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A PHASE IA SECOND LEVEL TOPIC-INTENSIVE DOCUMENTARY STUDY FOR THE ATLANTIC TERMINAL URBAN RENEWAL AREA BROOKLYN, NEW YORK

DRAFT

prepared for

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and

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ABSTRACT

A Phase IA second level topic-intensive documentary study was conducted by John Milner Associates, Inc. for portions of three blocks in Brooklyn, New York that will be potentially affected by construction of three-family row houses and associated facilities. The urban renewal project is being developed by the Atlantic Housing Corporation and Atlantic Center Housing Associates. Deeds, tax records, census records, and city directories were researched in order to trace the development of the 115 lots within the project area, which was first divided for residential use in the late 1840s. A series of historic maps was used to examine land use and structural changes through time, as well as to identify areas potentially sensitive for archeological resources. In addition to the map study, a variety of methods was used to assess previous disturbance to the project area, including a site visit, examination of construction plans showing previously installed utilities, and information, including photographs, of unauthorized archeological activities immediately to the north of the project area.

A large portion of the project area has remained residential throughout its history. While it was first developed by upper middle-class commuters who, for the most part, owned their homes, many of the structures remained standing in altered form until the present housing project was planned in the 1970s. The neighborhood became increasingly commercial along Atlantic Avenue, but the interior of the blocks housed a mixture of working-class owners and tenants in single and multi-family dwellings. Most of the backyards along S. Oxford, Cumberland, and Carlton streets were never built over. The earliest houses in the neighborhood were connected to public sewers in the 1860s; houses built later would have had indoor plumbing from the beginning. Archeological deposits, including filled features (i.e. cisterns and privies) associated with the early households, are potentially eligible to the National Register of Historic Places. These deposits could provide new information on efforts of the middle class to adopt aspects of an upperclass genteel lifestyle in order to attain respectability, on expanding consumerism in response to the Industrial Revolution, on the changing role of women, and on the realities of health and hygiene in the urban environment. Significant comparisons could be made with previously excavated contemporaneous sites in Manhattan and Brooklyn and with the material recovered on the Courthouse Block in Manhattan that is presently being analyzed. Testing for the presence of intact archeological resources is recommended on a sample of 17 lots within the project area, which represent a cross-section of the earliest residents who lived there.

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1. INTRODUCTION

1.1 Purpose and Goals of the Investigation

The Atlantic Housing Corporation and the Atlantic Center Housing Associates, L.P. are planning to develop portions of three city blocks in the Atlantic Terminal neighborhood of Brooklyn. The development includes the construction of new affordable three-family row houses, a multi-family project, a park-like open space, and a small commercial component along Atlantic Avenue, the southern boundary of the project area. The planned residential units will face Portland Avenue, S. Oxford Street, Cumberland Street, and Carlton Avenue. Similar residential units have already been completed on the northern half of two of these blocks. Two configurations have been proposed, one including a semi-circular drive at the western end of the development, and the other conforming to the existing linear arrangement of streets.

As part of New York City's commitment towards the appropriate treatment of significant historical and archeological resources, the Department of Housing Preservation and Development (HPD) and the Landmarks Preservation Commission (LPC) agreed to facilitate the preparation of an archeological survey for this project area. This report was completed in compliance with a Generic Scope of Work for a second level topic-intensive documentary study (provided by the LPC), including the identification of archeological resources that either do or do not have the potential to meet the National Register of Historic Places Criteria of Eligibility in accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended). As requested, the report includes a base map (drawn at a scale of one inch for every 60 feet) showing locations with the potential for the presence of such archeological resources.

1.2 Description of the Project Area

The project area is located in the Atlantic Terminal section of downtown Brooklyn (Figure 1). It includes the southern half of the block bound by Hanson Place on the north, S. Portland Avenue on the west, Atlantic Avenue on the south, and S. Oxford Street on the east; the southern third of the block bound by Hanson Place and Fulton Street on the north, S. Oxford Street on the west, Atlantic Avenue on the south, and Cumberland

Street on the east; and two thirds of the block bound by Fulton Street on the north, Cumberland Street on the west, Atlantic Avenue on the south, and Carlton Avenue on the east (Figure 2). The northern portions of the blocks between S. Oxford and Cumberland and between Cumberland and Carlton have previously been developed (Plate 1) as part of Phase I of the Atlantic Center Housing Construction Project.

Although most of the standing structures within the project area have been demolished in anticipation of construction (Plate 2), portions of intact adjacent blocks to the north of the Atlantic Terminal Development reflect the once residential character of the neighborhood (Plate 3). Structures still standing in the project area (Plates 4 and 5) suggest the quality of the houses that once lined the streets. The only structure that will remain after development is a house associated with a tennis club on S. Oxford Street (Plate 5).

Two historic districts have been designated in the immediate vicinity. The Brooklyn Academy of Music Historic District, to the northwest of the project area, is bound on the south by Hanson Place, and extends almost to S. Portland Avenue. The Fort Greene Historic District includes portions of S. Portland Avenue, S. Oxford Street, Cumberland Street, and Carlton Avenue, but to the north of Fulton Street, which provides the northern boundary for the eastern portion of the Atlantic Terminal Redevelopment project area. Both historic districts are comprised of three- and four-story brick or brownstone fronted houses, "the majority of which were built on speculation to house the burgeoning middle class population then moving to the city of Brooklyn from New York City and surrounding areas" (quoted from the Fort Greene Nomination Form in Historical Perspectives 1985:17).

Atlantic Avenue, the southern boundary of the project area, was historically, and continues to be, one of Brooklyn's major thoroughfares. Although the portion of the avenue within the project area was previously lined with commercial establishments, including gas stations and factory buildings, most of them have been taken down, leaving open vacant lots and parking areas. The Daily News has a plant at the southeast corner of Carlton Avenue and Atlantic Avenue, and the Flatbush Avenue Terminal for the Long Island Railroad extends for about three long blocks along the southern edge of Atlantic Avenue.

1.3 Previous Research

A Phase IA Archaeological Impact Report was prepared for the Atlantic Terminal and Brooklyn Center Projects by Historical Perspectives in 1985. The project area considered in that report was much larger than the present project area, extending along Atlantic Avenue from its intersection with Flatbush Avenue on the west to Carlton Avenue on the east. It included the present project area and the area immediately to the north that has already been developed. Because the earlier Phase IA study addressed the general history of the area, including prehistoric occupation, these subjects are not discussed in any depth here. This report, based primarily on deed, census, directory, and tax record research, focuses on the specific history of the lots that will be potentially affected by the proposed development, and the implications of that development for potential archeological resources. The original Phase IA report (and additional research) have been used to evaluate the potential significance of those resources within the context of general trends and themes in Brooklyn's development.

2. HISTORICAL BACKGROUND AND CONTEXT

2.1 Historical Documentation and Methods

The historical research for this report was conducted primarily in and near the borough of Brooklyn; conveyances (transfers of real property) for the 115 lots within the project area were researched at the Borough Office of the Register of the City of New York; tax assessments for about 2300 landowners over time were reviewed at the New York Historical Society; background information on the class and ethnicity of the population of the project area was derived from the study and analysis of Federal Censuses of Population for the project area (1850-1920) at the Federal Records Center (Mid-Atlantic Region) of the National Archives in Philadelphia and the Brooklyn city directories at the New York Public Library (5th Avenue and 42nd Street in Manhattan). Maps and other primary works were examined at the Brooklyn Historical Society in Brooklyn Heights and information on the installation of sewer lines vis a' vis individual homes was found at the Sewer Department of the City of New York. Information on the real estate boom in Brooklyn during the 1840s and 1850s was researched at the New York Historical Society on Central Park West in Manhattan.

2.2 Regional Overview

The first inhabitants of the Atlantic Terminal Urban Renewal Project Area (hereafter referred to as "project area") were Native Americans, called the Canarsee (Canarsie). The Canarsee lived in western Long Island along the shores of the East River, Gravesend Bay, Sheepshead Bay, and the Atlantic Ocean, as well as along the creeks, coves, and rivers that served as transportation routes between the islands which now make up the New York City metropolitan area (Bolton 1934:144). In their search for planting sites for grain and maize, the Canarsee blazed trails into the interior of Long Island to locate "large tracts of upland fields" (Bolton 1920:130). The main Native American trail on Long Island ran from what later became the Fulton Ferry landing in Brooklyn eastward. The present Flatbush Avenue (from the corner of Fulton and Nevins Streets) lies west of the path of the old trail to where the trail "diverged east of [Flatbush Avenue] at [Hanson Place], crossing Atlantic Avenue at Fort Greene Place", just west of the project area (Bolton 1920:141-142).¹

¹For a fuller discussion of the Native American influence within the region of the future Atlantic Terminal Urban Renewal Area before the arrival aof the Dutch in 1621, refer to Historical Perspectives's "Project I-A

Henry Hudson, an English seaman in the pay of the Dutch, first landed in this general area in 1609. Other Dutch followed, and by 1621, settlement was made on Manhattan Island, which Peter Minuit purchased from the Canarsee for the equivalent of twenty-four dollars in trading goods. After the Dutch settled "New Netherlands" (now New York), the governing body of the Netherlands, the Staats-Generale (Estates-General), awarded administrative control of the area to the Dutch West India Company, a trading company. The company, among its other prerogatives, had the power to grant newly acquired lands to individuals. A small settlement developed at the site of a ferry service to New Amsterdam, and to the rear of the waterfront a village was established in the approximate location of the present day Borough Hall at Joralemon and Court streets (Historical Perspectives 1985:10).

2.3 Early Ownership of the Project Area

2.3.1 The Cowenhoven Patent

The area of Kings County that would become incorporated into the City (later Borough) of Brooklyn and be subsequently known as the Atlantic Terminal Urban Renewal Area was part of a patent (land grant) bestowed on Gerrit Wolfertsen Van Couwenhooven by the Dutch West India Company in 1647 (Stiles 1869:87). The "first tier" of patents centered on the shore of the East River where a ferry service had been established; the "second tier" of patents was located beyond the waterfront, further inland (Stiles 1869:87). Gerrit Van Couwenhooven's patent was located on the "second tier" of patents situated about one and a half miles southeast from the ferry (later the Fulton Ferry; still later the access point of the Brooklyn Bridge) in the village of "Breucklen". The word "Breucklen", or "Brujkleen" (anglicized to "Brookland" after the English assumed control in 1664), translates to "free loan", as the early colonists could purchase their land for a quit-rent of one-tenth of their farm produce after ten years (Stiles 1869:86-91).

Archaeological Impact Report for the Atlantic Terminal and Brooklyn Center Proejcts, Brooklyn, New York " (1985:3-9) and Reginald P. Bolton: *Indian Life of Long Ago in the City of New York* (New York: Schoen Press, 1934).

2.3.2 The Cowenhoven Homestead

The original Van Couwenhooven patent was divided among Gerrit's heirs at his death; one of his sons, Jan Gerritsen Van Couwenhooven, purchased the property which would include the project area in two transactions in 1687 and 1689, thus giving him three hundred acres of farmland (Kings County Liber of Conveyances 1:45; 1:176)².

Several generations of Van Couwenhoovens (later Cowenhoven) lived and farmed on the homestead, which stretched roughly from Fort Greene Park west to the present intersection of Fulton, Rockwell, and Lafayette Streets; then south and west to the intersection of Atlantic and Flatbush Avenues at Fort Greene Place; and ³thence southeast on Atlantic Avenue to Fulton. The family lived in "a large, heavy building of the Dutch type, with humpbacked roof, shaded by enormous willows and fronting south" on the Flatbush Turnpike (later Flatbush Avenue) (Stiles 1869:134). The specific location of the house (demolished about the time of the Civil War) was the former 195 Fort Greene Place, 160 feet north of Atlantic Avenue, on the present Block 2001, Lot 3 (Swift & Co. erected a meat packing and processing plant at that location [187-199 Fort Greene Place, since demolished]) (Hyde 1915)⁴.

On July 1, 1784, the estate of Rem Cowenhoven, deceased, conveyed thirty acres of land (including a section of the project area roughly south of the present Hanson Place and east of South Portland Avenue) to John Cowenhoven, one of Rem's brothers (Liber 6:291). On May 23, 1798, Rem Cowenhoven's heirs conveyed two sections of the homestead—one parcel of one hundred acres—roughly the area north of the present Hanson Place and west of the present South Portland Avenue (Historical Perspectives 1985:11)--to Treadwell Jackson, an in-law; and a parcel of about two hundred acres—including a portion of the project area east of the

² The term "liber" comes from the Latin for "book". Hereinafter, deeds and conveyance records concerning the project area will be referred to as being found in a particular "Liber" (or deed book) unless noted otherwise.

⁴For more information on the meat packing sites adjacent to the project area see Historical Perspectives' Phase I-A Report (1985:19, 23, 25)

present Atlantic Avenue and north of Carlton Avenue-was jointly conveyed to two of Rem's sons and to Rem's brother, John (Liber 7:101; 7:105).

John Cowenhoven's holdings were, in August of 1808, divided among his heirs at law, one of whom was his son, another John Cowenhoven. This John (or "John I."), who lived in the family house and farmed the property, received eight separate parcels of varying size, totaling over one hundred and thirty acres (Liber 13:526). He farmed the property for fifteen years; then on August 15, 1823, Cowenhoven and his wife Eliza turned over control of their property (including the future project area) to a board of trustees, consisting of their neighbors (and relatives), Judge Leffert Lefferts, General Jeremiah Johnson, and silversmith John Targee. These trustees were granted the power to "in their discretion grant, bargain and sell the hereby granted premises or any part or parcel thereof with the appurtenances in fee simple or any less estate for such price or prices and either at a public or private sale and for cash or upon a credit as they might deem proper..."(Liber 13:526).

It would take over twenty years before the trustees would exercise any discretion regarding the property. That anything was accomplished was due to the efforts of the four children of John and Eliza Cowenhoven. On March 31, 1844, John Lefferts Cowenhoven and his three sisters sued the trustees in order to remove them and appoint three new Trustees who would fulfill the stipulations of the trust. The suit was successful; the old trustees were relieved of their duties, and the new board of trustees—Cowenhoven, Samuel Jones Mumford, and Cyrus Porter Smith—immediately set about dividing up the Cowenhoven Homestead into building lots. (Liber 118:144)

2.4 Early Development of the Project Area

2.4.1 Subdivision of Cowenhoven Homestead

By the early nineteenth century, Brooklyn was being transformed from a small farming village into a goodsized city. In 1814, steam-powered ferryboats replaced the older and much slower vessels which crossed the East River from Canal Street in Manhattan to Fulton Street in Brooklyn (Ment 1979:17). The new boats, faster and smoother than the old rowboats and barges, stimulated Brooklyn's transmutation into "a substantial urban center" (Ment 1979:37). Manhattan businessmen saw Brooklyn as far enough away from Manhattan to be a good place to raise a family but, thanks to the improved ferry service, close enough to their places of business in Lower Manhattan. With the upper reaches of Manhattan Island still largely farmland and villages, it took longer to get from there to the Battery than it did from Brooklyn.

To meet the progressive exigencies of Brooklyn's continual expansion, the village was incorporated as a city in 1835 (Stiles 1869:97). To facilitate projected development, Alexander Martin, City Surveyor of Brooklyn, in accordance with a municipal ordinance mandating that the streets be regularized, platted streets and city blocks on the vacant land within the city limits, and mapped them. The map, called the Grid Plan, placed the area of the Cowenhoven Homestead into the newly constituted Seventh Ward (later the Eleventh, and still later the Twentieth), broken up into sixteen city blocks, which are designated as Blocks 2001 through 2016. Figure 3 is Martin's 1834 Map (the 1839 Map is not reproducible). The three city blocks that make up the project area were designated as Blocks 2006 (then Block 70); 2005 (71); and 2004 (72), and included (South) Oxford Street; (South) Portland Street; Cumberland Street; and Carlton Avenue. The area was bordered by Atlantic Avenue on the south, running southwest-southeast; and to the north by University Place (now Hanson Place) running east-west, and Fulton Street, running east-southeast--west-southwest (Martin 1834).

However, these streets-except for Fulton Street and Atlantic Avenue-as with most of the streets on the map east of Rockwell (then Navy) and Ashland (then Raymond) Streets, had not been physically actualized at the time of the 1839 Grid Map, with Atlantic Avenue only extending as far as Fifth Avenue (Historical Perspectives 1985:14), or about four hundred feet from its present intersection with S. Portland Avenue. It was not until 1844 that the Cowenhoven Trustees hired Silas Ludlam, a local surveyor, to survey the area of the homestead and map out building lots. The resulting maps, dated April 23, 1844, show a total of four hundred and fifty lots of varying sizes (Ludlam 1844) (Figure 4).

The project area originally was composed of one hundred and ninety-six building lots over a portion of three city blocks. These blocks were two hundred feet wide, with the streets running north-south seventy feet wide, and on average, about eight hundred feet in length. (Atlantic Avenue was later widened to one hundred twenty feet in width, while Fulton Street and University Place [now Hanson Place] were eighty feet in width (Hyde 1915).

The lots facing on the north-south streets were uniformly one hundred feet deep, separated in the middle of the block by a "center boundary line" which was sometimes marked by a party wall separating the lots. The frontage of the lots varied--on Block 72 (2004), the width of the lots, front and rear, averaged twenty-one feet, six inches; on Block 71 (2005), the frontage averaged twenty-five feet; and on Block 70 (2006), the frontage averaged twenty feet (Ludlam 1844; Hyde 1915; deed analyses).

2.4.2 Initial Formation of the Project Area

The building lots on the old Cowenhoven family farm were offered for sale by the trustees from 1844 through 1853, with the first lots sold about a month after the homestead was subdivided (Cowenhoven's Trustees to George B. Fisk, May 22, 1844, Liber 19:529). The lots were offered for sale in a number of ways. Advertisements announcing the availability of building lots were taken out in the commercial and mercantile newspapers of the period (*Journal of Commerce*); also, the trustees and lot owners would get together and arrange for a "public vendue" or auction of the parcels. One such auction was advertised in a large brochure published by the auctioneer. In the pamphlet, the auctioneer, Albert H. Nicolay, described "186 choice and valuable vacant lots, and 27 houses and lots...in the City of Brooklyn!" (Nicolay 1853:1). Several of these lots are found in the project area.

According to Brockett (1884:831), the person who purchased parcels was primarily "a builder, an architect, a real estate dealer [who] obtained a tract of land consisting of two to a hundred lots--25 x 100--often paying a small percentage of the value of the land...and applied to [commercial] banks, savings banks, insurance companies, or private capitalists for a builder's loan sufficient or nearly sufficient to enable him to build houses of the style he intended."

The settlement of the project area was aided by the introduction of several modern amenities. The Brooklyn & Jamaica Railroad (later part of the Long Island Railroad) ran passenger trains "on a fixed route, on a published schedule, and at a uniform fare" (Ment 1979:38) in the area as early as the 1830s. The Brooklyn & Jamaica ran from the Fulton Ferry in Brooklyn out to Queens along Atlantic Avenue, first with steam locomotives, and later (after 1859) with horse-drawn carriages, thus encouraging Manhattan-based businessmen to make their home in the project area (Stiles 1869:418-420).

Also, with the city of Brooklyn experiencing its expansion "into the third largest city in the United States in 1860" (Ment 1979:38), the development of municipal services became a necessity. Starting in 1860, the city placed a six-inch water main down Atlantic Avenue, with mains of the same diameter being laid in S. Portland Avenue, S. Oxford Street and Carlton Avenue by March of 1861 (Maps in Borough Office of the Sewer Department of the City of New York, Brooklyn Municipal Building; Hyde 1915). Sewer connections to the building lots soon followed (Registers and Indices of Applications for Sewers, Borough Office of Sewer Department of the City of New York, Brooklyn Municipal Building).

2.4.3 Early Ownership

A great deal of buying and selling took place during the first few years in the project area's development, with close to one hundred property transfers during the first five years (Index of Conveyances 1687-1895, Borough Office of the City Register of New York, Brooklyn Municipal Building)--as speculators and investors bought and sold and bought again large numbers of parcels. By 1859, the volume of transactions began to abate as permanent residents purchased and moved into the two-story detached frame residences,

and the two and three-story brick rowhomes with basements on the north-south streets (Hyde 1915). A number of these speculators also become residents of the project area, while owning a number of rental properties within walking distance of their primary residence.

The neighborhood slowly began to take shape. In 1850, the Washington Avenue Protestant Reformed Dutch Church laid a cornerstone for a new edifice at Hanson Place and S. Portland Avenue, to the north of the project area; however, the church was disbanded soon after (Reformed Protestant Dutch Church of New York City to Edgar S. Van Winkle as assignee of Charles Squire, Liber 214:214, April 1, 1850), and the property eventually was sold in 1860 to the Hanson Place Baptist Church, which erected a building that still stands (Stiles 1884:995, 1078)⁵.

Initial purchasers of building lots included speculators in land, who would purchase large blocks of lots for almost immediate resale (for example, Cowenhoven's Trustees to George S. Howland, June 6, 1844, Liber 120:246, for one hundred and twelve building lots on four city blocks, including the project area, purchased for \$10,500; George S. Howland and Elmina W. Howland to William S. Packer, July 24, 1844, Liber 121:381, for fifty-two lots, sold for \$5,000). Carpenters, brickmasons, and house builders were especially interested in constructing "well-appointed residences" (Nicolay 1853) on these lots (for example, Cowenhoven's Trustees to Eli Crist, carpenter). The wealthy–and not-so-wealthy–with money that they sought to invest in real estate (for examples, see Cowenhoven's Trustees to John Morrison, ropemaker of Brooklyn, June 6, 1844, for three lots costing \$300, Liber 120:46; Cowenhoven's Trustees to Sarah Latham, widow, of Brooklyn, [three transactions totaling sixteen lots on present Block 2004], Libers 135:159, 154:264, 154:270; Cowenhoven's Trustees to Walter Whitman, Jr., July 17, 1853, Liber 311:277) and professional real estate agents and brokers, some of whom represented other investors (Power of Attorney granted by Mary M. Barton of Augusta, Georgia to Augustus Knowlton, Kings County Liber of Powers of

⁵The building is now occupied by a Seventh-Day Adventist Church. (Trustees of Hanson Place Baptist Church to Hanson Place Seventh-Day Adventist Church, Liber 9148:275, May 17, 1964)

Attorney 1:21, signed June 17, 1846, recorded August 6, 1846; cited in Cowenhoven's Trustees to Mary M. Barton [two separate transactions], Kings County Liber of Conveyances 173:274, 280, dated January 20, 1848) also purchased property in the area.

2.4.4 Early Occupants

By the enumeration of the 1860 Federal Census of Population, the project area began to take on the appearance it would display for the next three-quarters of a century. A sample of the residents of the project area in the 1860 Federal Census reveals that the majority of the residents on the north-south streets resided in single-family homes that they themselves owned, or rented from near by neighbors. The residents of S. Portland Avenue, S. Oxford Street, Carlton Avenue and Cumberland Street were primarily white-collar workers and professionals. For example, a list of households on S. Oxford Street (Block 2004) shows the following occupations--hardware merchant; dry goods merchant; Presbyterian minister (New School); accountant; real estate broker; paper dealer; jeweler; speculator [in land]; "range" [cooking stoves] manufacturer; "scribe for tract society"; master builder; clothing merchant; "gas fixture" [manufacturer]; and "housekeeper"(female). Most of these heads of household appear in the city tax assessments as property owners--some owned other properties in the area as well as their primary residence. Their net worth, as estimated in the census enumeration, totals \$197,000 worth of real estate and \$216,800 worth of personal property (Federal Census of Population for Third District of the Eleventh Ward of the City of Brooklyn, County of Kings, State of New York, 1860:626-628).

The census enumerations also show that these residents were primarily native born Americans; a majority of the adults were natives of New York, as were most of the children. As to other places of origin, New England predominated-primarily Massachusetts and Vermont, with New Jersey, Connecticut and Pennsylvania following in that order. Among foreign-born householders, England predominated as the country of origin, with the German states of Baden and Hamburg and British Canada (New Brunswick, Nova Scotia) following. Natives of Ireland were represented in the area as servants; no African Americans were represented other

than a twenty-eight year old native of Pennsylvania who worked as a maid for one of the residents of the block.

Residents of the project area along Atlantic Avenue (and Fulton Street, to the north of the project area) rented living space in multiple family dwellings in close proximity with structures given over to commercial development. A sample taken from Block 2004-- near Atlantic Avenue between S. Oxford Street and Cumberland Street--shows that these residents were primarily unskilled (laborer, washerwoman, drayman) and semi-skilled (shoemaker) laborers and small shopkeepers. They were of foreign birth, with the predominant country of origin being Ireland. There were also two natives of England (some with Irish surnames); Irish-surnamed natives of New York who may have been the first generation born in the United States; and a native of Hamburg, then one of the German city-states. Most of the children had been born in Ireland or England, which may show that most of these people were very recent immigrants to the United States. Only one person, Irish-born laborer Peter Keyes, owned the building where he lived (Effingham H. Nichols and Elizabeth S. Nichols to Peter Keyes, Liber 228:91, November 22, 1850)—and he rented portions out to two other families; the residents held a total of \$820 in personal property. In this instance, \$200 worth was held by Keyes, while \$500 worth was held by a salesman named Edward Savage, which probably consisted of the net worth of his stock. (Liber 228:629-630).

The 1870 Federal Census does not show much of a difference in the ethnic and class background of the residents on S. Portland Avenue and S. Oxford Street within the project area. At this time a large number of persons enumerated in the 1860 census are still living in their homes; those who have moved in the ten years since the last enumeration were largely replaced by people who reflect the same cultural background. Some changes can be found along Atlantic and Carlton Avenues and Cumberland Street. Foreign-born residents---mostly Irish and German -- now make up a number of the owners of the properties along these thoroughfares, where the tax assessments and deed books from the 1850s to the middle of the next decade show that most of the owners were predominately native-born Americans. At this time, many of the Irish and Germans formerly

restricted to the outer streets of Atlantic Avenue and Fulton Street are purchasing those buildings, and then buying homes on the north-south streets contiguous to their properties—mostly on Carlton Avenue and Cumberland Street. Where the houses on S. Portland and S. Oxford were tenanted either by the original owners, now growing elderly (1860-1880 Federal Census of Population), or subsequently by their children, the houses on Carlton and Cumberland—particularly the former—were owned by absentee landlords, people who may or may not live within walking distance of the project area, but used the property solely for investment purposes as rental property. To illustrate, during the 1890s, the structures on Lots 78 through 89 (460 through 480 Carlton Avenue/729 Atlantic Avenue) on Block 2006 were owned by people who did not live at those addresses--except for 464 Carlton Avenue (Lot 80), which was a livery stable (Brooklyn City Directories).

Many of these new owners followed in the footsteps of their predecessors and speculated in real estate; names like Polhaus, Lang, Moriarity and O'Connell are found in the tax assessments as owning a number of properties in the project area; most, if not all of these people, did not live in the project area--for example, an Irish-born "real estate agent" (Federal Census for Third District, Eleventh Ward of City of Brooklyn, 1860:589) named John Curtin, owned dwelling houses at 201 and 203 S. Oxford Street (Block 2005, Lots 3 and 4) and business property at 691 and 693 Atlantic Avenue (Block 2005, Lots 99 and 100) throughout the 1870s and 1880s. It is only after 1886 that he moved into the area, to a three-story brick residence at 186 S. Oxford Street (Block 2004, Lot 69).

As this trend continued into the early 1880s, a larger proportion of Irish and German owned properties along Atlantic Avenue, along with properties stretching north up Carlton Avenue and Cumberland Street. However, many of the owners of these homes had moved elsewhere by this time (Brooklyn City Directories), and the 1880 Federal Census now shows the emergence of other ethnic groups – Italians and African Americans--into the project area, as renters of properties on Cumberland and Carlton (Federal Census for

Supervisor's District 2, Enumeration Districts 201 through 203, covering portions of the Twentieth Ward of the City of Brooklyn, Kings County, New York).

2.5 Transformation of the Neighborhood

2.5.1 Demographic Shifts and Commercialization

By the turn of the twentieth century, the blocks to the south and west of the project area reflected the growth of commercialization. In 1905, the new Long Island Railroad Terminal at Atlantic and Flatbush Avenues was completed, thus giving the name "Atlantic Terminal" to the surrounding area (Historical Perspectives 1985:19). About the same time, meat packing and processing plants--Armour, Swift, Omaha Meats, St. Louis Dressed Meats, Cudahy--established an enclave west of the project area, bordering on the corner of Atlantic and S. Portland Avenues. Their presence created an adverse influence in the neighborhood, and many longtime residents moved away. The meat packing plants may also have violated a covenant in the deeds of the Cowenhoven trustees: "And it is hereby covenanted and agreed by and between the parties hereto that the premises hereby granted and conveyed shall at no time hereafter be used for slaughterhouses or any other purpose which shall be deemed a nuisance" (Cowenhoven's Trustees to Mary M. Barton, Liber 173:224, January 20, 1848).

Within the project area, the properties bordering Atlantic Avenue became commercial in the closing years of the nineteenth century. Tenements were purchased and torn down; in their place, the owners put up commercial structures. In 1893, the Fulton Iron Works was established at 695-697 Atlantic Avenue (Block 2005, Lots 98-99). The orderly lots once facing on Atlantic Avenue were purchased in blocks by speculators, and by the 1930s and 1940s many had been converted into gas stations (Heirs of Alois Lazansky to Safeway Petroleum Corporation, Liber 5579:5, July 2, 1936 for Block 2006, Lot 1 [715 Atlantic Avenue]; Antonio and Caroline Zappa to Socony Mobil Corporation, Liber 6275:583, January 13, 1943 for Block 2005, Lot 1 [669 Atlantic Avenue]).

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Commercialization also found its way up the formerly residential north-south streets. Livery stables were a necessary nuisance, as many residents of the area would have their carriages as well as their horses kept at the stable. With the advent of the automobile the stables--such as the one at 464 Carlton Avenue (Block 2006, Lot 80)--were converted into garages. In these new facilities the residents could have their cars kept and serviced until they needed them (Hyde 1915). Other former residences were demolished, and the properties became storage warehouses (for example, Charles B. Strong Storage at 193-195 S. Portland Avenue--Block 2004, Lots 10-11) or small shops.

The Federal Census returns for the early twentieth century reflect the continuing changes in the project area. The 1910 Federal Census, for instance, shows that many of the original white-collar residents of the northsouth streets and their descendants had moved away to be replaced by master craftsmen (plasterers, plumbers, carpenters), salesmen (real estate brokers), and small tradesmen (grocers) (1910 Federal Census of Population for Supervisor's District 2, Enumeration Districts 468 through 470 for the Twentieth Ward of the Borough of -Brooklyn, Kings County, New York).

A large percentage of the residences in the project area became rental properties in the twentieth century. Large numbers of Italians and African Americans moved into the neighborhood and, like the German and Irish of several decades earlier, the new arrivals moved north on Carlton Avenue and Cumberland Street from Atlantic Avenue. Real estate brokers such as Domenico Porco, Angelo M. Quattrocchi, John B. Moseley, and Clarence Quander first represented absentee owners of houses and provided tenants; then, after the turn of the century, they purchased these properties and either resold them at a profit, or rented them out. Porco and Quattrocchi lived just outside of the project area; Moseley and Quander both resided on Cumberland Street, Moseley at 387 (Block 2006, Lot 20) and Quander at 401 (Block 2005, Lot 13) (Brooklyn City Directories; 1910 Federal Census; Release of New York State Inheritance Tax Lien on the Estate of Clarence Quander affecting 401 Cumberland Street, Liber 474:268, July 13, 1967).

The neighborhood slowly began to reflect the work of the real estate agents. By 1920 the north-south streets were primarily tenanted by Italians on the northern half of the blocks near Fulton Street, with African Americans on the southern end, near Atlantic Avenue (1920 Federal Census for Supervisory District 2, Enumeration Districts 371-373, for portions of the Twentieth Ward, Borough of Brooklyn, Kings County, New York). Most of the Italians lived in homes that they had purchased (Genevieve Guinan to Domenico and Maria Acquavella, Liber 42:143, April 16, 1907; Rose D'Arpe, et al. as heirs of Domenico Acquavella to Bessie James, Liber 7796:33, June 27, 1951 for Block 2006, Lot 77 [458 Carlton Avenue]) while African Americans lived in rented quarters, many of which were former single family residences that had been converted into multi-family dwellings. The 1910 and 1920 censuses show that many households sublet rooms (or beds) in order to made ends meet.

2.5.2 Decline of the Neighborhood

By the middle of the 1930s, the project area began to undergo a change for the worse. In the wake of the Great Depression, many homeowners had their mortgages foreclosed by the lenders. In many cases, these properties would not be resold for up to several years. (for example, Francis M. Verrilli, referee, and Arthur Durrell et al., defendants to Home Owners Loan Corporation, Liber 5555:406, April 5, 1936; Homeowners Loan Corporation to Esther Harris, Liber 6748:409, July 27, 1944 for Block 2006, Lot 13 [381 Cumberland Street]. Real estate companies snapped up these properties and rented them out for years before selling them (Maude Miller to Miller Brothers Realty Co., Inc., Liber 8090:201, April 22, 1952; Miller Brothers Realty Co., Inc., Liber 9149:277, September 22, 1963 for Block 2006, Lot 20 [387 Cumberland Street].

After World War II, the neighborhood continued to change. A large influx of African Americans and Latinos moved into the project area, while many of the Italians and the older African American residents moved elsewhere. By the 1960s, the City of New York, along with the Untied States Government, formulated plans to revitalize the Atlantic Terminal area. By 1968, the New York City Housing and Development Administration and the United States Department of Housing and Urban Development (HUD) began to

purchase properties in the project area to be demolished, with new structures proposed for residences and shops as the "Atlantic Terminal Urban Renewal Area."

At this time, a comparatively small number of property owners still resided in the project area (Annie Lee Gaston of 411 Cumberland Street [Block 2006, Lot 8] to the City of New York, Reel 398:1646, March 11, 1970; Victor and Carmen Rodriguez of 458 Carlton Avenue [Block 2006, Lot 77] to the City of New York, Reel 402:1262, April 1, 1970), while many others did not (Evelyn Bell Mickens of 260 West 125th Street, Manhattan to the City of New York for property at 421 Cumberland Street [Block 2006, Lot 3], Reel 397:1904, March 6, 1970; George and Philomena D'Amato, of 430 Vanderbilt Street, Brooklyn to the City of New York for property at 454 Carlton Avenue [Block 2006, Lot 76], Reel 402:1268, April 1, 1970; Giovanni and Maria Paolillo, of 412 Clermont Avenue, Brooklyn to the City of New York two properties [Block 2006, Lots 75 and 83--454 Carlton Avenue and 468 Carlton Avenue]; Carl F. Esposito of Howard Beach, Queens to the City of New York for property located at 450 Carlton Avenue [Block 2006, Lot 73], Reel 403:106, April 2, 1970).

By the close of the 1970s, most of the structures in the project area had either been demolished or abandoned in order to make way for new construction. That the new construction took twenty years to get underway is a reflection of the economic fluctuations that have characterized this period.

3. POTENTIAL ARCHEOLOGICAL RESOURCES

3.1 Methods

An analysis of maps and construction plans provided the basis for assessing the potential for the presence of potentially significant archeological resources within the project area. Maps were examined at the New York Public Library, the Brooklyn Historical Society, Brooklyn's Municipal Building and Borough Hall, and the New York Historical Society. The research uncovered the following maps which are pertinent to the study. They are listed below in chronological order:

Anonymous

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1766 Plan of the Village of Brooklyn and Part of Long Island. Reprinted in H. McCloskey's Manual, 1864. George Hayward, New York. t

Gadsdam, James

- 1814 Plan of Fort Greene and Line of Intrenchments. Map in the Collection of the New York Public Library.
- Commissioners to Lay Out Streets and Avenues and Squares in the City of Brooklyn 1838 Map of the City of Brooklyn. State of New York.

Haywood, George

1843 Haywood's Map of the City of Brooklyn. George Haywood, New York.

Bridges, Joseph F.

1847 Untitled Map in the Collections of the New York Historical Society.

Colton, J.H.

1849 Map of the City of Brooklyn. J.H. Colton, New York.

Anonymous

1853 Choice and Rare Property at Auction Situated on the Crown of Fulton Avenue between Oxford and Cumberland Streets, Brooklyn. Hayward, New York.

Nicolay, Albert

1853 Large and Positive Sale of 186 Choice and Valuable Vacant Lots, and 27 Houses and Lots. P. Miller, New York.

Perris, William

1855 Maps of the City of Brooklyn. William Perris, New York.

Johnson, Jeremiah

1858 Map of Brooklyn at the Time of the Revolutionary War. George Hayward, New York.

Perris, William 1860 Maps of the City of Brooklyn. William Perris, New York.

Dripps, Mathew

Bromley, G.W., and Elisha Robinson

1880 Atlas of the Entire City of Brooklyn. G.W. Bromley, New York.

Robinson, Elisha, and R.H. Pidgeon

1886 Robinson's Atlas of the City of Brooklyn, New York. Elisha Robinson, New York.

Sanborn

1887 Insurance Maps of the Borough of Brooklyn, City of New York, Volume 2. Sanborn Map Co., New York,

Ullitz, Hugo

Sanborn

- 1904 Insurance Maps of the Borough of Brooklyn, City of New York, Volume 2. Sanborn Map Co., New York.
- 1915 Insurance Maps of the Borough of Brooklyn, City of New York, Volume 2. Sanborn Map Co., New York.

Ohman, [unknown]

1920 Map of the Borough of Brooklyn Showing Location and Extent of Racial Colonies. Ohman Map Co., New York.

Hyde, E. Belcher

- 1920 Desk Atlas- Borough of Brooklyn, City of New York, Volume One. E. Belcher Hyde, New York.
- 1929 Desk Atlas- Borough of Brooklyn, City of New York, Volume One. E. Belcher Hyde, New York.

Sanborn

- 1939 Insurance Maps of the Borough of Brooklyn, City of New York, Volume 2. Sanborn Map Co., New York.
- 1943 Insurance Maps of the Borough of Brooklyn, City of New York, Volume 2. Sanborn Map Co., New York.

3.2 Change Through Time

To show how the project area changed through time, structures depicted on historical maps from 1847, 1860, 1904, and 1943 were plotted on a base map of the project area (Figures 5, 7, 8, and 9). Figure 5 illustrates structures depicted on the 1847 Bridges map, which is the first available map reflecting development within

¹⁸⁶⁹ Map of Brooklyn and Vicinity. Mathew Dripps, New York.

¹⁸⁹⁸ Atlas of the Brooklyn Borough of the City of New York, Volume One. Hyde Co., New York.

the project area. Unfortunately, the available portion of this map did not include Block 2006 (bounded by Cumberland Street and Carlton Avenue). In 1847, the project area contained single-family residences, most of which were wood-framed with large front porches. An exception is Oxford Street, which contained a row of six brick, or brownstone, structures. Cole's (1853) broadside described the neighborhood as "a most desirable location, being in a most select neighborhood." No detailed descriptions of houses within the project area were found; however, auctioneer broadsides survive for three residences located in Phase I of the Atlantic Center Housing construction project (immediately north of the present project area). Two connected houses are described as:

two-story basement and high attic brick houses on the east side of Oxford Street [numbers 143 and 145].... The houses are 22 by 34 feet, with extensions in the rear, 14 by 18 feet, and two stories high, piazzas in front. The houses are built in the best manner, with French windows inside; blinds, marble mantles, grates, range, gas furnace, bath-rooms, and every modern convenience. The lots are each 25 by 100 feet; fine terrace in front, about 5 feet high, making beautiful court-yards. These houses have an observatory on the roof, from which a fine view can be obtained of nearly all Brooklyn, this being on the crown of the hill at Fulton Avenue (Cole 1853).

The third residence was on the opposite side of Oxford Street (numbers 136-140. Figure 6 shows this three-

story brick house. It had

37 feet square on ground floor, with extended piazzas of 7 feet, enclosed and included; there is also a rear extension frame building 16 feet square. The house contains 17 rooms, and is well finished throughout; gas-fixtures in all rooms, with improvements. The stable is well arranged for two horses, with carriage house, &c. &c. Fruit trees of various kinds, and a large quantity of grape vines (Nicolay 1853:2).

It is likely that houses within the project area were similar to the three described above. The Bridges map shows that in 1847 there were no commercial properties in the project area, although a church is shown at 199 Oxford Street (Figure 5).

Figure 7 illustrates structures seen on the 1860 Perris map. This map is the earliest map which shows the entire project area, including block 2006 (bounded by Carlton Avenue and Cumberland Street), which is not depicted on the 1847 map. During the intervening thirteen years, the project area was further developed but still remained primarily residential. Along Portland, Oxford, and Cumberland Streets available lots were

filled with residences. For example, a row of brick, or brownstone, houses was constructed between 418 and 406 Cumberland Street. The 1860 map does show some commercial properties along Atlantic Avenue. The earliest of these were wooden buildings classified as "first class specially hazardous stores". "First class stores" included bakers, brewers, brush manufactories, comb makers, copper smiths, dyers, floor cloth manufactories, hat manufactories, malt houses, oil manufactories, oil cloth manufactories, tobacco manufactories, type and stereotype foundries, and wheelwrights (Perris 1855). In this period Block 2006 was the most built-up of the three within the project area. Long rows of wooden frame houses ran down the east side of Carlton Avenue as well as the west side of Cumberland Street.

Figure 8 shows structures depicted on the 1904 Sanborn map. It represents a period of increased development, including the portions of the blocks nearest to Atlantic Avenue. All lots along Carlton Avenue, Cumberland Street, and Oxford Street were built upon and, with one exception, contained residences. Although most of these houses were the same wooden structures depicted on the 1860 map, the majority were now lined with bricks. Rows of brick, or brownstone, houses were added to both sides of Cumberland, so the street became a solid line of row houses. Only the east side of Portland Avenue was not fully developed. This street also contained two large storage warehouses. By this period commercial properties dominated Atlantic Avenue. These included a variety of stores, a horse shoer [blacksmith], a wagon "HQ & storage", a carpenter, and the St. James Mission.

Figure 9 shows the structures portrayed on the 1943 Sanborn map. By this time, the neighborhood was in a state of obvious decline. Within the previously residential streets, some houses had been torn down and left as vacant lots. Furthermore, commercial properties had sprung up between residences. For example, a confection manufacturer was located at 464 Carlton Avenue, and 402 Cumberland Street contained a packing company. The east side of Portland Avenue had been developed as a commercial area. Businesses included several large warehouses, a laundry, and a phone book distributor. Atlantic Avenue had become completely

commercial and was dominated by automobile services. These included five filling stations, at least four auto repair shops, and a machine shop.

3.3 Archeological Sensitivity

The information presented in Figures 5 through 9 provides a basis for predicting likely types and locations of archeological features in the project area. The four types of features considered are privies, cisterns, trash pits, and outbuildings. The possible presence of intact yard surfaces and sheet middens is also considered.

3.3.1 Privies and Cisterns

Privies are among the most informative archeological features in the urban environment. Analysis of material recovered from privy fills often provides data on diet, disease, and material culture. Privies regularly yield easily identifiable artifacts which are in an excellent state of preservation. Cisterns may also contain important archeological deposits. When they were no longer useful for gathering water, owners often filled them in with trash. Thus, cisterns also have the potential to contain rich deposits of domestic refuse.

Both privies and cisterns were commonly used in Brooklyn before the city installed sewage and water pipes about 1860 (Sanborn 1943; Stiles 1869). Residents who built structures before this date probably constructed privies and cisterns in the rear of their properties. It is likely that archeological remains of these features survive in portions of the project area that have not been subsequently disturbed. Structures that predate the properties' connection to running water may have surviving privy and cistern remains. As the Department of Sewers for the City of Brooklyn recorded when each property was connected to the city's water supply, likely locations of privy and cistern remains are identifiable. Table 1 and Figure 10 note the specific and general locations of each of these sites respectively. Unfortunately, the city's records are badly damaged and books covering 1860 to 1868 are missing. Therefore, dates are not available for many addresses, but estimates are possible. Based on the comprehensive deed, census, and directory research completed for the project area, Table 2 lists who was living at the addresses in Table 1 when sewers were installed, the occupation of the heads of household, if available, and any pertinent characteristics (e.g. size, number of servants) of the household.

Between April and June of 1994, unauthorized excavators, commonly called pot hunters, conducted nonscientific excavations on Block 2006 immediately to the north of the project area on the site of Phase I of the Atlantic Center Housing Construction Project (Figure 11). These excavations uncovered twenty-nine (29) privy and/or cistern features (personal communication, Linda Stone, March 8, 1995). Appendix 1 includes color xerographic copies of photographs taken by the unauthorized excavators. The first in the series shows a cistern discovered at 418 Carlton Avenue. The trash deposited in the cistern is clearly visible. The remaining photographs show objects excavated from a privy at 351-353 Cumberland Street. (Note that the empty space above the artifacts displayed on the trunk lid of a car once contained the images of the pot hunters. They evidently removed these images in order to conceal their identities.) The variety of well-preserved objects, including medicine and liquor bottles, table wares, pipes, ink wells, toys, combs, and tooth brushes is noteworthy. Undoubtedly, more mundane artifacts, such as faunal remains and broken pottery, were also found. The bottle labeled "Bogle's Hyperion Fluid for the Hair" was available to consumers from the early 1840s to the late 1880s. The ceramic tea pot and pitcher date to the mid-to-late nineteenth century.

Table 3 lists the locations of eleven excavated features and when the properties were connected to running water. These eleven features were found on properties connected to running water between 1860 and 1868. The precise locations of the other 18 features could not be determined from the available data.

3.3.2 Trash Pits

Trash pits are another important type of urban archeological feature, as they usually contain large quantities of domestic or industrial refuse. Before New York City developed a public system of garbage disposal in the late nineteenth century, most Brooklyn residents disposed of their garbage by discarding it in the streets, paying private companies to remove it, or burying it in abandoned privies and cisterns and specifically dug trash pits (Rathje and Murphy 1992; Fee and Carey 1994). The primary method of garbage disposal used by

the project area's residents is unknown, although it is likely that at least some dug trash pits on their properties. These pits were probably located at the rear of the lots, and could be present on any property that contained a structure prior to 1890.

3.3.3 Outbuildings

Outbuildings such as storage sheds, workshops, smoke houses, and stables rarely contain rich artifactual deposits, but they frequently reveal data on land use and light industry. The 1860 Perris Map (data presented on Figure 7) depicts two smoke houses and two structures classified as "First Class Specially Hazardous Stores", which are in the locations that smoke houses were shown on the 1855 Perris Map. The locations of all known outbuildings have been plotted on Figures 5, 7, 8, and 9. Although others may have existed, their precise locations cannot be predicted.

3.3.4 Yard Surfaces and Sheet Middens

It is rare in urban situations for intact yard surfaces in association with backyard features to be preserved because the surfaces (and the tops of the features) have often been truncated by later construction activities. In a residential neighborhood that never saw the development of buildings with deep basements, however, the possibility exists that early yard surfaces remain intact. Such intact surfaces, their relationship to untruncated features, and a comparison of yard midden deposits with artifact deposits in the features could provide important information on the nature of deposition in urban situations and the selective processes that are reflected in the feature deposits. Recent archeological work in Cumberland, Maryland (Cheek et al. 1994) demonstrated that nineteenth century trash disposal practices were more varied than previously thought, including midden deposits close to the backs of houses as well as in pits at the rear of properties.

3.3.5 Disturbance

Two major factors have most likely compromised the integrity of some of the archeological features and historical backyard surfaces within the project area: 1) the construction of subsequent structures; and 2) the installation of utility lines during Phase I of the Atlantic Center Housing Construction Project. However, two reasons suggest that early to mid-twentieth-century construction may have left many nineteenth century

archeological deposits relatively undisturbed. First, there were few buildings constructed within the project area that needed deep foundations or contained multiple basements. Therefore, deep archeological features, such as privies, cisterns, and trash pits, may remain intact. Secondly, the rear portions of most houselots, where waste disposal areas were usually located, remained undeveloped.

Nevertheless, the 1915 and 1943 Sanborn maps depict a number of warehouses and light industries that may have disturbed archeological deposits. A row of warehouses located along Portland Avenue (numbers 201 and 181) were between two and five stories tall and filled their entire lots (Figure 12). Industries were mainly located along Atlantic Avenue, but there were also a few elsewhere (Figure 12). Table 4 lists the industries along with their addresses. The effect of these industries on the archeological record is unknown. The excavation required to install gasoline storage tanks may also have destroyed or compromised archeological deposits, but deposits elsewhere within a property could have survived. Other types of industry may have had no effect on archeological deposits. For example, the 1943 Sanborn map shows a large garage at 422 South Carlton Avenue, yet the unauthorized excavators still found an intact cistern on the property.

Many of the lots that held filling stations, in particular, may contain hazardous wastes. Some hazardous material was removed from the project area in the 1970s (personal communication, Luk Sun Wong, January, 1995), but the precise location and extent of these clean-up activities are not known. The laying of utility pipes also may have destroyed or compromised archeological deposits. Figure 13 shows the location of water and sewage pipes in relation to the planned construction. Water pipes were buried between twelve and twenty feet deep within five-to six-foot-wide trenches, and seware pipes were placed in two-foot-wide trenches at a depth of three feet (personal communication, Luk Sun Wong, February, 1995). Figure 14 shows these disturbed areas in relation to likely locations of archeological features.

4. CONCLUDING SUMMARY AND RECOMMENDATIONS

4.1 Summary of Historical Development

The project area embodies the history of Brooklyn, from growth to decline to renewal. First visualized as an upper middle-class "bedroom community" for Manhattan businessmen and their families, the neighborhood declined into a working-class community where commercial activity shared space with its residents. As the *commercial district* itself began to wither, the project area continued to decay, with absentee landlords owning most properties. In the past quarter-century, the project area has seen the beginnings of a neighborhood revival.

For over one-hundred-and-fifty years, the site of the project area was farmed by descendants of the Dutch who first settled the area in the late seventeenth century. Upon the incorporation of Brooklyn as a city in 1835, the project area began to take shape as a neighborhood. The construction of mass transit facilities that provided commuter service between Brooklyn and lower Manhattan made the area available to wealthy residents of Manhattan who sought to reside beyond walking distance of their places of employment.

These inhabitants were largely well-to-do merchants and professionals who owned their homes, employed servants, and were predominantly of Anglo-Saxon descent. From the first, a significant population of lowerclass residents--at first Irish and German, later in the century, Italian and African American, and still later, African American and Latino--were present along the southern edge of the project area, co-existing with the well-to-do residents on the interior of the blocks.

As the nineteenth century progressed, the neighborhood began to change. Part of the project area was given over to commercial development; the well-to-do residents of the project area either died or moved away. Many of the original residents--or their children--became absentee landlords, renting out properties to the second-generation Irish and German-American residents of the area. Irish and German-surnamed real estate agents facilitated this change by first renting properties, and then purchasing properties for sale. This trend was continued by the Italians and the African Americans at the turn of the twentieth century. Real estate agents of these ethnic backgrounds followed in the footsteps of their predecessors and rented properties to other Italians and African Americans. By the 1920s, the project area reflected a larger number of renters than owners. This propensity, along with the decay of the commercial area, contributed to the decline of the project area. Only recently, through the infusion of capital and the influence of the state and federal governments, has the project area begun to undergo a revival.

4.2 Potential Archeological Resources

As discussed above, the project area reflects the history of Brooklyn in microcosm. It is not expected that archeological resources representing all significant events in the city's history are present, but there is a very good possibility that archeological features and deposits exist that relate to the early development of Brooklyn or present & development of Brooklyn or present & as a suburban haven for the upper middle class. If such resources/retain integrity (i.e. have not been severely disturbed since they were deposited), they would be potentially eligible to the National Register of Historic Places under criterion d, i.e., as resources "that have yielded, or may be likely to yield, information important in prehistory or history" (36 CFR 60.4). It is also possible that these resources might be considered eligible under criterion a, i.e., resources "that are associated with events that have made a significant contribution to the broad patterns of our history."

4.2.1 Research Potential

While the general patterns in Brooklyn's history are known, the details of everyday middle-class life are not well understood. It is these kinds of details that archeological data can address. Consumerism, the subject of much recent historical and archeological research (e.g. McCracken 1988; Spencer-Wood 1987; Shackel 1993), was a characteristic of mid-nineteenth century urban life, a reflection of the economic transformations brought on by the Industrial Revolution. Many aspects of consumerism, including the elaboration of private property, the investment in sanitary facilities, and the purchase of luxury goods, may be addressed by information contained within the project area. Changes in family life having to doing with gender roles, health and hygiene practices, and the raising of children might also be investigated. There is also the

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possibility of comparing evidence contained in the project area with sites relating to nineteenth century middle-class residential life that previously have been excavated in Manhattan (e.g. Sullivan Street) and Brooklyn (Metro Tech) that date to the same period. Even more significant are the potential comparisons with the material recovered on the Courthouse Block, a part of the notorious Five Points slum of lower Manhattan, that is presently being analyzed as part of the General Services Administration's Foley Square Project.

The integrity of potentially significant archeological resources is suggested by two major factors. The first is the virtually unchanged character of most of the lots within the project area. When first developed, the houses hugged the streets, with long narrow backyards stretching out behind them. The remains of privies and cisterns, trashpits, and outbuildings, which were located in these backyards, could still remain buried intact beneath the backyard areas. The second factor is the demonstrated presence of such features, including rich artifactual deposits, on lots located immediately to the north of the project area (within block 2006), and depicted in Appendix I. Unauthorized archeological excavations on 18 lots along Fulton Street, Cumberland Street, and Carlton Avenue uncovered untruncated features filled with trash, including many whole or nearly whole objects. Although the excavators did not investigate adjacent yard surfaces, there is no reason not to believe that they, too, might be preserved.

The potential significance of archeological features and associated yard surfaces is enhanced by the likelihood that deposits within them represent a tightly definable time period. In general, the houses that were built in the late 1840s and early 1850s were connected to sewers in the early 1860s. It is therefore expected that the archeological deposits will reflect the households' occupants during this period. Unlike many urban situations, most of the houses within the project area during this time period were owner-occupied, which also enhances the value of the archeological deposits. It should be possible to identify whose things were thrown out and when.

The unusually tight timeframe for the potential deposits and the likelihood that they can be associated with specific people have implications for the kinds of research questions that could be addressed by analysis of the deposits. Research questions fall into several general categories: 1) the rise of manners associated with middle-class gentility; 2) the comparative study of social class in mid-nineteenth century New York and Brooklyn; and 3) the nature of deposition on urban sites.

Middle-Class Gentility

During the first half of the nineteenth century, members of America's middle class adopted aspects of the upper class' genteel lifestyle (Bushman 1993). To create the "respectability" necessary for membership in the middle class, individuals had to transform their lifestyles to conform to genteel sensibilities. This desire for respectability created a distinctly middle-class world view which remained in place through the late twentieth century. For most members of the middle class, this entailed relocating their homes from urban areas to planned suburban neighborhoods. As a result, homes became physically separated from work places, and women's roles in the household were redefined (Wall 1994). Members of the middle class were also expected to understand and strictly follow rules of etiquette which governed nearly all aspects of life. This led to both the publication of numerous etiquette guides and the production of new types and forms of material culture needed to follow these rules (Bushman 1993). As a result, the middle class surrounded themselves with specific objects needed to sustain a genteel lifestyle.

Constructed as an upper middle class suburban neighborhood, the project area offers the potential for examining how members of this class used material culture to create and maintain a respectable and genteel lifestyle. Archeological investigations of the project area might consider the following research questions:

- How did households use the material symbols of gentility in social strategies?
- How can the archeological record contribute to our understanding of meal-time ritualism which resulted from the adoption of genteel etiquette?
- How did the desire to become "respectable" change attitudes toward health and hygiene?
- How were landscapes created to conform to genteel sensibilities?

- How did the separation of home and work place affect gender roles, and how do the data from this site compare with Wall's (1994) conclusions?
- How did these social changes affect children's lives?
- How uniformly was the genteel lifestyle adopted by the households in the project area? Can the answer to this question provide information on the coalescence of the middle or upper middle class?

The Comparative Study of Social Class in Mid-Nineteenth Century New York

In the last fifteen years, a number of sites have been excavated within the New York Metropolitan Area, each generally including archeological deposits relating to a single or several households. While it is dangerous to generalize about a middle-class (or any other class) way of life from a single site, as the inventory of properties investigated grows, insights into general patterns become more feasible. The presence of people from different backgrounds within the project area also provides the opportunity to see how influenced people were by their neighbors and how and if people expressed their individuality through their private possessions. The kinds of questions that might be posed include:

- Can general similarities between mid-century upper middle class households in Manhattan and Brooklyn be identified?
- Do people tend to imitate their nearby neighbors or are they more likely to express their individuality?
- Do non-Native born Americans who have embraced a middle-class living standard express their background in specific ways?
- Do people from different ethnic backgrounds use outdoor space in distinctive ways?
- Are there pronounced differences between middle-class and working-class households in terms of consumer goods or are the differences a matter of degree (quantity)?
- Are material culture assemblages associated with female heads-of-household distinctive in any way?

The Nature of Deposition on Urban Sites

service became available, thus making it possible to identify particular people's behavior by the artifact content of their cisterns and privies. Questions that might be addressed include;

- Over how long a period is a privy or cistern used as a trash repository?
- Do patterns of discard vary between households in any regular way (e.g. mature household versus young household, single family versus multiple family)?
- How do feature fills differ from contemporaneous yard scatter?
- How do trash deposits reflect the size and constituent parts of individual households?

4.2.2 Recommendations

It is recommended that seventeen (17) lots within the project area be tested for the presence of intact archeological resources relating to the properties that were developed before sewer service was available. The lots have been selected as representatives of the variation within the population at the time that backyard features would have been replaced with indoor plumbing. The lots are marked on the large scale (1 inch = 60 feet) maps that are included in the back pocket of this report. Both construction plans were considered, although it is understood that the linear plan is the favored alternative (personal communication, Luk Sun Wong, February 1995). Only lots that apparently will be affected by the proposed construction have been included in the sample.

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The backyards between Carlton Avenue and Cumberland Street have been the least disturbed by industrial development and/or utility installation (Figure 14). In addition, these yards have been covered (and thus protected) from unauthorized investigation (i.e., pot hunting) for some time with backdirt removed from the northern portions of the block during the construction of the first phase of the Atlantic Center Housing Construction Project. While a series of dry wells or drains was noted running down the center of the open area between the houses already constructed to the north (Plate 6), it is assumed that these drains were not installed on the southern half of the block before the fill was placed there.

Because of this assumed undisturbed condition, emphasis has been given to block 2006. Properties recommended for testing include: 389, 391, 403, and 401 Cumberland Street, and 454, 456, 444, and 442 Carlton Avenue. As shown on the construction plans, these lots are numbers 77 and part of 78, 76 and part of 77, 70 and part of 71, 71 and part of 72 along Cumberland and 65 and part of 64, 66 and part of 65, 59, and 58 and part of 59 along Carlton. The heads-of-household represented include a fancy goods merchant, a New York City merchant, a livery stable keeper, a merchant of unknown foreign extraction, a New York City produce merchant, a hoop skirt manufacturer, and two widows. Some of the households had no servants and some had as many as three (see Table 2 for specific characteristics of these particular households).

In order to compare block 2006 with the other blocks within the project area, it is recommended that limited testing also be undertaken on blocks 2005 and 2004. Lots recommended for such testing along the west side of Cumberland Street include addresses 410, 412, 408, 406, and 388. On the construction plans, these lots are numbers 93, the northern part of 92, 94, and the proposed tennis court. Heads-of-household include someone dealing in gentlemens' furnishings, a shipmaster, a gentleman and a postoffice clerk (in a single residence), a widow, and a minister. None of these people had servants. Along S. Oxford Street, it is recommended that addresses 195, 199, 204, and 202 be tested. These lots are numbered 103, 104 and 105, 111 and part of $_{r}^{112}$, and 112 and part of 113 on the construction plans. Heads-of-household include an oil merchant, a wholesale druggist, a lawyer, and a widow. The number of servants ranged between none and two.

Because the lots are twenty-feet-wide on average, it should be possible to machine-excavate thirty-foot-long trenches running north-south (parallel to the backs of the historic houses) to test the center portions of two adjacent lots. The line of cisterns investigated by the unauthorized excavators on the northern half of the block between Cumberland and Carlton appeared to be located no more than six (6) to ten (10) feet behind the new construction (Plates 7 and 8). It is therefore recommended that testing target this area, which will surely be disturbed by construction.

Comprehensive archeological testing in the rear of the lots (i.e., the probable locations of privies) is not recommended, since no construction is planned for this area. However, it is recommended that the location of the line of privies at the back of the lots be determined during the testing program so they can be protected during construction. One or two east-west oriented trenches within blocks 2005 and 2006 should be adequate to establish the location of the privies on either side of the rear property lines.

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TABLES

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Street	Address	Structure Type	<u>Built</u>	<u>Sewer</u>
S. Portland	207	Fr Dw	by 1847	5/23 1869
S. Portland	205	Br Dw & Fr Dw	1848-1855	5/23 1869
S. Portland	203	Fr Dw	by 1847	5/23 1869
S. Portland	195	Fr Dw	by 1847	Unknown
S. Oxford	212	Fr Dw	1848-1855	1860-1868
S. Oxford	210	Fr Dw	1848-1855	1860-1868
S. Oxford	206	Fr Dw	by 1847	1860-1868
S. Oxford	204	Fr Dw	1856-1860	1860-1868
S. Oxford	202	Fr Dw	1856-1860	1860-1868
S. Oxford	200-196	Fr Dw	by 1847	1860-1868
S. Oxford	194	BrDw	by 1847	1860-1868
S. Oxford	192	Br Dw	by 1847	1860-1868
S. Oxford	190	Br Dw	by 1847	1860-1868
S. Oxford	188	Br Dw	by 1847	1860-1868
S. Oxford	186	Br Dw	by 1847	1860-1868
S. Oxford	184	Br Dw	by 1847	1860-1868
S. Oxford	182-180	Fr Dw	by 1847	1860-1868
S. Oxford	205	Fr Dw	by 1847	Unknown
S. Oxford	203-201	Fr Dw	by 1847	1860-1868
S. Oxford	199-195	Fr Dw	by 1847	1860-1868
S. Oxford	185	Fr Dw	by 1847	1860-1868
S. Oxford	183-181	Fr Dw	by 1847	1860-1868
S. Oxford	177	Fr Dw	by 1855	1860-1868
S. Cumberland	422	Br Dw	1856-1860	1860-1868
S. Cumberland	420	Fr Dw+SH	1848-1855	1860-1868
S. Cumberland	418	Fr St/Mn	by 1855	1860-1868
S. Cumberland	416	Br Dw	1856-1860	1860-1868
S. Cumberland	414	Unknown	1856-1860	1860-1868
S. Cumberland	412	Unknown	1856-1860	1860-1868
S. Cumberland	410	Br Dw	1856-1860	1860-1868
S. Cumberland	408	Br Dw	1856-1860	1860-1868
S. Cumberland	406	Br Dw	1856-1860	1860-1868
S. Cumberland	402-400	Fr Dw+SH	1848-1855	8/6/1868
S. Cumberland	398-396	Fr Dw	1848-1855	1860-1868
S. Cumberland	394	Fr Dw	by 1847	1860-1868
S. Cumberland	392	Fr Dw	by 1847	1860-1868
S. Cumberland	390	Fr Dw	by 1847	1860-1868
S. Cumberland	388	Fr Dw	by 1847	1860-1868
S. Cumberland	386	Fr Dw	by 1847	1860-1868
S. Cumberland	384	Fr Dw	by 1847	1860-1868
S. Cumberland	382	Fr Dw	by 1855	1860-1868
S. Cumberland	380	Fr Dw	by 1855	Unknown
S. Cumberland	378	Fr Dw	by 1855	Unknown
S. Cumberland	419-417	Fr St/Mn	by 1860	1860-1868
S. Cumberland	405	Br Dw	by 1860	1860-1868
S. Cumberland	403	Br Dw	by 1860	1860-1868
S. Cumberland	401	Br Dw	by 1860	1860-1868
S. Cumberland	399	Br Dw	by 1860	1860-1868
			-	

Table 1. Data on Dwellings Built Before Sewer Connections Were Available

	KEY: Fr Dw	Frame Dwell	- -		
	Atlantic	729-735	Unknown	by 1860	1868 & 1871
	Atlantic	725-727	Unknown	by 1860	Unknown
	Atlantic	721	Fr St	by 1860	1870
	Atlantic	689	FrDw	1848-1855	5/18/1870
•	Atlantic	681	Fr St/Mn	1848-1855	1860-1868
	Atlantic	679	Fr Dw	1848-1855	1872
	Atlantic	677	Fr Dw	1848-1855	1871
	Atlantic	675	Fr Dw	1848-1855	9/27/1869
	Atlantic	671-673	Fr Dw	1848-1855	1860-1868
	Atlantic	669	Fr St/Mn	1848-1855	1860-1868
	S. Carlton	436	Fr Dw	by 1860	1860-1868
	S. Carlton	438	FrDw	by 1860	1860-1868
	S. Carlton	440	Fr Dw	by 1860	1860-1868
	S. Carlton	442	Fr Dw	by 1860	1860-1868
	S. Carlton	444	Fr Dw	by 1860	1860-1868
	S. Carlton	446	Fr Dw	by 1860	1860-1868
	S. Carlton	448	Fr Dw	by 1860	1860-1868
	S. Carlton	450	Fr Dw	by 1860	1860-1868
	S. Carlton	452	Fr Dw	by 1860	1860-1868
3	S. Carlton	454	Fr Dw	by 1860	1860-1868
	S. Carlton	456	Fr Dw	by 1860	1860-1868
	S. Carlton	458	Br Dw	by 1860	1860-1868
	S. Carlton	460	Br Dw	by 1860	1860-1868
	S. Carlton	462	Fr Dw	by 1860	1860-1868
	S. Carlton	464	Fr Dw	by 1860	1871
	S. Carlton	466	Fr Dw	by 1860	1860-1868
	S. Carlton	468	Fr Dw	by 1860	1860-1868
	S. Carlton	470	Fr Dw	by 1860	1860-1868
	S. Carlton	472	Fr Dw	by 1860	Unknown
	S. Carlton	474	Br Dw	by 1860	1860-1868
	S. Carlton	476	Br Dw	by 1860	1860-1868
	S. Carlton	478	Br Dw	by 1860	1860-1868
	S. Carlton	480	Br Dw	by 1860	9/27/1868
	S. Cumberland	381	Fr Dw	by 1860	1860-1868
	S. Cumberland	385	Fr Dw	by 1860	1860-1868
	S. Cumberland	387	Fr Dw	by 1860	1860-1868
	S. Cumberland	389	Br Dw	by 1860	1860-1868
	S. Cumberland	391	Br Dw	by 1860	1860-1868
	S. Cumberland	393	Br Dw	by 1860	1860-1868
	S. Cumberland	395	Fr Dw	by 1860	1860-1868
	S. Cumberland	397	Fr Dw	by 1860	1860-1868

FLDW	riane Dwennig
Br Dw	Brick Dwelling
Fr St/Mn	Frame Store/Manufacturing
SH	Smoke House
	Br Dw Fr St/Mn

Table 2: Characteristics of Households at Which Houses Were Built Before Sewer Connections Were Available

Note: This table of residents of the project area at the time the sewer pipes were placed (between 1860 and 1869) was compiled from: (a) tax assessments for the City of Brooklyn; (b) Brooklyn City Directories from 1867-1868 through 1870-1871; and (c) 1870 Federal Census of Population for the portion of the Twentieth Ward of Brooklyn that includes the project area.

Street	Address	Head-of-Household	Occupation	<u>No.</u>
S. Port	land 207	Charles K. Meyers	butcher	N/A
S. Port		James Brewster	fish merchant	5
S. Port		John M. Young	gentleman	?
S. Port		Benjamin Crockett	shipmaster	?
-S. Oxf		Charles Bixby	machinist	4(1)
S. Oxf		Isabella Simpson	music teacher	4(1)
S. Oxf		James Cruikshank	Assistant Super. Schools	6(1)
S. Oxf		T.W. Leonard	oil merchant	6(2) ✓
S. Oxf		Frank Dodge	wholesale druggist	4(2) √
/ S. Oxf		Sarah L. Bridges	boardinghouse keeper	4(2) V 6
S. Oxf		George A. Gaines	lawyer	
S. Oxf		John H. Dukes	lawyer	10(1)
S. Oxf		F.R. Crocker	fish merchant	8(2)
S. Oxf		John H. Bludan		6(1)
S. Oxf		Wm. J. Quinlan	storage house owner architect	6(2)
S. Oxf		D.W. Fisk	author	6(2)
S. Oxf		Joseph E. Paine	bookkeeper	4(1)
S. Oxf		Phillip Euer	shoe manufacturer	5(2)
S. Oxf		John Curtin	real estate agent	4 8
S. Oxfo		Eliza A. Harrison	widow	
²		Jeremiah Johnson	Asst. NYC Corp. Counsel	9(1) 🖌
S. Oxfo	5505 EL 15	William A. Rich	hardware merchant	7(2) ✓ 11
S. Oxfo		Jas. D. Serrington	jewelry salesman	3
S. Oxfo		Edward P. Waits	life insurance agent	2
S. Oxfe		George H. Gorham	bookkeeper at bank	4
Cumbe		William H. Turner	merchant	?
Cumbe		Johanna Dorsey	widow	?
Cumbe		Patrick Leonard	leather manufacturer	6
Cumbe		Peter Robinson		5
_ Cumbe		F.J. Pierce	expressman agent for grocery	5
<u>Za</u> Cumbe		David Wilson	shipmaster	? 🖌 ,
Cumbe		Walter W. Salter	gent's furnishings	4 /
çumot		Charles Beach	bookkeeper	5(1)
Cumbe	rland 408	William Hall	gentleman	$3^{(1)}$
Cumot		William Sutton	clerk, post office	
Cumbe	rland 406	Jane Dillon	widow	2 6 √
Cumbe		Edwin C. Russell	comm. merchant NYC	
Cumbe		James Clark		8(2)
	J70	Charles Henry	ferryman bootman (retired)	5 2
Cumbe	rland 396	Henry Macomber	boatman (retired)	
Cumbe		Stephen Dando	real estate agent hatter	6(1) 8(1)
Cumpe	11anu 374	Nicholas Hansen	pianoforte maker	8(1)
o. Cumbe	rland 392	M.C. Decker	commercial merchant	3
31 Cumbe	alanu J72	HI.C. DOLKO	commercial mercuant	:

Comb 1 d	200			
Cumberland	390	John Collins	cotton broker	4
Cumberland	388 ·	Joseph Harrison	minister	? √
Cumberland	386	John H. Trippler	gent's furnishings	8
Cumberland	384	Robert Walton	merchant	5
Cumberland	382	Henry Husted	glassware merchant	6
Cumberland	380	William Edith	brewer	4
		Charles W. Overton	fish merchant	3
Cumberland	378	John Phillips	bookkeeper, hoop skirt	3
			factory	
		Grant Dubois	clerk, dry goods	5
Cumberland	419-417	Herman Posberg	grocer	6(1)
Cumberland	405	James Johnson	retired	3(1)
Cumberland	403	Joseph Johnson	livery stablekeeper	\checkmark
Cumberland	401 -	Gustave Polhaus	merchant NYC	5(1) 🗸
Cumberland	399	George W. Bergan	grocer	3
Cumberland	397	J.P. Wortz	real estate agent	6(1)
<u>Cumberland</u>	395	John Brush	agent	?
Cumberland	393	Levi Elmendorf	real estate agent	?
Cumberland	391 -	Lyman R. Hopkins	merchant NYC	8(2) 🗸
Cumberland	389 -	Charles A. Righter	fancy good merchant	4 √
Cumberland	387	A.P. Bates	lawyer	6
¹ →Cumberland	385	Robert King	machinist	8
Cumberland	381	Albert Jewett	sea captain	7
Carlton	480	Patrick H. Ford	laborer	8
Carlton	478	Henry Smith	paper manufacturer	5.
			salesman	
		Adam Searing	paper stainer	4
Carlton	476	George W. Pindley	Deputy Sheriff, NYC	10(1)
Carlton	474	D.L. Lansing	stationer	4(1)
Carlton	472	Samuel W. Raisley	broker	3
Carlton	470	John T. Smith	post office clerk	3
		E.C.T. Townsend	widow	4
Carlton	468	William H. Hammer	owner cast ironworks	4
Carlton	466	August Entrost	importer hosiery &	4(1)
			gloves	
Carlton	464	John Miller	carpenter	5
Carlton	462	Frederick Johnson	gentleman	3(1)
		Charles Blagrove	druggist	2
Carlton	460	T.W. Bradley	proofreader	6(2)
Carlton	458	S.P. Taylor	retired	8(1)
		Elisha Avery	accountant	2
Carlton	456 ·	Joseph W. Oakman	hoopskirt manufacturer	5(1)
Carlton	454 -	Benjamin W. Otis	produce merchant NYC	5(1)
\longrightarrow Carlton	452	Moses Baldwin	poultry merchant NYC	8(1)
Carlton	450	J.K. Draper	clerk wholesale dry goods	3(1)
Carlton	448	Charles Stansbury	clerk wholesale dry goods	2
Carlton	446	E.L. Moore	agent, Amer. Emigrant Co.	6(1)
Carlton	444 /	Mary Maguire	widow	6(1) 🗸
\rightarrow Carlton	442,	Louisa Holberton	widow	6(1) 🗸
Carlton	440	John Hambler	police sergeant	6(1)
Carlton	438	James W. McKay	printer	4(1)
Carlton	436	Graves Power	manuf. paper bangings	5(1)
Atlantic	669	John McKinney	liquor dealer	4(1)
1117		*	•	• •

Atlantic	671	Edward McKinney	newspaper carrier	7
Atlantic	673	Nils Lund	tailor	6
		James Kenney	laborer	3
		George Folk	shoemaker	3
		William Gascoyne	bricklayer	3
		John McLoughlin	laborer	3
Atlantic	675	John McCarman	laborer	5
Tuurdo	075	Michael Cassidy	laborer	8
Atlantic	677	August Kirschren		0
-	011	Barbara Graham	grocer	4
		James Philcaney	no occupation	1
		and the state of t	laborer	4
Atlantic	670	John Eagan	stonemason	3
Auanuc	679	Martin Seeley	pork packer	3
		Cornelius Hurley	laborer	3
		Margaret McAllrin	no occupation	1
Atlantic	681	James Higginbotham	labor e r	4
		Richard C. Swartz	paver	2
		Mary Swiss	widow	2
		Margaret Harvey	washerwoman	6
		John Lee	stablehand	3
		Terrence Diver	shoemaker	3
Atlantic	689	James Marran	no occupation	4
		Thomas Moore	laborer	4
		Bridget Fay	washerwoman	2
		James Gallagher	carman	4
Atlantic	721	Michael Tracy*	drayman	N/A
<u></u>		Thomas Finnan*	drayman	N/A
Atlantic	725-727	uncertain		
Atlantic	729-735	Patrick H. Ford**	laborer	8

*Place of business.
**Commercial property on same lot as home.
(1) Denotes servants or hired help in household.

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Table 3: Features Found During 1994 Unauthorized Excavations

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Street	Number	Feature	Sewer Connections
Cumberland	351-353	Privy	1860-1868
Cumberland	355	Cistem	1860-1868
Carlton	418	Cistern	1860-1868
Carlton	420	Cistern	1860-1868
Carlton	422	Cistem	1860-1868
Fulton	738	Privy	1860-1868
Fulton	740	Privy	1860-1868
Fuiton	740	Cistem	1860-1868
Fulton	742	Privy	1860-1868
Fulton	742	Cistern	1860-1868
Fulton	744	Privy	1860-1868

Table 4: Locations of Light Industry in Project Area

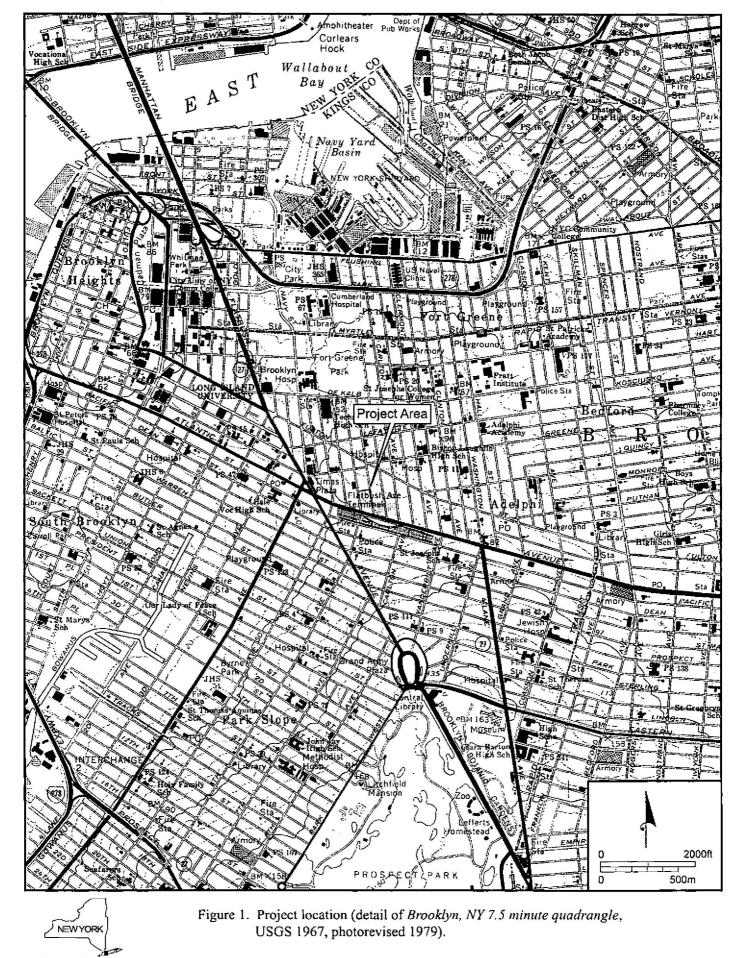
Street	Number	Type of Industry	Source
Atlantic	669-677	Filling Station	Sanborn 1943
Atlantic	683-689	Filling Station	Sanborn 1943
Atlantic	691	Machine Shop	Sanborn 1943
Atlantic	695	Auto Repair Shop	Sanborn 1943
Atlantic	703-711	Filling Station	Sanborn 1943
Atlantic	713-719	Filling Station &	Sanborn 1943
		Auto Repair	
Atlantic	725-727	Auto Repair Shop	Sanborn 1943
Atlantic	729-735	Filling Station	Sanborn 1943
Portland	181	Cement Lined Pipe Man.	Sanborn 1939
Portland	197-199	Laundry	Sanborn 1943
Oxford	205-207	Elevator Manufacturer	Sanborn 1939
Oxford	208	Parking Garage	Sanborn 1943
Cumberland	400-402	Packaging Plant	Sanborn 1943
Carlton	464	Confectioner Manufacturing	Sanborn 1943
Carlton	484	Auto Repair Shop	Sanborn 1943

FIGURES

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Quadrangle Location

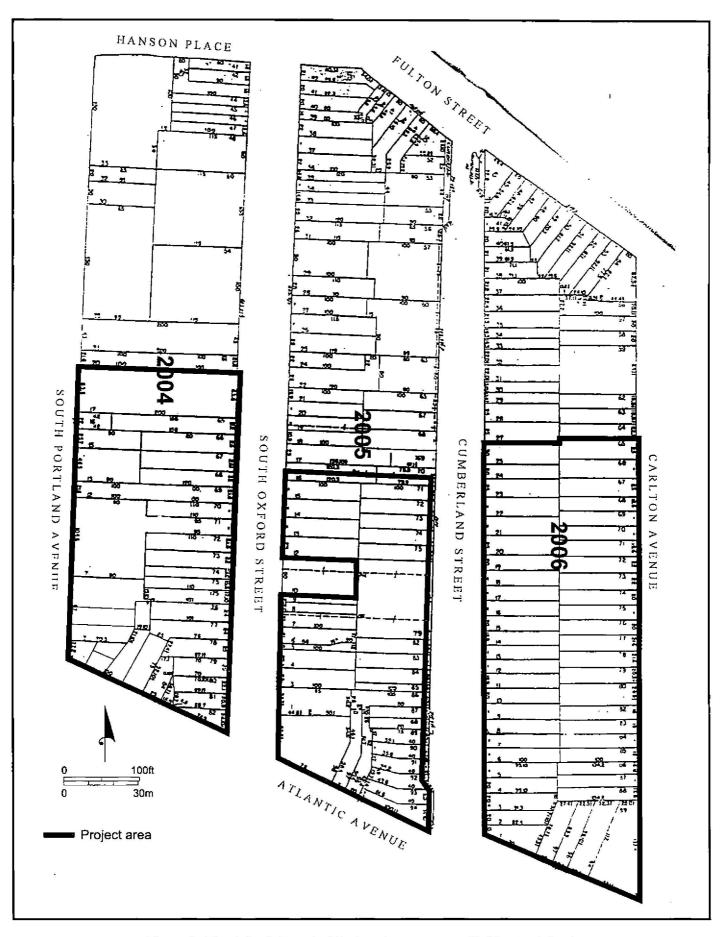


Figure 2. The Atlantic Terminal Project Area, map supplied by the Atlantic Housing Corporation.

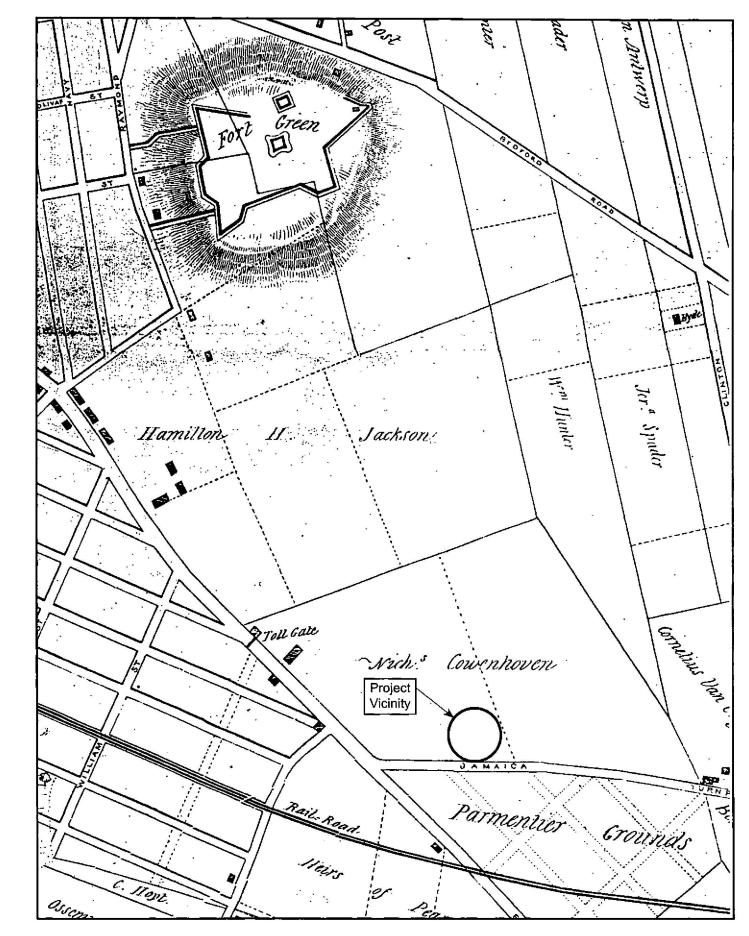


Figure 3. Map of the City of Brooklyn, Alexander Martin, 1834.

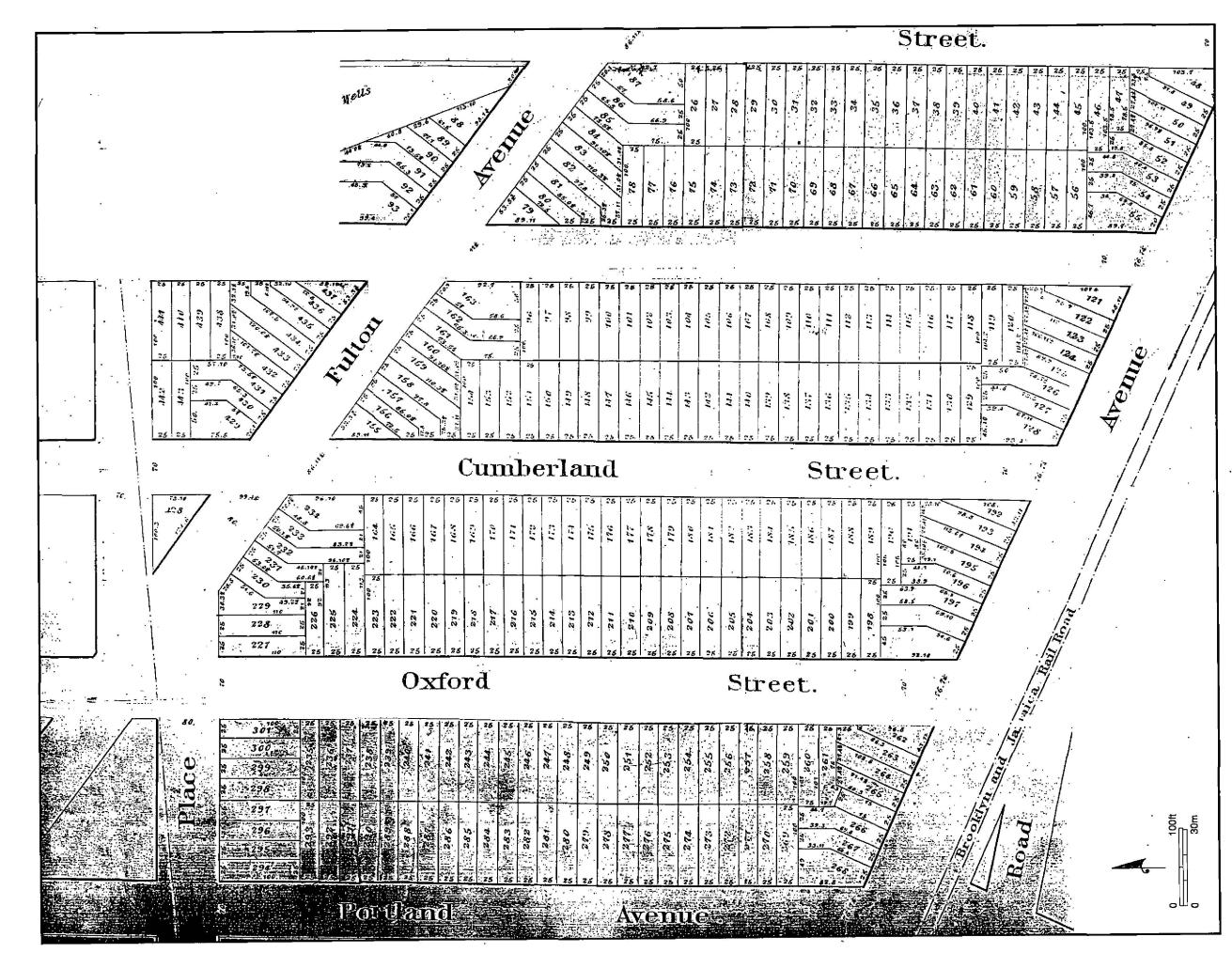


Figure 4. Map of the Cowenhoven Farmstead, Silas Ludlam, 1844.

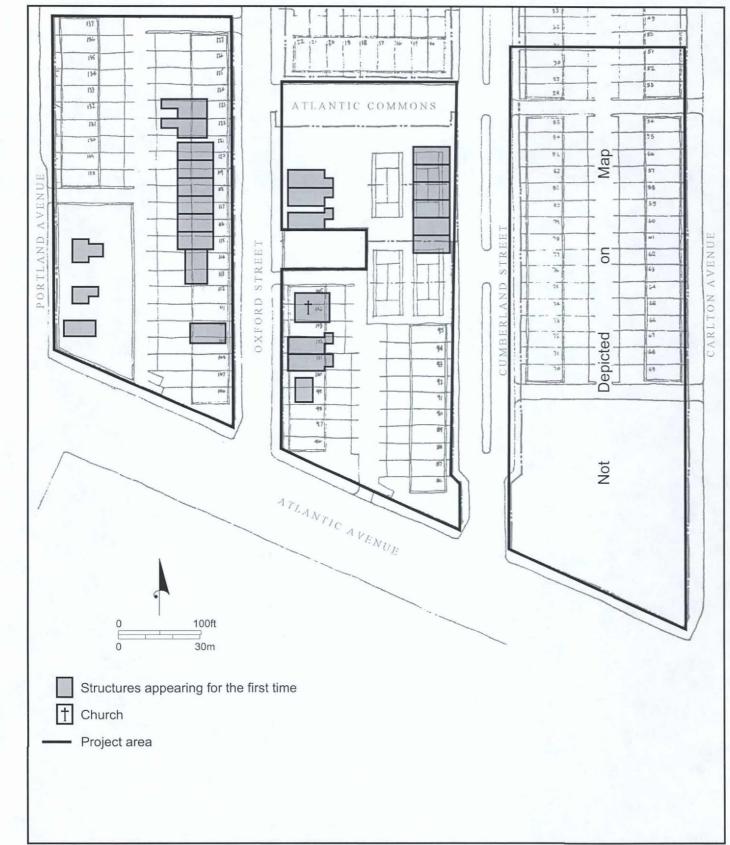


Figure 5. Structures shown on the 1847 Bridges Map.

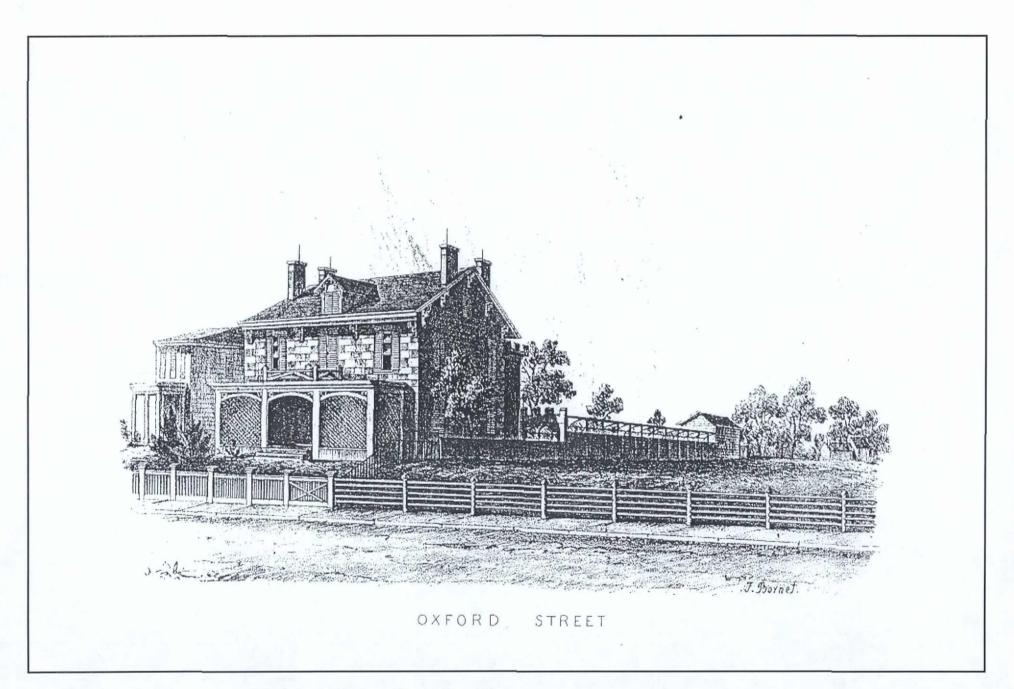


Figure 6. House at 136-140 Oxford Street auctioned by Albert Nicolay in 1853.

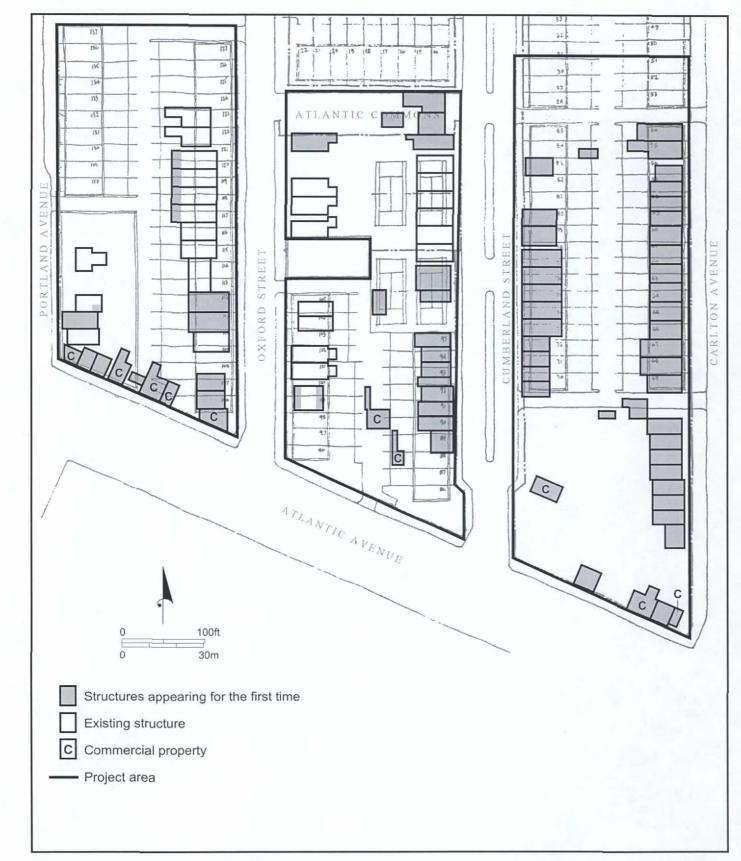


Figure 7. Structures shown on the 1860 Perris Map.

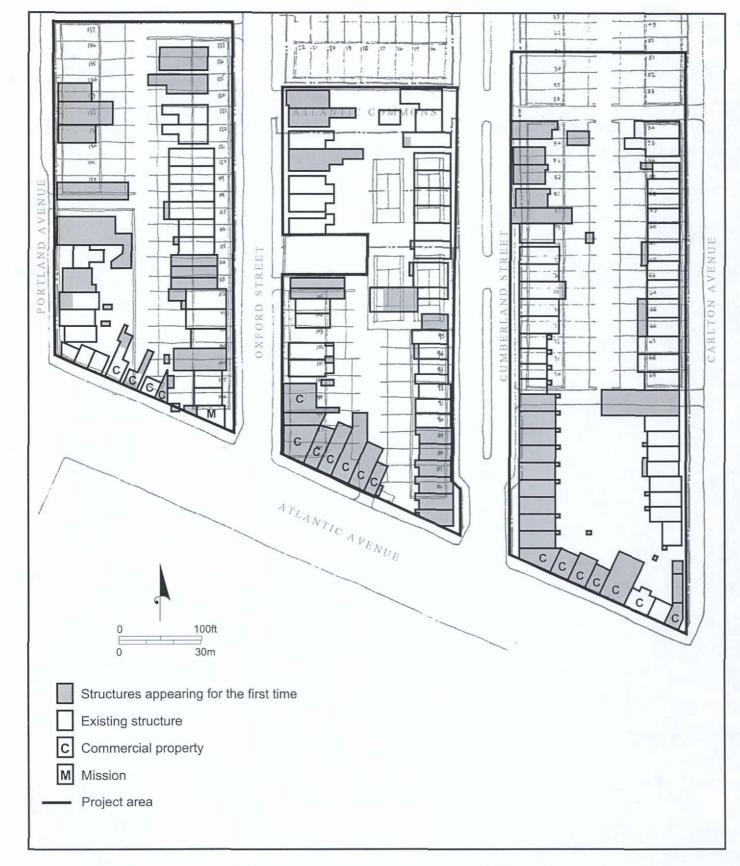


Figure 8. Structures shown on the 1904 Perris Map.

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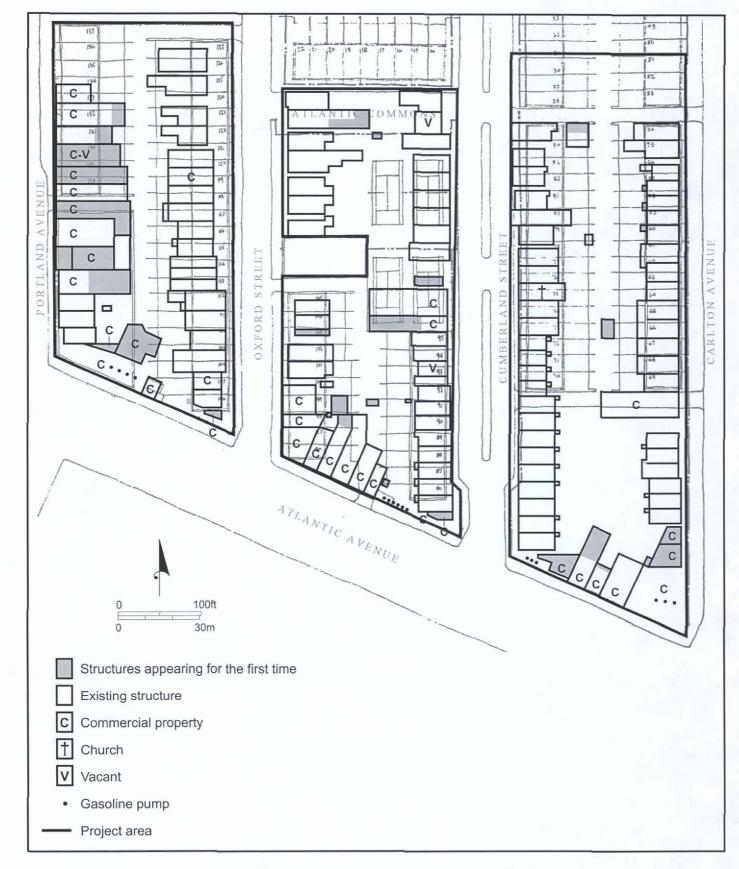


Figure 9. Structures shown on the 1943 Sanborn Map.

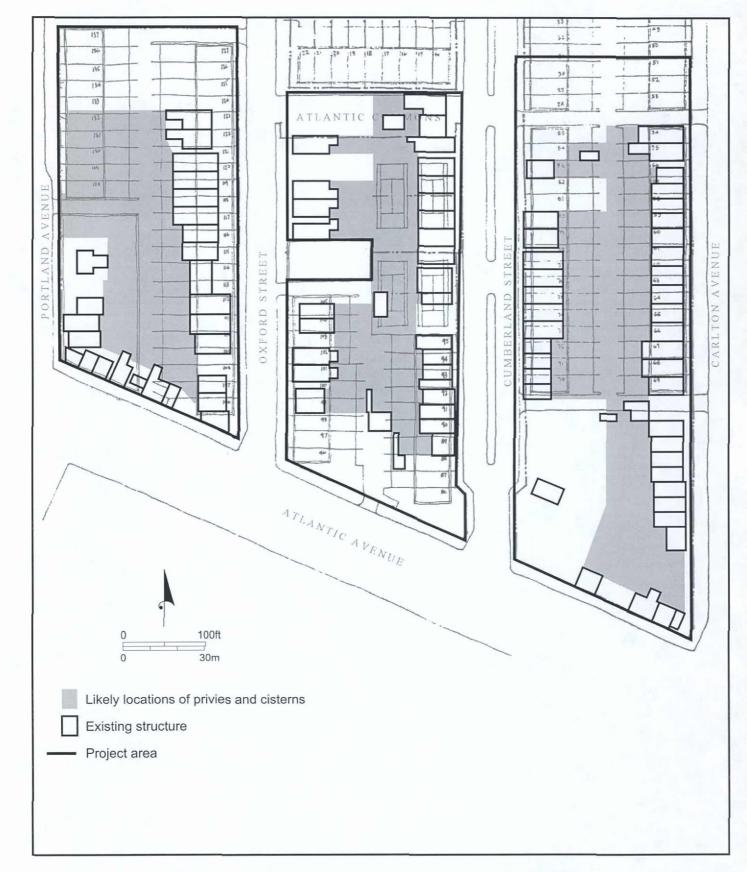


Figure 10. Structures shown on the 1860 Perris Map with likely locations of associated pre-1860s cisterns and privies.

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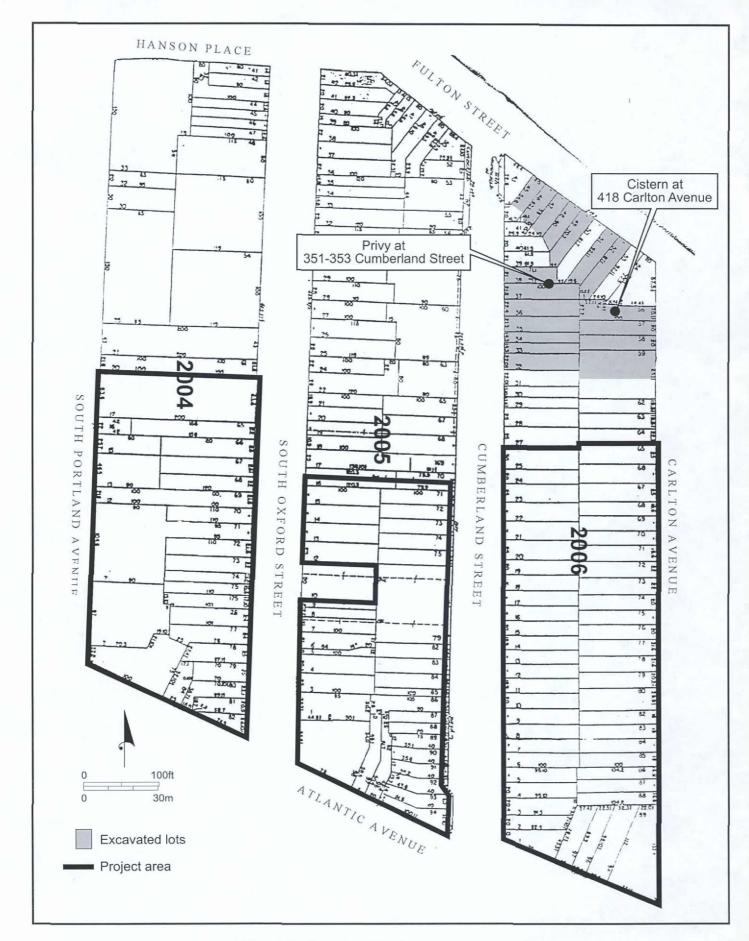


Figure 11. Location of pot hunters' excavations.

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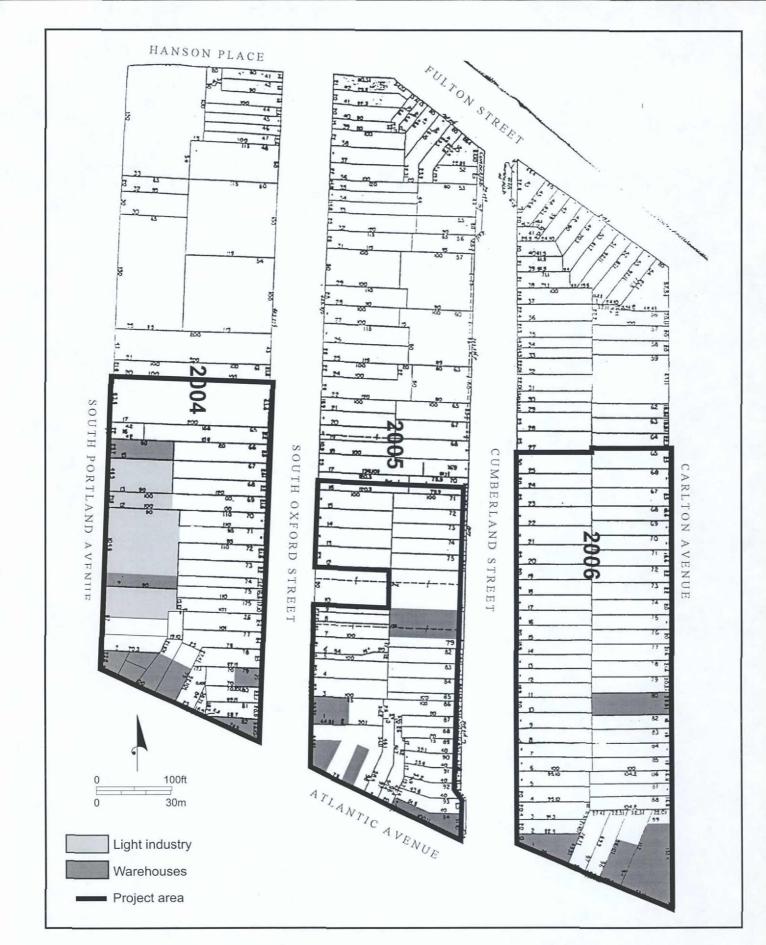


Figure 12. Location of light industry and large warehouses within the project area.

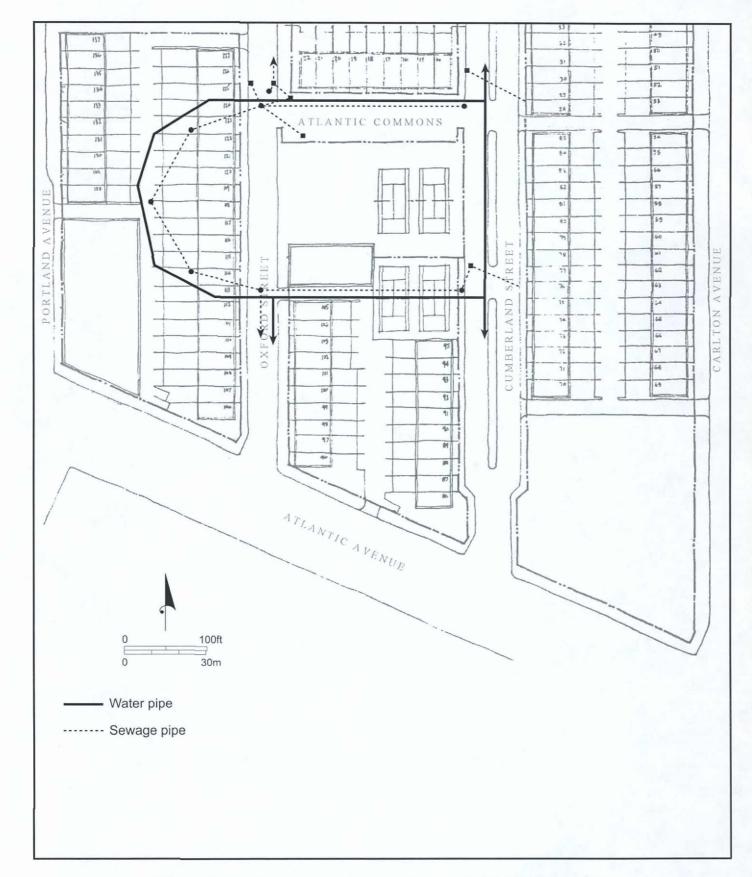


Figure 13. Location of water and sewage pipes installed during Phase I of the Atlantic Center Housing Construction Project.

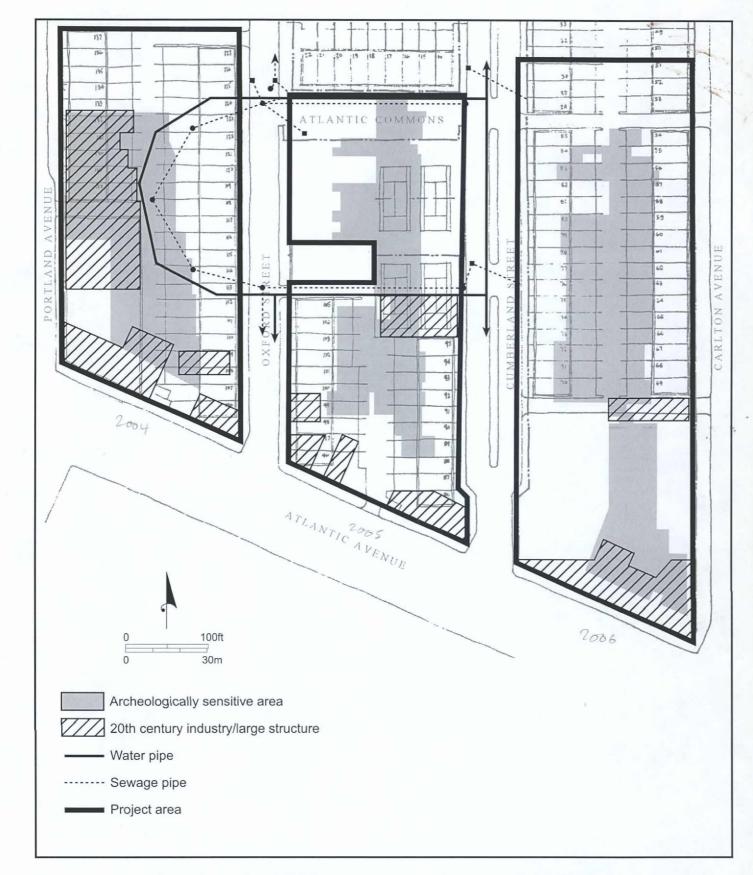


Figure 14. Overlay of disturbed areas on a map of archeologically sensitive areas.

PLATES



Plate 1. The back of new housing facing Cumberland Street. Looking west.



Plate 2. Empty lots bordering the west side of Cumberland Street where former houses have been demolished. Looking west.

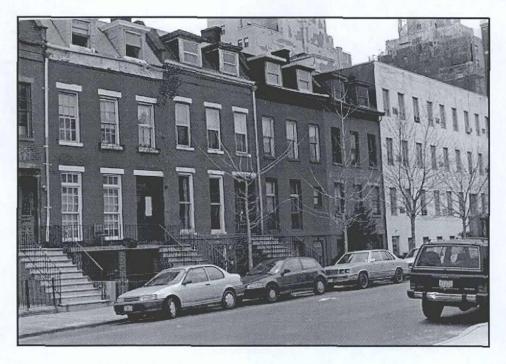


Plate 3. West side of Portland Avenue to the north of the Atlantic Terminal Development. Looking northwest.

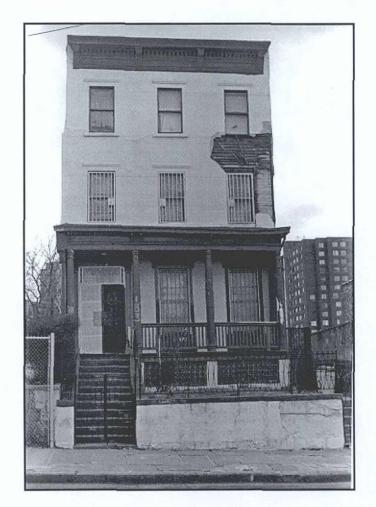


Plate 4. 183 S. Oxford Street. Looking east.

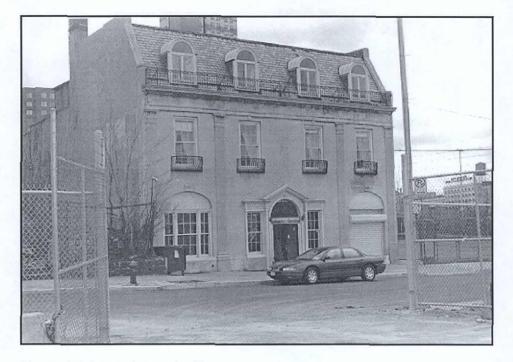


Plate 5. 183 S. Oxford Street. Looking east.



Plate 6. Drywell (?) drain cap behind new housing bordering the west side of Cumberland Street.

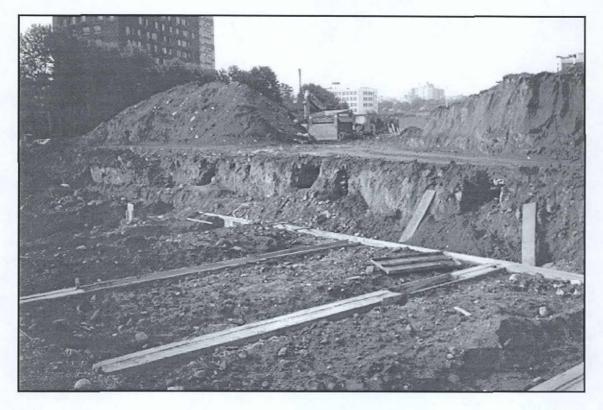


Plate 7. Area of unauthorized excavations showing the distance between the features and the new construction (photo supplied by Linda Stone).

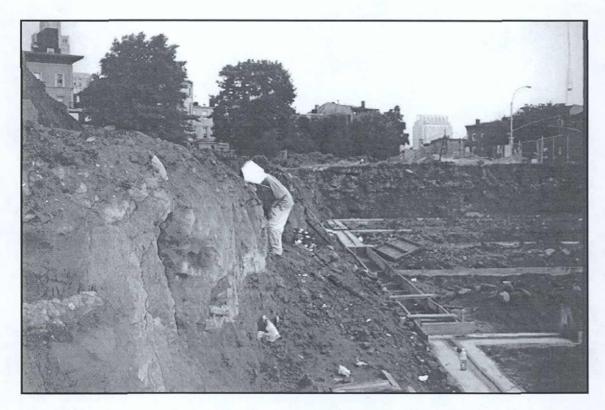
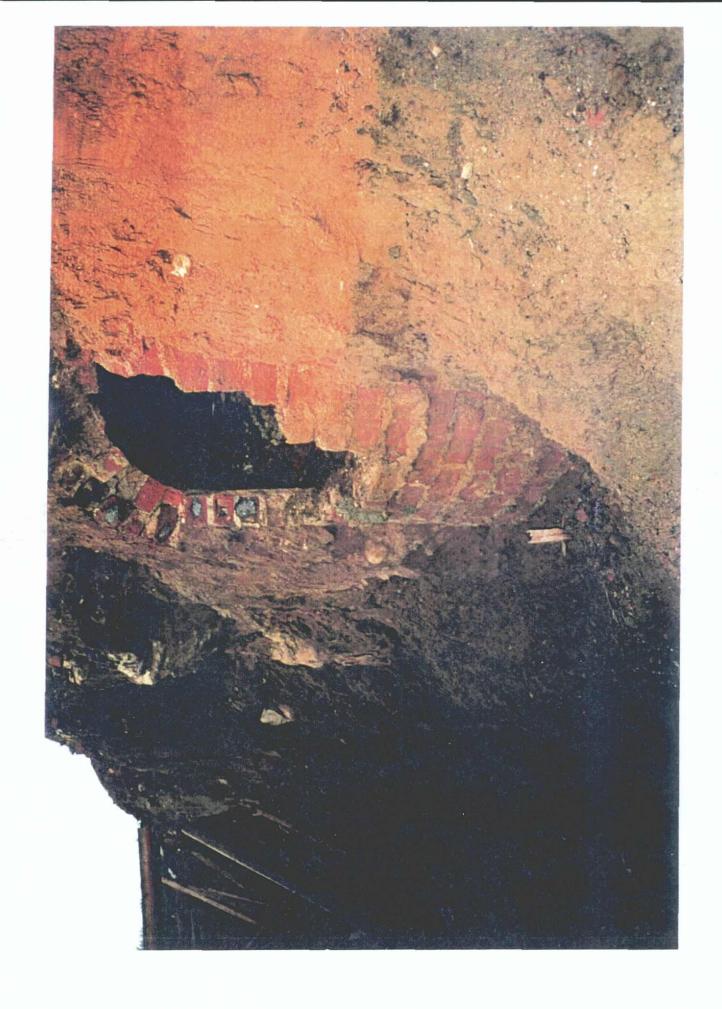
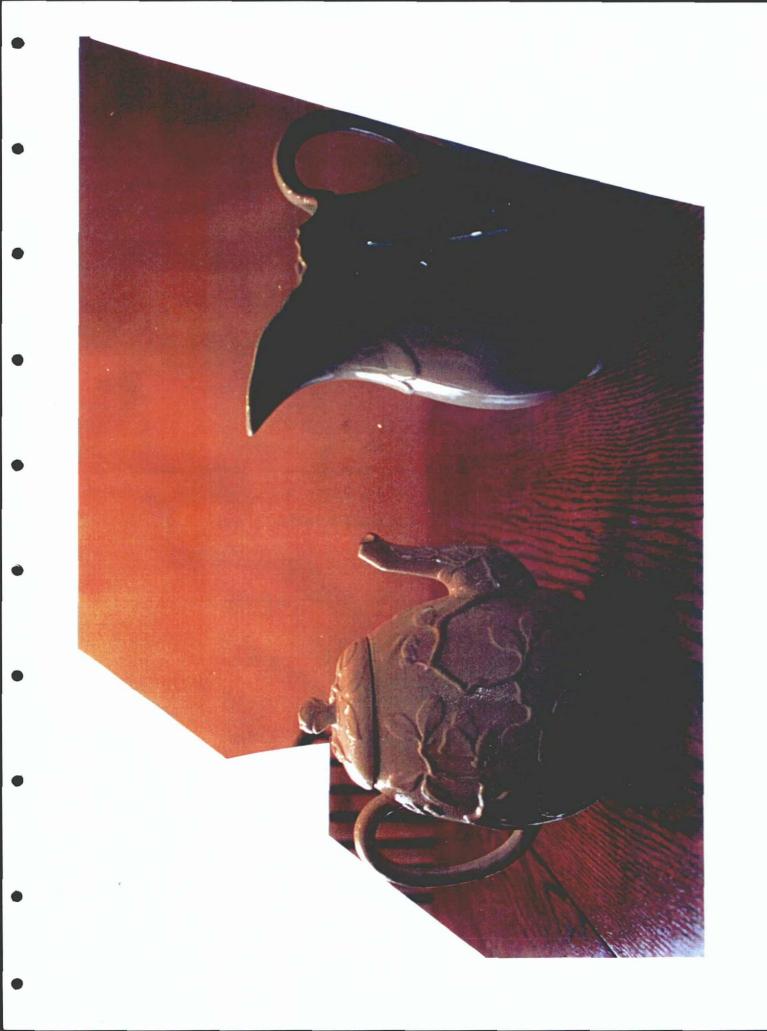


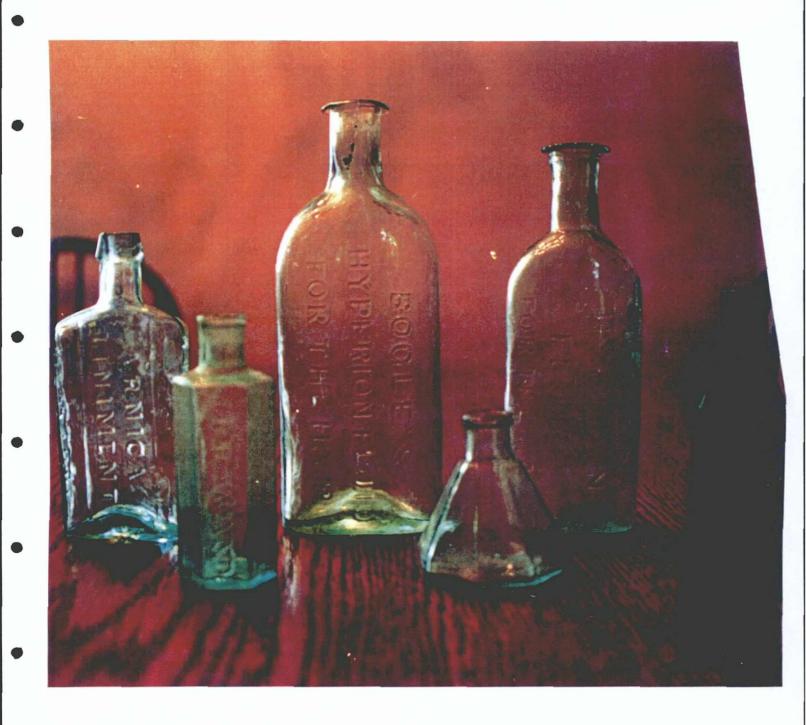
Plate 8. Area of unauthorized excavations showing pothunter investigating one of the cisterns (photo supplied by Linda Stone).

APPENDIX I:

PHOTO DOCUMENTATION OF UNAUTHORIZED ARCHEOLOGICAL INVESTIGATIONS









APPENDIX II:

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PROJECT PERSONNEL

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Appendix II: Project Personnel

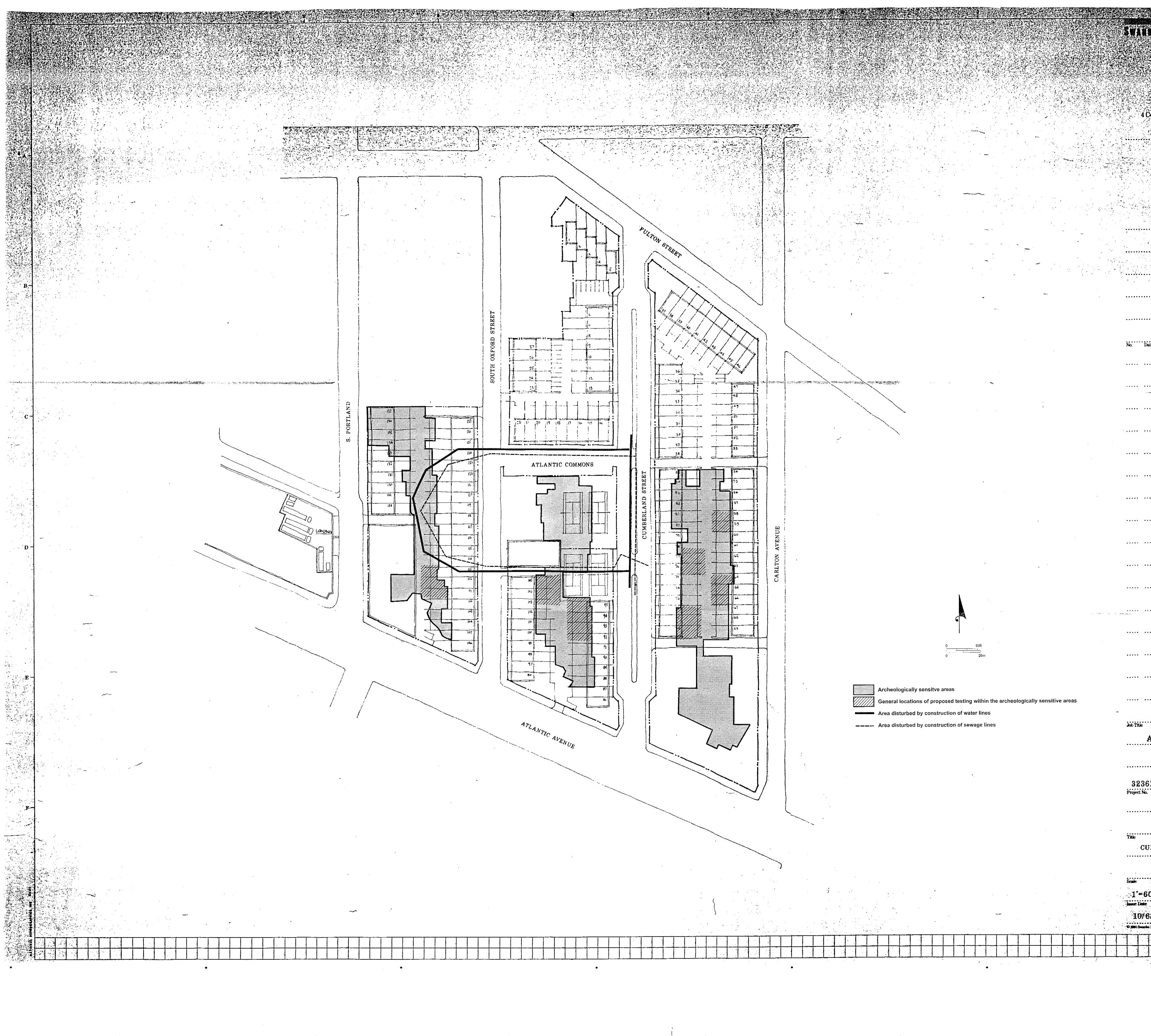
Mr. Daniel G. Roberts, Principal-in-Charge: Responsible for project administration, quality assurance, and report review. Mr. Roberts has over 25 years experience in cultural resources management and historic preservation, and is the author, co-author, or editor of more than 100 cultural resources reports and publications. He has a Masters degree in Anthropology, and is certified by the Society of Professional Archeologists (SOPA).

Dr. Rebecca Yamin, Principal Investigator/Project Manager: Responsible for all day-to-day managerial and technical aspects of the project, including documentary research and primary authorship of the report. Dr. Yamin has 17 years experience in conducting cultural resource investigations in the Northeast. She specializes in the historical archeology of New York City and New Jersey, and her doctoral work focused on pre-Revolutionary trade networks in northern New Jersey. Dr. Yamin has directed all phases of cultural resources surveys and several data recovery projects. She is presently directing analysis of the material recovered on the Courthouse site at Foley Square in lower Manhattan. Dr. Yamin also has considerable compliance and review experience, having assisted Federal Energy Regulatory Commission headquarters staff in satisfying agency obligations under Section 106 of the National Historic Preservation Act. She is certified by the Society of Professional Archaeologists (SOPA).

Mr. Reginald Pitts, Project Historian: Responsible for directing the documentary study and coordinating the study team. Mr. Pitts has over seven years of experience in cultural resources management and historical research. He is an accomplished archival researcher and, since joining JMA in 1993, has applied his research skills to several projects in the Middle Atlantic region, including a cultural resources survey of the Philadelphia Naval Complex and primary source historical research on the (Tenth Street) First African Baptist Church Cemetery in Philadelphia. Mr. Pitts received his Master's degree in American History in 1979 and a J.D. degree in Law in 1982. He is currently a doctoral candidate in American History at Temple University.

Dr. Robert K. Fitts, Project Archeologist. Responsible for analysis of archeological sensitivity data. Dr. Fitts recently completed his doctoral dissertation in Anthropology at Brown University. For his dissertation, entitled, "Constructing and Deconstructing New England's Slave Paradise: Master/Slave Relations in Eighteenth-Century Narragansett, Rhode Island," he conducted extensive deed and other documentary research. He also worked as a historical researcher for the Public Archaeology Lab in Pawtucket, Rhode Island. Dr. Fitts has participated in numerous field investigations in the Middle Atlantic and New England regions and also has laboratory experience. His research interests include African American ethnicity, slavery, and gravestones.

Ms. Claudia Milne, Documentary Researcher. Responsible for conducting archival research. Ms. Milne is a Ph.D. candidate in historical archeology at the City University of New York. She is also presently working on the analysis of the materials recovered at the Courthouse site at Foley Square in lower Manhattan. Relating to that project, she has conducted documentary research in order to investigate specific topics covered in her graduate courses. She also completed the documentary research for the MCC/Tunnel project in lower Manhattan, including an examination of directories, census records, insurance and land maps, taxes, and deeds.



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