2</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>6</td>
</tr>
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<td><strong>43</strong></td>
<td><strong>14</strong></td>
<td><strong>10</strong></td>
<td><strong>1</strong></td>
<td><strong>85</strong></td>
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</table>
fragment of a calf skull, as well as a small number of pig and caprid head elements. Although head elements are not well represented in either assemblage, it does appear that parts of the head were sometimes consumed. This is seen most clearly in Feature 19A01, where the fragment of calf's skull was sawn through the maxilla to remove the anterior portion of the head.

Foot bones are not well represented in the two assemblages, with the exception of pig foot bones. The cattle metatarsals, metacarpals, and phalanges in Feature R5 are all from an extremely young animal (c. one month old) and could all be from the same animal. These bones probably represent the preparation of calves' foot jelly or a similar dish. Cattle feet are even less well represented in Feature 19A01, where only a single fragment of a metatarsal was present in the assemblage. There are no carpals or phalanges of sheep or goats in either assemblage. It appears that cattle and sheep and goat feet were routinely removed by the butcher before select portions of the carcass were acquired for preparation. Pig's feet, however, seem to have been routinely consumed. There are a number of pig foot bones in each assemblage, and several of these have butchery marks on them.

The body part representation for birds appears to suggest that most birds were acquired after the heads and part of the neck had already been removed (Tab. 5). Of over 400 bird bones identified to body part in these two assemblages, only a single cranial fragment and five mandible fragments were identified. Chickens and other birds were apparently not usually raised and slaughtered on the house lots, unless the heads were always discarded somewhere other than the privies.

It is difficult to make any other supportable statements about body part representation in the assemblage from Feature R5 because of the small size of the sample. This is not the case, however, with the assemblage from Feature 19A01. Before discussing body part representation in any greater detail it is appropriate to examine butchery practices more fully, as the two topics are closely interrelated. The assemblage from Feature R5 is too small to accurately interpret the butchery patterns, but the butchery evidence, on the whole, seems to suggest a pattern very similar to that represented in the assemblage from Feature 19A01. The noticeable differences are noted below. The butchery of sheep and goats appears to be the most idiosyncratic, and caprids are not particularly well represented in either assemblage. As a result, a clear picture
of the butchery patterns exists only for cattle and pigs in the assemblage from 19AØ1 (Fig. 1 and 2).

Butchery mark type frequency.

<table>
<thead>
<tr>
<th>Mark type</th>
<th>Feature R5 number</th>
<th>percent</th>
<th>Feat. 19AØ1* number</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>scrape</td>
<td>37</td>
<td>14.6</td>
<td>67</td>
<td>8.4</td>
</tr>
<tr>
<td>cut</td>
<td>80</td>
<td>31.5</td>
<td>212</td>
<td>26.6</td>
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<td>chop</td>
<td>12</td>
<td>4.7</td>
<td>10</td>
<td>1.2</td>
</tr>
<tr>
<td>shear</td>
<td>52</td>
<td>20.5</td>
<td>109</td>
<td>13.7</td>
</tr>
<tr>
<td>saw</td>
<td>73</td>
<td>28.7</td>
<td>398</td>
<td>50.0</td>
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<tr>
<td>Total</td>
<td>254</td>
<td>100.0</td>
<td>796</td>
<td>99.9</td>
</tr>
</tbody>
</table>

* South half of feature only.

Interestingly, the proportion of bones in each assemblage with butchery marks is virtually identical (Tab. 2). In addition, the proportion of different types of butchery marks is also fairly close. The major difference is that saw marks are almost twice as common in Feature 19AØ1 as in Feature R5; otherwise the relative proportions of other types of butchery marks are quite close. The difference in the proportion of saw marks could result from a variety of different causes, but one legitimate possibility is that the use of saws by butchers became increasingly common as the 19th century progressed.

The general butchery pattern of cattle carcasses seems to be the most consistent of all the domestic mammals (Fig. 1). The carcass was split into two halves along the vertebral column. The vertebral column was then subdivided by sawing across it. Lumbar vertebrae and the sacrum were sawn into thin steaks, thoracic vertebrae were sawn into slightly thicker (about one vertebrae thick) steaks, and the cervical row was divided in only a couple places, creating larger portions. The three caudal vertebrae in Feature 19AØ1 were all split longitudinally. The rib cage appears to have been sawn along the body in two places, but a certain amount of variation in the treatment of the ribs is apparent. The scapula was sawn into chuck steaks generally about 2 inches thick, with the primary variation being whether is was sawn at an angle or basically perpendicular to the long axis of the bone. The scapula fragments in R5 were
Figure 1. Inferred pattern of cattle carcass apportionment in Feature 19AØ1.
Figure 2. Inferred pattern of pig carcass apportionment in Feature 19AΦ1.
all sawn on the angle and most were for chuck steaks 3-4 inches thick. The pelvis was subdivided by sawing medial-laterally across the innominate to create loin and rump steaks. The thickness of portions created from the innominate varied greatly, ranging from about 4 inches thick to about 0.75 inches thick. The humerus, radio-ulna, femur, and tibia were all subdivided by sawing perpendicular to the shaft to create roasts or steaks. The exact position where these divisions took place varied slightly, but the general pattern was the same, and served to divide each bone lengthwise roughly into quarters. The portions created in this fashion from the proximal and distal humerus, the distal femur, and proximal tibia were further subdivided by splitting the bone along its long axis. Cross-cuts of the limb seem to have been made in fairly uniform sizes, with the exception of the humerus, which appears to have had slightly thinner steaks created from center shaft cuts.

The butchery of pig carcasses is also very clearly represented. As with cattle, the carcass was generally split down the line of the vertebral column. The pattern of further subdivision of the vertebral column and the exact treatment of the rib cage are not clear. The fore and hind limb of pigs were treated almost identically. The feet were removed from the carcass by sawing through the lower leg. Generally this cut was through the distal shaft of the tibia/fibula or radius/ulna, but occasionally it was through the carpals or tarsals. A large ham or shoulder portion was then created by removing the remaining portion of the limb from the body by sawing through the neck of the ilium or the scapula. The ham or shoulder could be divided into two pieces by sawing through the shaft of the humerus or femur. This appears to have only rarely been done with the shoulder, but usually done with the ham, creating separate rump and shank portions. The parts of the scapula and pelvis that were not incorporated in the ham or shoulder were divided into thin steak cuts. In addition, ham and shoulder portions were not always left complete, but were sometimes cut into thin steaks. Several of these ham and shoulder steaks were identified in the assemblage from Feature 19A01.

Some of the butchery marks on sheep and goat bones suggest similarities to the pattern of butchery of the pig carcass. The division of the legs by sawing or chopping through the distal shaft of the tibia and radio-ulna is well represented. The separation of the distal humerus from the proximal radio-ulna by sawing into the "elbow" joint is also reflected. Beyond this it is extremely difficult to interpret the butchery pattern. Some of the butchery marks on some
Figure 3. Cattle body part representation in Feature 19AØ1

1) skull; 2) dentary; 3) atlas; 4) axis; 5) other cervical vertebrae; 6) thoracic vertebrae; 7) lumbar vertebrae; 8) sacrum; 9) caudal vertebrae; 10) rib; 11) scapula; 12) humerus; 13) radius; 14) ulna; 15) carpal; 16) metacarpal; 17) first phalanx; 18) second phalanx; 19) third phalanx; 20) innominate; 21) femur; 22) patella; 23) tibia; 24) tarsal; 25) metatarsal.

* These percentages were calculated by dividing the number of fragments of a particular body part by the number of those parts in a single animal carcass, and expressing the resultant adjusted frequency as a percentage of the total for all parts of a single type of animal.
Figure 4. Pig body part representation in Feature 19AØ1.

1) skull; 2) dentary; 3) atlas; 4) axis; 5) other cervical vertebrae; 6) thoracic vertebrae; 7) lumbar vertebrae; 8) sacrum; 9) caudal vertebrae; 10) rib; 11) scapula; 12) humerus; 13) radius; 14) ulna; 15) carpal; 16) metacarpal; 17) first phalanx; 18) second phalanx; 19) third phalanx; 20) innominate; 21) femur; 22) patella; 23) tibia; 24) fibula; 25) tarsal; 26) metatarsal.

* These percentages were calculated by dividing the number of fragments of a particular body part by the number of those parts in a single animal carcass, and expressing the resultant adjusted frequency as a percentage of the total for all parts of a single type of animal.
Figure 5. Caprid body part representation in Feature 19AØ1.

1) skull; 2) dentary; 3) atlas; 4) axis; 5) other cervical vertebrae; 6) thoracic vertebrae; 7) lumbar vertebrae; 8) sacrum; 9) caudal vertebrae; 10) rib; 11) scapula; 12) humerus; 13) radius; 14) ulna; 15) carpals; 16) metacarpals; 17) first phalanx; 18) second phalanx; 19) third phalanx; 20) innominate; 21) femur; 22) patella; 23) tibia; 24) tarsal; 25) metatarsal.

* These percentages were calculated by dividing the number of fragments of a particular body part by the number of those parts in a single animal carcass, and expressing the resultant adjusted frequency as a percentage of the total for all parts of a single type of animal.
bones, specifically the pelvis, scapula, and femur, are functionally identical to those on the corresponding pig bones, but the small size of the sample makes it difficult to conclusively support this interpretation.

This information on butchery patterns is crucial to understanding the body part representation in Feature 19AØ1. Body part representation is shown graphically in Figures 3, 4, and 5. The percentages graphed in these figures are based on adjusted frequencies. The total number of fragments of a particular body part was divided by the number of those body parts in a single animal. This calculation "adjusts" the total number of fragments based on the animals' anatomy. The individual adjusted frequencies were then summed, and each body part was expressed as a percentage of this total. As a result, body parts that are relatively well represented in the assemblage appear as peaks on the graphs.

The relative body part representation for cattle in Feature 19AØ1 is shown in Figure 3. As was discussed above, cranial and foot elements of cattle are not well represented. Numbers 1 and 2 represent the head, and 15-19, 24, and 25 all represent the feet. The best represented part is the femur, followed by the innominate, lumbar vertebrae, tibia, scapula, cervical vertebrae, and smaller quantities of other bones. This body part representation translates into cut representation as follows: round roasts, rump roasts, short loin/sirloin steaks, hindshank cross cuts, chuck blade steaks, and neck bones (Lyman 1979; Schulz and Gust 1983).

The relative body part representation for pigs in Feature 19AØ1 is shown in Figure 4. The best represented body part is the humerus, followed by the scapula, radius, femur, ulna, tibia, and innominate. All other body parts are less well represented. This type of body part representation is very easy to interpret given the butchery patterns. The vast majority of the pig bones came from the shoulder cut, followed by the shank and butt portions of the ham.

The pattern body part representation for sheep and goats is extremely similar to that of pigs. The humerus is the best represented part, followed by the ulna, tibia, radius, scapula, femur, and innominate. As with pork, the shoulder cut of mutton appears to be best represented, followed by leg of mutton.

Animal ages

Most of the information on animal ages comes from the epiphyseal fusion data. In very young mammals, many of the bones of the skeleton exist as
several parts that grow together as the animal ages. The sequence and approximate age bone fusion takes place has been established for a variety of different animals (Silver 1969). The number of unfused, just fusing, and fully fused bones of each body part for the major domestic animals is shown in Table 6.

There are too few bones of cattle and caprids in the assemblages from Feature R5 to make an assessment of general kill-off patterns. Pigs appear to have generally been killed under 2 years of age, with some animals killed under 1 year. At least one very young cow is represented in this assemblage by metapodials that are extremely small and incompletely ossified at the proximal end. The pig skull found in this privy had the upper first molar in wear and the upper second molar was visible in the crypt in the bone.

The assemblage from Feature 19AØ1 is large enough that more detailed statements can be made about animal ages at death. Virtually all of the cattle appear to have been slaughtered at or under 2 years of age. Only three bones definitely come from cattle more than 2 1/2 years old at death. Some animals were clearly killed under one year of age. Based on general bone size and morphology the bones from calves were 6 radius shafts, 3 cervical vertebrae, 2 scapula blade fragments, 2 proximal femora, 2 ulnas, 1 ilium, 1 pubis, and 1 humerus shaft. There was also one fragment of a calf skull that had the first molar half erupted, making the animal about 6-8 months at death (Hillson 1986: 206).

The epiphyseal fusion data for sheep and goats suggest that caprids were killed at a variety of different ages. The majority of the animals appear to have been slaughtered between 10 and 30 months, close to the optimum range for meat production (Payne 1973). There were very few unfused examples of bones that fuse at or before ten months, and relatively few fused examples of bones that fuse at more than 30 months. Three mandible fragments were present in the assemblage from Feature 19AØ1. One was from an animal c. 6-12 months of age and the other two were from animals 12-36 months of age (Hillson 1986: 331-2).

The epiphyseal fusion data for pigs in Feature 19AØ1 is much like that for Feature R5. Very few pigs appear to have lived beyond 2 years of age. Only a single bone was present in the assemblage that was definitely from an animal more than 2 1/2 years of age. The vast majority of the pigs appear to have been killed under 1 year of age. Of 49 distal humeri, only a single one was fully
Table 6. Epiphyseal fusion stages of domestic animal bones.

**Fusion stages of cattle bones.**

<table>
<thead>
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<th>Feature 19AØ1</th>
</tr>
</thead>
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<td>7-10 months</td>
<td>scapula</td>
<td>-</td>
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<td></td>
<td>acetabulum</td>
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<td>2</td>
</tr>
<tr>
<td>12-18 months</td>
<td>distal humerus</td>
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</tr>
<tr>
<td></td>
<td>proximal radius</td>
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<td>1</td>
</tr>
<tr>
<td>18 months</td>
<td>distal first phalanx</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distal second phalanx</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>24-30 months</td>
<td>distal metacarpal</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distal tibia</td>
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</tr>
<tr>
<td>27-36 months</td>
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</tr>
<tr>
<td>36-42 months</td>
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</tr>
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<td>42 months</td>
<td>proximal femur</td>
<td>-</td>
<td>9</td>
</tr>
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<td>42-48 months</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distal radius</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>ulna</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distal femur</td>
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<td>19</td>
</tr>
<tr>
<td></td>
<td>proximal tibia</td>
<td>-</td>
<td>7</td>
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**Fusion stages of sheep and goat bones.**

<table>
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<th>Body part</th>
<th>Feature R5 §</th>
<th>Feature 19AØ1</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-8 months</td>
<td>scapula</td>
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<td>-</td>
</tr>
<tr>
<td>6-10 months</td>
<td>acetabulum</td>
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<td>2</td>
</tr>
<tr>
<td>18 months</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>proximal radius</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>13-16 months</td>
<td>distal first phalanx</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>distal second phalanx</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>18-24 months</td>
<td>distal metacarpal</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>distal tibia</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>30 months</td>
<td>ulna</td>
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<td>-</td>
</tr>
<tr>
<td>30-36 months</td>
<td>calcaneum</td>
<td>2</td>
<td>1</td>
</tr>
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<td>proximal femur</td>
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<td>36 months</td>
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<tr>
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<td></td>
<td>proximal tibia</td>
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(continued)
Table 6, continued.

Fusion stages of pig bones.

<table>
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<th>Feature 19A01</th>
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<td>E</td>
</tr>
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<td>scapula</td>
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<td>-</td>
</tr>
<tr>
<td></td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>proximal radius</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>proximal second phalanx</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>acetabulum</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>24 months</td>
<td>distal metacarpal</td>
<td>7</td>
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</tr>
<tr>
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<td>proximal first phalanx</td>
<td>1</td>
<td>1</td>
</tr>
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<td></td>
<td>distal tibia</td>
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<td>-</td>
</tr>
<tr>
<td>24-30 months</td>
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</tr>
<tr>
<td>30 months</td>
<td>distal fibula</td>
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</tr>
<tr>
<td>36-42 months</td>
<td>ulna</td>
<td>2</td>
<td>-</td>
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<tr>
<td>42 months</td>
<td>proximal humerus</td>
<td>1</td>
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<td></td>
<td>distal radius</td>
<td>-</td>
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<td></td>
<td>proximal femur</td>
<td>2</td>
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<td>distal femur</td>
<td>3</td>
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<td></td>
<td>proximal tibia</td>
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<td></td>
<td>proximal fibula</td>
<td>1</td>
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* Based on Silver (1969).

† U= unfused, E= epiphyseal line, F= fused.

§ Feature R5 also includes 2 incompletely ossified cattle proximal metacarpals and 2 incompletely ossified cattle proximal metatarsals.
fused. Two mandible and three maxillary fragments with teeth could be assigned ages based on the stage of tooth eruption and wear. One mandible was from an animal approximately 6 months of age and the other was from an animal 6-10 months of age. The three maxillary fragments were from animals c. 9-12 months, 8-14 months, and roughly 18 months, and the first two could have come from the same pig (Hillson 1986: 209).

**Conclusion**

The analysis of the faunal material from Features R5 and 19AØ1 provides some interesting insights into urban diet and foodways in 19th- and early-20th-century Baltimore. Most of the animals represented in the assemblages are, not surprisingly, typical domestic animals: cow, pig, sheep, goat, chicken, and turkey. Pork and beef were clearly the most important types of meat, followed by chicken and mutton. Other types of foul and seafood seem to have been less important in the diet.

Both assemblages also contained some wild animals that might have been locally hunted or trapped including diamond back terrapin, wild duck, and pigeon in Feature R5, and bullfrog, wild duck, rabbit, and muskrat in Feature 19AØ1. All of these animals have been identified from other sites along the southern Atlantic coastal plain, with the apparent exception of muskrat (Reitz 1986). Muskrats are valued primarily for their fur, and the lack of widespread evidence for the consumption of muskrats might suggest that the muskrats represented in Feature 19AØ1 were trapped for their fur instead of for food.

The body part representation and butchery evidence imply that virtually all of the domestic animals were professionally butchered, and that specific meaty portions of the carcass were brought to the sites. Cranial elements of cattle, pigs, and caprds are poorly represented in both assemblages, as are cattle and caprid feet. Pig feet do seem to have been eaten, and the cranial and foot elements of cattle that are present in the assemblages might reflect the use of these parts in specific dishes. The extremely poor representation of crania and cervical vertebrae of birds would seem to suggest that domestic birds were not regularly raised on the houselots with which these privies were associated, but were purchased after they had been beheaded.

An interesting way to examine the pattern of specific cuts of meat represented in Feature 19AØ1 is in terms of the relative cost and cost-efficiency of the cuts (Huelsbeck 1989; Landon 1987; Lyman 1987; Schulz and Gust
Based on the adjusted frequencies, pork shoulder was by far the most common cut of meat, followed by ham, beef round, beef loin, pigs' feet, beef hindshank, beef rump, beef chuck, mutton shoulder, and leg of mutton. These cuts represent a fairly wide range of both costs and cost-efficiency (measured as meat yield per unit of expenditure). At the end of the 19th century, ham was the most expensive cut of pork, shoulder was relatively inexpensive, and feet were the least expensive cut of pork (Landon 1987: 133). Pork shoulder, in addition to being relatively inexpensive, was also a high yield cut, making it a very cost-efficient purchase. Ham would have been less cost-efficient because of the higher price. Feet are difficult to characterize in terms of cost efficiency because they were both cheap and low-yield. For the beef cuts, the loin steaks were the most expensive cut during the 19th century, and represent a very cost-inefficient purchase (Huelsbeck 1989: 115; Lyman 1987; Schulz and Gust 1983). Round, rump, and chuck were more moderately priced, and were also in the middle of the range in terms of cost-efficiency. Hindshank was one of the least expensive cuts, and was one of the most cost-efficient. Mutton shoulder (or forequarter) was consistently less expensive than leg of mutton (Landon 1987: 133). Both of these cuts would have been high yield, and mutton shoulder would have been considerably more cost efficient than leg.

The majority of meat cuts represented in Feature 19A01 are thus in the middle of the range in terms of both price and cost-efficiency. This includes pork shoulder, beef round, beef rump, beef chuck, and mutton shoulder. Some more expensive, less cost-efficient cuts are represented as well, including ham, beef loin, and leg of mutton. Some very inexpensive cuts of moderate to high cost-efficiency are also present including pigs' feet and beef hindshank. Overall, this could probably be viewed as a "middle-class" purchasing pattern; for a family in a solidly working class neighborhood it would probably represent a fairly high status meat purchasing pattern. This conclusion must be viewed fairly cautiously, however, because the relationship between the bones in Feature 19A01 and any actual meat purchasing pattern is unknown. Boneless cuts of meat, which are invisible in faunal assemblages, could skew the apparent purchasing pattern (Henn 1985). Similarly, some meatless but marrow rich bones might have been acquired for soups or other dishes.

Finally, the ages of the cattle, pigs, and caprids in the assemblages suggest that the majority of the animals represented in the assemblages (especially in Feature 19A01) were raised specifically for food. The ages at
which domestic animals are slaughtered are based, in part, on the uses to which the animals are put; animals raised solely for food tend to be slaughtered much younger than animals raised for draft, dairy, or other purposes. It is very clear that the pigs were raised solely as food animals. Almost all of the pigs were slaughtered under 2 years of age and a significant proportion were slaughtered under 1 year of age. It also appears that most of the cattle and caprids, at least in Feature 19AØ1, were slaughtered under 2 1/2 years of age. This suggests that most of the cattle and caprids were not animals that were culled after they had outlived their useful life as wool producers, milk producers, or draft animals, but were instead raised specifically for meat.
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Chomko, Stephen

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Gifford, Diane P. and Diana C. Crader

Gilbert, Miles

Henn, Roselle E.

Hillson, Simon

Huelsbeck, David R.
Landon, David B.

Lyman, R. Lee

Olsen, Stanley J.

Payne, Sebastian

Prummel, Wietske and Hans-Jörg Frisch

Reitz, Elizabeth J.

Schulz, Peter D. and Sherri M. Gust
APPENDIX III

PUBLIC INTERPRETATION
January 17, 1990

The Maryland Stadium Authority, through its architectural consultant, HOK Sport, has retained the firm of R. Christopher Goodwin and Associates, Inc., Frederick, Maryland, to conduct architectural and archeological investigations at the site of our new sports complex. The background research and field work completed thus far has generated much public interest and enthusiasm.

The excavation of a structure formerly located at 406 West Conway Street has aroused particular interest. This building housed a saloon managed by George Herman Ruth, Sr., father of "Babe" Ruth. The Ruth family lived in apartments above the establishment from 1906 to 1912.

On Friday, January 26th at 11:00 a.m., the Ruth Saloon site will be opened for a special one hour on-site tour. Access to the site will be via the construction gate at Camden and Eutaw Streets in Baltimore. Representatives of the Stadium Authority, archeologists and architectural historians will be at the site to discuss the project and answer any questions you may have. On Saturday, January 27, 1990, the site will be open to the public from 1:00 to 5:00 p.m.

We would be honored if you could join us at this event.

Sincerely,

Herbert J. Belgrad
Chairman

Bruce H. Hoffman
Executive Director
FOR IMMEDIATE RELEASE

(BALTIMORE, MD.) On Friday, January 26th at 10:30 a.m., the Maryland Stadium Authority will open the site of the Ruth Saloon to the media for a special on-site tour.

The Maryland Stadium Authority, through its architectural consultant, HOK Sport, has retained the firm of R. Christopher Goodwin and Associates, Inc., Frederick, Maryland, to conduct architectural and archeological investigations at the site of the new sports complex in Camden Yards. The background research and field work completed thus far have generated much public interest and enthusiasm.

The excavation of a structure formerly located at 406 West Conway Street has aroused particular interest. This building housed a saloon managed by George Herman Ruth, Sr., father of "Babe" Ruth. The Ruth family lived in apartments above the establishment between 1906 and 1912.
Access to the site will be via the construction gate at Camden and Eutaw Streets in Baltimore. Representatives of the Stadium Authority, archeologists and architectural historians will be at the site to discuss the project and answer questions.

Tours for members of the public will be held on Saturday, January 27, 1990 from 1:00 to 5:00 p.m.

FOR ADDITIONAL INFORMATION CONTACT:

R. CHRISTOPHER GOODWIN
(301) 694-0428
Babe Ruth and his father, George Herman Ruth Sr., behind the bar at Baltimore's Eutaw and Lombard streets in 1916.

**Babe Ruth's past uncovered**

By CAROLYN HAKES
News-Post Staff

While the new Orioles stadium is not scheduled to open until 1992, baseball fans will be able to see a little bit of Babe Ruth's past today, in Baltimore.

Buried under what will soon be short center field is the saloon that was operated by Babe Ruth's father, George Herman Ruth Sr.

Born in 1895, George Herman Ruth Jr., was more popularly known to millions of his fans as "the Babe." Beginning his baseball career as pitcher and outfielder for the Boston Red Sox, Ruth played for the New York Yankees from 1920 to 1935. Prior to his retirement in 1935, Babe Ruth held a baseball record of 714 home runs until Hank Aaron broke Ruth's record in 1974.

In the early 1900s, Babe Ruth's parents ran a saloon which was located on the corner of Eutaw and Camden streets, where the recently-discovered site is located.

R. Christopher Goodwin and Associates, Inc., a Frederick-based preservation planning archeology and historical research firm, was chosen by the Maryland Stadium Authority to conduct studies at the site of the new Camden Yard-area stadium complex.

With the use of the Geographic Information System, a computer cartography miracle referred to as GIS, Mr. Goodwin and his associates were able to pinpoint the location of the Ruth saloon. "Most people use GIS for future planning purposes," says Dr. Goodwin "We use ours to reconstruct the past."

Babe Ruth fans can actually see the excavation site of George Herman Ruth Sr.'s saloon Saturday, Jan. 27. For the first time, the dig will be open to the public from 1-5 p.m. The historical site is located in Baltimore between Eutaw and Camden streets in the Camden yard area.
PRESS PACKET

ARCHAEOLOGY AND HISTORY AT CAMDEN YARDS:
THE GEORGE HERMAN RUTH SALOON SITE

PREPARED BY:
R. Christopher Goodwin & Associates, Inc.
636A Solarex Court
Frederick, MD 21701

For further information, contact:
Dr. R. Christopher Goodwin
(301) 694-0428

PREPARED FOR:
The Maryland Stadium Authority
World Trade Center, Suite 2450
Baltimore, Maryland 21202

For further information, contact:
Ms. Carol Salmon
(301) 333-1560
AN INTRODUCTION TO THE MARYLAND STADIUM PROJECT

The historical, archaeological, and architectural documentation of the Camden Yards stadium site is being accomplished by a partnership between the Maryland Stadium Authority, the Maryland Historical Trust, and R. Christopher Goodwin and Associates, Inc., a preservation planning firm located in historic Frederick, Maryland. This partnership has been created as a result of Maryland’s continuing awareness of the richness and variety of the tangible remains of its history.

Such an awareness has been growing for nearly a quarter of a century. In 1966, Congress enacted the National Historic Preservation Act out of concern for the rapidly diminishing stock of historical resources in America. The legislation placed the historic preservation issue in the forefront of national governmental concerns. It also encouraged individual states, through the establishment of state preservation offices like the Maryland Historical Trust, to adopt similar programs in their own jurisdictions. Subsequent federal and state laws broadened the kinds of cultural resources to be considered in such preservation planning. Since 1985, the state of Maryland has required that its agencies develop plans for preserving significant properties under their jurisdiction.

Today, both architectural and archeological resources are being studied and preserved. The city of Baltimore is rich in such tangible reminders of the past. For over 250 years, Baltimore has been central to the social and economic history of the state of Maryland. The industrial, commercial, and residential districts of the city, including the Camden Yards section, have formed integral parts of the city’s historic fabric.

The historical significance of the Camden Yard area was the catalyst that propelled the Maryland Stadium Project into being. The architectural, archeological, and historical research being carried forward on this site will help to preserve tangible reminders of Baltimore’s past for the citizens of the future.

The pages that follow will explain in greater detail the goals and methods of these investigations, and the research results obtained thus far.
THE GEORGE HERMAN RUTH (SR.) SALOON SITE
THE GEORGE HERMAN RUTH (SR.) SALOON SITE
406 West Conway Street

In 1989, the Maryland Stadium Authority and HOK Sport retained R. Christopher Goodwin and Associates, Inc., of Frederick, Maryland, to conduct archeological and architectural investigations at the site of the new stadium complex. The primary purpose of the project was the discovery and preservation of significant elements of the history and material culture of the Camden Yards area. Goodwin and his associates soon found one part of that history intimately connected to the sports theme of the Stadium Authority’s project. One site that researchers discovered played a small but significant part in the life of a genuine American legend: George Herman Ruth, Jr., otherwise known as “The Babe.” The Babe’s father managed a saloon in the Camden Yards area during the early years of this century.

George Herman Ruth, Sr.’s. saloon was located near the intersection of Camden and Eutaw Streets, adjacent to the Camden Station and the Baltimore and Ohio railroad’s large freight yards. The dirty traffic-crowded streets of Baltimore’s river front were “noisy with the roar of heavy trucks” and populated by draymen who “aimed their whips at the legs of kids who played in the streets.” Babe Ruth himself painted this Image of the tough Camden section of turn-of-the-century Baltimore in the preface of his 1928 book, Babe Ruth’s Own Book of Baseball. As a child he walked and played in those mean streets, while his father and mother operated a saloon on the ground floor of the three-story row-house at 406 West Conway Street, between 1906 and 1912. Ruth’s family—including his mother Katherine and his sister Mary—lived in apartments above the saloon, taking in occasional boarders to supplement the family income.

Babe and his sister both have painted verbal pictures of what life was like at 406 West Conway. Ruth recalled that his parents worked “twenty hours a day” trying to make a success of the barroom. Mary Ruth Moberly, now 90 years old and living in Hagerstown, remembers that her mother cooked good German meals, and served lunches to the workmen who were employed in the industries of the Camden Yard district. She also recalled, in a recent interview, that neither she nor her brother were permitted inside the saloon, which even had a small ladies’ dining room.

The younger Ruth was not home very often during the family’s years on West Conway Street. His admitted “incorrigibility” and his persistent truancy from school led his parents to send him to St. Mary’s Industrial School, an orphanage/reform school operated by the Xavieran Brothers at Caton and Wilkins Avenue on the western outskirts of the city. Ruth first entered St. Mary’s in 1902, and returned for various periods over the next twelve years. It was at St. Mary’s that Ruth learned to play baseball, and from that institution he embarked upon his professional career in 1914. During the intervening years, he visited at home only infrequently; in all, he actually “resided” at the Conway Street address for perhaps three years.

When he had begun to achieve some professional success in the major leagues, Babe used a portion of his earnings to help his father set up a new saloon, at the corner of Eutaw and Lombard Streets. That building, now known as the Club Tic-Toc and devoted to a slightly different function, still stands. The photograph included with this section shows “Babe” and his father tending bar, apparently during the Christmas season, at the Lombard Street establishment. It provides a good visual model of how a typical early twentieth century saloon might have appeared.

It is difficult to imagine what life was like for an energetic boy and his parents, living in a crowded working class neighborhood during the early years of the century. Archeology can help complete the picture provided by the documents. Even under the asphalt of the former B. Green Warehouse loading dock, foundations of that rowhouse may still survive intact. The china and glassware from the saloon, food remains from those German lunches, maybe even some of the children’s toys, all may be waiting for the archeologists to peel back the layers of asphalt and rubble.
HISTORIC DEVELOPMENT OF THE RUTH’S SALOON AREA

HOPKINS 1876 - 1877
SANBORN 1901
SANBORN 1914
USGS 1953
BALTIMORE EAST, MD.
PHOTOREVISED 1974

LEE ST.
600 FEET
THE GEORGE HERMAN RUTH (SR.) SALOON SITE
406 West Conway Street

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DEVELOPMENT OF THE CAMDEN YARDS:
FROM FARMSTEADS TO BALLPARKS
DEVELOPMENT OF THE CAMDEN YARDS:
FROM FARMSTEADS TO BALLPARKS

As the Orioles take the field on opening day in 1992, the cheers of their fans will echo from the walls of the old Camden Station and from the warehouses overlooking right field. The source of the clamor on that day will be new and exciting; however, the level of activity on this spot definitely will not be anything new. For those Orioles and their fans will be playing, cheering, and winning on top of 250 years of active Baltimore history.

The history of the Camden Yards area began quietly enough. Until the 1780s, the area was entirely rural and probably reflected the scattered plantation and farmstead landscape characteristic of Maryland's tobacco and small grains economy of the time. The rolling fields and forests were spacious enough to accommodate Rochambeau's forces in 1781 and 1782, as they encamped there on their way to and from the siege of Yorktown.

The town of Baltimore was established formally in 1729. Even at that early date, the future site of the Camden Yards had become important as an area for land speculation. This speculative activity intensified after the Revolutionary War. By 1782, the large land holdings of Lunn's Lot, Howard's Timber Neck, and Ridgely's Delight had been subdivided into smaller parcels and sold off. Country houses and farm dwellings, such as those along Fremont Avenue and along Eutaw Street, had been constructed. By 1783, the entire project area had been annexed by the city.

Expansion of the residential core of Baltimore reached the project area slowly. By 1804, the Otterbein district had begun to extend westward across Howard Street, and settlement had become fairly dense in the northern portion of the project area. Settlement further west than the present B. Green property was blocked by the presence of brickyards and clay pits until the 1820s. The residential and socio-economic patterns associated with the Otterbein district—ethnically and economically mixed two story rowhouses, with upper class whites on the main streets and lower class whites and free blacks in the alleys—were carried into the project area. The English (represented by the Dorsey's, the Warners, and the Albrights), and Germans (represented by Peter Fossbenner), dominated the area ethnically; slaves, freed blacks and some French (represented by Mr. Dupuy) were scattered throughout.

Until the 1850s, expansion of residential areas was tied to local commercial and industrial establishments; the ethnic character of the area also changed during this time. Shot towers and brickworks provided employment for some of the residents in the northern portion of the project area. Local merchants, craftsmen, skilled laborers, and domestics commonly were listed in the city directories by the 1820s. Residential settlement extended as far south as Montgomery Street and west to Paca Street by the 1830s. By the 1850s, settlement had reached the southern-most limit of the residential core of the project area, Hamburg Street. An influx of Irish and German Immigrants (peaking in 1847 and 1854, respectively) led to the replacement of native English and German residents who had begun moving to more affluent districts.

1852 marked the turning point in the project area with the construction of the Baltimore and Ohio Railroad's Camden Station. Not only were five blocks of rowhouses between Camden, Eutaw, and Howard Streets leveled, but the previous socio-economic fabric of the project area also was shattered. In essence, the residential patterns of the previous half century were frozen in time. As the project area became inextricably linked to the railroad, future expansion to the south became dominated by the space requirements of the railroad and the commercial and industrial operations that depended upon it. Two and three story mixed residential/commercial and residential rowhouses filled the interstices between the factories and storage facilities that came to dominate the area below Hamburg Street. In the older, more established north, dilapidated rowhouses and the last of the individual dwellings were replaced with blocks of smaller, denser rowhouses and apartments, catering to unskilled and less affluent railroad workers.

After the Civil War, another important change occurred in the project area. Prior to 1865, the residential areas around Camden Station had comprised a relatively undifferentiated mix of Black, European, and native white laborers. By the 1870s, those ethnically heterogeneous neighborhoods had become noticeably segregated. By the end of the nineteenth century, the project area, as well as the neighboring Otterbein district, had become predominantly Black.
The blocks that had been vacant in the southern portion of the project area prior to the 1870s were filled in with commercial and industrial operations and scattered sets of residential rowhouses. However, space devoted to residential use had reached its zenith by the 1890s. Increasingly, rowhouses in the north were either converted into warehouses or simply replaced altogether by a diversifying industrial complex. By the early twentieth century, entire blocks that once had been entirely residential were now firmly in the grip of commerce and industry. Many of the rowhouses that remained were subdivided into flats and apartments. The saloon/restaurant/apartment building at 406 W. Conway Street occupied by the George Herman Ruth family between 1906 and 1912 illustrates this change in the character of the neighborhood. The two photographs appended to this section illustrate the landscape present in the project area at this time.

With the introduction of the automobile, many one story residences were converted into garages. Automobiles also eliminated the need for housing within walking distance of jobs, and more residential space was lost to parking lots.

The increasing dominance of industry eventually sealed the doom of residential space in the project area. Conversion and replacement of residential space continued apace throughout the modern period. The few scattered residential remnants from the opening decades of this century were gone by the 1950s. Along with the residential space, the inhabitants of the project area—by now almost entirely lower income black laborers—were forced into other sections of the city. The final conversion of the project area into an "industrial park" was diagnostic of the movement away from a balanced landscape to the sterile environment so common in other industrial sections of Baltimore.

But by 1992, the former Camden Yard area will be "sterile" no more. The opening of the new stadium will act as a magnet, drawing the people back to the old neighborhood. When that happens, the streets of the district will be vibrant once more.
View of Cross Street, West of Columbia Avenue: March 21, 1911
(Photographic files, Enoch Pratt Free Library, Maryland Room)
View of Cross Street, at Eutaw Street: March 21, 1911
(Photographic files, Enoch Pratt Free Library, Maryland Room)
SOURCES OF FURTHER INFORMATION

Peale Museum, Baltimore, MD

Mary Markey, Prints Curator
(301) 396-1149

Has large collections of historical photographs and prints of Baltimore. Will permit photography of
collection, but there may be a charge. When calling, specify what kind of program, subjects, and time
period of interests.

Enoch Pratt Free Library, Maryland Room

400 Cathedral Street, Baltimore
(301) 396-5430

Has extensive collections of historical photographs of Baltimore. They are arranged alphabetically
by subject; no sub-categories have been established. Majority of prints from period 1910-1959. Have
photographs of Camden Station, Conway Street, Eutaw Street, Cross Street, and Henrietta and Howard
Streets in the project area. Permission needed from librarian to photograph.

Maryland Historical Society

201 Monument Street, Baltimore
(301) 685-3750

Has original wall-mounted copy of Sachse's 1869 Panoramic view of Baltimore in color.
THE MARYLAND STADIUM PROJECT
GEOGRAPHIC INFORMATION SYSTEM (MSPGIS)
THE MARYLAND STADIUM PROJECT
GEOGRAPHIC INFORMATION SYSTEM (MSPGIS)

The scale of the Baltimore Stadium Complex project (encompassing seventy-one city blocks) required that a system be developed to manipulate and interpret a vast body of information. The creation of a Geographic Information System (GIS) helped to identify significant archeological and cultural resources and to place those resources into manageable chronological and geographic contexts. The GIS also helped in the selection of examples of resources from various time periods to be preserved or examined; it not only allowed for accurate selection in terms of time and specific location, but also reduces costly duplication of effort.

The early phase of the creation of the Baltimore Stadium Complex GIS was carried out by acquiring historic maps, digitizing the map information on a computer, and then using the computer to scale these cartographic materials so that they could be integrated into representative base maps. Following its creation, the GIS was be used to identify historic resources that deserved attention, and to locate those resources precisely within the modern project area.

One hundred thirteen maps were retrieved from repositories in Annapolis, Baltimore, and Washington, D.C. Ten classes of maps were available:

1. plats and surveys of land tracts;
2. street and lot surveys of annexations;
3. military plans;
4. tax assessment plats;
5. public works surveys;
6. city plans;
7. ward maps;
8. general city maps;
9. fire insurance maps;
10. topographical surveys.

Map coverage favored the later periods of the city's history (1870-1930 and 1930-present), because of the comprehensive nature of the Sanborn fire insurance maps of 1890, 1901, and 1914, and of the Baltimore City plan of 1940. Maps of the project area before 1768 were limited, because the site was beyond the city limits. In a general sense, however, coverage for each period was found to be adequate for the needs of the GIS.

Base maps were created for the five historical periods in which resources were identified. Those resources were then translated to their modern locations. The 1786 Maccubbin and 1792 Hart maps supplied information for land parcels and owners for the period of Early Settlement, 1668-1768. The Berthier series identified the encampments of Rochembeau's army in 1781 and 1782. The Folie and Warner and Hanna maps detailed farms, residences, and early industrial sites on the eve of the nineteenth century. The Poppleton, Sidney and Neff, and Martenet maps revealed building locations in 1823, 1851, and 1856, respectively. The Hopkins, Sanborn, and Baltimore City plan supplied detailed structural data for 1876, 1901, 1914, and 1940. The 1935 Mathews map delineated the original shore line of the Middle Branch of the Patapsco, and the USGS 7.5 minute quadrangles were used to provide a modern base map.

Portions of five of these historic maps have been reproduced for this packet; the approximate location of the George Herman Ruth Saloon site has been noted on each map. The final map in this series is a GIS-generated adaptation of the 1901 Sanborn Fire Insurance map, and shows how the GIS system can be used to clarify and highlight the details of one house lot within a city block.

Combined with a disturbance study conducted last October, the base maps created with the GIS helped to identify those resources that merited further attention. The GIS identified land that had remained vacant through time. The value and versatility of the GIS system lay in its ability to identify areas of historical significance that also corresponded with the least disturbed sites.
The MSPGIS is in the vanguard of cultural resource management technology. Elizabeth Cole, Administrator of Archeological Services for the Maryland Historical Trust, recently remarked that "(t)his method of data manipulation allows for efficient, prompt, and well-informed decisions to be made regarding the project area's full range of cultural resources. The MSPGIS will serve as a model for future urban and large scale projects in our state."
1792: A. P. Folie, "Plan of the Town of Baltimore and It's Environs"
1801: Werner and Hanna, "Plan of the City and Environs of Baltimore"
1822: Fielding Lucas, Jr., "Plan of the City of Baltimore, compiled from Actual Survey"
1869: E. Sachse, "Bird's Eye View of Baltimore"
1896: Ward's topographic map of Baltimore
Geographic Information Systems Is the Latest in Computer Cartography

By Sandra Sugawara
Washington Post Staff Writer

On a clear, chilly day last February, a twin-engine airplane circled over the Maryland suburbs, meticulously photographing neighborhoods in Montgomery and Prince George's counties.

The aerial photos will be the first step in the creation of "smart" maps, a fast-developing computer technology that is for municipal officials what X-rays and CAT scans are to physicians, offering remarkably revealing views of the surface world.

A $1.2 million pilot project in the two counties will create electronic maps that can be displayed on a computer screen, showing roads, rivers and buildings. But the transformation of camera images into electronic replicas is just the beginning.

Overlaid on the maps will be information on the location of sewer and water lines, soil quality and topography. Next, planners may tie in data from county files, such as traffic patterns or tax assessments.

The result will be a geographic information systems, or GIS, map that provides answers and analysis. With this system, planners who are looking for the best site for a landfill or a new office building could, in minutes, summon a computer map highlighting the areas of the county that have the desired characteristics: for instance, a site that is larger than 20 acres, within one mile of an interchange and has good soil drainage and no steep hills.

County officials or businesses trying to select new sites for day-care facilities could use the system to find the blocks with large concentrations of single mothers, while educators could see where most non-English speaking households are located, and engineers can use it for traffic analysis.

The potential of these systems has municipal officials across the country, as well as many industry executives, salivating in anticipation.

Some public officials, at least, are proceeding with caution, in part because of the cost of the systems and uncertainty about the benefits. There are also some "Big Brother" concerns about the concentration of information about people and neighborhoods in government computer systems, according to Christopher Abrams, a GIS consultant in Northern Virginia.

Montgomery and Prince George's counties, joined by the Washington Suburban San... See GIS MAPS, page 34
GIS Expands Map's Capabilities

Traditional Information, Plus Census Data, Combine to Create a New Product

GIS MAPS, from page 1

Library Commission and the Maryland-National Capital Park & Planning Commission on this project, have purchased a scaled-down system to conduct the six-month pilot project that will start in April. It will cover an eight-square-mile area in Montgomery County, along the Route 29 corridor near White Oak, and another area in Prince George's County around the intersection of Central Avenue and the Beltway. If officials like the results, the GIS will be expanded to cover the entire two counties.

Arlington is installing a system and Fairfax is considering GIS and may commission some aerial photographs of the county in February. In addition, some federal agencies are interested, including the Bureau of Land Management and the Environmental Protection Agency, which can use GIS for detecting and handling hazardous waste problems. In the private sector, Hertz is using a simple system to guide customers to their destinations, and Great Northern Paper Co. employs GIS to keep track of timber inventories and to schedule harvests.

The market for GIS hardware, software and services is still relatively small, about $529 million in revenue for 1988, according to Daratech Inc., a Cambridge, Mass., market research firm. But Daratech adds to that figure another $2.4 billion for companies providing GIS-related services, such as Photo Science Inc. of Gaithersburg, which took the photographs for the Montgomery-Prince George's project, and Dewberry & Davis, a Northern Virginia engineering firm that has developed a GIS-related business collecting and converting aerial photographs and other data to a computer-readable form.

However, Daratech predicts that GIS may become "one of the most dynamic computer system-related businesses of the 1990s."

"It's about to explode because there are mountains of paper that are becoming unmanageable," said Abrams.

"We believe there really is tremendous GIS potential out there, and it's really being exploited worldwide in a number of different industry segments, the federal and public sector, utilities and communications companies. We also see requirements for the insurance industry, the banking industry, retail industry," said Denys Sigloh, director for GIS at International Business Machines Corp. "We're really very excited about this thing."

Initially, GIS was employed in specialized areas like mineral exploration, timber companies, utilities and the military, which used GIS to prepare operational maps, track submarines, guide pilots and find sites for facilities.

Recent advances in technology have expanded the horizons of GIS while lowering costs of systems (although price remains an issue for some potential customers).

The greatest stimulus for GIS may come with the publication of results from the 1990 census, which provides a wealth of information about communities and their residents that can be incorporated into the computerized maps. The Census Bureau has created computer-readable maps known as TIGER (topologically integrated geographic encoding and referencing) files, and offers a complete national set for $56,025. But some potential customers say they probably would need more detailed or complex maps than the TIGER files.

GIS systems incorporating census data could display maps identifying city blocks with large concentrations of children or elderly; whites, blacks, Asians or Hispanics; renters or homeowners, or single or married couples. Other information, such as education, ancestry, disabilities, occupations, incomes, number of automobiles and time-spent commuting, also will be available.

"I think you will see a lot of activity around the release of the 1990 census data," said Pete Shaw, director of market research for Prime Computer Inc. "Marketing firms, retailers, insurance companies, anybody that relies on demographics" will find this attractive.

In February, Prime, which is headquartered in Natick, Mass., formed a joint venture with Wald Leitz, a Swiss company that is a major supplier of photographic and surveying equipment.

IBM recently established an independent group to address GIS development, marketing and technical support services. Unisys Corp. is introducing a GIS product in Europe and may do so in this country as well. Lockheed Corp. hopes to break into this field by bidding on some major federal GIS projects in the coming months.

These companies still have a distance to go to catch up with the two industry leaders, Intergraph Corp. of Huntsville, Ala., which has a large operation in Reston, and Environmental Systems Research Institute of Redlands, Calif. The two companies account for more than half of total GIS revenue, according to Daratech.

Newcomers say the market is shifting rapidly, offering opportunities for more competition. "I think it is safe to say there is no large entrenched incumbent," said Donald C. Latham, president of Lockheed's C3I division in Washington, which is heading the company's GIS effort.

Much of the hesitation about GIS relates to its cost. Although the prices of the systems have fallen dramatically—a system that cost $250,000 five years ago costs only...
The Making Of a GIS Map

The maps for geographic information systems can be obtained from three different sources. Images from satellites, such as Landsat and the French satellite SPOT, can be used. The federal government has been the largest user of these images, which can be received from satellites in digital form and fed directly into computers.

But most commercial customers, or counties and cities, prefer aerial photographs, which offer more of the type of details they need. The critical piece of equipment in converting an aerial photograph into computer-readable digital form is a machine called a stereo plotter, a workstation that can cost from $100,000 to $200,000.

Two aerial photographs are placed on the stereo plotter. Because the photographs contain overlapping views of the same area and are taken from slightly different angles, they produce a three-dimensional image that can be seen by looking through a binocular-like lens. With a pointing device, the operator marks the outlines of buildings and other physical features on the photo image and from that information, the computer generates the map.

Alternatively, conventional maps can be scanned by a device that transfers information into a computer, which creates an electronic map.

Other maps must be converted by hand. Paper maps are placed on a backlit table. A hand-held apparatus is moved over the map. The operator pushes a button to mark each important detail on the map, thus recording the information in digital form.

Information on sewer and water pipe networks can be recorded from maps by hand in a similar way, although a newer method involves the use of electronic measurements in the field. By using a small computer fixed to the top of a tripod, a field crew precisely records the location of utility poles, manholes and other features, and that information is incorporated in the electronic map.

The advantage of the computer maps is that they can be easily called up on a screen, added to, subtracted from, and printed only as needed. The time and cost of redrafting an entire map can cause the whole system to fail. For instance, he said, "You're talking about a new technology and a new field."

In some cases, maps were not precise enough, throwing the whole system off. "The car data didn't line up with the map data," Grady said.

He cited other cases in which cities, in an effort to save money, attempted to run their systems on insufficient data. The GIS then suggested inappropriate sites for things like hazardous waste facilities, because those decisions were made without critical data.

A potential problem is the shortage of trained technicians. "There are not too many people with the experience walking around," said Little. "You're talking about a new technology and a new field."

It can take six months to train employees, who are paid an average annual salary of $20,000 to $35,000 while they are in training, according to Abrams.

As in most emerging markets, some companies stumbled. Eastman Kodak Co. recently closed a facility in Lanham that it opened in January 1987 to tap into the expected growth in GIS sales. The facility was to produce maps from satellite images in both computer-readable tapes and hard copy for commercial customers. In addition, it planned to sell its processing systems to companies that wanted to do it themselves.

"We were overly optimistic in terms of how responsive the market would be," said Jim Graham, who headed the Kodak Remote Sensing facility. "People want to overlay maps from satellites or Landsat with other data... and the costs of raw data are not insignificant."

But he added that Kodak has not abandoned the market and will continue to run a scaled-down operation out of its Rochester, N.Y., headquarters.

"We still believe the market is there and will be a significant opportunity," Graham said.

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Photo Science's GIS map of a Scranton, Pa., street, at right, and an aerial photo. The GIS map comprises several overlays.

---Sandra Sugawara
SELECTING RESOURCES FOR ARCHEOLOGICAL INVESTIGATION
SELECTING RESOURCES FOR ARCHEOLOGICAL INVESTIGATION

The selection of significant resources that deserved further archeological and historical investigation was guided by a three tiered approach. That approach was derived from The Maryland Historic Preservation Plan, a management plan for historic resources adopted by the Maryland Historical Trust. Under this kind of plan, architectural and archeological resources are evaluated in relation to historic periods or contexts, by historic themes, and by type.

Historic contexts (periods) for the Maryland Stadiums Project were a refinement of the chronological/developmental periods found in the State plan:

- Early Settlement, 1668-1768;
- Growth of the Port, 1768-1815;
- Agricultural-Industrial Transition, 1815-1870;
- Period of Industrial Dominance, 1870-1930;
- Modern Period, 1930-present.

The first and second contexts deviated from the overall Maryland plan so that they more accurately reflected specific landmark dates significant in Baltimore's historical development: 1668 was the year the first land patents in the project area were entered, and 1768 was the year in which annexation of project area land into Baltimore first occurred. The absence of any probable pre-European sites precluded including periods prior to 1668.

Historic themes in the Maryland state plan that were relevant to the project area included agriculture, architecture, community planning, commerce, industry, government, military, religion, society, education, culture, and transportation.

This approach provided a framework for the identification of potentially significant areas, blocks, and individual structures. Locational and historic information was drawn from cartographic and primary data sources. Through the use of the Maryland Stadiums Project Geographic Information System (MSPGIS), that information was then used to identify, to catalog, and to classify specific resource types found in the project area.

Resource types were identified according to their significance. Significance is measured by a resource type's ability to illustrate the major themes which were important during each of the contextual periods. Of primary importance were those resources that represented typical land uses or significant changes in each historical period within the project area. Special resources, such as the George Herman Ruth saloon, were also given very high priority. The more common types of resources--those that occur not only in the project area, but also elsewhere in Urban Baltimore--were deemed to be of secondary importance.

Once significance had been established, the MSPGIS was used together with a disturbance study to further refine the investigation. A disturbance study is designed to identify the locations and the types of historical resources that have been destroyed, and to determine the location and the extent of previous disturbance in the project area. With informed decisions concerning the probability that remains have survived to the present, the combination of the MSPGIS and the disturbance study provided a predictive model for locating intact archeological resources. Resources that had been identified as both significant and undisturbed were then targeted for archeological investigation.

The sequence and location of investigation was dictated by yet another factor: the Maryland Stadium Authority's construction schedule for the project area. Significant and undisturbed resources which had been identified as lying exclusively in the baseball stadium footprint were given the highest priority. Resources present in only limited numbers, but which could be found both inside and outside the baseball stadium's footprint, were designated as a secondary priority, because these had a backup location elsewhere. The most common, frequently occurring kinds of resources were reserved for study only in areas outside the baseball footprint. Due to the particular settlement history of the project area, most of the significant resources dating from the late eighteenth century were found to occur within the baseball footprint; they were therefore given highest priority. Most of the significant resources from the later contexts--with the exceptions of three blocks of 1830s rowhouses and the George Herman Ruth saloon--were located outside the baseball footprint, and therefore were scheduled for study at a later date.
CLASSES OF STRUCTURES (historically present in Maryland Stadiums Project Area)

Agriculture
- Farmed fields
- Farm house
- Gardens

Commerce
- Automobile repairs
- Bakery
- Carpenter shop
- Cobbler shop
- Cooperage
- Drug store
- Electrician's shop
- Feed store
- Filling station
- Hardware store
- Ice house
- Livery
- Motor freight station
- Office
- Plumber's shop
- Restaurant
- Saloon
- Shipping (Express company)
- Shop
- Tailor shop
- Truck repairs
- Undertaker
- Utilities
- Warehouse/storage
  - chemicals
  - coal yard
  - coal and wood yard
  - cold storage
  - fabric/clothing warehouse
  - furniture/machinery warehouse
  - junk/scrap yard
  - lumber yard
  - plumbing supplies
  - shipping supplies
  - steel warehouse
  - stock yard
  - stone yard
  - tool/implements warehouse
  - wool yard

Wholesaling
- baker's supplies
- food products
- fuel oil
- groceries
- cleaning supplies
- magazines
- paper products
Industry
  Bottling works
  Brickmaking
  Can factory
  Cleaning products manufactory
  Coal oil factory
  Drug manufactory
  Fabric/clothing plant
clothing factory
cotton cloth/felt factory
  Fertilizer factory
  Food processing plant
cannery
dairy products factory
flour mill
fruit and vegetable packing
meat packing
pickle factory
  Ice factory
  Metals industry
  iron foundry
lead works
sheet metal fabrication
shot tower
steel fabrication
tin shop
  Paper products
  match factory
paper box factory
wallpaper factory
  Piano factory
  Plumbing supplies factory
  Rope walk
  Rubber products
  Safe factory
  Shoe factory
  Stonecutting
  Stove factory
  Tack factory
  Tool/implement manufactory
  Wood products
barrel factory
box factory
furniture factory
planing mill
sash/molding factory
sawmill
stove factory
woodworking shop

Government
  Sewer pipe storage

Military
  Encampment
Religion
- Chapel
- Church
- Church (black)
- Sunday school

Social
- Charitable organization
- Fraternal lodge hall
- Movie theater

Education
- Grammar school (Black)
- Primary school
- Public school
- Public school (Black)
- School (Black)

Residential
- Apartments
- Dwelling in garage
- Estate house
- Flats
- Individual dwellings, single or double
- Mixed residential/commercial rowhouses
- Residential townhouses
- Tenements

Transportation
- Automobile-related
  - parking lot
  - viaduct
- Railway-related
  - baggage room
  - cold storage shed
  - freight depot
  - grain elevator
  - office
  - oil house
  - passenger depot
  - power house
  - railway station
  - repair shops
  - sidings
  - switch house/tower
  - tool shed
  - tracks
  - train shed
  - waiting room/platform
  - warehouse
  - water tower
  - yard clerk's office
ARCHITECTURAL RECORDATION PROJECT
ARCHITECTURAL RECORDATION PROJECT

R. Christopher Goodwin & Associates, Inc., on behalf of the Maryland Stadium Authority, and in consultation with the Maryland Historical Trust, is undertaking the architectural recordation of eight architecturally and historically significant sites located within the boundaries of the future stadium complex. The sites under study are:

- Diggs Johnson School
- B&O Office Building
- Southern Seafood Complex
- Baltimore Thermal Complex
- Maryland Office Company Building
- W. B. Cassell Company
- Monumental Hotel Supply Company
- Inland Leidy Complex.

The purpose of the architectural recordation project is to provide a permanent record of the significant structures which stood within the project area prior to its redevelopment. This record will be included in the permanent collection of the Maryland Historical Trust for future use by scholars and by the public. In order to insure the highest quality documentation, each of the sites has been recorded according to guidelines established by the Historic American Buildings Survey and the Historic American Engineering Record. These guidelines set professional standards for report format, architectural graphics, and architectural photography; they also establish strict archival standards for the production and curation of the documentation.

The Historic American Buildings Survey (HABS) was established in 1933 to document the nation's architectural resources. In 1969, the Historic American Engineering Survey (HAER) created a similar archive of our nation's engineering resources. The recordation of a building is frequently prescribed to compensate for development projects which will adversely affect historic structures having national, state, or local significance. The HABS and HAER collections, housed in the Prints and Photographs Division of the Library of Congress, contain written, photographic, and graphic documentation on over 18,000 structures. Thus, documentation of these buildings in the Camden Yard area to HABS/HAER standards is a method of permanently preserving important information on our architectural and historical past.

The appropriate level of documentation for each of the eight sites within the stadium project area was determined by the Maryland Historical Trust, in consultation with the Preservation Planning Branch of the Northeast Region of the National Park Service. Three levels of recordation were established for the buildings within the project area. The level of documentation has been tailored to the architectural and historical significance of each site.

Level I includes the preparation of data forms summarizing the appearance of the building and its historical significance. The written information on the site is supplemented by large format architectural photographs and proportional architectural plans of the building's interior. Level I documentation is being obtained for the Diggs Johnson School, the Maryland Office Interiors Company, the W.B. Cassell Company, and the Monumental Hotel Supply Company.

Level II documentation includes the preparation of an in-depth narrative report providing a physical description of the site, its physical and historical context, and its specific background history. The report is supplemented by large format architectural photography and proportional building plans. Level II documentation has been undertaken for the B&O Office Building, the Southern Seafood Company, and the Baltimore Thermal Energy Complex. Representative photographs and the title pages for Level II documentation of the B&O Office Building appear on the pages following this narrative.

Level III documentation includes the preparation of a detailed outline report providing historical, architectural, and project information. Level III documentation is supplemented by large format architectural photographs and proportional building plans. Level III has been prescribed for the Inland Leidy Complex.

The architectural recordation project began in September and is continuing. The quality of the documentation is insured through periodic progress meetings with the Maryland Historical Trust. Architectural recordation ensures that a permanent record of the most recent stage in the evolution of the stadium project site will be preserved for the future.
HISTORIC AMERICAN BUILDINGS SURVEY
BALTIMORE AND OHIO RAILROAD:
CAMDEN STATION OFFICE BUILDING

HABS No. MD-326-A

Location: West Camden Street, between S. Eutaw and I-395, Baltimore, Maryland

Present Owner: Maryland Stadium Authority
Suite 2450, The World Trade Center
Baltimore, Maryland 21202

Present Use: The building was demolished in December, 1989.

Significance: The Camden Station Office Building was an architecturally and historically significant commercial building constructed in 1905 as part of the Camden Station complex of the Baltimore and Ohio Railroad. The Second Renaissance Revival style building was designed by the Baltimore and Ohio Engineering Department to house the operational and administrative offices of the adjoining railroad station and warehouse.

Project Information: This documentation was undertaken by R. Christopher Goodwin & Associates, Inc., on behalf of the Maryland Stadium Authority for the Maryland Historical Trust. Kathryn M. Kuranda served as project architectural historian. Martha Williams was the project historian.
The Freight and Warehouse Office Building: Baltimore and Ohio Railroad (1905)
THE MARYLAND STADIUM PROJECT'S ARCHEOLOGY AND HISTORY TEAM
THE MARYLAND STADIUM PROJECT'S ARCHEOLOGY AND HISTORY TEAM

R. Christopher Goodwin and Associates, Inc., of Frederick, Maryland, a firm that specializes in all phases of cultural resource management, is conducting all of the archeological, architectural, and historical work at the Camden Yards stadium site.

Dr. R. Christopher Goodwin is President of the Maryland Stadium Project. He is a former Yale Peabody Museum (1976) and Smithsonian Institution (1979-1980) Research Fellow. He received his Bachelor of Arts with Honors in Political Science from Tulane University (1971), his Master of Science in Anthropology from Florida State University (1974), and his Doctor of Philosophy in Anthropology from Arizona State University (1979). Dr. Goodwin is recognized as one of the nation's leading experts in cultural resource management. He has been a contractor to the U.S. Army Corps of Engineers (Baltimore, Memphis, New Orleans, Pittsburgh, Savannah, and Vicksburg Districts) on numerous projects during the past few years. He has served as Principal Investigator on cultural resources investigations; on historic preservation planning projects; and for industrial and governmental agency compliance with federal and state laws and regulations governing archeological and historic sites on projects for the Southeast and Southwest regions of the National Park Service (NPS), the Department of Energy (DOE), Her Majesty’s Service, U.K., the Louisiana Division of Archaeology, Texaco, Southern Natural Gas, the U.S. Fish and Wildlife Service, Northeast Region, the Maryland Historical Trust, and for Peabody Coal. A native of Maryland, Dr. Goodwin has directed research and compliance projects in Maryland, Pennsylvania, West Virginia, Illinois, Virginia, Arkansas, Florida, Georgia, Louisiana, Texas, and Puerto Rico.

Dr. Goodwin has published widely in the fields of prehistoric and historic archeology. His fields of expertise include cultural resources management, cultural ecology, prehistoric demography, ceramic analysis, field methods in archeology, human osteology, and historic archeology. He is a court-qualified expert in historic archeology, and in cultural resources management. In addition to numerous technical reports and monographs, Dr. Goodwin's writings have appeared in American Anthropologist, American Antiquity, and American Scientist.

Ms. April Miller Fehr, M.A., A.B.D, Assistant Vice President, is Project Manager for the Stadium project. She received a Bachelor of Arts degree in History from George Mason University in 1975. She received her Master of Arts degree from the Catholic University of America in 1979, and is currently a Ph.D. candidate (ABD) there. Ms. Fehr has nine years of archeological experience in the Middle Atlantic Region. Ms. Fehr has teaching, supervisory, and archival experience, and she has authored numerous professional reports. In 1983, she served as director of the Thunderbird Museum and of the Catholic University Field School.

Fehr's experience on historic period sites has included both archival research and field supervision on historic sites in the Washington, D.C. area, and in Portsmouth, Virginia; at Civil War sites in Prince William County, Va.; at the Barbara Fritchie Tea Room site in Frederick, Md.; and in the Chincoteague, Back Bay, and Eastern Shore Wildlife Refuges, on behalf of the United States Fish and Wildlife Service.

Ms. Kathryn M. Kuranda, M. Arch. Hist., Architectural Historian, directs the archeological history aspect. A graduate of Dickinson College and of the University of Virginia, Ms. Kuranda has special familiarity with Historic American Buildings Survey/Historic American Engineering Survey (HABS/HAER) documentation, with the regulatory environment, and with Section 106 compliance as it pertains to historic buildings. She also is court qualified.

As Architectural Historian with the Nevada State Historic Preservation Office for five years, Ms. Kuranda coordinated and implemented that State's program for historic buildings including Survey and Inventory Activities and the Historic Preservation Tax Program.
Ms. Kuranda has been responsible for the successful research, coordination, preparation, and submission of numerous HABS/HAER projects. These include residential, commercial and industrial sites, in the Mid Atlantic, Northeastern, and Western states. Before joining Goodwin & Associates, Inc., Ms. Kuranda was the Architectural Historian for the U.S. Bureau of Reclamation, in Denver, Colorado.

Suzanne L. Sanders, M.A., Historic Sites Specialist, received her Bachelor of Arts degree from SUNY-Binghamton in 1984, and her M.A. in Historical Archeology from the College of William and Mary in Virginia in 1988. Ms. Sanders' M.A. thesis focused on historic buildings; hence, her graduate training was at the interface of archeology and architecture. In addition to field experience in Maryland, Virginia, New Jersey, and New York State, Ms. Sanders has worked on historic archeological sites in the West Indies. She has had experience with historic sites ranging from the mid-seventeenth century to the twentieth century. Ms. Sanders also had four years of experience instructing archeological field schools for the College of William and Mary. Ms. Sanders serves as archeological Field Supervisor for the Maryland Stadium Project.
PRESS RELEASE

R. Christopher Goodwin & Associates, Inc.
636A Solarex Court, Frederick, Maryland

October 16, 1989

FREDERICK COMPANY AWARDED STADIUM PROJECT

When their new stadium opens in 1992, Baltimoreans will not only have a "state-of-the-art" ball park; they also will have saved significant reminders of their city's past. R. Christopher Goodwin and Associates, Inc., a preservation planning and archeological and historical research firm based in Frederick, Maryland, has been chosen by the Maryland Stadium Authority to conduct historical, archeological, and architectural studies at the site of the new stadium complex.

Located in the Camden Yard area, the new sports facility will be built on an 85 acre site with a 300 year history. Part or all of the stadium site has been used for agricultural purposes, as an encampment during the Revolutionary War, as a socially and ethnically mixed residential neighborhood, and, most recently, as an industrial and commercial center. One site which should be of interest to Orioles' fans is the location of the saloon that was operated by the father of George Herman ("Babe") Ruth. Preserving, retrieving, and interpreting such history is the primary objective of the project. Goodwin and Associates, Inc., will marshal the talents of over 20 staff specialists, ranging from architectural historians, historians, archeologists, geographers, and photographers to field and laboratory technicians, to work on the stadium project.

Goodwin and Associates, Inc., is appropriately housed in the ca. 1823 Linden Grove house complex on Solarex Court; thus, the company's offices are listed on the National Register of Historic Places. The company also maintains an office in New Orleans. Goodwin & Associates, Inc. employs a staff of forty-one, over half of whom are assigned to the Frederick facility.

Even as work on the stadium project began, the company's architectural historian and photographers were on hand to record and photograph interiors and exteriors of buildings in the Camden Yard area. Two of the structures on the 85 acre-tract will be preserved entirely: the Camden Station, constructed about 1850, and the Baltimore and Ohio Warehouse. Once the photographic record of the other
buildings is complete, future historians and architects will have a permanent record of the details of structures in the area. The photographs and accompanying architectural analyses will be placed on file with both the Library of Congress and the Maryland Historical Trust.

Goodwin’s researchers also have been busy documenting the stadium site’s 300 year history. Using a computer-based process known as a Geographic Information System (GIS), researchers are working from historic city maps to create a series of overlays showing changing land uses in the area at five and ten year intervals. Researchers already have obtained over one hundred historic maps which are being used with the GIS system. Information obtained from other sources, such as data on socio-economic status, occupations, and the ethnic composition of the area’s neighborhoods, can be superimposed onto these base map overlays. The company has its own graphics and production departments; three professional cartographers and illustrators who do all the company’s own work in house are producing these historic map overlays.

The GIS mapping system also will facilitate the project’s next phase, archeological recovery of historic materials. It will be used to identify areas of the site that have remained largely intact over the years, and which therefore have the most potential for producing significant historical and archeological information. By using GIS, Goodwin expects to focus his field crews’ efforts on areas of special interest identified by the researchers, and yet keep pace with the Stadium Authority’s ambitious demolition and construction schedule.

According to Dr. Goodwin, President and CEO of the firm, the primary objective of the project is to see that a significant slice of Baltimore’s history is preserved while the building of the stadium complex goes forward on schedule. Because of the archeological and architectural work now underway, the foundations of the Orioles’ new home will be securely rooted in a well documented past.
Dig seeks secrets buried under new stadium site

By Sandy Banisky

On this frozen, wind-whipped afternoon, R. Christopher Goodwin and Suzanne L. Sanders — two people with so many academic degrees you'd think they'd know to come in out of the cold — are standing on a construction site and sorting through shards of pottery and old oyster shells.

To you, this is garbage. To Chris Goodwin and Suzanne Sanders, this is a find.

"What we've got here is a slice of time," said Dr. Goodwin, head of the consulting firm that is advising the Maryland Stadium Authority on the history of Camden Yards, which soon is to be home to a new ballpark for the Orioles.

The construction equipment will arrive this month to rip up the ground and disturb the earth's secrets. But first, here come Dr. Goodwin and his team of archaeologists and historians, digging for clues to who lived and worked on the site and how Baltimore grew.

Under state law, developers are required to preserve as much of the history of an area as possible. The Maryland Stadium Authority is paying R. Christopher Goodwin & Associates, a consulting firm with offices in Frederick and New Orleans, $254,000 to do the job.

By the time their work is finished next spring, they will have photographed every historically significant building inside and out, dug about 100 trenches on the 71-block site and cataloged the bits of household history they use to learn about the area.

They already know a lot. "If you look at this neighborhood, you see an evolutionary change over time," Dr. Goodwin said.

They know that Rochambeau camped his Revolutionary War troops there, with tents running through the forest from what is now Russell Street diagonally toward the site of the Holiday Inn.

They know that farmers grazed their cattle there. They know that after the railroad came in, in 1851, rail workers lived in small brick row houses, similar to the ones that still stand across Russell Street in Ridgely's Delight. They know Quakers founded the city's first black school where the Diggs-Johnson school stood.

And they know that George Herman Ruth, the Babe's father, ran a saloon there, in what soon will be short center field.

They've culled that information from 113 maps, dating back to the 1790s and found in Baltimore, Annapolis and Washington. They've also searched old land records, tax documents and city directories.

With a computer, they pulled all the map information together into a "geographic information system," a kind of cartography by computer that allows the Goodwin staff to adjust all the maps to the same proportions and use overlays to see how land use has changed over time.

See DIG, 5D, Col. 1
Diggers at Orioles' new digs aiming for the Ruths' saloon

By Frank D. Roylance
Evening Sun Staff

Sometime during the 1992 opening day ceremonies at the Orioles' new stadium at Camden Yards, somebody ought to propose an official toast to George Herman Ruth Sr., father of baseball great "Babe" Ruth, the Sultan of Swat.

For somewhere near short center field in the new ballpark will lie buried the remains of a saloon, one of several the elder Ruth operated in the neighborhood.

Ruth and his family lived above this one — the Ruth Cafe at 406 W. Conway St. — from 1906 to 1912, a time when the Babe was tuning his baseball skills at St. Mary's Industrial School in Southwest Baltimore.

The saloon's foundation, if anything remains of it, now lies beneath the B. Green Warehouse, and it is a prominent target of a complex archaeological project now under way within the 85-acre site.

The $250,000 archaeological contract was awarded to R. Christopher Goodwin & Associates, of Frederick. Work began two months ago within the "footprint" of the baseball stadium.

"Candidly, I don't expect we're going to find a lot of artifacts" from the Ruth saloon, said Christopher Goodwin, the firm's president.

The building was demolished in about 1952, along with other rowhouses on the block, to make way for the recently razed Green warehouse. Test trenches nearby have turned up mostly rubble fill from the rowhouse period.

"We may find some stone walls from the original construction, and rubble fill, and if we're lucky, a broken beer bottle or two," Goodwin said.

See SALOONS, A6, Col. 4
Diggers aiming for Ruth family digs

SALOONS, From A1
The real goal of the project, he said, is to rescue from the vast site as much information as possible about 260 years of growth and change in the area before it is dug up or paved over by the stadium construction.

"I don't think in terms of the amount of artifacts, but in terms of information, and the historical methodology that is going to allow us to reconstruct the history of this neighborhood at a level that has never been accomplished before," Goodwin said.

The complexity of the site is enormous. For example, Ruth's was just one of 52 saloons in the area.

The Maryland Stadiums Project Geographic Information System, a computer-aided mapping system, will be used by the archaeologists. It will allow them to superimpose 130 historical land use maps over modern coordinates to determine where to dig.

The area began as forest and swamp and it was first settled by a handful of German, English and French farmers, together with slaves and freed blacks, whose farmhouses and fields were gradually engulfed by Baltimore to their east.

By the mid-1800s, the area encompassed 71 city blocks, and was populated by upper-class whites on the main streets, and lower-class whites and blacks on the alleys. The area was crowded with Irish and German immigrants and filling up with rowhouses, commercial, trade, and manufacturing businesses, schools and churches.

By the turn of the 20th century, the railroad had cut the area off from the harbor and Otterbein areas, and the neighborhood had gone into a decline. Increasingly poor laborers, mostly black and unskilled, moved in, but their neighborhoods began to be swallowed up by warehouses, commerce and industry. By the 1950s, the last residential rowhouses were gone.

The early digs have allowed archaeologists to check the accuracy of their maps, and to judge how much of the area's buried history can be expected to have escaped disturbance over the years.

Of special interest are the rear yards of the properties, said April Fehr, 37, vice president of the firm and project manager for the archaeological portion of the project. "That's where ... the wells and privies are, and where people disposed of their trash."

Archaeologists on the project have assembled a catalog of "significant" sites and planned at least 100 trenches. The work will advance across the site, moving into new parcels as they are acquired by the stadium authority, and ahead of the construction.

Most sites within the "footprint" of the baseball stadium have already been explored.

One of them, at the extreme northeastern corner of the project area, is the site of a Revolutionary War encampment used by the French general Count Rochambeau and his troops.

Nothing of the encampment was found, but to get to it, archaeologists had to dig down through the remains of 200 years of later development on the site.

"That's what makes urban archaeology the most complex archaeology of all; there is a confounding array of remains," Goodwin said. "When it's least confounding is where you find an intact feature that had been filled in over one or two time periods, and has stratified fill, like a privy."

At least one old privy has yielded bottles, broken stemware, spoons, a chamber pot, glass marbles, a shaving mug and a washstand pitcher — all from the late 1800s to mid-1900s.

The archaeologists are most interested in sites dating from the late 18th and early 19th centuries. Later sites can often be well-documented from private and public records, and even personal recollections.
Stadium Site Yields Clues to the Past

Archaeologists, Historians Unearth ‘Slice of Time’ in Baltimore

Associated Press

BALTIMORE—Pieces of the past are being unearthed at the site of the Baltimore Orioles new baseball stadium. They are the findings of a team of archaeologists and historians searching for clues to who lived and worked on the site and how Baltimore grew.

"What we've got here is a slice of time," said R. Christopher Goodwin, head of the consulting firm advising the Maryland Stadium Authority on the history of Camden Yards.

On a recent frozen, wind-whipped afternoon, Goodwin and his colleague, Suzanne L. Sanders, stood at the construction site and sorted through shards of pottery and oyster shells.

That day, the team recovered what Goodwin calls "domestic refuse"—pieces of glass and trash.

"Whiteware," Goodwin said, picking up a shard of pottery. "Typically 1850s, 1860s."

"Pearlware," he said, as Sanders handed him another ceramic fragment. "They began manufacturing it in the 1790s. Peak popularity in the 1820s and '30s."

The pottery is all British-made. "It reflects Baltimore's participation in the global economy," Goodwin said.

Under state law, developers are required to preserve as much of the history of an area as possible. The Maryland Stadium Authority is paying Goodwin's firm, which has offices in Frederick and New Orleans, $254,000 to do the job.

By the time their work is finished next spring, they will have photographed every historically significant building, dug about 100 trenches on the 71-block site and catalogued the bits of household history they use to learn about the area.

They already know a lot—that Rochambeau camped his Revolutionary War troops there and farmers used the land for grazing cattle. They know that after the railroad came in 1851, rail workers lived in small brick row houses, similar to those still standing nearby. They know Quakers founded the city's first black school in the neighborhood.

And they know that George Herman Ruth, the Babe's father, ran a saloon in what soon will be short center field.

They've culled that information from 113 maps, dating back to the 1790s and found in Baltimore, Annapolis and Washington. They've also searched old land records, tax documents and city directories.

With a computer, they pulled all the map information together into a "geographic information system," a kind of cartography by computer that allows the Goodwin staff to adjust all the maps to the same proportions and use overlays to see how land use has changed over time.

In the Goodwin laboratory in Frederick are other items found at the northern end of the stadium site on earlier digs. There are some slivers of wood that will be analyzed and dated, a pharmaceutical flask, some door hinges and other hardware.

At the southern end of the site, archaeologists believe they can find the foundation of the farmhouse that in the late 1700s belonged to a woman named Elizabeth Doyle. They're also looking for the remains of early 1800s brick kilns, for an old rope factory, and, of course, for anything left from George Herman Ruth's saloon.
Archaeologists seek ‘slice of time’ under site for new Orioles park

Part of the historic preservation work began in the fall. The Goodwin team has photographed the buildings that occupied the site and will file the archival-quality prints with the Library of Congress. So exterior and interior views of the Diggs-Johnson School have been saved in photographs printed on paper, meant to last forever. "The Diggs-Johnson alumni will be happy. People get really attached to their schools," Dr. Goodwin said.

The patents on the machinery inside the Baltimore Thermal plant have been traced and the equipment has been photographed. And pictures of the Southern Seafood building, which was blown up before television cameras in November, will rest in Washington for future historians to review.

The idea is to leave a lasting record of what was on the site before it was demolished, said Kathryn M. Kuranda, the architectural historian who directed the work.

Now most of those buildings are gone. Most of the action is in trenches scattered in the area, holes in the ground dug as demolition crews cart rubble away from the site. It has not been easy going. The early freeze turned the ground into "permafrost concrete," said Dr. Goodwin, who had to rent a special carbide-tipped saw to cut through the pavement and into the frozen earth.

But the saw did the trick, cutting through the layers of macadam, stone, brick and earth. And in this arctic weather, Pamela Crane, an archaeological assistant with a degree in anthropology, is standing in a 3-foot-deep trench and sifting through dirt to see what it holds.

The digging exposed the corner of a stone row house foundation, to the delight of the Goodwin team. Ms. Crane, swaddled in a parka and wool cap but not wearing gloves, notes every discovery on a clipboard.

So far today, the team has recovered what Dr. Goodwin calls "domestic refuse"—the pieces of glass and trash that he and Ms. Sanders sort through. "Whiteware," Dr. Goodwin says, picking up a shard of pottery. Typically 1850s, 1860s. "Pearlware," he says, as Ms. Sanders hands him another ceramic fragment. "They began manufacturing it in the 1790s. Peak popularity in the 1820s and '30s."

The pottery is all British-made. "It reflects Baltimore's participation in the global economy," Dr. Goodwin says.

But some of the ceramics are cheaper than others, making it hard for the archaeologists to say exactly what the standard of living was of the owners of the house they've uncovered. "That's something we've got to puzzle out," Dr. Goodwin says.

He points out a cow bone and a pig bone, clam and oyster shells, all encrusted with fine sand. "This gives you a handle on diet," he said.

Back in the Goodwin laboratory in Frederick are other items found at the northern end of the stadium site or earlier digs. There are some slivers of wood that will be analyzed and dated, a pharmaceutical flask, some door hinges and other hardware.

And then there is a tiny porcelain doll, about the size of an adult's index finger, more a figure than a toy. And it's armless; the arms lost, no doubt, earlier this century when the doll was dropped into a privy behind a house in Camden Yards.

At the southern end of the site, across the railroad tracks from Hammerjacks, the archaeologists believe they can find the remains of an old rope factory and, of course, for anything left from George Herman Ruth's saloon.

As the staff of the Maryland Stadium Authority looks to the future, members of the Goodwin team will be at work on scattered sites around the tract, looking for history.
George Herman Ruth, Sr., father of Babe Ruth, managed a saloon on the ground floor of the three-story row-house at 406 West Conway Street, between 1906 and 1912. This establishment was adjacent to the Camden Station and the Baltimore and Ohio Railroad's large freight yards. Ruth's family—including his mother Katherine and his sister Mary—lived in apartments above the saloon, taking in occasional boarders to supplement the family's income. The congested streets of Baltimore's Camden Yard industrial area were "noisy with the roar of heavy trucks." It was in this environment that Babe Ruth grew up.

Ruth recalled that his parents worked "twenty hours a day" trying to make a success of the saloon. His sister Mary remembers that her mother cooked and served lunches to the workers who were employed in the industries of the Camden Yard district. She also recalls that neither she nor her brother were permitted inside the saloon, which even had a small ladies' dining room.

The younger Ruth was not home very often during the family's years on West Conway Street. At the age of seven, he was sent to St. Mary's Industrial School, a training school operated by the Xavarian Brothers on the western outskirts of the city. It was at St. Mary's that Ruth learned to play baseball, and from that institution he embarked upon his professional career in 1914. During the intervening years, he visited at home only infrequently; in all, he actually "resided" at the Conway Street address for perhaps three years.

When he had begun to achieve some professional success in the major leagues, Babe used part of his earnings to help his father set up a new saloon, at the corner of Eutaw and Lombard Streets. That building still stands.

Archeology can help complete the picture of daily life in a crowded working class neighborhood at the turn of the century. The china and glassware from the saloon, food remains from those workers' lunches, maybe even some of the childrens' toys, all may be underneath the layers of asphalt and rubble. The possibility for discovering insights into the lives of these people is the reason for conducting the work on the George Herman Ruth, Sr., saloon site. Any artifacts recovered from the site by the team from Goodwin & Associates, Inc. will be curated at the Babe Ruth Museum in Baltimore.
The History of Camden Yards

When the Baltimore Orioles and their fans occupy their new stadium on Opening Day in 1992, they will be seated and playing on top of 250 years of their city's history.

The Stadium Project area has been occupied since the early 18th century. By 1729, plantations and farmsteads in the area were producing tobacco and grain for export, and a few small maritime industrial establishments stood along the shore of the Patapsco River. When French Count Rochambeau led his forces towards the Revolutionary War's final battle at Yorktown in 1781, and camped near Baltimore on those farms, land speculators already were subdividing the larger holdings for resale. The City of Baltimore formally annexed the area in 1783, and its transition from farmstead to ballpark began.

The early nineteenth century saw the Camden region develop as an upper middle class residential neighborhood, with two-story rowhouses lining its main streets. Less affluent residents, both whites and free blacks, lived in more modest dwellings located in smaller alleyways. Residential development had moved south as far as Hamburg Street by 1850.

The critical force for change entered the Camden area in 1852; in that year, the Baltimore and Ohio Railroad built its Camden Station and Warehouse complex. From that time on, the convenience of good transportation facilities dictated the use of space in the surrounding areas. Progressively larger industrial and commercial enterprises were drawn into the Camden Yard sector; these in turn confined residential space into smaller and smaller areas. Three-story mixed commercial and residential row houses, later subdivided into flats and apartments, replaced the older two-story single-family dwellings. By the mid-twentieth century, industrial and commercial expansion had eliminated virtually all residential space in the Camden Yard section.

Opening Day, 1992, will mark the final chapter in the transformation of Camden Yards. People once more will stream into the old neighborhood, and the walls of the Camden Station and Warehouse will echo again, this time to the shouts of excited fans.

The Archeology of Camden Yards

The Maryland Stadium Project is preserving the history of the Camden Yards area, even as our new baseball stadium writes a new chapter in that history. The Maryland Stadium Authority and HOK Sport retained R. Christopher Goodwin & Associates, Inc., to conduct archeological and architectural studies of the historic Camden Yard neighborhood. Goodwin's firm has adopted a multi-disciplinary approach towards documenting the area's history.

Archival research is basic to the project. Baltimore is rich in historical resources and the stadium project has used them all. These resources include historic maps, public records such as deed, tax, and census data, architectural drawings, and even the records of private corporations. Managing a large data base, such as that presented by the more than 100 historic maps of Baltimore used during this project, has been facilitated by using a computer process called a Geographic Information System (GIS). This system allows researchers to superimpose historic maps, portraying changing historical uses of a property lot, block, or entire neighborhood. The results of the GIS mapping project have been used to guide archeological field work.

Through fieldwork, archeologists seek to understand and to interpret the past through the retrieval and interpretation of artifacts and features found on a site. Their work adds another dimension to the information gained through documentary research. Using the GIS as a guide, project archaeologists have placed nearly one hundred exploratory trenches across the 85-acre Camden area. These trenches reveal areas where buried remains are undisturbed, such as the George Herman Ruth saloon site. Such undisturbed areas then can be investigated more intensively.

As older industrial buildings make way for the new stadium construction, architectural historians on the project are documenting their architectural and technical details. This documentation includes both historical research and photography. When complete, the architectural history of the Maryland Stadium Project area will have been preserved so that the history and technology of the twentieth century are recorded for future generations.

THE MARYLAND STADIUM AUTHORITY
World Trade Center, Suite 2450
Baltimore, MD 21202
(301) 333-1560
APPENDIX III-B

SCHOOL PRESS DAYS
FOR IMMEDIATE RELEASE - THURSDAY, MARCH 22, 1990

BALTIMORE, MD. On Tuesday, March 27, 1990 at 9:00 A.M., Bruce H. Hoffman, Executive Director of the Maryland Stadium Authority will host a press conference at the Best Western Harbor City Inn, 1701 Russell Street, Baltimore.

The press conference will mark the beginning of "Student Press Days" at the Camden Yards site of the new baseball park. As a part of its commitment to documenting and promoting public awareness of the historic aspects of the site, the Stadium Authority, working with its archeological consultant, R. Christopher Goodwin and Associates, Inc., is welcoming students from the Baltimore Metropolitan area to visit the site and observe the archaeologists at work.

Students from Baltimore City, Baltimore, Anne Arundel and Howard Counties are expected to participate in the program during the two-day period - March 27 and 28, 1990. Two sessions will be held each day.

(MORE)
Each session will begin with a press conference/orientation session presented by representatives of the Maryland Stadium Authority as well as archaeologists, architectural historians and historians from Goodwin and Associates. The students will be briefed on the stadium project and the archeological process utilized to document this historically significant location.

Following the press briefing, the students will be escorted to the project site where they will have the opportunity to observe archeological work in progress and interview on-site archaeologists.

FOR FURTHER INFORMATION PLEASE CONTACT:

Carol Salmon (301) 333-1560
**MARYLAND STADIUM AUTHORITY**

PRESS BADGE

SCHOOL PRESS DAYS
MARCH 26-27, 1990

*R. CHRISTOPHER GOODWIN & ASSOCIATES, INC.*
PRESS PACKET: SCHOOL PRESS DAYS

ARCHAEOLOGY AND HISTORY AT CAMDEN YARDS

PREPARED BY:

R. Christopher Goodwin & Associates, Inc.
636A Solarex Court
Frederick, MD 21701

For further information, contact:
Dr. R. Christopher Goodwin
(301) 694-0428

PREPARED FOR:

The Maryland Stadium Authority
World Trade Center, Suite 2450
Baltimore, Maryland 21202

For further information, contact:
Ms. Carol Salmon
(301) 333-1560
SCHOOL PRESS DAY
March 26-27, 1990

Schedule of Events

Welcome and Opening Remarks
Mr. Bruce Hoffman, PE
Executive Director
Maryland Stadium Authority

Remarks
Helen Campbell, Curator
Babe Ruth Museum

Introduction and Overview of the Maryland Stadium Historical Project
Dr. R. Christopher Goodwin, Ph. D.
President and CEO
R. Christopher Goodwin & Associates, Inc.

Architectural History Studies
Kathryn M. Kuranda, M. Arch.
Architectural Historian and Senior Project Manager
R. Christopher Goodwin & Associates, Inc.

Archeological Studies
April Fehr, M. A.
Project Archeologist and Assistant Vice-President
R. Christopher Goodwin & Associates, Inc.

Questions and Discussion

Tour of Stoneware Pottery and Brickyard Site

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This School Press Day has been jointly sponsored by:
The Maryland Stadium Authority
World Trade Center, Suite 2450
Baltimore, MD.

R. Christopher Goodwin & Assoc., Inc.
636-A Solarex Court
Frederick, MD.

Hellmuth, Obata, & Kassabaum, Inc.
323 West 8th Street, Suite 700
Kansas City, MO.
A BRIEF HISTORY OF THE CAMDEN YARDS AREA

The Baltimore Orioles will play the first game in their new stadium on Opening Day in 1992. The action on that day will be fast and exciting; the stadium will be new and modern. However, the team will be playing in the shadow of the old Camden Station; the old Baltimore and Ohio Railroad warehouses will overlook right field. These old buildings will remind the team and its fans that the foundations of the new ballpark are resting on over 250 years of the city’s history.

The area on which the stadium is being built has been occupied since the early 1700s. As early as 1729, plantations and farmsteads in the area were producing tobacco and grain for export. A few small maritime industrial establishments, such as a ropewalk, stood along the shore of the Patapsco River. When French Count Rochambeau led his army to join Washington at the Revolutionary War’s final battle at Yorktown in 1781, his forces camped near Baltimore on those farms. By that time, land speculators were already dividing the larger plantations into smaller properties, and reselling them for large profits. The City of Baltimore formally annexed the area in 1783. The Camden neighborhood began its transition from farmstead to ballpark.

In the early nineteenth century, the Camden Yards area became an upper middle class residential neighborhood; two-story rowhouses lined its main streets. Less wealthy residents, including immigrants and free blacks, lived in smaller dwellings located in the back streets and alleys. By the 1850s, this residential development extended as far south as Hamburg Street. More and more immigrants, most of them from Germany and Ireland, moved into the neighborhood shortly before the Civil War. Small business and industrial enterprises also developed, and schools and churches were built to fill the needs of these new residents.

In 1852, the Baltimore and Ohio Railroad built its Camden Station and Warehouse complex. From that time on, the Camden Yards neighborhood began to change more quickly. The availability of good transportation facilities dictated how space would be used in the areas next to the railroad. Larger industrial and commercial enterprises, including a piano and a stove factory, were attracted to Camden Yards. These business enterprises took up space formerly devoted to housing. As a result, three-story mixed commercial and residential row houses replaced the older two-story single-family dwellings; these rowhouses were later subdivided into flats and apartments. By the middle of the twentieth century, industrial and commercial expansion had squeezed out practically all residential space in the Camden Yard section.

Opening Day, 1992, will mark the final chapter in the section’s transformation. People will once more come to the Camden Yards. The walls of the old railroad station and of the warehouse building will echo once again--this time, to the shouts of excited fans.
PROJECT METHODS

The construction of Baltimore's new stadium is writing a new chapter in the history of the Camden Yards. The goal of the Maryland Stadium Historical Project is to preserve the history of the Camden Yards area. To achieve that goal, project researchers are using a variety of methods.

Historical background research is basic to the project. The City of Baltimore has a wide variety of historical resources available to the researcher; the stadium project has consulted many of them. These resources include historic maps; public records, such as deed, tax, and census data; architectural drawings; and even records of private corporations. These sources have created an historical framework on which the other aspects of the project research are based.

Project researchers have used a computer process called a Geographic Information System (GIS) to manage the large amounts of data, such as more than 100 historic maps of the city, found by the historians. This GIS system allows researchers to superimpose one historic map over another; in this way, it is possible to understand the changing uses of a single property lot, a city block, or an entire neighborhood over time. The results of the GIS mapping project also are being used to determine the direction of the archeological field work.

Archeologists in the field are seeking to understand and interpret the activities which have taken place at the Camden Yards in the past. They are finding and interpreting the material culture—the artifacts and the features—found on the site. Their work adds another dimension to the information gained through documentary research. Using the GIS maps as a guide, archeologists have dug nearly one hundred exploratory trenches in the 85-acre Camden area. These trenches have revealed locations where buried remains have been least disturbed by previous construction activity. Two such areas are the George Herman Ruth saloon site and the stoneware pottery kiln that you will see today. These undisturbed areas then are being investigated more intensively.

As older industrial buildings make way for the new stadium, the architectural historians on the project are documenting the architectural and technical details of the structures. This documentation includes both background research and photography. When it is complete, the architectural history phase of the Maryland Stadium Project will provide future researchers with material critical to understanding the history and technology of the nineteenth and twentieth centuries.

The Maryland Stadium Historical Project provides a good example of the kinds of multiple skills that are necessary to carry out any research project. The project has used the contributions of historians, archeologists, computer technicians, graphic artists, laboratory technicians, and architects. Working together, this project team will produce a complete picture of the history of this section of old Baltimore.
The Making Of a GIS Map

The maps for geographic information systems can be obtained from three different sources. Images from satellites, such as Landsat and the French satellite SPOT, can be used. The federal government has been the largest user of these images, which can be received from satellites in digital form and fed directly into computers. But most commercial customers, or counties and cities, prefer aerial photographs, which offer more of the type of details they need. The critical piece of equipment in converting an aerial photograph into computer-readable digital form is a machine called a stereo plotter, a workstation that cost can from $100,000 to $200,000.

Two aerial photographs are placed on the stereo plotter. Because the photographs contain overlapping views of the same area and are taken from slightly different angles, they produce a three-dimensional image that can be seen by looking through a binocular-like lens. With a pointing device, the operator marks the outlines of buildings and other physical features on the photo image and from that information, the computer generates the map.

Alternatively, conventional maps can be scanned by a device that transfers information into a computer, which creates an electronic map.

Other maps must be converted by hand. Paper maps are placed on a backlit table. A handheld apparatus is moved over the map. The operator pushes a button to mark each important detail on the map, thus recording the information in digital form.

Information on sewer and water pipe networks can be recorded from maps by hand in a similar way, although a newer method involves the use of electronic measurements in the field. By using a small computer fixed to the top of a tripod, a field crew precisely records the locations of utility poles, manholes and other features, and that information is incorporated in the electronic map.

The advantage of the computer maps is that they can be easily called up on a screen, edited to add new information, then printed, avoiding the time and expense of redrafting an entire map.

The Washington Suburban Sanitary Commission, which must maintain 8,000 miles of water and sewer pipe, updates its maintenance crew maps only every three years, despite the rapid development of the suburbs, because of the costs.

In addition, because conventional paper maps can display a limited amount of information, multiple sets of maps must be created by local governments. Each new subdivision in Montgomery or Prince George's counties requires six sets of maps—one for the county tax assessor, one for the planning commission, and separate maps each for water lines, sewer lines, utility assessments and permits.

Once a GIS map is created, that information and a good deal more can be stored in computer memory and selectively presented.
Sanborn Fire Insurance Map (1890)
showing location of the site area
E. E. Sachse's *Bird's Eye View of the City of Baltimore* (1869), showing vicinity of the site area
A SHORT HISTORY OF AMERICAN STONEWARE POTTING

Today, when we have food items to store, we use mass-produced plastic or metal type wares. However, the availability of such items is a relatively recent development. For most of history, people have relied upon ceramics for food storage. In the seventeenth, eighteenth, and nineteenth centuries, the most common utilitarian ceramic was known as stoneware.

Stoneware is an extremely hard and heavy type of pottery. It is impermeable to liquids, easy to keep clean, very durable, and relatively cheap. Stoneware derives these desirable characteristics from the type of clay used in its manufacture, and from the processes used to manufacture it.

Nineteenth century American stoneware had its origin in Northern Europe. Both the first colonists, and later immigrants, brought with them the skills and traditions of their native ceramic industries; in Baltimore, and particularly in the Camden Yards area, both British and German traditions were represented. Clusters of potters would locate their small businesses in areas where suitable clays could be found. Many of these pottery makers worked by themselves, or perhaps hired one or two apprentices.

According to the Census of 1820, there were ten potters working in the City of Baltimore, two of whom manufactured only stoneware. Thirty five men and twelve boys were employed in the Baltimore pottery industry. There were 12 pottery kilns, 41 wheels, and there were also 15 horse-powered "pug" mills to mix clays.

Stoneware manufacture involved the following process. After the clay was gathered, it was washed and sieved through a screen. Then it was mixed with water in a pug mill. When enough water had evaporated from the mixture, the pliable clay could then be "thrown" on a wheel, powered by a foot-operated treadle. Potters worked quickly; some skilled potters could make over 100 five-gallon jars in a single day. The pottery then was decorated in one of several ways; applying cobalt glaze in a variety of designs was a favored method of decoration.

Finally, the pieces were stacked in the kiln for firing. Unfired pieces were separated from one another by using "kiln furniture." When the kiln temperature had reached the desired level (stoneware was usually fired at temperatures between 1200° and 1300° Centigrade), salt was thrown into the top of the kiln through special openings. This salt vaporized in the intense heat; it left a shiny glaze on the outside of the vessels, and it also pitted their surfaces (a bit like orange rind).

At the kiln site on the corner of Russell and Hamburg Streets, the archeologists of the Maryland Stadium Project have located the pug mill and the base of one kiln of a stoneware potter's workshop.

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Plan for a pottery kiln, ca. 1838 (Quimby, 1972: 356)

Photograph of a rural "pug mill", ca. 1915 (Greer, 1981: 31)
THE NEW STADIUM

BY REBECCA WOODWARD

On Tuesday, March 27, 1990, 3 students from Benjamin Franklin Middle School attended a press conference at the Western Harbor City Inn to discuss the new home for the Baltimore Orioles.

The press conference marked the beginning of "Student Press Days" at Camden Yards, home of the new baseball park. Part of the Stadium Authority's commitment to documenting and promoting public awareness of the historic aspects of the site, the stadium authority, working with its archaeological consultant, R. Christopher Goodwin and Associates, INC., welcomed students from the Baltimore Metropolitan area to visit the site and observe archaeologists at work.

After a short meeting, the students and teachers were led to some major archaeological sites. The students witnessed archaeologists working at the site of the pug-mill. They also saw some of the discoveries the scientists had made. They included pieces of shoes, a sapot, remains of a kiln, and the early stone foundations. Information was also distributed about Babe Ruth's family.

At the press conference, artifacts were not the only topic of discussion. The press was very curious to learn about the new stadium and many questions were raised. One of the main questions asked was about the name of the new stadium. As it turns out, even the Orioles aren't sure. One of the guest speakers announced that 50% of the people are voting for the park to be named after Babe Ruth.

You may have heard rumors that the park was going to be called Orioles Park or Babe Ruth Park but the truth is no decision has been made. According to an insider, "Even if the park is not named after Babe Ruth, part of the park will be dedicated to him."

Another question that arose was the cost of the new stadium. The representatives told us that the cost will be divided up in this way: 10 million for design; 9 million for the cost of construction, and 95 million for stadium, warehouse, and site. Many people gasped at the price. The representatives felt that for a new ballpark, the price seemed reasonable.

Surprisingly enough, the Orioles have already made many important decisions. They don't want ticket or food prices to rise. They have requested natural grass saying that they want to "Go back to the basics of baseball."

The Franklin Post would like to thank the members of the Maryland Stadium Authority for giving us the opportunity to witness history in action.
March 28, 1990

Mrs. Martha Williams
R. Christopher Goodwin and Associates
Linden Grove
636-A Solarex Court
Frederick, Md. 21701

Dear Mrs. Williams:

I would like to take this opportunity to commend you and to thank you for your farsightedness in planning the "school press" day at Camden Yards. The event held on March 26, 1990, was well planned and well executed. The students were able to act like adults and were treated as such. The archeological and the architectural studies gave our students a great deal of insight in the planning process, historical documentation, and a chance to be part of the working press. I look forward to seeing our students' work included in the archives of the Maryland Stadium Authority.

Please convey my thanks and appreciation to Dr. Goodwin, Ms. Kuranda and Ms. Fehr. Their preparation, planning, and cooperation meant much to the occasion. I look forward to having the opportunity to work together again when your company works again in the Baltimore area. Thank you in supporting our efforts to make education relevant and significant to the children and youths of Baltimore City.

Sincerely,

Dale M. Johnson
Instructional Specialist

cc: Dr. Richard C. Hunter, Superintendent
    Mrs. Jerrelle Francois, Associate Superintendent, Bureau of Instruction
    Dr. Norman J. Walsh, Associate Superintendent, Bureau of Planning and Curriculum Development
    Mr. Samuel Billups, Assistant Superintendent, Secondary Schools
    Mrs. Alice Morgan-Brown, Assistant Superintendent, Curriculum Development
    Dr. Samuel L. Banks, Director, Bureau of Instruction
    Dr. Jeanette Evans, Director, Secondary
    Mrs. Ellen Oberfelder, English Curriculum
    Mrs. Jessie Gladden, Social Studies Curriculum
APPENDIX III-C

MARYLAND STADIUM AUTHORITY BROCHURE
LEARNING FROM THE PAST

MARYLAND STADIUM AUTHORITY
HISTORIC PRESERVATION PROJECT

In 1986, the Maryland Stadium Authority began planning for the construction of a new sports facility in the heart of downtown Baltimore. As part of its continuing commitment to the preservation of Baltimore's past, in 1989, the Stadium Authority, through its architectural consultant, HOK Sport, retained the firm of R. Christopher Goodwin & Associates, Inc., to conduct historical, archeological and architectural history studies of the site of the future stadium complex.

WILLIAM DONALD SCHAEFER
GOVERNOR

MARYLAND STADIUM AUTHORITY
WORLD TRADE CENTER, SUITE 2450
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PRESERVING THE PAST

On a brisk January afternoon, over 1000 people strolled around the Camden Yards section of downtown Baltimore, site of a former industrial park and future home of the Orioles. The crowds came to view an unusual slice of Baltimore's history: the George Herman Ruth, Sr., saloon site.

George Herman "Babe" Ruth, Jr., the baseball immortal, spent part of his childhood in this former working class neighborhood. In the early years of this century, Camden Yards was a bustling place, "noisy with the roar of heavy trucks." Ruth's father and mother managed a saloon and restaurant that catered to the workers and residents of this community. The "Babe" and his younger sister lived with their parents in an apartment above the saloon, sometimes sharing facilities with other boarders taken in to supplement the family's income.
A HISTORY OF CAMDEN YARDS

Until the 1780s, the Camden Yards area was dominated by open fields and farmsteads. The French Comte de Rochambeau bivouacked his forces here in 1781 and 1782, en route to and from the Revolutionary War campaign at Yorktown, Virginia.

The City of Baltimore annexed the area in 1783; larger farms were subdivided into smaller urban lots. By the 1820s, Camden Yards had become an urban neighborhood. Two-story rowhouses, inhabited by prosperous English and German immigrants, lined its main streets; less affluent immigrants, slaves and free blacks lived along its small interior alleyways. In the 1850s, more recent Irish and German immigrants moved into the neighborhood.

The building of Baltimore & Ohio road in 1852 significantly changed the character of the area. The railroad required space for its tracks, its freight warehouses and other related structures. The proximity of the railroad made the area undesirable as a location for industrial and commercial enterprises. These developments reduced residential space. To accommodate the change, smaller and denser rowhouses and apartments were constructed to replace the earlier, more spacious dwellings.

The increasing dominance of industry and commerce eventually sealed the doom of residential space at Camden Yards. The few remaining dwellings from the opening decades of the twentieth century were entirely gone by the 1950s. The conversion of the area into an "industrial park" was complete. The stage was set for the building of a new ballpark for the Orioles.

THE ARCHEOLOGY OF CAMDEN YARDS

The intensive archeological testing program at Camden Yards targeted two major locations: the George Herman Ruth, Sr., saloon site, and the J. S. Berry Fire Brick Manufacturing Company.

At the saloon site, the research team found that the foundations of the three-story rowhouse at 406 South Conway Street were substantially intact. These brick foundations were consistent with those pictured on the 1901 Sanborn Fire Insurance map of Baltimore. Even more exciting was the discovery of an intact two-barrel privy feature in the rear yard. The ceramics from this feature suggested that the building may have been occupied as early as the 1820s or 1830s. Bones and other organic remains provided clues about the diet and the nutrition of the building's residents.

The J. S. Berry Fire Brick Factory, at Hamburg and Russe Street, was depicted on the 1890 Sanborn Fire Insurance Map. The archeologists found the base of a pug-mill, used by brick makers to mix their clays. Researchers also were surprised to find hundreds of fragments of stoneware kiln furniture and the remains of at least one pottery kiln beneath the site of the Park's Sausages manufacturing complex. These features suggest that a heretofore unidentified stoneware potter was at work on this site before the brick factory existed.

The discovery and documentation of these previously unknown pieces of the past have achieved the major goal of the Maryland Stadium Authority's preservation efforts.

The scope of this project extended beyond the resources that lay buried underneath Camden Yards. While archeological methods documented the resources that were not immediately visible, the use of architectural history techniques addressed resources that were still standing.
 Camden buildings get close scrutiny before demolition

By Sandy Banisky

Before the new Orioles stadium goes up in Camden Yards, a team of preservation experts is taking a careful last look at what's coming down.

The buildings to be demolished on the 85-acre site just west of the Inner Harbor — including the old home of Maryland Cup, the Diggins-Johnson Junior High School, Southern Seafood, the B&O office building — are being photographed inside and out, at the direction of the Maryland Historical Trust.

Specialists are producing measured drawings of the floor plans. Interior pieces of some of the old industrial buildings are being salvaged for museums.

"We want a good, standardized record of these buildings before they're gone," said R. Christopher Goodwin, whose company, with offices in Frederick and New Orleans, is overseeing the work for the Maryland Stadium Authority.

And this fall, archaeologists will be digging on the site, trying to unearth all the clues they can about how Baltimoreans lived in past centuries.

It will be the historians' last chance before monstrous construction equipment takes over and begins building the foundation for the new ballpark.

"Urban archaeology is teaching us new things about ways of life we thought we understood," Mr. Goodwin said. "We want to be sure that knowledge of those different periods is preserved."

State law requires that any projects built, sponsored or subsidized by the state be reviewed by the Historical Trust. J. Rodney Little, Maryland's historic preservation officer, said his staff reviews about 5,000 such projects a year to see how their construction might affect historically important areas.

"Not everyone is delighted by the notion," Mr. Little said. "But I have to commend the Stadium Authority. They came to us early, and they've been very cooperative."

At the offices of the Maryland Stadium Authority, Bruce H. Hoffman, the executive director, finds himself concerned about Baltimore's past as he oversees the construction of a part of its future.

"It's state law," Mr. Hoffman said. "The Historical Trust identifies all the historically significant buildings on the site, and then we take photographs. The archival-quality photographs are expensive, at $100 apiece. Mr. Goodwin's firm has a $46,810 contract with the Stadium Authority."

Over the last two years, the Historical Trust has taken inventory of the buildings on the stadium site, most of them industrial buildings, and decided which ones were historically significant. For instance, the Maryland Cup building can demonstrate how various technologies developed in this century.

For that reason, Maryland Cup and other buildings will be recorded in photos and...
Archaeologists have discovered that the father of baseball great Babe Ruth ran a saloon near what will be center field of the Baltimore Orioles' new stadium, according to a report published Tuesday.

The Baltimore Evening Sun reported that the saloon and cafe was one of several run by George Herman Ruth Sr. around Camden Yards, the neighborhood of the new stadium that is set to open in 1992.

Ruth and his wife Kate opened the Ruth Cafe in 1906, when Babe was 11 and his sister, Mary "Mamie" Ruth Moberly, was 6. The future baseball star learned the rudiments of the game at St. Mary's Industrial School in southwest Baltimore while the family lived above the saloon from 1906 to 1912, the newspaper said.

Moberly, now 89 and living in Hagerstown in western Maryland, said her mother served lunches to factory workers at the establishment.

"Of course, I couldn't put one foot in that saloon," she said. "Babe couldn't either, when he was a boy. A saloon was for men, not children. Mom stayed in the kitchen."

When the Red Sox won the 1915 World Series, Babe, 20, used his earnings to set his father up in another saloon in Baltimore. That place is still a bar, run under another name.

The foundation of Ruth Cafe's, if anything remains of it, now lies beneath the B. Green Warehouse.

A $250,000 archaeological contract was awarded to R. Christopher Goodwin & Associates, of Frederick, Md., to do excavations within the 85-acre stadium site. Work began two months ago.

"Candidly, I don't expect we're going to find a lot of artifacts" from the Ruth saloon, said Christopher Goodwin, president of the company.

Archaeologists at the site have assembled a catalog of "significant" sites and planned to dig at least 100 trenches.
Ball stadium site hides 1906 saloon run by Babe's dad

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Although the saloon was off-limits to women and blacks, Moberly said females could be served drinks and meals in a small, separate dining room. Also, "Daddy had a place where colored people could come in, not so much to buy a drink, but to buy a bottle and go."

Kate Ruth died in 1913, the year before her son was hired by the minor-league Baltimore Orioles, and soon after by the big-league Boston Red Sox.

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The Ruth building was demolished around 1952, along with others on the block, to make way for the recently razed Green warehouse. Test trenches nearby have turned up mostly rubble from that period.

"We may find some stone walls from the original construction, and rubble fill, and if we're lucky, a broken beer bottle or two," Goodwin said.

The real goal of the project, he said, is to rescue from the vast site as much information as possible about 260 years of growth and change in the area before it is dug up or paved over by the stadium construction.

"I don't think in terms of the amount of artifacts, but in terms of information, and the historical methodology that is going to allow us to reconstruct the history of this neighborhood at a level that has never been accomplished before," Goodwin said.

Associated Press
More than 1,000 visitors toured the site of the Ruth Saloon on Saturday, January 27th.

On Saturday, January 27, 1990, tours were conducted at the location of the saloon once managed by George Herman Ruth, Sr., father of Babe Ruth. The saloon was located at 406 West Conway Street, within the boundaries of the new ballpark now being constructed in Camden Yards.

The Ruth family lived in apartments above the establishment from 1906 to 1912. The Babe's sister, Mary Ruth Moberly, recalls that their parents worked twenty hour days to make a success of the saloon, cooking and serving lunches to the workmen employed in the industries of the Camden Yards district. Neither child, however, was permitted inside the saloon.

Babe spent only about three years of his youth at the Conway Street home. At age seven, he was sent to St. Mary's Industrial School in west Baltimore, a training school operated by the Xavieran Brothers. It was there that he learned to play baseball and embarked on his professional career in 1914.

The archaeological excavation of the saloon is a part of the Maryland Stadium Authority's efforts to document the historical aspects of the area while proceeding with the construction of the new ballpark. HOK Sport, the Authority's architectural consultant, retained the firm of R. Christopher Goodwin and Associates, Inc. of Frederick, Maryland to perform the archaeological excavations on the site. The archaeological work will help to complete the picture of daily life in what was a crowded working class neighborhood at the turn of the century.

On Saturday morning, the site was opened to members of the media and elected officials. Among those attending were Anne Arundel County Executive James Lighthizer and City Council President Mary Pat Clarke. That afternoon, when the excavation was open to the public, more than 1,000 visitors came to observe the remains of the row house where Babe, his mother, Katherine, his sister, Mary and his father lived. Representatives of the Stadium Authority and the archaeologist were present to explain the history of the site and the plans for the new ballpark. Among the artifacts found during the excavation were a rubber ball, bottles, soup bones and pottery shards.
Baseball, Baltimore and the Babe

Baltimore is building a new stadium—that is, an old stadium—a new-old stadium modeled on memories such as Brooklyn’s Ebbets Field. Some years ago, long after that storied playground gave way to a high-rise building, a man driving by the Ebbets Field Apartments pulled over to the curb and proudly informed his small son: “That’s where the Dodgers used to play.” The boy studied the place quietly before asking a wonderful question: “Which floor?”

There is a story just as sweet about a neglected boy from Baltimore who became the city’s most famous son and the world’s most famous child. It may sound too convenient to the tale, but the preposterous fact is he grew up on the very grounds of the new stadium at Camden Yards. The last of his father’s numerous saloons, Ruth’s Cafe, stood in the vicinity of short center field. Could it be that the city is building him a home finally?

Babe Ruth was not a foundling but he lived an orphan’s life “among tough kids in a tough neighborhood,” where he had to admit: “Right and wrong was something we left to the cops to figure out.” Committed by his parents to St. Mary’s Industrial School for Boys, George Herman Ruth fell into the care of an Xaverian Brother named Matthias, who wielded a mean fungo bat with a gentle hand. “I think I was born as a hitter,” Ruth said, “the first time I ever saw Brother Matthias sock a baseball.”

At St. Mary’s, Ruth developed his own reputation for strength and kindness. He was given to shooing younger inmates away from broken windows and taking their punishments himself. To the least visited and loneliest children, he would say: “Your folks’ll be along, just you wait. Look at me; I’m too big and ugly to have visitors.”

Jack Dunn of the International League Orioles found Ruth in the local sports pages, where he was generally murdering either Mt. St. Joe’s or Mt. St. Mary’s. When Ruth wasn’t pitching shutouts, he was catching left-handed and slugging homers that priests were having difficulty getting other priests to believe. To parole him, Dunn had to adopt him. The other Orioles took to calling him “Dunnie’s Babe.”

Baltimore’s major league team, the old American League Orioles, had long since been lost to New York City. They called themselves the Highlanders for a time, then the Yankees. If those Orioles had never left, maybe Ruth would never have left. But he was certainly not a minor leaguer and Dunn eventually had to sell him to Boston.

While it is difficult to contemplate now, in those days the Red Sox were considered historic winners, having collected six of the first 15 World Championships. The rookie pitcher Ruth won 18 games for them, then 23 and 24 before his batting average pushed him off the mound and into the order every day. As he loped to the outfield, he left behind a World Series record of 29% scoreless innings that lasted just 43 years.

The Red Sox were the property of a music lover named Harry Frazee who needed cash to back such Broadway shows as “No, No, Nanette.” Neglecting to notice that Ruth produced 29 of Boston’s 32 home runs in 1919, Frazee cursed the franchise forever by peddling him to the Yankees, for whom Ruth hit 54 home runs his first summer and 59 the next. Besides being a one-man antidote to betting scandals, he was the most amazing player and personality anyone ever saw.

“If he had never played ball,” said Waite Hoyt, a Red Sox and Yankees pitcher, “if you had never heard of him and passed him on Broadway, you’d turn around and look.” As a matter of fact, in places where baseball has never been practiced, the name Babe Ruth still is as commonly known as any president’s or king’s. After cancer finished him at 53, the writers who had traveled on the trains with Ruth, sharing his yeasty humor and beer, toiled overtime to keep him alive. But it was increasingly frustrating work. “Some 20 years ago,” said one of the best of the breed, Tommy Holmes, “I stopped talking about the Babe for the simple reason that I realized that those who had never seen him didn’t believe me.”

Legions of Ruth biographers—Robert Creamer, Bob Considine, Dan Daniel, et al., all corroborated his legendary appetite. It was true, he did enjoy searching out farmhouses that advertised “chicken dinners,” hoping for the chicken dinner and daughter combination. He was absolutely a glutton for hot dogs. And his Homeric thirst was no myth. But neither was his good-heartedness. To a man they found he was the gentle creature of the caricatures, promising medicinal homors to carcinogenic moppets and coming through much of the time. He was agreeable, he was polite, he could even be gallant. He liked people. Think of that and apply it to today: a star who liked people.

When John Steadman of the Evening Sun first thought of “Babe Ruth Park,” the Orioles executives reacted coolly. They said Ruth belonged to New York. (One can only wonder how many of the executives belong to Baltimore.) They think “Oriole Park” has a bright, beautiful ring. Maybe the Baltimore fans should weigh in on this. Perhaps all the Orioles fans should.

“Camden Yards” has its own lilt, but as a subtitle on the order of Chavez Ravine or Coogan’s Bluff. The Yankees have The House That Ruth Built, Baltimore should have The House Built For Ruth. Isn’t it fitting and right?
The Orioles' new park will be near the site where the Babe was born.

she was 89 and in good health although recovering from a recent fall. "It would be nice. He was a good ballplayer and a wonderful person. He helped everyone under the sun. If a poor person needed food, he gave them the money for the food."

Old-Time Flavor

Michael Gibbons, the executive director of the Babe Ruth Museum, said the park would be named after the baseball legend. Gibbons, a native of Maryland, has spent his career studying the history of baseball and has written several books on the topic.

"Babe Ruth is the most prestigious name in American sports—certainly in base-ball," he said. "He was the most celebrated athlete in the United States, maybe in the world. He was Baltimore's most famous son."

"Some people might point to his high living as an example of the excesses that often accompanied a career in professional sports. But the truth is that Ruth always put the game first. He was known for his dedication to the sport and his commitment to his teammates."

In the off season, Babe Ruth, second from right, helped out his father, right, by tending bar as seen in this picture taken around 1915. The bar, one of many owned by the elder Ruth, stood on a site about two blocks from that of the new park, below and left, being built in the Camden Yards section of Baltimore. The young man also got into neigh-boorhood fights, his sister recalled. "Boys called him a sissy because his last name was Ruth," Gibbons said. "The ones who called him sissy went up at the turn of the century, why do we think more people than usual have a problem with that?"

"As a child, he was very sensitive about his family's name and he was always looking for ways to prove himself."

The new ball park is so entwined with Babe Ruth's name in American sports—certainly in the district in Baltimore along the waterfront. "The greatest field ever built," he pros-claimed. "And it's going to be able to host the old-fashioned de-signs that defined the game."

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I'll dance at home plate on opening day at Baltimore's new ballpark if I can make it," says 90-year-old Mary Moberly. "And if they name it Babe Ruth Stadium."

Okay, so he was a Yankee for most of his career. He was also a Baltimore boy who became the greatest and most popular player in the world, Moberly reasons. Besides, Babe was her brother.

It's not known when a decision on the name will be made. But one thing is certain: Mary Moberly would feel right at home on the Orioles' new field when it opens in 1992. She and Babe lived above the saloon on West Conway Street, where center fielders will soon be catching fly balls. From her bedroom window she could watch trains and trucks at a big brick warehouse that still stands beyond what will be right field. She may even have eaten from some of the china that's been dug up at the site.

"It was a very rough neighborhood," she recalls. "I was never allowed out at night. Babe did not have to look far to find plenty of mischief and boys to run with."

Babe was 5½ years older than Mary, but his little sister had orders to watch over him.

"When I started going to school, Mother told me to make sure Babe was in school before I went to my classroom. But that made me late every morning, and the teachers got after me. It didn't do any good, anyhow. Babe hooked school every chance he got. "Babe never minded anybody. Daddy would take Babe over his knees and give him a good beating."

Babe was Little George—his father was Big George—until he was nicknamed Babe when he joined the Orioles, then a minor league team, in 1914. He grew to 6-foot-2, like his father.

"Mother was tiny, like me," says Moberly, who never stood taller than 4-foot-10 and measures only about 4-foot-5 since she broke her hip two years ago. She has lived with her daughter in Hagerstown since her husband, Wilbur, a cutter for a menswear manufacturer, died in 1964.

A small 1920s photo of Babe in a swimsuit sits on her dresser. It's inscribed, "To my lovely and only sister from her brother, Babe Ruth—July 21, 1928."

Says Moberly: "He was a little wild, but I loved him dearly." —NORMAN L. MACHT
APPENDIX IV

RESUMES OF KEY PROJECT PERSONNEL
R. CHRISTOPHER GOODWIN, Ph.D.
PRINCIPAL INVESTIGATOR

Dr. R. Christopher Goodwin, Ph.D., is President and Director of Research of R. Christopher Goodwin & Associates, Inc. A native of the Washington Metropolitan area, he is a former Yale Peabody Museum (1976) and Smithsonian Institution (1979-1980) Research Fellow.

Dr. Goodwin is recognized as one of the nation's leading experts in cultural resource management. He has been a contractor to the U.S. Army Corps of Engineers (Baltimore, Memphis, New Orleans, Pittsburgh, Savannah, and Vicksburg Districts) on numerous projects. During the past ten years, he has served as Principal Investigator for major cultural resource investigations conducted by his firm within the Baltimore-Washington Metropolitan area. These projects have included such large-scale efforts as the architectural and archeological investigation at Baltimore's Camden Yards Stadium Site; the archeological assessment of the Bachelor's Hope Farm in St. Mary's County, Maryland; Phase III data recovery projects at three Archaic period Russett sites, in Anne Arundel County, Maryland; and, most recently, the Phase II and III investigations of the Signal Hill/Bobby/Doll tracts, site of a portion of the Confederate Winter encampment of 1861-62, in Prince William County, Virginia.

Dr. Goodwin's expertise also has been called upon for historic preservation planning projects, and for industrial and governmental agency compliance with federal and state laws and regulations governing archeological and historic sites. He has served as Principal Investigator on preservation and compliance projects for the Southeast and Southwest regions of the National Park Service (NPS); the Department of Energy (DOE); Her Majesty's Service, U.K.; the Louisiana Division of Archaeology; major utility companies, including Texaco, Southern Natural Gas, and Baltimore Gas and Electric Company; the U.S. Fish and Wildlife Service, Northeast Region; the Maryland Historical Trust; and for Peabody Coal. The geographic range of research and compliance projects completed under Goodwin's direction encompasses Maryland, Pennsylvania, West Virginia, Illinois, Virginia, Arkansas, Florida, Georgia, Louisiana, Texas, and Puerto Rico. Dr. Goodwin has published widely in the fields of both prehistoric and historic archeology. His areas of particular expertise include cultural resource management, cultural ecology, prehistoric demography, ceramic analysis, field methods in archeology, human osteology, and historic archeology. He is a court-qualified expert in both historic archeology and in cultural resource management. In addition to numerous technical reports and monographs, Dr. Goodwin has contributed articles to several scholarly journals, including American Anthropologist, American Antiquity, the Florida Anthropologist, and American Scientist.
ELIZABETH S. PEÑA, M.A., PH.D.
MATERIAL CULTURE SPECIALIST

Elizabeth S. Peña, M.A., Ph.D. was awarded a B.A. in Classical Archaeology (1983) from the University of Michigan; in connection with her undergraduate studies, she attended the Intercollegiate Center for Classical Studies in Rome, Italy. Dr. Peña received the M.A. (1987) and the Ph.D. (1990) from Boston University; her dissertation was entitled Wampum Production in New Netherland and Colonial New York; The Historical and Archaeological Context.

Dr. Peña has served as a project director for a private archeological consulting firm, and has authored nine cultural resource management reports. She also has experience in the public sector, and has held positions with the State of New York and Massachusetts, as well as on projects in Italy, Tunisia, and Israel. She has taught at Boston University and at Skidmore College. Articles by Dr. Peña have appeared or have been accepted for publication in the American Journal of Archaeology, the Journal of Field Archaeology, and in The Bulletin of the New York State Archaeological Association.

Since joining Goodwin & Associates, Inc., Dr. Peña has been responsible for the analysis of major collections recovered from the Maryland Stadium project and the Icehouse Square/Gettysburg Bottling Works site. Currently, Dr. Peña is re-analyzing previously recovered artifacts from Sully Plantation, and she will complete comparative analytical studies for future collections from that site.
MARTHA R. WILLIAMS, M.A., M.Ed.
HISTORICAL ARCHEOLOGIST

Martha R. Williams, M.A., M.Ed., Historical Archeologist, holds a B.A. (1960) from Lebanon Valley College; a Master of Education, with emphasis in the Social Sciences, from the University of Pennsylvania (1965); and an M.A. in History, with emphasis in Applied History, from George Mason University (1987). She was a Coe Fellow in American Studies at SUNY-StonyBrook in 1982 and 1989. While completing her internship with George Mason University, she co-authored the Heritage Resource Management Plan for Fairfax County, Virginia.

Ms. Williams has had extensive experience in cultural resource management and in historical archaeology in Northern Virginia. As co-director of the Fairfax County Seminars in historical archaeology for high school students (1973-1987), she directed or assisted in the investigation of fifteen archeological sites in Fairfax County. Her experience includes volunteer work on both prehistoric and historic sites with the Fairfax County Heritage Resources Branch, for the City of Alexandria, for the Virginia Division of Historic Resources, and for the National Park Service.

Ms. Williams' archeological experience also includes a field school with Colonial Williamsburg (1972), and employment with the National Park Service as an archeological laboratory technician. Since joining Goodwin and Associates, Inc. in 1989, Ms. Williams has served as historian and as Project Manager on Phase I and II projects in Maryland and Virginia. Her duties with Goodwin and Associates also have encompassed public outreach functions for the firm.

Ms. Williams currently serves as Vice-President of the Archeological Society of Virginia, and is Chair of the Education Committee for the Society for Historical Archaeology. She has written for the Quarterly Bulletin of the Archeological Society of Virginia, the Yearbook of the Historical Society of Fairfax County, Museum News, the Federal CRM report, and the National Park Services in-house publication, Interpretation. She has spoken numerous times to archeological and educational organizations, most recently at the "Preservation Challenges of the 90s" Conference, sponsored by the National Park Service in June 1990. In May of 1991, Ms. Williams was awarded a Distinguished Achievement Award for Historic Preservation by the Fairfax County History Commission.