

Gowanus Neighborhood Rezoning

**AREA BOUNDED BY BOND, HOYT, AND SMITH STREETS; 3RD AND 4TH AVENUES;
HUNTINGTON, 3RD, 7TH, AND 15TH STREETS; AND WARREN, BALTIC, AND
PACIFIC STREETS**

BROOKLYN, KINGS COUNTY, NEW YORK

Phase 1A Archaeological Documentary Study

Prepared for:

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Executive Summary

CEQR Number: 19DCP157K

LPC Project Unique Identification Number: 34126

Involved Agencies:

Phase of Survey: Phase 1A Archaeological Documentary Study

Location Information

Location: Manhattan
Minor Civil Division: 06101
County: New York County

Survey Area

Length (Project Area): Approximately 0.75 to 1.3 miles (4,000 to 7,000 feet)
Width (Project Area): Approximately 0.5 miles (2,500 feet)
Area (Project Area): Approximately 188 acres/8,196,00 square feet
Area (Phase 1A Study Area): 24.791 acres/1,080,045 square feet

USGS 7.5 Minute Quadrangle Map: Brooklyn Quadrangle

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Abstract:

LPC conducted an initial review of the proposed potential and projected development sites. In a comment letter dated April 23, 2019, LPC determined that a number of potential and projected development sites (collectively referred to as the “archaeological study area”) possess potential archaeological significance and determined that additional archaeological analysis in the form of a Phase 1A Archaeological Documentary Study (“Phase 1A Study”) was necessary to determine the archaeological sensitivity of each development site. The remaining potential and projected development sites were determined by LPC to have no potential archaeological significance and, as such, no additional archaeological analysis of those properties is warranted.

This Phase 1A Study of the archaeological study area was prepared to determine the archaeological sensitivity of the 50 development sites that were identified as potentially archaeologically significant. The Phase 1A Study identified all or portions of 46 potential and projected development sites as archaeologically sensitive for resources associated with the Gowanus Canal bulkhead and associated landfill; 19th century shaft features; and/or evidence associated with milling or agricultural activities dating between the 17th and 19th centuries, including evidence of the role of forced labor and enslavement as they related to those efforts. The Project Area was determined to have low sensitivity for precontact archaeological resources, some of which may be deeply buried; evidence of industrial uses in the 19th and 20th centuries; and for human remains associated with the Revolutionary War or with homestead burial grounds. Additional archaeological analysis is recommended for certain

development sites, including archaeological monitoring; Phase 1B Archaeological Testing; a geomorphological assessment of deeply buried landscapes; and the preparation of an Unanticipated Human Remains Discoveries Plan in addition to continued consultation with LPC and submission and concurrence of all required work plans.

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A. INTRODUCTION

The New York City Department of City Planning (DCP), together with the Department of Housing Preservation and Development (HPD) and the Department of Parks and Recreation (NYC Parks), is proposing a series of land use actions—including zoning map amendments, zoning text amendments, City Map amendments, and disposition of City-owned property (collectively, the “Proposed Actions”)—to implement land use and zoning recommendations in the Gowanus Neighborhood Plan (the “Neighborhood Plan” or “Plan”). The area subject to the Proposed Actions (the “Project Area”) is generally bounded by Bond, Hoyt, and Smith Streets to the west; 3rd and 4th Avenues to the east; Huntington, 3rd, 7th, and 15th Streets to the south; and Warren, Baltic, and Pacific Streets to the north (see **Figure 1**). The Project Area is an approximately 80-block area of the Gowanus neighborhood.

The Proposed Actions are intended to facilitate development patterns that meet the long-term vision of a thriving, inclusive, and more resilient Gowanus where existing and future residents and workers can participate in civic, cultural, and economic activities and where a wholly unique resource—the Gowanus Canal—can thrive and play an active role in that equitable and sustainable growth. Overall, the Proposed Actions are expected to result in an increase in dwelling units (including affordable housing units), commercial space, community facility space, and open space including more than an acre of newly mapped parkland while at the same time decreasing the amount of warehouse space, self-storage space, and industrial space.

The Proposed Actions are the culmination of many years of planning work in and around Gowanus by local community members, elected officials, and City agencies, and reflect DCP’s ongoing engagement process with community boards, residents, business owners, community-based organizations, elected officials, and other stakeholders to achieve the following land use objectives:

- Support existing clusters of economic activity and promote development of new job-generating uses through increased industrial and commercial density and updated parking and loading regulations in key areas;
- Provide opportunities for the creation of new, permanently affordable housing with options for low- and moderate-income households, while bringing existing residences into conformance with zoning;
- Facilitate the creation of new waterfront open space and neighborhood parks along the Canal through the establishment of a Waterfront Access Plan (WAP) and changes to the City Map;
- Facilitate several shared neighborhood-wide goals, including promoting a walkable, vibrant, mixed-use neighborhood, brownfield remediation, and activation of key areas by allowing higher densities and a broader range of uses and incentivizing or requiring non-residential uses in select areas;
- Create special rules to establish limits for height, bulk envelope, and density that consider neighborhood context as well as other shared goals, including encouraging variation and diversity of future programming, open spaces, site planning, and design along the canal; and

- Support a successful Neighborhood Plan by institutionalizing a comprehensive planning framework that is inclusive of relevant capital infrastructure needs and services to support current demand and future growth.

The Proposed Actions include discretionary land use approvals that are subject to review under Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, and New York City Environmental Quality Review (CEQR). These approvals include zoning map amendments, zoning text amendments, city map amendments, disposition of HPD-owned land, and Urban Development Action Area Project (UDAAP) designation. DCP will be acting as lead agency on behalf of the New York City Planning Commission (CPC) and will conduct a coordinated environmental review. HPD will be the applicant for the UDAAP disposition applications on City-owned sites. NYC Parks will be applicant for the parkland mapping actions. HPD and NYC Parks will serve as involved agencies under CEQR. To assess potential environmental impacts that would result from the Proposed Actions, an Environmental Impact Statement (EIS) is being prepared pursuant to the above-referenced environmental review legislation. This Phase 1A Archaeological Documentary Study was prepared as part of the EIS analysis of cultural resources.

B. PROJECT DESCRIPTION

The Proposed Actions affect an approximately 80-block area (see **Figures 2 and 3**) surrounding the Gowanus Canal and a segment of 4th Avenue. The area encompasses approximately 200 acres, and is defined by the 1.8-mile-long, man-made Gowanus Canal, which splits the neighborhood, and the major north-south and east-west corridors that connect the upland areas to the surrounding neighborhoods. The Proposed Actions are intended to facilitate development patterns that meet the long-term vision of Gowanus as a sustainable, mixed-use neighborhood anchored by a vibrant and resilient waterfront that can support the housing and economic needs of the community, the surrounding neighborhoods, and the City as a whole. Within this context, the Proposed Actions are intended to work in unison with the comprehensive set of strategies put forth in an overall Gowanus Neighborhood Plan, which seeks to foster a thriving, inclusive, and more resilient Gowanus where existing and future residents and workers are able to participate in civic, cultural, and economic activities, and where a wholly unique resource—the Gowanus Canal—can thrive and play an active role in that equitable and sustainable growth.

The Proposed Actions are necessary because existing land use patterns and zoning do not permit for the implementation of the Neighborhood Plan. Current land use and development patterns have been shaped by the Canal and the existing zoning that has been in place since 1961. Without zoning changes, much of Gowanus will likely remain underdeveloped and underutilized and nearby neighborhoods will continue to become more costly. Strong demand for housing Citywide along with a rapidly growing and diversifying economy will continue push up housing prices and limit housing that is affordable for households at lower incomes.

Originally designed to support many of the industrial uses in the immediately surrounding area with water access to shipping lanes, the utilization of the Canal as an industrial waterway has waned over the years and has disappeared north of the 9th Street Bridge. Today, Gowanus is significantly changed from the peak of its industrial past and is characterized by a mix of building forms and uses, including one- to two-story former industrial buildings, vacant or underutilized lots that are primarily used for open storage or parking, and larger loft-style buildings, many of which have been adaptively reused for commercial and art-related uses. The waterfront blocks contain a mix of commercial activity, parking lots, storage facilities, and light industrial facilities interspersed with vacant buildings and land. While the Canal is no longer used for industrial or commercial transport, it is accessed and used for

recreational, educational, and stewardship purposes. Many of the properties are contaminated from former industrial waste or through subsurface migration of pollutants.

Current zoning around the Canal allows industrial and some commercial uses with no new residential uses or affordable housing permitted. However, new non-residential development has been precluded by the existing zoning's relatively low permitted densities coupled with high parking, loading, and other requirements. The combination of outdated zoning and broader economic and demographic conditions has resulted in few new buildings constructed within the Project Area in recent decades other than hotels and self-storage facilities. Since new commercial and industrial construction is mostly infeasible, former industrial buildings have been adaptively reused for commercial, light industrial, and arts-related uses. Two new apartment buildings were recently constructed after a private rezoning was approved in 2010 to allow a mix of uses, including residential.

IDENTIFICATION OF DEVELOPMENT SITES

In projecting the amount and location of new development, several factors were considered in identifying likely Development Sites. These include known development proposals, past development trends, and the Development Site criteria described below. Generally, for area-wide rezonings that create a broad range of development opportunities, new development can be expected to occur only on selected sites within the Project Area. To produce a reasonable, conservative estimate of future growth, the Development Sites have been divided into two categories: projected Development Sites and potential Development Sites. The projected Development Sites are considered more likely to be developed within a 15-year timeframe. Potential sites are considered less likely to be developed within 15 years. The extent to which each Development Site would be developed subsequent to the proposed rezoning is not yet known and no plans for lot-specific development are currently proposed. For the purposes of this Phase 1A Archaeological Documentary Study, it is assumed that property within the study area will be developed to the maximum vertical and horizontal extents permitted by the new zoning.

C. PROJECT BACKGROUND

The current rezoning follows numerous previous rezoning efforts in the immediate area, as described below. A summary of previous archaeological studies completed as part of previous rezonings and other development projects is included in **Chapter 2, "Summary of Previous Archaeological Investigation of the Project Area and Vicinity."**

PREVIOUS PLANNING EFFORTS

In the mid-2000s, the neighborhoods surrounding Gowanus were the focus of contextual zoning changes that sought to prevent out-of-scale, height factor towers. The zoning changes also had the effect of restricting opportunities for new housing production, including affordable housing. Since 2010, Brooklyn has gained more than 100,000 new residents and 50,000 new jobs. Without providing additional residential capacity or new space for jobs, it will be increasingly difficult to accommodate the anticipated growth expected in Brooklyn. Strong demand for housing across New York City has played out locally by pushing up prices and limiting housing that is affordable for households at lower incomes. Below are brief descriptions of the zoning changes by neighborhood.

PARK SLOPE AND 4TH AVENUE REZONING

A 2003 rezoning was completed at the request of the local community in an attempt to protect the scale of development in Park Slope and to allow for the growth of housing development along 4th Avenue. The rezoning leveraged 4th Avenue's width and access to transit to accommodate new housing, albeit

without any zoning tools to encourage or require the inclusion of affordable housing. New residential developments are not currently required to provide affordable housing. DCP initiated a follow-up zoning text amendment in 2011 to map the first Enhanced Commercial District in the City along 4th Avenue to require commercial and community facility uses on the ground floor and apply transparency and curb cut location requirements for ground floors in new developments to enhance the pedestrian streetscape.

CARROLL GARDENS REZONING

In 2009, the Carroll Gardens Rezoning mapped contextual zoning districts that established height and bulk regulations to ensure that future development reflected the predominantly brownstone, walk-up apartment building character of the area, while allowing for modest growth on appropriate corridors and limited building upgrades. The rezoning focused on 86 blocks in the Carroll Gardens and Columbia Street neighborhoods that were primarily zoned R6. The community was concerned that new buildings would be developed and expanded under the existing R6 zoning height factor regulations and could produce developments that were out of scale with the rowhouses in these neighborhoods.

BOERUM HILL REZONING

In 2011, the Boerum Hill Rezoning mapped contextual zoning districts to reflect existing building forms and uses to protect the character and scale of the neighborhood while allowing for limited expansions and development on vacant sites. The rezoning, which focused on a 31-block area formerly known as North Gowanus, also refined commercial overlays on many of the thoroughfares to more closely tailor them to the existing distribution of mixed uses, bringing existing uses into conformance, and preventing the expansion of commercial activity into residential midblocks where such uses would threaten existing neighborhood character.

GOWANUS CANAL BROWNFIELD OPPORTUNITY AREA NOMINATION STUDY

In an effort to catalyze economic development and clean up environmentally contaminated sites, a Brownfield Opportunity Area (BOA) Nomination Study was prepared in 2014 for Community Board 6 and submitted to the New York State Department of State (DOS) and the New York State Department of Environmental Conservation (DEC). The BOA study area straddles the neighborhoods of Carroll Gardens, Park Slope, and Boerum Hill. It includes areas mapped with manufacturing districts generally located on the east side of the Canal between 3rd and 4th Avenues, 1st Street, and 15th Street/Hamilton Avenue, and the east side of the Canal between 4th Avenue, Sackett Street, and Baltic Street. A portion of the study area is located within the Southwest Brooklyn Industrial Business Zone (IBZ). The BOA study analyzed land use, building, and economic trends; surveyed businesses; and developed a series of findings and recommendations. Nineteen sites were also studied further to explore opportunities for strategic investment and redevelopment.

Based on community outreach and an existing conditions analysis, the BOA study found that Gowanus is an employment hub for local residents with a building stock appealing to artists and start-ups, while also a neighborhood grappling with a legacy of contamination, transportation, and parking challenges, along with limited parks and open space—especially along the Canal. The BOA study presents three recommendations: first, support and grow industrial business in Gowanus; second, preserve a navigable canal for all users; and third, integrate evolving interests in Gowanus (cultural, environmental, recreational) with existing industrial and business interests to foster a multi-faceted, productive, and creative economy.

SUPERFUND DESIGNATION

A legacy of pollution in and around the Canal has led to a need for substantial remediation of the Canal, including both its active waterway and formerly inundated basins that have been filled. From the mid-19th to the mid-20th centuries, Gowanus was a center of heavy industry, including coal gasification (manufactured gas) plants (MGPs), oil refineries, chemical plants, cement works, machine shops, and tanneries. Underground chemical storage and runoff from these sites spread toxins throughout the area, and coal tar and other contaminants continue to leach into soil and migrate due to container leaks, improper disposal, the natural topography, and high-water table of the former wetlands and creeks that were filled to form today's neighborhood.

City, state, and federal government agencies have committed to remediation throughout the neighborhood. In 2010, the United States Environmental Protection Agency (EPA) placed the Canal on its National Priorities (Superfund) List and has developed a remediation plan that focuses on hazardous materials located in and beneath the Canal, primarily non-aqueous phase liquid (NAPL) and associated polycyclic aromatic hydrocarbons (PAHs), which were discharged from the three former MGPs. As part of the remediation plan, EPA has also mandated the installation of underground tanks to reduce CSO discharges into the Canal. DEC and the Mayor's Office of Environmental Remediation (OER) have developed remedial programs and incentive programs to facilitate the investigation and cleanup of brownfield sites.

The Gowanus Canal was designated as a Federal Superfund Site by EPA in 2010 and Superstorm Sandy in 2012 led to increased attention and community engagement on the potential to remediate and improve the infrastructure in the Gowanus area and advanced discussions about the Gowanus' future among members of the community, elected officials, and City, state, and federal agencies. The Superfund remedy calls for the removal by dredging of contaminated sediment that has accumulated as a result of industrial and sewer discharges from the bottom of the Canal. The dredged areas would then be capped. Remedial efforts are also underway at three former MGPs along the Canal that contributed to the Canal's contamination. In 2014, EPA issued an order to National Grid (the company that acquired the legal liability for the three former MGP sites), the City of New York, and other potentially responsible parties requiring them to design the selected remedial action in the Canal. EPA has also mandated the installation of underground tanks to reduce discharges from CSOs into the Canal. DEC and OER have developed remedial and incentive programs to facilitate the investigation and remediation of brownfield sites.

BRIDGING GOWANUS

From 2013 to 2015, New York City Councilmembers (CMs) Brad Lander and Stephen Levin, in collaboration with other elected officials and the Pratt Center for Community Development, led a community-driven planning process called *Bridging Gowanus*. This process engaged community members and stakeholders with a series of public meetings, culminating in a final report published in September 2015. *Bridging Gowanus* put forth a broad vision for growth with recommendations and goals concerning sustainability and resiliency, public investments in infrastructure and programs, strengthening local jobs, and preserving and creating affordable housing.

Although *Bridging Gowanus* laid a vital foundation for a shared neighborhood vision and key priorities in connection with supporting growth, the report and its recommendations were developed without input from City agencies and did not contain a land use proposal with location-specific strategies for use and bulk. To build upon *Bridging Gowanus*, DCP, in partnership with other City agencies, CMs Lander and Levin, elected officials, and community-based partners, launched the Gowanus

Neighborhood Study in August of 2016 as part of a comprehensive effort to plan for the neighborhood’s future.

CURRENT REZONING

Consistent with Citywide trends over the past three decades, interest in working and living in older industrial neighborhoods (such as the area surrounding the Canal) has returned. Strong demand for housing Citywide has played out locally by pushing up prices and limiting housing that is affordable for households at lower incomes. At the same time, the City has experienced a rapidly growing and diversifying economy. Although a small portion of the land around the Canal remains industrial in character, manufacturing and industrial uses are no longer present in most locations adjacent to the Canal. Commercial businesses, offices, and other uses that serve the surrounding residential communities have increased alongside long-time artists and a small number of remaining industrial tenants. The reinvestment in and reactivation of older loft buildings for a variety of commercial office and artist spaces indicate a growing local demand for new office and other work spaces.

D. DEFINITION OF PHASE 1A STUDY AREA

Pursuant to CEQR, consultation was initiated with the New York City Landmarks Preservation Commission (LPC) regarding the potential archaeological sensitivity of the 275 potential and projected Development Sites identified within the 80-acre Project Area. In a comment letter dated April 23, 2019, LPC identified a total of 54 sites that were determined to be potentially archaeologically significant (see **Table 1-1 and Figures 2 and 3**). LPC determined that these properties were potentially sensitive for archaeological resources associated with the neighborhood’s 19th century occupation and its industrial past, including resources associated with landfilling and the construction of bulkheads. Furthermore, LPC determined that two lots are potentially sensitive for human remains associated with Revolutionary War battlefield burials. One of the sites identified by LPC is included within the study area of the previously-referenced CSO study area and its archaeological sensitivity is being assessed as part of that project and it is therefore not included in the study area (“Phase 1A Study Area”) for this Phase 1A Archaeological Documentary Study. Furthermore, LPC identified Block 395, Lot 37 as potentially sensitive, but that lot is currently being developed with a 12-story building which will presumably result in extensive subsurface disturbance, and that property has also been removed from the study area, which comprises the 50 remaining sites identified by LPC (Wong 2019). Similarly, Development Sites BXa and BXb on Block 1003, Lots 43 and 44 are currently being developed with a 10-story luxury housing development. Given the disturbance that will be generated as a result of the construction of the building on those lots, which LPC identified as potentially sensitive for human remains associated with the Revolutionary War, those sites have also been removed from the study area. Several additional properties were previously analyzed in a comprehensive Phase 1A study completed in 2009 by Historical Perspectives, Inc. (HPI) and the Louis Berger Group (LBG).

**Table 1-1
Properties Identified by LPC as Potentially Archaeologically Sensitive**

Block	Lot	Development Site Name	Notes
198	34	Aa	
198	35	Ab	
395	37	1c	Currently being developed with a 12-story building; Tax records indicate that the lot was recently merged and is now part of Lot 30
399	6	58a	
399	39	3a	
399	41	3b	
399	58	4a	
399	59	4b	
399	60	4c	
405	12	6c	
405	13	5a	
405	16	5d	
405	51	57aa/ab	
405	63	6a	
405	64	6b	
417	21	15d	Property thoroughly assessed in LBG/HPI 2009
424	1	18a	Property thoroughly assessed in LBG/HPI 2009
424	20	18b	Property thoroughly assessed in LBG/HPI 2009
425	1	Wa	Included within Gowanus CSO project site; archaeological sensitivity is being assessed as part of that project and is excluded from this study
431	17	22b	Property thoroughly assessed in LBG/HPI 2009
432	15	Wb	
433	8	Aha	
433	13	AHe	
438	3	28c	Property thoroughly assessed in LBG/HPI 2009
438	7	AOa	Property thoroughly assessed in LBG/HPI 2009
439	1	29a	Property thoroughly assessed in LBG/HPI 2009
445	11	28e	Property thoroughly assessed in LBG/HPI 2009
445	20	28f	Property thoroughly assessed in LBG/HPI 2009
447	50	BBa	
451	25	36a	
453	1	37a	Property thoroughly assessed in LBG/HPI 2009
453	21	37b	Property thoroughly assessed in LBG/HPI 2009
453	26	A1a	
453	31	APa	
453	54	BJaa/ab	
462	6	BOa	
462	14	40b	Property thoroughly assessed in LBG/HPI 2009
465	27	42a	
465	28	42b	
466	17	43a	
466	19	44a	
466	60	43b	
471	100	47b	
471	125	59a	
471	200	48a	
934	3	2c	
934	4	2d	
934	5	2e	
934	6	2f	
934	74	2j	
972	1	41a	
972	58	41c	Property thoroughly assessed in LBG/HPI 2009
1003	43	BXa	LPC Identified lot as sensitive for human remains associated with the Revolutionary War; However, these lots are being developed with a large luxury housing development and have been removed from the study area
1003	44	BXb	

Source: LPC comment letter dated April 23, 2019

A. INTRODUCTION

As described in **Chapter 1, “Introduction and Project Description,”** portions of the Phase 1A Study Area have been included within previous archaeological assessments associated with previous rezoning efforts or other development projects. Dozens of such assessments are included within the New York State Cultural Resource Information System (CRIS) archaeology survey database maintained by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the LPC database of archaeological reports. Some reports were submitted only to OPRHP pursuant to state and/or federal environmental review laws and therefore have not been reviewed by LPC pursuant to CEQR. Furthermore, nearly all of these reports were prepared prior to LPC’s issuance of its revised guidelines in 2018; therefore, the conclusions described therein may no longer be consistent with the current guidance as described in LPC’s 2018 *Guidelines* and the *CEQR Technical Manual*. Therefore, these previous studies have only been used to inform the present archaeological analysis and all conclusions regarding archaeological sensitivity of specific Project Area Development Sites have been reevaluated as part of this assessment.

B. IDENTIFICATION OF PREVIOUS ARCHAEOLOGICAL STUDIES WITHIN AND ADJACENT TO THE PROJECT AREA

As shown in **Table 2-1**, more than one dozen archaeological assessments have been completed within and adjacent to the Gowanus Neighborhood Rezoning Project Area. Previous studies have identified areas of archaeological sensitivity in the area associated with 18th century military activity; 18th century mill construction and operation; 19th century industrial development; 19th century residential occupation; and with resources associated with the construction and maintenance of the Canal, including its historic bulkhead wall. **Table 2-1** summarizes previous reports that have involved assessments of archaeological resources fully or partially within the Project Area and which address similar types of sensitivity; these reports have been filed with LPC¹ and/or OPRHP.² The overall area has been studied in several broad, large-scale studies of the broader Gowanus Canal region (e.g., Hunter Research, et al. 2004) as well as those that placed intense focus on specific properties in the area (e.g., LBG/HPI 2009). The list included in **Table 2-1** includes studies prepared for CEQR (and filed with LPC); SEQRA, Section 14.09, and/or Section 106 of the National Historic Preservation Act (and filed with OPRHP); or both.

¹ LPC’s archaeology report database is available at: <https://www1.nyc.gov/site/lpc/about/archaeology-reports.page>

² Reports filed with OPRHP were accessed through the New York State Cultural Resource Information System (CRIS): <https://cris.parks.ny.gov/>.

**Table 2-1
Previous Archaeological Analyses of the Gowanus Canal Area**

Year	Author	Report Title	Area Covered	Overlaps with Project Area	LPC Report Number	OPRHP Report Number
2002	McLean Archaeological Consultants, Inc.	Phase 1A Archaeological Investigation of the Gowanus Facilities Upgrade Project Area	Block 411, Lots 14 and 53	Adjacent	940	Not in database
2004	Hunter Research, Raber Associates, and Northern Ecological Associates, Inc.	Final Report National Register of Historic Places Eligibility Evaluation and Cultural Resources Assessment for the Gowanus Canal, Borough of Brooklyn, Kings County, New York, In Connection with the Proposed Ecosystem Restoration Study	Entire Gowanus canal Region	Yes	922	04SR55139
2009	LBG/HPI	Gowanus Canal Corridor Rezoning Project; Gowanus, Brooklyn, New York: Phase 1A Cultural Resource Assessment	Entire Gowanus canal Region and many Development Sites (see Table 1-1)	Yes	1174	Not in database
2011	Hunter Research	Archaeological Sensitivity Study, Gowanus Canal, Brooklyn Borough, City of New York, Kings County, New York	Entire Gowanus canal Region	Yes	Not in database	11SR61194
2012	Chrysalis Archaeological Consultants and Gregory Dietrich Preservation Consulting	Historic Resource Inventory and Limited Phase 1A Documentary & Archaeological Sensitivity Report: Gowanus Canal Area Borough of Brooklyn, Kings County, New York	Entire Gowanus canal Region; limited focus on certain Development Sites	Yes	Not in database	12SR61409
2013	Langan Engineering and Environmental Services, Inc. ("Langan")	Gowanus Canal Bulkhead and Cribbing Documentation at Carroll Gardens, 365 Bond Street and 400 Carroll Street, Brooklyn, Kings County, New York.	Block 452, Lots 1 and 19; Block 458, Lot 1	Yes	1530	13SR62278
2014	Langan	Gowanus Canal Bulkhead at Benson Scrap Metal	Block 483, Lot 20	No	Not in database	14SR62743
2015	HPI	Phase 1A Archaeological Documentary Study Gowanus Canal Area Phase II High Level Storm and Water Main Replacement; Brooklyn, Kings County, New York.	Streetbeds in area bounded by 3rd Avenue; 4th Avenue; Atlantic Avenue; and Douglass Street.	Yes	Not in database	15SR00739
2016	AKRF, Inc.	9th Street Infrastructure Improvements; Capital Project SEK20068; Brooklyn, Kings County, New York: Phase 1A Archaeological Documentary Study	Streetbeds of 2nd Avenue between 7th Street and 9th Street and 9th Street between Smith Street and 2nd Avenue	No	1735	17SR00137
2016	AHRS	Identification and Historical Assessment of "Target 31a" 4th Street Basin Gowanus Canal Superfund Site Brooklyn, New York	Within 4th Street Basin	No	Not in database	16SR00290
2016-2017	Joan H. Geismar, PhD, LLC	Gowanus Houses (Block 404 Lot 1) Brooklyn Phase 1A Archaeological Assessment; and NYCHA Gowanus Houses (Block 404 Lot 1) Brooklyn, Phase 1B Archaeological Testing	Block 404, Lot 1	Adjacent	Not in database	17SR00014; 17SR00420

Table 2-1 (cont'd)
Previous Archaeological Analyses of the Gowanus Canal Area

Year	Author	Report Title	Area Covered	Overlaps with Project Area	LPC Report Number	OPRHP Report Number
2018	HPI	Phase 1A Archaeological Documentary Study Wyckoff Gardens Infill Development	Block 394, Lot 1	Adjacent	1820	18SR56607
2019	Geoarcheology Research Associates (GRA)	Summary Geoarchaeological Assessment; Gowanus CSO Facilities: Outfall OH-007 and Outfall RH-034; Borough of Brooklyn, New York	Block 411, Lot 24; Block 418, Lot 1; Block 425, Lot 1; Block 977, Lots 1 and 3; Block 990, Lots 1, 16, and 21	Yes; additional investigation on-going	Not in database	19SR00204
2016-2018	AKRF, Inc.	Phase 1A Archaeological Documentary Study: Proposed Pre-Kindergarten Center; 168 8th Street, Brooklyn, Kings County, New York; and Proposed Pre-Kindergarten Center, 168 8th Street (Block 1003, Lot 11), Brooklyn, Kings County, New York; Final Archaeological Technical Report: Phase 1B Investigation and Phase 2 Evaluation	Block 1003, Lot 11	No	Not in database	16SR00381; 18SR56192
Notes: The absence of a report in LPC’s database assumes that the report was not reviewed by LPC pursuant to CEQR. This table includes only those previous reports that overlap with the proposed Project Area; additional reports prepared in the vicinity of the Project Area will be reviewed and summarized in the Phase 1A study as necessary and appropriate.						
Sources: LPC Archaeology Report Database; OPRHP CRIS database.						

Any conclusions reached by these previous studies regarding specific Development Sites within the Project Area are summarized in **Table 2-2** and previously identified archaeological sites within 1 miles of the Project Area (as mapped in CRIS) are summarized in **Table 2-3**.

Table 2-2
Conclusions Reached by Previous Archaeological Surveys for Development Sites in the Phase 1A Study Area

Block	Lot	Site	Previous Study	Sensitivity Determinations from Previous Reports
405	51	57aa/ab	Chrysalis and Dietrich 2012	Determined no archaeological sensitivity but report states additional research is needed on a lot-by-lot basis
417	21	15d	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
424	1	18a	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
424	20	18b	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
425	1	Wa	Chrysalis and Dietrich 2012; GRA 2019	Chrysalis and Dietrich 2012 determined no sensitivity but GRA’s 2019 geoarchaeological investigation identified sensitivity in certain soil levels and recommended monitoring during excavation to a depth of 25 feet
431	17	22b	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
432	15	Wb	Hunter Research 2004	General location of Freeke’s mill
433	8	AHa	LBG/HPI 2009	Parcel is possibly sensitive for bulkhead resources
438	3	28c	LBG/HPI 2009	Parcel is possibly sensitive for bulkhead resources
438	7	AOa	Chrysalis and Dietrich 2012	Determined no archaeological sensitivity but report states additional research is needed on a lot-by-lot basis
439	1	29a	LBG/HPI 2009	Parcel is possibly sensitive for bulkhead resources

Table 2-2 (cont'd)

Conclusions Reached by Previous Archaeological Surveys for Development Sites in the Phase 1A Study Area

Block	Lot	Site	Previous Study	Sensitivity Determinations from Previous Reports
445	11	28e	LBG/HPI 2009; Chrysalis and Dietrich 2012	Chrysalis and Dietrich 2012 identified archaeological sensitivity; LBG and HPI 2019 identified sensitivity for bulkhead resources
445	20	28f	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
453	1	37a	Hunter Research 2004; LBG/HPI 2009	General area of Denton's Mill as identified by Hunter Research 2004, generally sensitive for 1st Street Turning Basin; LBG/HPI 2009 identified sensitivity for bulkhead resources and 19th century resources
453	21	37b	Hunter Research 2004; LBG/HPI 2009	General area of Denton's Mill as identified by Hunter Research 2004, generally sensitive for 1st Street Turning Basin; LBG/HPI 2009 identified sensitivity for bulkhead resources and 19th century resources
453	26	Ala	Hunter Research 2004	General area of Denton's Mill; generally sensitive for 1st Street Turning Basin
453	31	APa	Hunter Research 2004	General area of Denton's Mill
453	54	BJaa/ab	Hunter Research 2004	General area of Denton's Mill; generally sensitive for 1st Street Turning Basin
462	14	40b	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
466	60	43b	Chrysalis and Dietrich 2012	Determined no archaeological sensitivity but report states additional research is needed on a lot-by-lot basis
471	100	47b	AKRF 2014	Bulkhead excavation monitored by AKRF 2014
471	200	48a	AKRF 2014	Bulkhead excavation monitored by AKRF 2014
972	1	41a	LBG/HPI 2009	Parcel is sensitive for bulkhead resources
Notes: This table only references those reports that made specific determinations on an individual lot's archaeological sensitivity as they pertain to the existing conditions of the proposed rezoning. These determinations may not align with the determinations made based on the particular impacts proposed as a result of the proposed rezoning.				
Sources: LPC Archaeology Report Database; OPRHP CRIS database.				

Table 2-3
Previously Identified Archaeological Sites within 1 Mile of the Project Area

Site Name	Distance from Project Area	Time Period	Site Type	Additional Source(s)
Revolutionary War Mass Grave (Exact Location Unknown) OPRHP Site Number: 04701.014947	Within Project Area as mapped in CRIS; exact location unknown	Late 18th century	Reported mass burial associated with the Battle of Brooklyn in 1776; location is disputed and discussed in greater detail in Chapter 7, "Burial Grounds in the Vicinity of the Project Area."	AKRF 2016a; Parry 2017; AKRF 2018
Rear Yard of 197 9th Street/Gowanus Pre-K Archaeological Site OPRHP Site Number: 04701.020238	400 feet	Mid-19th century to early 20th century	Rear yard shaft features associated with 19th century home and adjacent ink factory	AKRF 2018
Target 31a Sunken Vessel (ex <i>Point O'Woods V</i>) OPRHP Site Number: 04701.019115	350 feet	Mid-20th century	Sunken US Navy aircraft rescue boat later converted for use as a ferry	AHRS 2016
Atlantic Terminal Historic Site OPRHP Site Number: 04701.013923	1,350 feet	Mid-19th century	Rear yard shaft features associated with 19th century homes	
Ingersoll OPRHP Site Number: 04701.019352	3,500 feet	Mid-19th century	Rear yard shaft features associated with 19th century homes	Chrysalis 2017
PCI/Admiral's Row Historic Site OPRHP Site Number: 04701.016569	5,250 feet	19th century	Artifact assemblage	
22 Chapel Buried 19th Century Ground Surface OPRHP Site Number: 04701.019317	5,000 feet	Mid-19th century	Buried ground surface with 19th century artifacts	AKRF 2016b
84 Tillary Street Privy Remnant Historic Site OPRHP Site Number: 04701.018574	4,200 feet	Mid-19th century	Truncated privy pit associated with 19th century home	AKRF 2014
Privy and Cistern, Block 176, Lot 56 OPRHP Site Number: 04701.015450	1,350 feet	Late-19th century	Rear yard shaft features associated with 19th century home	
Bishop Mugavero Site OPRHP Site Number: 04701.000508	1,000 feet	Mid-19th century	Rear yard shaft features associated with 19th century homes	Geismar 1992
Note: Precontact archaeological sites mapped by the New York State Museum are discussed in Chapter 5, "Precontact Archaeological Resources."				
Source: Sites mapped in the New York State Cultural Resource Information System (CRIS): https://cris.parks.ny.gov				

C. RESEARCH THEMES IDENTIFIED IN PREVIOUS STUDIES

The dozens of previous archaeological assessments that have occurred in the vicinity of the Gowanus Canal have emphasized four major critical research themes: 1) the history of the construction of the Canal, including landfilling efforts and the construction of the bulkhead wall forming the Canal's perimeter; 2) the residential development of the neighborhood that began following the division of larger farms in the first half of the 19th century; 3) the area's industrial history and the possibility of

industrial archaeological resources being present; and 4) possible remaining evidence associated with the Battle of Brooklyn in 1776 and the possibility that human remains associated with soldiers killed in battle are present within the area.

As described in greater detail in **Chapter 3, “Research Goals and Methodology,”** this Phase 1A Archaeological Documentary Study also addresses these research themes and examines the likelihood that each of the Development Sites included within the Study Area could be sensitive for one or more of these types of resources. Furthermore, this Phase 1A study addresses additional topics that are underrepresented in previous studies, including the potential for any of the Development Sites to contain human remains associated with cemetery sites not related to the Revolutionary War, including undocumented burials of enslaved persons.

A. RESEARCH GOALS

This Phase 1A Archaeological Documentary Study of the Gowanus Neighborhood Rezoning Study Area has been designed to satisfy the requirements of LPC and follows the guidelines of the New York Archaeological Council (NYAC). The study documents the development history of the Development Sites within the Phase 1A Study Area and their potential to yield archaeological resources, including both precontact and historic cultural resources. In addition, this report documents the current conditions of the Project Area, as well as previous cultural resource investigations that have taken place in the vicinity.

This study has four major goals: (1) to determine the likelihood that the Development Sites were occupied during the precontact (Native American) and/or historic periods; (2) to determine the effect of subsequent development and landscape alteration on any potential archaeological resources that may have been located within the Development Sites; (3) to make a determination of the Development Sites' potential archaeological sensitivity; and (4) to make recommendations for further archaeological analysis, if necessary. The steps taken to fulfill these goals are explained in greater detail below.

The first goal of this study is to determine the likelihood that the Project Area was inhabited during the precontact or historic periods, and identify any activities that may have taken place in the vicinity that would have resulted in the deposition of archaeological resources.

The second goal of this Phase 1A Study is to determine the likelihood that archaeological resources could have survived intact within the Development Sites after development and landscape alteration (e.g., grading). Potential disturbance associated with the construction and demolition of buildings; paving; utility installation; and other previous development-related impacts was also considered. As described by NYAC in their Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State:

An estimate of the archaeological sensitivity of a given area provides the archaeologist with a tool with which to design appropriate field procedures for the investigation of that area. These sensitivity projections are generally based upon the following factors: statements of locational preferences or tendencies for particular settlement systems, characteristics of the local environment which provide essential or desirable resources (e.g., proximity to perennial water sources, well-drained soils, floral and faunal resources, raw materials, and/or trade and transportation routes), the density of known archaeological and historical resources within the general area, and the extent of known disturbances which can potentially affect the integrity of sites and the recovery of material from them (NYAC 1994: 2).

The third goal of this study is to make a determination of the Development Sites' archaeological sensitivity. As stipulated by the NYAC standards, sensitivity assessments should be categorized as low, moderate, or high to reflect "the likelihood that cultural resources are present within the project area" (NYAC 1994: 10). For the purposes of this study, those terms are defined as follows:

- Low: Areas of low sensitivity are those where the original topography would suggest that Native American sites would not be present (i.e., locations at great distances from fresh and salt water

resources), locations where no historic activity occurred before the installation of municipal water and sewer networks, or those locations determined to be sufficiently disturbed so that archaeological resources are not likely to remain intact.

- Moderate: Areas with topographical features that would suggest Native American occupation, documented historic period activity, and with some disturbance, but not enough to eliminate the possibility that archaeological resources are intact on the Development Sites.
- High: Areas with topographical features that would suggest Native American occupation, documented historic period activity, and minimal or no documented disturbance.

As mentioned above, the fourth goal of this study is to make recommendations for additional archaeological investigations where necessary. According to the NYAC standards, Phase 1B testing is generally warranted for areas determined to have moderate sensitivity or higher. Archaeological testing is designed to determine the presence or absence of archaeological resources that could be impacted by a proposed project. Should they exist within the project corridor, such archaeological resources could provide new insight into the precontact and historic occupation of this portion of Brooklyn.

B. GENERAL RESEARCH THEMES

As described in **Chapter 2, “Summary of Previous Archaeological Assessments,”** four general research themes have been identified in previous archaeological assessments and additional themes were identified for this Phase 1A Study. These themes are summarized below and were used to frame the historical research completed as part of this investigation and helped to inform the sensitivity determinations made for each site within the Study Area:

1. **The Gowanus Bulkhead and Associated Landfill:** The Gowanus Canal is included within the Gowanus Canal Historic District, which is eligible for listing on the State and National Registers of Historic Places and comprises a collection of industrial structures associated with New York City’s water transportation and industrial development along the Gowanus Canal during the mid-19th through mid-20th centuries. Although the Gowanus Canal itself no longer functions in the industrial and manufacturing capacity that it once did, the architectural integrity of the neighborhood surrounding the canal still largely reflects that historic industrial character. The Canal is considered an architectural resource by the New York State Historic Preservation Office (SHPO), and submerged and buried portions of the bulkhead wall have been studied by archaeologists for the last several decades. Areas of interest include intact, original segments of the bulkhead wall that represent the original engineering efforts made to design and construct the wall and its associated landfill.
2. **Precontact Archaeological Sites:** While much of the Project Area is located on landfill or formerly fast land that was developed to the extent that it is not likely that precontact archaeological sites would remain intact, the Gowanus area was the site of extensive precontact settlements, including villages and planting fields. Despite development, intact Native American burials have been encountered during landscaping efforts on private residential property several blocks from the Canal in the last fifteen years (see **Chapter 5, “Precontact Archaeological Resources”**). It is therefore possible that other undisturbed locations outside of those areas that were historically inundated could potentially yield intact archaeological resources associated with the Native American occupation of the region.
3. **17th through 19th Century Agricultural and Milling Activity and the Role of Enslavement in those Practices:** Between the 16th and 19th centuries, much of the Gowanus Canal area was divided into large farms, with dozens of farm parcels being situated within the current Project Area.

In addition to farms, several historic mills were located along the former Gowanus Creek, and mill-related construction represents some of the first human-led efforts to transform the landscape in the region. Sites within the Project Area that were not disturbed by later industrial or residential development could therefore contain evidence of earlier phases of occupation associated with farms and the farmers who resided on those properties as well as with early milling activity. As slavery was an integral component of the economy between the 17th century and the emancipation of slaves in New York State in 1827, any evidence of the enslaved persons who worked on farms and in mills and their role in colonial socio-economic structures that could be recovered through archaeological means would be of extremely high research value. Given the extent to which the area has been developed since the first half of the 19th century, it would be difficult to recover evidence of occupation during the colonial and early American periods.

4. **19th Century Residential Occupation:** Following the incorporation of the City of Brooklyn in 1834, the Gowanus area was rapidly developed as former family farms were divided into development lots and streets were constructed, creating a grid of blocks (Burrows and Wallace 1999). Prior to the installation of reliable sewer and water infrastructure within the streetbeds in the Gowanus area—which has been documented to have occurred in the early- to mid-1870s (LBG/HPI 2009)—residential buildings relied on domestic shaft features for the purposes of water gathering and sanitation. Such features were often filled with domestic refuse once they were no longer needed for their original purpose, and are therefore of high research value to archaeologists. Privies—the shaft features constructed beneath outhouses—are typically expected to be located at the rear of the historic property while wells and cisterns are typically located closer to a dwelling. Shaft features were typically constructed of brick or stone and extended to significant depths, often to 10 to 15 feet or more below grade. As such, these types of features frequently survive disturbance episodes, even if the upper portions are truncated during development. Studies of shaft features and the artifacts within can provide a significant amount of data regarding the aspects of domestic life, from consumption practices to consumer choice, including information that is not typically recorded in the documentary record.
5. **19th and 20th Century Industrial Use:** Concurrently with the development of residential properties in the area, the lots immediately bordering the Gowanus Canal were developed with industrial uses in the 19th and early 20th centuries. Evidence of the industrial use that formed the modern neighborhood could still be present beneath the surface of the properties within the Study Area. However, the research value of such industrial resources could vary greatly from site to site and would depend on the ability of those resources to contribute new data to the archaeological record that could not be recovered through documentary research alone.
6. **Military Activity and Possibility of Burials Associated with the Battle of Brooklyn:** The Battle of Brooklyn occurred in the vicinity of the Gowanus Canal in August 1776, towards the beginning of the Revolutionary War. While few primary sources exist that describe the battle and its aftermath, several secondary sources published in the 19th century have identified or attempted to identify the locations of burial sites associated with those killed during the battle, many of who are thought to have been associated with regiments that marched north from Maryland to aid in the fighting. Since the mid-20th century, archaeologists and historians have attempted to locate the remains of soldiers killed in the battle, though none have been recovered to date and no conclusive evidence exists to suggest that soldiers were interred in mass graves, as was suggested in the 19th century. The presence of human remains associated with the battle would be considered to be of the highest research importance and would have profound historical and emotional significance on a national level.

- 7. Evidence of Human Remains Associated with Farmstead Burials in use between the 17th and 19th Centuries:** It has been documented in the past (e.g., Parry 2017; AKRF 2018) that many of the historical farms in the Gowanus Canal area maintained small family cemeteries. Furthermore, those families that owned slaves and utilized forced labor on their farms often also maintained burial areas for enslaved persons, either in the immediate vicinity of the family cemeteries or elsewhere on their farms. While private family cemeteries were often relocated to other burial places (notably nearby Green-Wood Cemetery), the remains of enslaved persons were rarely relocated. Therefore, the archaeological identification of obliterated cemeteries—either those related to colonial families or enslaved persons—would help to protect human remains from future development and could provide archaeologists with information about past ways of life that can only be obtained through an examination of skeletal material recovered from graves and associated artifacts (e.g., grave goods, coffin fragments, burial shrouds and pins, etc.).

C. RESEARCH METHODOLOGY

To satisfy the four goals as outlined above, documentary research was completed to establish a chronology of the area of potential effect (APE)'s development, landscape alteration, and to identify any individuals who may have owned the land or worked and/or resided there, and to determine if buildings were present there in the past. Data was gathered from various published and unpublished primary and secondary resources, such as historical maps, topographical analyses (both modern and historic), historic and current photographs (including aerial imagery), newspaper articles, local histories, and previously conducted archaeological surveys. These published and unpublished resources were consulted at various repositories (both physical and digital), including the Main Research Branch of the New York Public Library (including the Local History and Map Divisions); the Brooklyn Public Library; the Brooklyn Historical Society; the Brooklyn Office of the City Register, Department of Finance; and the Municipal Archives. File searches were conducted using LPC's archaeology report database, OPRHP, and the New York State Museum (NYSM). Information on previously identified archaeological sites and previous cultural resources assessments on file with OPRHP and NYSM was accessed through CRIS.¹ Online textual archives, such as Google Books and the Internet Archive Open Access Texts, were also accessed.

Modern advancements in mapping technology and geographic information systems (GIS) were used to more thoroughly analyze the development of the project corridor. This effort involved georeferencing historical maps of the Project Area that were published between the 18th and 20th centuries. The maps were aligned with the modern street grid so that analysis could be completed with respect to changes in the elevation/topography of the landscape; filling in or other modification of marshes and streams; and the extent to which the construction of both historic and modern structures (including residential and industrial/commercial buildings) affected the landscapes.

The general history of the Gowanus Canal area and its early industrial and agricultural use has been thoroughly documented in previous archaeological assessments (e.g., Hunter Research, et al. 2004; LBG/HPI 2009; Hunter Research 2011). Therefore, this assessment briefly summarizes information on these periods of activity and places greater emphasis on the specific development and occupation of the Development Sites within the Phase 1A Study Area. This includes research into landfilling, development, and identification of industrial and residential uses through the mid-20th century. Previous studies have suggested that sewer and water networks were available in the vicinity of the Gowanus Canal by the early- to mid-1870s (LBG/HPI 2009). Therefore, this assessment involved a

¹ <https://cris.parks.ny.gov>.

review of historical maps to identify map-documented structures within the Study Area. Additional documentary records including historical deeds, directories, tax assessments, and census records were collected for those properties for which residential uses or other significant development were confirmed prior to 1875 (e.g., those most likely to contain shaft features). Such records were not collected for sites developed with industrial uses not expected to have resulted in the deposition of archaeological resources of high research value (e.g., coal and lumber yards) and that exhibited evidence of later disturbance.

As part of this intensive documentary research tax assessment records dating to between 1866 and 1872—the earliest time period for which such records are available in this part of Brooklyn—were examined, where possible. These records were supplemented with examinations of historical conveyance records¹ and historical directories. Conveyance records were accessed at the Brooklyn Office of the City Register, New York City Department of Finance, and through the New York Land Records collection from www.FamilySearch.com. Tax assessment ledgers were obtained at the New York City Municipal Archives. Historical directories were accessed through www.Fold3.com and through the Brooklyn Public Library’s digital directory collection. Finally, information from census records and wills was accessed through www.Ancestry.com. Attempts were made to identify older street numbers, as many of the streets within the Project Area were renumbered circa 1871. Census records were accessed only where relevant, as such records are typically not associated with specific street addresses and it is therefore hard to confirm which records correspond to which residence. As a result of changing block, lot, ward, and street numbers, only those records that were confirmed to be associated with a particular property based on cross-referencing various historical documents have been included in this study. For those lots that were previously subjected to intense analysis in previous archaeological investigations (e.g., LBG/HPI 2009), additional research was completed, where necessary, in an attempt to supplement previous determinations; however, as those lots were already thoroughly surveyed in a report that was accepted by LPC pursuant to CEQR, such research was minimal.

¹ Conveyance records for King County are organized by block but not by lot prior to 1895. Therefore conveyance records included in this Phase 1A study are those that could be accurately identified through cross-referencing names from other sources identifying the owners and occupants of Historical Lots.

Chapter 4: Environmental Context and Assessment of Landscape Modification

A. CURRENT CONDITIONS

The 50 sites within the Phase 1A Study Area are developed with a wide range of residential or commercial/industrial buildings or are vacant.

**Table 4-1
Current Conditions of Sites within the Phase 1A Study Area**

Block	Lot	Development Site Name	Current Site Conditions
198	34	Aa	Developed with a two-story (with basement) rowhouse with an undeveloped rear yard
198	35	Ab	Developed with a two-story (with basement) rowhouse with an undeveloped rear yard
399	6	58a	Developed with the one-story (with basement) Cuyler Warren Street Methodist Church and adjacent paved parking lot
399	39	3a	Paved parking lot
399	41	3b	Paved parking lot
399	58	4a	Developed with a two-story (with basement) residential building with outbuildings
399	59	4b	Paved parking lot with one-story parking structure
399	60	4c	Developed with a one-story warehouse and an undeveloped rear yard
405	12	6c	Developed with a one-story warehouse
405	13	5a	Developed with a two-story residential building with one-story garage to the rear
405	16	5d	Developed with a one- to two-story office/storage facility with adjacent paved parking lot
405	51	57aa/ab	Developed with a two-story garage constructed in 1916 with an adjacent paved parking lot
405	63	6a	Paved parking lot
405	64	6b	Paved parking lot
417	21	15d	Developed with a one-story manufacturing facility constructed in 1954 with an adjacent paved parking lot
424	1	18a	Developed with one-story truck rental facility constructed in 1980 surrounded by paved parking lot
424	20	18b	Paved parking lot/storage yard
431	17	22b	Developed with a coal storage facility with a one-story office building
432	15	Wb	Developed with 1 to 2 story industrial buildings
433	8	AHa	2-story (with basement) residential building with undeveloped front and rear yards
433	13	AHe	2-story (with basement) residential building with undeveloped side and rear yards
438	3	28c	Paved auto wrecking lot with small one-story sheds
438	7	AOa	Developed with a one-story foundry with a paved parking lot
439	1	29a	Paved parking lot with one-story (with basement) commercial building constructed in 1958
445	11	28e	Paved parking lot with one- and two-story commercial/industrial buildings
445	20	28f	Paved parking lot with two-story office building
447	50	BBa	one- to three-story commercial building with paved parking lot
451	25	36a	Developed with 6-story (with basement) nursing home constructed 1985; surrounded by paved parking lot
453	1	37a	Developed with a one-story commercial building
453	21	37b	Paved parking lot and junk yard
453	26	Ala	Paved parking lot
453	31	APa	Paved Parking Lot
453	54	BJaa/ab	Developed with a four-story self-storage facility with paved parking lot
462	6	BOa	Center of lot developed with one-story freight depot; north and southern portions paved and used for parking/vehicle storage
462	14	40b	Majority of lot is occupied by a paved parking/storage lot; northwestern part of lot developed with a one-story commercial building
465	27	42a	Undeveloped; paved parking lot
465	28	42b	Undeveloped; paved parking lot
466	17	43a	Paved parking lot with small, one-story sheds at southwest end
466	19	44a	Paved parking lot with two- to two-and-a-half-story office building at northwest corner and larger one-story industrial building built in 1977 at northeast corner
466	60	43b	Developed with one-story industrial buildings used for storage
471	100	47b	Partially paved storage yard lined with bulkhead on east side; developed with hoppers, cement mixers, and small one-story commercial/office buildings
471	125	59a	Developed with three-story brick industrial building/warehouse built in 1915 with paved rear yard, lined with bulkhead on south side
471	200	48a	Partially paved storage yard lined with bulkhead on east side
934	3	2c	Developed with a three-story (with basement) rowhouse with an undeveloped rear yard
934	4	2d	Developed with a three-story (with basement) rowhouse with an undeveloped rear yard
934	5	2e	Developed with a three-story (with basement) rowhouse with an undeveloped rear yard
934	6	2f	Developed with a three-story (with basement) rowhouse with an undeveloped rear yard
934	74	2j	Developed with a three-story (with basement) rowhouse with an undeveloped rear yard
972	1	41a	Unpaved, undeveloped lot adjacent to canal used for controls associated with the adjacent 3rd Street Bridge
972	58	41c	Paved parking lot with one-story commercial building/garage in center

B. GEOLOGY

The borough of Brooklyn is found within a geographic bedrock region known as the Atlantic Coastal Plain Province. This has been described as “that portion of the former submerged continental shelf which has been raised above the sea without apparent deformation” (Reeds 1925: 3). Soils on Long Island, on which Kings County is located, are composed of glacial till or undifferentiated sediments, such as sand and clay. The Atlantic Coastal Plain is typified by “flat, low-lying” ground “that slopes very gently toward the sea” (Isachsen, et al. 2000: 149). The soils in the immediate vicinity of the Project Area are associated with glacial till; however, the Terminal Moraine, a belt of elevated rock that crosses through Brooklyn and marks the location of the southernmost point of the most recent glacial event, is located immediately to the southeast (Schuberth 1968; Caldwell 1989). The glacial till was deposited by the massive glaciers that retreated from the area toward the end of the Pleistocene epoch (1.6 million years before present [BP] to approximately 10,000 years BP). There were four major glaciations that affected New York City, culminating approximately 12,000 years ago with the end of the Wisconsin period. During the ice age, the glacial moraine bisected Brooklyn, running in a northeast-southwest direction and marking the location of the southernmost point of the most recent glacial event (Schuberth 1968). The deposition of glacial till in the wake of the retreating glaciers resulted in the creation of sand hills, known as kames, across New York City, some of which rose to heights of one hundred feet. The bedrock beneath the till is unknown, but believed to date to the relatively recent Quaternary period of the Cenozoic era, and may have been formed within the last 100 million years (Fisher, et al. 1995; Isachsen, et al. 2000).

C. TOPOGRAPHY

The landscape within and surrounding the Project Area has been significantly modified over the last three centuries as a result of the filling in and channeling of the Gowanus Creek, the grading associated with the construction of streets in the neighborhood, and residential and industrial development. Before the late-19th century, when the Gowanus Canal was constructed, the majority of the Project Area was inundated by the Gowanus Creek or its associated network of marshes and streams. As seen on the 1776 Ratzler map depicting conditions circa 1766 (see **Figure 4**), only a small number of the sites included within the Study Area were dry, inhabitable land before the landscape modification efforts associated with the construction of the Canal occurred. Some landscape changes had occurred by that time as a result of the construction of several historic mills in the area, resulting in the creation of mill ponds. United States Geological Survey (USGS) maps indicate that the general elevation of the Project Area varies between 0 and 30 feet above mean sea level, with slopes increasing to the east and west of the Canal. The general topography of the site is consistent with that depicted on USGS maps dating back to at least 1889, suggesting that despite the dramatic landscape changes that occurred as a result of the construction of the mill ponds and the Canal, little change has occurred since the late-19th century, by which time the modern street grid and urban landscape were constructed.

D. HYDROLOGY

As described previously, the Project Area is situated around the modern Gowanus Canal, an artificially constructed channel. The Canal was constructed by filling in and channelizing the former Gowanus Creek, which occurred in the late-19th century. The majority of the Project Area was historically inundated by either the Creek itself or the dense marshes that surrounded it.

E. SOILS

The Web Soil Survey maintained by the National Resource Conservation Service (NRCS) of the United States Department of Agriculture (USDA)¹ indicates that the Project Area is located in an area characterized by six soil complexes and open water (Soil Survey Staff 2019). These soil complexes are characteristic of highly developed urban areas and areas of artificial landfill. These soil types are summarized below:

- **LaGuardia Artifactual Coarse Sandy Loam (LaB):** well-drained soils typically found on summits, shoulders, or slopes with 3 to 8 percent slope and comprising cobbly and very cobbly artifactual coarse sandy loam;
- **Urban Land-Greenbelt Complex (UGAI):** well-drained soils typically found on summits with 0 to 3 percent slopes and comprising gravelly sandy loam beneath up to 15 inches of cemented material;
- **Urban Land-Greenbelt (UGB):** well-drained soils typically found on summits with 3 to 8 percent slopes and comprising gravelly sandy loam beneath up to 15 inches of cemented material;
- **Urban Land, Reclaimed Substratum (UrA):** Fill materials on summit landforms with 0 to 3 percent slopes comprising gravelly sandy loam beneath up to 15 inches of cemented material. This soil complex covers the majority of the Project Area;
- **Urban Land, Till Substratum (UtA, UtB):** urban fill materials over glacial till on summit landforms with 0 to 3 percent (UtA) and 3 to 8 percent (UtB) slopes comprising gravelly sandy loam beneath up to 15 inches of cemented material; and
- **Water (W):** inundated areas

¹ <https://websoilsurvey.sc.egov.usda.gov>

A. INTRODUCTION

In general, Native American habitation sites in the northeastern United States are most often located in coastal areas with access to marine resources, and near fresh water sources and areas of high elevation and level slopes not exceeding 10 to 12 percent (NYAC 1994). The potential presence of Native American activity near a project site is further indicated by the number of precontact archaeological sites that have been previously identified in the vicinity of a project site. Information regarding such previously identified archaeological sites was obtained from various locations including the site files of OPRHP and NYSM—accessed through the CRIS database,¹ and other published accounts.

B. PREVIOUSLY IDENTIFIED NATIVE AMERICAN ARCHAEOLOGICAL SITES

Portions of the Project Area are included within generalized areas of archaeological sensitivity as mapped by OPRHP in the CRIS database. Two precontact archaeological sites exist within one mile of the Project Area, as summarized in **Table 5-1**. In addition, other sources (e.g., Bolton 1922 and 1934; Parker 1920) document Native American sites in the general vicinity of the Project Area. Additional Native American sites were identified between one and two miles south of the Project Area, near the shores of the Gowanus Bay in the vicinity of what is now the Sunset Park neighborhood of Brooklyn (Bolton 1922).

Table 5-1
Previously Identified Precontact Archaeological Sites

Site Name and Number	Approximate Distance from Project Area	Time Period	Site Type and Information	Other Reference(s)
NYSM Site 3606 Parker (1920) Site 2	0.38 miles (2,000 feet)	Woodland	Camp or village	Parker 1920
Native American Burial OPRHP Site A04701.017322	0.14 miles (750 feet)	Precontact	Human burial encountered by a private landowner. Burial included clam and oyster shell and possibly red ochre.	
Werpoes Bolton (1922) Site 67	0.12 miles (650 feet)	Precontact	Village and Maize Field	Bolton 1922
Sassian's Maize Land Bolton (1922)	0.14 miles (750 feet)	Precontact	Planting Field	Bolton 1922 Grumet 1981

Source: New York State Cultural Resource Information System (<https://cris.parks.ny.gov>); Bolton 1922 and 1934; and Grumet 1981.

As seen on Bolton's 1922 map of Native American sites and trails (see **Figure 5**), the largest village site near the Project Area was *Werpos*, situated near the intersection of Hoyt and Baltic Streets. At its closest point, the site was located approximately 750 miles east of the Project Area near what was originally the northern terminus of the stream that was subsequently converted into the Gowanus Canal (Bolton 1922, Bolton 1934). The village was on the western side of the creek that originally ran through the area. Bolton indicated that the village was abandoned shortly after European settlement and that the

¹ <https://cris.parks.ny.gov>.

village was originally inhabited by the Manhattan Indians (Bolton 1922). The same group maintained a second village also called *Werpos* within what is now Greenwich Village in Manhattan (ibid). In 2004, the New York City Office of the Chief Medical Examiner (OCME) reported to OPRHP that the skeleton of a male Native American had been discovered on private property in the immediate vicinity of the village (OPRHP Site A04701.017322). The burial was found in a context with clam and oyster shells and red ochre (Adams 2004).

A large maize planting field was situated immediately to the northwest of the village (ibid). A trail extended southwest from this site towards and Bolton's map indicates that another Native American settlement was situated along this branch (Bolton 1922). It is possible that the southern site was a planting field known as "Sassian's Maize Land" (Grumet 1981: 50). Another Native American trail, later known as Gowanus Road, extended along the southeastern side of the Gowanus Creek from a point near modern Atlantic Avenue to settlements along the Gowanus Bay to the south of the Project Area. The trail ran in the vicinity of 5th Avenue as far south as 11th or 12th Street, where it angled southwest, crossing west of 4th Avenue and through the Project Area on its way south.

A. INTRODUCTION

The general historic context of the Gowanus Canal has been documented in great detail in previous archaeological assessments (e.g., Hunter Research, et al. 2004; Hunter Research 2011). Therefore, in-depth historical information will only be presented here as it relates to the general research themes outlined in **Chapter 3, “Research Design and Methodology.”** This chapter includes a broad overview of those themes as they relate to the Development Sites located within the Phase 1A Study Area.

B. THE AGRICULTURAL USE OF THE GOWANUS AREA

New York was “discovered” by Giovanni de Verrazano in 1524 and explored by Henry Hudson in 1609, thus marking the beginning of European occupation in the area. Hudson described the Brooklyn Heights neighborhood to the north of the Project Area as having “magnificent forests gorgeous with autumnal hues” (Stiles 1867: 9). By 1621, the area had become part of a Dutch colony and the States-General in the Netherlands chartered the Dutch West India Company (WIC) to consolidate Dutch activities in the New World. It was at this time that the WIC began to purchase large tracts of land from the Native Americans. The WIC began to purchase land in northwest Brooklyn in the late 1630s (Bolton 1975). It has been speculated that the sale of Brooklyn land “saved New Netherland from being abandoned by the West India Company” (Armbruster 1918: 3). After the WIC purchased the land from the local Native Americans, they in turn granted it to European settlers.

The western end of Long Island was settled in the first half of the 17th century predominantly by Dutch and Walloon (French Protestants from Belgium who fled to escape persecution) families. In 1638, land was granted to any individual who promised to establish a farm in the area (Armbruster 1918). Six independent towns were established in the second and third quarters of the century. One of these was Brooklyn. Brooklyn was first settled in the 1640s, although not formally organized until 1746. While at first the WIC granted patroonships—a patroon was the “feudal chief” of a small colony of fifty or more individuals (Stiles 1867: 20)—they found that farms were more successful if the land was granted directly to individual farmers. Therefore, the land was given the name Brooklyn, which is derived from the Dutch *Bruijkleen*, meaning “a free loan, given to a tenant or user for a certain consideration” (Armbruster 1914: 20). The name went through several changes throughout the Dutch and English colonial periods—from *Bruijkleen* to *Breukelen* to *Brookland* and, finally, to *Brooklyn*. English settlements were established throughout Brooklyn during the mid-1600s. In 1664, the English took control of the colony and it was renamed “New York.”

AGRICULTURAL USE THROUGH THE EARLY-19TH CENTURY

Following the initial purchase of the Gowanus area from the local indigenous population, individual farms were established around the creek beginning in the 17th century (Hunter Research, et al. 2004). Some of the earliest European landowners in the area were William Adrianse Bennet and Jacques Benyn, who purchased a 930-acre tract of land from the local indigenous population in 1636 (Stiles 1867). This transaction initiated what would become centuries of agricultural use in the area, with many of the same families farming the land for generations. In addition to farming, the marshes surrounding the Gowanus Creek were heavily utilized by salt hay farmers (Hunter Research 2011).

The 1776 Rutzer map, depicting conditions in 1766, categorizes the majority of the Project Area as inundated but indicates that portions of the Area were dry land incorporated into much larger farms. Stiles' (1867) annotated version of the Rutzer map identifies six residential or commercial properties around the Gowanus Creek: 1) Jacob Bergen's house, situated to the west of the creek outside the Project Area near the modern intersection of Union and Hoyt Streets; 2) the Jacob van Brunt house at the northern head of the creek within the Project Area near the intersection of Baltic and Nevins Street; 3) Freeke's Mill (also known as the "Old Brouwer Mill" or "Upper Mill") located within the Project Area near the modern intersection of Nevins and Sackett Streets; 4) Denton's Mill (also known as the Brouwer Mill or Lower Mill); 5) the Vechte-Cortelyou house located east of 4th Avenue in the vicinity of modern 3rd Street, where a recreation of the house continues to stand; and 6) the Teunis Tiebout House, later that of Theodorus Polhemus, located within the Project Area near the intersection of Fourth Avenue and Sixth Street. The map also depicts a number of buildings that aren't identified by Stiles, including a structure between what Stiles identifies as the Tiebout and Vechte-Cortelyou families. The Tiebout property appears to have been misidentified by Stiles and the home actually appears to have been that of the Staats and later Van Brunt families (AKRF 2016; AKRF 2018). Adriance Van Brunt, whose family owned the farm after Staats, was married to Polhemus' daughter (Bergen 1867). The Tiebout/Polhemus house may therefore have been the home to the northeast as seen on the Rutzer map but not labeled by Stiles.

Development surrounding the Canal remained generally similar through the early 19th century, as shown on the 1821 Randel Map (see **Figure 6**). By that time, the farms surrounding the Canal had been divided into smaller estates. Fulton's 1874 map depicting farm lines in Brooklyn (see **Figure 7**) indicates that approximately more than one dozen historic farm properties were present within the Project Area at one time. To the west of the modern canal were the farms of Jordan Coles, Jacob Bergen, J.B. Johnson, J. Boerum, and Samuel Gerrettsen. To the north of the canal and in the vicinity of the northern end of the Project Area were the farms of George Martense, Mary Powers, and James Pearsall. To the east of the canal were the farms of P. Remsen, T. Poole, Theodorus Polhemus, John C. Freeke, the Cowenhoven family, Henry C. Clark, Adriance Van Brunt, Rem Adriance, Thomas G. Talmadge, and others.

HISTORICAL MILLS ALONG THE GOWANUS CREEK

The tidal waters of the Gowanus Creek were naturally conducive to milling, which quickly became one of the first industries in the area in addition to agriculture (Hunter Research, et al. 2004). The construction of the mills and their associated mill dams also represent one of the first efforts made by European settlers to alter the landscape of the region. By the late 18th century, at least two mills were present on the Gowanus Creek: Denton's Mill or Yellow Mill, built near the modern intersection of 3rd Avenue and Carroll Street in 1709; and Freeke's Mill (also known as the Old Gowanus Mill or the Brower Mill), built before 1661 near the intersection of the eastern side of the Canal and modern Union Street (ibid). Both mill locations are included within the Project Area.

A third mill, known as Cole's Mill, was constructed in the late 18th century along the western side of the creek along the west side of the Gowanus Canal near the southwestern corner of the Project Area by the late 18th century. As described by Hunter, the mill was founded by John Rapelje and was later owned and operated by John Coles (Stiles 1867). As described by Stiles (1867):

...the mill pond was an artificial work, being excavated out of the marsh, on the side of the Gowanus Kil [sic], by negro labor. Jordan Cole's house was situated on Ninth Street, between Gowanus Canal and Smith street (Stiles 1867: 67).

The 1821 Randel Map continues to depict the mill, labeled “Cole Mill,” at the western end of the Project Area and the 1836 Colton Map “Cole’s Mill Pond.” The mill owners maintained homes adjacent to the mills (Stiles 1867). The mills were accessed via Gowanus Road, later known as Freeke’s Road, which was established through the Project Area in the early 18th century and the line of which is shown to the east of the Canal on the 1776 Ratzler map included as **Figure 4** (LBG/HPI 2009).

C. REVOLUTIONARY WAR ACTIVITY IN THE REGION

Like all of the area now known as New York City, Brooklyn was occupied by the British during the Revolutionary War in the late 18th century. The most prominent battle in the New York region was the Battle of Long Island, also known as the Battle of Brooklyn, which occurred on August 27, 1776. The history of the battle has been extensively documented in both historic sources (e.g., Furman 1824; Ward 1839; Bailey 1840; Onderdonk 1849; Lossing 1850; Stiles 1867; Field 1869; Johnston 1878; and Fraser 1909) and contemporary works (Gallagher 1998, Schecter 2002, and Reno 2008) as well as through archaeological investigations (Hunter Research 2011; Chrysalis and Dietrich 2012; AKRF 2016; AKRF 2018). As such, the history of the complete battle, which was waged across a large portion of the modern borough of Brooklyn as troops moved from east to west, will only be briefly summarized here with a particular focus on the military activity that occurred in the immediate vicinity of the Project Area.

The Cortelyou House near the intersection of what is now 5th Avenue and 3rd Street and which has since been reconstructed as the “Old Stone House,” became the scene of some of the battle’s most intense fighting after being occupied by the British on the day of the battle (Reno 2008). Around noon on that day, the British troops led by Lord Cornwallis, approaching from the north, met the American troops, led by Lord Stirling, along the Gowanus Road to the east of what is now 5th Avenue. The American soldiers suffered greatly during the fight, and soldiers from Maryland are said to have stayed behind to continue the fight, sacrificing themselves to allow the remaining regiments to retreat (ibid). There has been speculation that these soldiers were buried in a mass grave in the vicinity of the Project Area; this idea is explored in greater detail in **Chapter 7, “Burial Grounds in the Vicinity of the Project Area.”**

Numerous maps were created in the 19th century to depict the sequence of the battle, including the fighting at the Cortelyou House. Stiles’ 1867 map of the battle depicts the Cortelyou House and the nearby Tiebout House and Denton’s Mill in the vicinity of the Project Area. Field’s 1869 map of troop positions and movements identifies the marshes to the west of the Project Area along the shores of the Gowanus Creek as the location where Stirling’s troops retreated across the swamps. Onderdonk’s 1849 and Johnston’s 1878 maps identify the retreat in a similar location as Field within the marshes to the west of the Project Area (see **Figure 8**). A map included in Bailey’s 1840 history of the battle depicts the location of the Maryland soldiers’ defeat further to the northwest, in the location of what was known as Freeke’s Mill Pond. Despite these discrepancies in the depiction of troop movement on that day, it appears clear that intense fighting and military activity took place within and in the vicinity of the Project Area on the day of the Battle of Brooklyn in August 1776. The Stiles and Field maps also depict a fortification identified as “Fort Box” along the western side of the Gowanus Creek on a hill to the west of the Project Area though Johnston’s 1878 map identifies the fort to the north of the Creek, just south of Fort Greene. A map of Fort Greene included in Stiles (1867) indicates that the fortifications associated with Fort Greene, to the north of the Project Area, extended south towards the vicinity of the modern intersection of Bond and Wyckoff Streets, near the northern end of the Project Area.

D. ROLE OF ENSLAVED LABOR IN AGRICULTURE, MILLING, AND EARLY DEVELOPMENT IN THE GOWANUS AREA

Slavery was an integral component of social and economic life in Brooklyn between the 17th and early 19th centuries. Slavery was not abolished in New York State until 1827 following a period of gradual manumission and Brooklyn therefore experienced centuries of enslavement (Berlin and Harris 2005). The portion of Brooklyn's population occupied by free and enslaved individuals of African descent rose from nearly 18 percent at the beginning of the 18th century to more than 32 percent at the century's end (Greene and Harrington 1981). While the role of forced labor in Brooklyn is not well documented in the historical record, enslaved persons were present in large numbers on the mills and farms that made up the Project Area—representing “the highest proportion of slaveholders and slaves in the North” (Linder and Zacharias 1999: 81). As described previously, their labor helped form the physical landscape of the area, as slave labor was used to construct and operate mills in the region (Stiles 1868; LBG/HPI 2009). The labor of enslaved persons helped Brooklyn become a center for agriculture in the region and farmers of European descent generated significant profits, allowing the system to thrive for hundreds of years and remain more prevalent in Brooklyn than in other parts of New York City in the years leading up to 1827 (Linder and Zacharias 1999).

A diary maintained between 1828 and 1830 by Adriance Van Brunt, whose farm was located within the southern portion of the Project Area, confirms that even after the end of slavery, many individuals of African descent continued to work as indentured servants and the extent to which they were truly free is unclear as others continued to profit from their labor (AKRF 2018). The continued presence of former slaves within the homes of the owners who formerly enslaved them was noted across Brooklyn in the years following emancipation, but decreased towards the middle of the 19th century (Linder and Zacharias 1999). The Van Brunt diary refers to those individuals who continued to perform labor following emancipation as “bound” and makes references to salaries paid to individuals of African descent, which were less than those paid to persons of European descent, as well as payments made to the “masters” of indentured servants living on other farms.

Additional evidence of the conditions of individuals of African descent was recorded in the 1845 will of Nehemiah Denton, the operator of Denton's Mill within the Project Area (Kings County Wills Volume 6, Page 110). Denton bequeathed to a woman he described as “my colored woman Jude” an annual allotment of \$150 for the remainder of her life in addition to a portion of his 17-acre estate on which to live. LBG/HPI (2009) identified a woman of African descent named “Judith Denton” who resided near the mills in an 1848 Brooklyn directory, possibly a reference to the same woman. The 1840 census indicates that of the six members of Denton's household, three were “free colored persons,” including two adult females. In the 1820 census, Denton's household included two enslaved persons and four free people of African descent. It is therefore clear that the labor of free and enslaved persons was integral to the operation of the mills and farms in the Gowanus area both before and after slavery and that the continued social connection between former slave owners and free persons of African descent in the area following the end of slavery is underrepresented in the documentary record.

E. SUMMARY OF THE DEVELOPMENT OF THE GOWANUS CANAL

In the first half of the early 19th century, Brooklyn's landscape was transformed as farms and large estates were broken up and divided into smaller blocks and lots for residential development. The incorporation of the City of Brooklyn, which included the Project Area, in 1834 spurred dramatic urban development as streets were constructed and farms were subdivided into development lots (Burrows and Wallace 1999). As part of this urban development, the marshes adjoining the Gowanus Creek were filled in to create developable land. Many real estate speculators and developers purchased large tracts

of land in the area at this time and were influential in the filling and developing of these lots as well as the construction of the Canal (LBG/HPI 2009). These individuals included James Brady, Orasmus Bushnell, and Edward W. Fiske, who owned and developed several of the Development Sites within the Project Area, and Arthur W. Benson, who purchased much of the former Denton's Mill property (ibid).

Richard Butt's 1846 map of Brooklyn reflects the proposed filling in of the Gowanus Creek marshes and the construction of streets through the newly created land. Similar projections are depicted on Sidney's 1849 map (see **Figure 10**). In 1849, a 30-foot railroad drawbridge was constructed across the Creek in the vicinity of modern 9th Street (Hunter Research, et al. 2004). The early- to mid-19th century urbanization and industrialization of Brooklyn, which until then remained a largely agricultural suburb, resulted in the construction of the Gowanus Canal, which was planned and built in stages between the 1840s and 1870s (Hunter Research 2011).¹

Connor's 1852 map of Brooklyn reflects the construction of the southern portion of the canal as well as two large basins that formerly made up the head of the canal in the vicinity of Douglass Street between Bond Street and 3rd Avenue (formerly Powers Street) and in the area generally bounded by 1st and 4th Streets, 3rd Avenue, and the modern western line of the Canal. While the map does not depict individual building footprints, it does use shading to identify those blocks that were developed at the time, and suggests that the majority of the Project Area was undeveloped with the exception of the blocks north of Sackett Street to the west of the Canal and Baltic Street to the east. The basins and similar extent of shading depicting developed areas are also shown on the 1855 Colton and 1858 Dripps maps.

A coastal survey produced in 1856 by F.H. Gerdes reflects significant development in the vicinity of the Project Area, though it depicts the basins seen on the 1852 Connor map as inundated marshes. The construction of the Canal's bulkhead walls is visible across portions of the Canal, especially along its western side. Bridges crossed the Canal in the vicinity of what are now Degraw, Carroll, and 9th Streets. Third Avenue was among the first roads to be opened through the area when it was constructed circa 1840 and the Gerdes survey depicts it as a major corridor (Stiles 1869).

Dripps' 1869 atlas of Brooklyn reflects the completion of the Gowanus Canal's construction and the filling of the surrounding areas. The Canal was crossed by bridges at Union and 3rd Streets in addition to those mentioned previously. While extensive residential development had occurred on many blocks within the Project Area, the blocks immediately adjacent to the Canal were extensively developed with commercial and industrial uses, including a large number of lumber and coal yards. Similar uses are depicted on the 1880 Hopkins and 1880 Bromley atlases, which indicate the presence of water lines (and presumably sewer lines) within most of the streetbeds within the Project Area.

F. HISTORIC DEVELOPMENT OF SITES WITHIN THE STUDY AREA

The majority of the Development Sites included within the Phase 1A Study Area were developed following the construction of the Gowanus Canal and the resulting industrial and residential development boom that followed within the surrounding area. A brief summary of the development of each site is provided below. Previous research has confirmed that sewer lines were introduced into the streetbeds near the northern end of the Project Area by 1874 and that existing houses were often connected to municipal sewer networks in the years that followed (LBG/HPI 2009). As such, this

¹ The history and influence of the Gowanus Canal are summarized in greater detail in Hunter Research, et al. (2004); LBG/HPI 2009; Hunter Research (2011); and Chrysalis and Dietrich (2012).

analysis focused on identifying residential development prior to 1875 in addition to evidence of earlier industrial use (including milling). For properties that were documented as having been developed for residential use before 1875, additional research was completed in an attempt to identify owners and occupants of those residential properties (summarized in **Appendix A**). Historical map-documented structures were identified through the examination of dozens of historical maps, including but not limited to the following: 1776 Ratzler (see **Figure 4**); 1782 British Headquarters Map (and its 1900 copy by B.F. Stevens); 1821 Randel (see **Figure 6**); 1834 Martin; 1839 Hammond, Cheever, and Tiffany; 1846 Butt (see **Figure 9**); 1849 Sidney; 1852 Connor (see **Figure 10**); 1855 Colton; 1856-1863 Gerdes;¹ 1869 Dripps (see **Figure 11**); 1880 Bromley; 1880 Hopkins; 1886 Robinson; 1929 Hyde; and Sanborn map volumes published in 1886 (see **Figure 12**), 1888, 1904, 1915, 1939, and 1950. Additional maps that do not depict structures but which identify other valuable information, such as the 1874 Fulton farm line atlas (see **Figure 7**), were also consulted.

DEVELOPMENT SITES AA AND AB—BLOCK 198, LOTS 34 AND 35

Block 198, Lots 34 (360 Dean Street) and 35 (362 Dean Street) are situated near the southwest corner of the modern intersection of Dean Street and 4th Avenue. The lots are currently developed with two identical two-story (with basement) residential buildings with undeveloped rear yards. As seen on the Ratzler map, the two lots were historically located on a small hill that rose to the north of the Gowanus Creek. The 1834 Martin map indicates that the lots were just east of a previously proposed road known as William Street but the 1839 Hammond, Cheever, and Tiffany map of Brooklyn depicts the streets in their current configuration. Neither map depicts development on these lots, and both properties were included within the larger farm of Mary Powers as shown on the 1846 Butt map.

Shading included on the 1852 Connor map indicates that Block 198 was developed with buildings by that time, although footprints are not depicted on that map. Both lots were developed with two-story (with basement) buildings by the time the 1866 tax assessments were recorded. Tax records dating between 1866 and 1872 identify the owner of Modern Lot 34 (historically known as 312 Dean Street until circa 1871) as Jane Crommelin and the owner of Modern Lot 35 (historically known as 314 Dean Street) as John H. Gallaway. Conveyance records identify both lots as part of the larger land holdings of Austin Dunham and George Beach, Jr. Dunham and Beach sold Lots 34 and 35 to Isaac Embree, who sold Lot 34 to Crommelin in 1859. The 1860 census indicates that Jane Crommelin (spelled Crumley) lived in Brooklyn seven relatives aged 9 to 30, some of whom were presumably her children and two of whom, Adrian and Thomas Crommelin, worked as a mustard manufacturer. Crommelin's real estate holdings were valued at \$3,000 and her personal estate at \$1,000 at the time. In 1862, "AMC" (presumably Adrian Crommelin) of 312 Dean Street advertised the sale of mustard machinery (*Brooklyn Daily Eagle* 1862).

After Embree defaulted on his mortgage and the property reverted back to Dunham and Beach, they sold Lot 35 to George G. Cochran in 1865 who sold the property to Gallaway, an engraver, two years later. Directories show that the residents of Lot 35 changed frequently before Gallaway's ownership and it was presumably used as a rental property. An 1878 advertisement in the *Brooklyn Daily Eagle* announced that the residents of the home were renting rooms and indicated that the home had "all improvements," suggesting a connection to water and sewer networks.

¹ The Gerdes coastal survey was prepared in 1856 and updated in 1863 through the addition of colored shading to designate development as of that year. The version viewed for this study was a black and white copy and therefore lacked the updated information.

The 1869 Dripps map depicts the two extant buildings on the lot at the eastern end of a row of what appears to be four rowhouses within one property and possibly as many as thirteen identical wood frame houses along the southern side of Dean Street (see **Figure 11**). The 1880 Hopkins, 1880 Bromley atlases, and 1886 Robinson both depict the two houses on Lots 34 and 35 as Lots 32 and 33, respectively, and continue to indicate that they were the easternmost of a row of identical rowhouses. The 1886 Sanborn map identifies the houses as two-story brick lined wood-frame structures with front porches. Few changes appear within the lots on historical maps published in the 19th and 20th centuries with the exception of a small wood frame outbuilding at the southeast corner of Modern Lot 35 that was depicted on the 1898 Ullitz atlas.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 198, Lots 34 and 35 are considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITES 2C, D, E, F, AND J—BLOCK 934, LOTS 3 THROUGH 6 AND 74

These lots are located at the northwest corner of Warren Street and 4th Avenue and are currently developed with identical three-story (with basement) residential buildings. Lots 3 through 6 are contiguous and are located at 93 through 87 4th Avenue, respectively, and Lot 74 is around the corner at 607 Warren Street. The Rutzer map shows that these lots were inundated marshland during the late-18th century. The 1834 Martin map depicts the five lots on an irregularly-shaped parcel owned by C. Hoyt, while a portion of Lot 6 extended onto the property of the “Heirs of Pearsall” and the southern portion of Lot 74 extended onto the property of Orasmus Bushnell to the south. The 1839 Hammond, Cheever, and Tiffany map continues to depict the land as inundated marshland. The 1852 Connor map does not include shading on this block to suggest that development had occurred by that time and the 1856-1863 Gerdes coastal survey also depicts no development on this block.

While tax assessment records could not be located for this block for the late 1860s, some information on the lots’ early residents was obtained from other sources, including historical directories, conveyance records, and census records. These records are included in **Appendix A**. The lots were developed with what are presumed to be the existing rowhouses by the publication of the 1869 Dripps map, which depicts identical homes on all of the lots at the western end of the block. The 1880 Hopkins and 1880 Bromley atlases depict identical brick houses on each of lots 3 through 6 and 74. The 1886 Sanborn map identifies each building as three stories. Few changes to these lots are depicted on historical maps through the mid-20th century with the exception of the construction of small rear additions to some of the homes.

Tax assessment records for this block could not be located as a result of frequently changing ward and block numbers. Directories suggest that 4th Avenue may not have been numbered as late as 1871 around which time the street numbers were changed (75 through 81 4th Avenue may have been renumbered 87 through 93 4th Avenue, respectively, at that time). A limited number of residents could be identified in historic directories as identified in **Appendix A**.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 934, Lots 3 through 6 and 74 are considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITE 58A—BLOCK 399, LOT 6

Development Site 58A (Block 399, Lot 6) is currently developed with the Cuyler Warren Street Methodist Church (189-197 3rd Avenue or 450-458 Warren Street) at the southeast corner of Warren

and Bond Streets. The church, a one-story (with basement) brick building, was constructed in 1969 and is surrounded by a paved parking lot and overgrown or landscaped areas. Historically, the parcel was divided into six historic lots, known as Historical Lots 6 through 11, that faced either Warren or Bond Streets. The rear yards of Historical Lots 6, 8, and 9 and a portion of Historical Lot 7 are situated beneath the footprint of the existing church and were presumably at least partially disturbed by excavation activities associated with the construction of the church's basement.

The 1776 Rutzer map indicates that the Development Site was situated at the border between fast land and marsh. The 1846 Butt map and 1874 Fulton atlas indicate that the site was historically within the farm of George Martense. The 1834 Martin map depicts development on the eastern portion of Block 399 at that time, however, Development Site 58a was undeveloped at the time. The 1839 Hammond, Cheever, and Tiffany map similarly does not reflect any development on the site, however, it indicates that the southeastern portion of the block remained inundated at that time. The 1856-1863 Gerdes coastal survey includes shading on Block 399 that indicates the presence of unspecified development. Tax assessments from 1866 to 1869 suggest that three buildings were located on two lots at that time: two three-story buildings located on the western portion of Modern Lot 6 at 450 Warren and 197 Bond Streets (presumably a front and rear house consistent with that seen on later maps as described below), which was owned by James E. Bailey at the time. The real estate valuation appears to suggest that the home was built before 1866. A two-story building was also located at 454 Warren Street, owned by Margaret Percell, the valuation of which increased from \$400 in 1868 to \$1,000 in 1869, suggesting that the home was built in that year. Similar increases suggest that the remaining properties within the Modern Lot were developed in the years that followed (see **Appendix A** for residents identified in historical directories).

The 1869 Dripps map depicts the block divided into lots and depicts irregular lots with at least seven buildings at the northwest corner of the block within Development Site 59a even though tax assessments indicate some of those properties may have been vacant at the time. The 1880 Bromley and 1880 Hopkins atlases more clearly depicts the development on the six lots. Historical Lots 7 through 10 (450 through 456 Warren Street) measured 20 to 30 feet in width along the southern side of Warren Street and 75 feet in length. Historical Lot 6 (197 Bond Street) fronted 25 feet along Bond Street and extended for 10 feet along the southern sides of Historical Lots 7 through 10. At the eastern end of Site 59a was a standard-size (25 by 100 foot) Historical Lot 11 (458 Warren Street), which was adjacent to the eastern sides of both Historical Lots 6 and 10. Historical Lot 7 was developed with two brick structures separated by a central courtyard. Historical lot 8 and 11 were each developed with a brick structure while Lots 6 and 9 were developed with one wood frame building each. Historical Lot 10 was developed with three identical wood frame structures located along the southern and eastern edges of the lot and accessed via an alley that ran along the western side of the lot. The 1886 Sanborn map more clearly depicts the buildings and outbuildings on these lots: Lot 6 was developed with a small two-story wood frame dwelling with one- and two-story sheds at the rear lot line; Lot 7 was developed with a three-story brick store with a two-story dwelling at the rear of the lot; Lot 8 was developed with a three-story brick store with a one- to one-and-a-half-story wood frame house at the rear of the property accessed via an alley along the eastern side of the lot; Lot 8 was developed with a two-story wood frame store; Lot 10 was developed with a three-story wood frame store in a manner similar to that seen on the 1880 atlases; and Lot 11 was developed with a three-story store with a one-story wood frame outbuilding at the rear of the lot.

Few changes to the lots appear on Sanborn maps published in 1904, 1915, 1939, and 1950 with exceptions to minor changes to rear additions and outbuildings. None of the buildings located on the Development Site at this time featured basements. The 1950 Sanborn map indicates that a church was operating on the first floor of the wood frame structure on Historical Lot 10. The lots were consolidated

and the buildings on them razed in the late 1960s in association with the construction of the existing church.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 399, Lot 6 is considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITES 4A, 4B, AND 4C—BLOCK 399, LOTS 58 THROUGH 60

Development Sites 4a through 4c are located on three lots (Block 399, Lots 58, 59, and 60, or 463 to 459 Baltic Street, respectively), along the northern side of Baltic Street between Bond and Nevins Streets. Lots 59 and 60 are currently developed with one-story commercial structures that are separated from the street by a roll-down metal gate and cinderblock wall. Lot 58 is developed with a two-story (with basement) house with outbuildings in the rear yard.

The early history of these properties is similar to that of Development Site 49a, and the properties were inundated or otherwise undeveloped areas within the Martense farm until the mid-19th century. Helen Martense was identified as the owner of Modern Lots 59 and 60 in tax records dating between 1866 and 1872. Both lots were developed with two-story buildings before 1866, though earlier tax records indicate that Lot 59 was developed with an “old shanty.” During this time, Lot 58 was owned by Matthew Farrell and was also developed with a two-story (with basement) building. Farrell had purchased the lot from Martense in 1864. Residents of these properties who were listed in historical directories are identified in **Appendix A**.

The 1869 Dripps map depicts the lots as developed with two buildings in the center of the lots and at least one longer building at the front (southern side) of Sites 4a and 4b that continued to the east. The 1880 Hopkins and 1880 Bromley atlases depict each of the three lots as developed with a wood frame structure and that the lots were at that time known as Historical Lots 54 (Modern Lot 58), 55 (Modern Lot 59), and 56 (Modern Lot 60). The 1886 Sanborn map Depicts Modern Lot 60 as developed with a three-story wood frame dwelling with an undeveloped rear yard; Lot 59 as developed with a two-story wood frame barn or stable at the front (south) of the lot with a two-story wood frame dwelling at the rear of the lot; and Lot 58 as developed with a two-story rag shop at the front of the lot and a two-story dwelling at the rear of the lot, with a second two-story wood frame dwelling and a one-story shed in the lot’s central courtyard.

The 1904 Sanborn map depicts the three lots in similar fashion, though it indicates that the stable at the front yard of Lot 59 had been extended to the north. The map also indicates that the rear dwellings on Lot 59 and the front dwelling on Lot 58 were both constructed with basements. Few changes are depicted on the Sanborn maps published in 1904, 1915, and 1939. The 1950 Sanborn map reflects the demolition of the buildings on Lot 59 and the construction of a one-story warehouse at the rear of that yard. Lots 58 and 60 appear on the 1950 Sanborn map in a condition similar to that still seen through the present.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 399, Lots 58 through 60 are considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITES 3A AND 3B—BLOCK 399, LOT 39 (FORMERLY LOTS 39 AND 41)

Development Sites 3a and 3B are located within what is now Block 399, Lot 39 but which until recently had been divided into Lots 39 and 41. The sites are located at the northwest corner of Baltic and Nevins

Streets. The combined Lot 39 is currently developed with a paved parking lot surrounded by a chain-link fence. The early history of these properties is similar to that of Development Sites 49a and 4A through 4C: the properties were inundated or otherwise undeveloped areas within the Martense farm until the mid-19th century. Helen Martense is identified as the owner of more than one of the Historical Lots included within Modern Lot 30 in tax assessment records dating between 1866 and 1872. Most of the owners of the other lots as reported by tax assessments had also purchased their land directly or indirectly from Martense. Tax assessment records appear to suggest that the two Historical Lots on either end of the Site were developed by the late-1860s. This is consistent with the 1869 Dripps map, which depicts Modern Lot 39 as mostly vacant, with four structures on the lot, one in each of its corners. Residents of these properties identified in historic directories published before 1875 are included in **Appendix A**.

The 1880 Hopkins, 1880 Bromley, and 1886 Robinson atlases depict the Modern Lot as divided into five Historical Lots: four 18.4- to 20-foot by 85-foot lots along Baltic Street (Historical Lots 37 through 40) and one 20 by 100 foot lot (Historical Lot 36) along the northern side of the Modern Lot, which fronted on Nevins Street. The 1886 Sanborn map shows that each lot was developed with a two- or three-story wood frame dwelling or store and that at least two of the lots (Historical Lots 37 and 39) had rear dwellings behind them. The same buildings are depicted on the 1904 Sanborn map, which indicates that rear additions or outbuildings had been constructed on several of the lots. By the publication of the 1915 Sanborn map, many of the outbuildings and rear structures had been demolished. The four lots on the southern side of Modern Lot 39 were entirely vacant by the publication of the 1939 Sanborn although the house on the northern side of the property continued to stand at that time. The 1950 Sanborn map depicts no changes to the site.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 399, Lots 39 and 41 are considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITE 5A—BLOCK 405, LOT 13

Development Site 5a is situated on Block 405, Lot 13, located at 456 Baltic Street, on the southern side of Baltic Street east of Bond Street. The property is currently developed with a two-story residence at the front (north) of the lot with a one-story garage occupying much of the rear yard accessed by a paved alley to the west of the house. The 1846 Butt map and 1874 Fulton atlas identify the block within the larger farm of George Martense. The 1776 Ratzer map depicts the lot as entirely inundated by marsh and the waters of the Gowanus Creek. The 1834 Martin and 1839 Hammond, Cheever, and Tiffany maps indicate that the western portion of Block 405 had been filled, but that it remained undeveloped at that time.

The western portion of Block 405 was developed as indicated by shading included on the 1852 Connor map. However, the 1856-1863 Gerdes coastal survey continues to depict the area as inundated marsh. Like many other properties in the area at the time, tax assessments dating between 1866 and 1872 identify Helen Martense as the owner of Modern Lot 13, which was developed with a one-story building at the time. The 1869 Dripps map depicts a building at the northern end of the lot, fronting on Baltic Street, which may have extended onto the block to the west. Margaret Moran purchased the lot from Helen Martense in 1871. Two members of the Moran family were recorded as residents of 456 Baltic Street in directories published between 1872 and 1875.

The 1880 Hopkins, 1880 Bromley, and 1886 Robinson atlases depict a wood frame building at the front of the lot. The 1886 Sanborn map depicts the lot as almost entirely vacant with the exception of a one-story wood frame stable or barn at the extreme southern end of the lot. The 1904 Sanborn map depicts

the construction of a two-story dwelling at the northeast corner of the lot, which continues to stand on the lot, as well as a new one-story barn or shed and a one-story building used as a kitchen along the eastern lot line that were accessed via a narrow alley along the western side of the lot. The 1915 Sanborn map reflects the demolition of the rear buildings and their replacement with a single small one-story outbuilding behind the main dwelling. The existing rear garage was constructed before the publication of the 1939 Sanborn map and few changes to the lot are depicted on maps published through the present.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 405, Lot 13 is considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITE 5D—BLOCK 405, LOT 16

Development Site 5D is located on Block 405, Lot 16 and is situated at 462 to 466 Baltic Street. The Modern Lot was historically divided into to three lots formerly known as Lots 16 (462 Baltic Street), 17 (464 Baltic Street), and 18 (466 Baltic Street). The lot is currently developed with a paved parking lot with stacked parking structures. The early history of the lot is identical to that of Development Site 5a as described above.

Tax assessments dating to between 1866 and 1872 provide limited information on these three Historical Lots at that time. Assessments from 1866 to 1869 identify Helen Martense as the owner of Historical Lot 16 and later assessments identify Joseph Morris as the owner. Morris purchased the property to the west of Modern Lot 16 in 1867 but no property records could be located that confirmed his ownership of any part of Lot 16 at that time. Residents of this property that could be identified in historical directories in 1873 and 1874 include Joseph Keane and John Gallagher, both of whom worked as laborers. The residents of each of the three lots were identified in the 1870 census (see **Appendix A**). Each home was occupied by multiple families, most of whom were employed in working class professions, including many laborers, and many were of Irish or English descent.

Historical Lot 17, at 464 Baltic Street, was sold by Martense to Margaret Conway in 1868, and Conway is listed as the owner in tax records dating between 1866 and 1872 although assessment records don't confirm the presence of a building on the lot at that time. Conway, a widow, worked as a grocer and directories show that she shared her home with her family and boarders. The 1870 census identifies Conway (also spelled Connaway) as an Irish grocery store keeper and identifies at least four other families who shared her home. In 1865, Historical Lot 18, at 466 Baltic Street, was sold by Martense to Henry Clinton, who sold it to Mary J. O'Neill (also spelled O'Neil) two years later. O'Neill is identified as the owner of the lot on tax records, which identify a one-story (with basement) building on the site before 1869 and a two-story (with basement) building that date. The O'Neill family appears as the residents of the home through the early 1870s. The 1870 census identifies Mary's husband, Paul, as a general laborer, and indicates that the family shared their home with three other families.

The 1869 Dripps map depicts one structure at the northwestern corner of Modern Lot 16 but depicts the remainder of the lot as undeveloped. The 1880 Hopkins, 1880 Bromley, and 1886 Robinson atlases depict wood frame buildings at the front of each of the three lots now included within Modern Lot 16. The 1886 Sanborn map depicts development on each of the three lots. The property at 462 Baltic Street was developed with a two-story wood frame junk shop at the front of the lot and a two-story wood frame swelling at the rear of the lot, accessed via a narrow alley along the eastern side of the property. A three-story wood frame dwelling was located at the front of the lot at 464 Baltic Street while a one-story outbuilding was located at the rear of the lot. Finally, a two-story wood frame dwelling was located at the northern end of 466 Baltic Street. The 1904 Sanborn map depicts the same buildings on

the site and indicates that the buildings at 464 and 466 Baltic Street were constructed with basements and the house at 464 Baltic is identified on that map as a “wreck.”

By the publication of the 1915 Sanborn map, the “wreck” had been demolished as 464 and 466 Baltic Street were consolidated into a single lot. While the dwelling at 466 Baltic Street remained standing, the combined rear yard of the lot was developed with small sheds and industrial buildings used as a flag pole manufacturing facility and a cooper shop. No changes to any of the three properties located within Lot 16 are depicted on the 1939 Sanborn map. However, by the publication of the 1950 Sanborn map, all three lots now within Lot 16 had been consolidated into a single property. All of the buildings on the site had been demolished and replaced with a one- to two-story composition flooring manufacturing facility at the southern end of the lot and two one-story structures, one of which was used for storage, constructed along the western side of the property. These buildings have since been demolished.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 405, Lot 16 is considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITES 6A AND 6B—BLOCK 405, LOTS 63 AND 64

Development Site 6a is located on Block 405, Lot 63 and is known as 203 Butler Street and Development Site 6b is located on Lot 64 and is known as 201 Butler Street. The lots are currently paved and overgrown.

The early history of these lots is identical to that of Development Site 5a as described above. Tax assessment records indicate that these lots were vacant between 1866 and 1872, although the 1869 Dripps map depicts buildings at the southern (front ends) of both of these lots. Tax records identify Frederick W. Barwick as the owner of Lot 64 and Jacob D. Bergen as the owner of Lot 63 and adjacent land to the east. Bergen had purchased a parcel of land containing Modern Lot 63 from Edward J. Jacques in 1869 and Barwick had purchased Lot 64 from the heirs of Joseph Warner the same year. Warner had acquired the property from Henry Warren, who owned many other properties on the block, in 1861. No historic directories were located that identified residents of either property before 1875. Bergen sold Lot 63 to John Hayes in 1875.

The 1880 Hopkins and 1880 Bromley atlases indicate that Modern Lot 64 (at 201 Butler Street), known then as Historical Lot 60, was vacant and that a wood frame building was located on Modern Lot 64 (203 Butler Street), then known as Historical Lot 59. The 1886 Robinson map depicts a wood frame building at the rear of Modern Lot 60. The 1886 Sanborn map depicts a one-story wood frame building in the center of Modern Lot 63 that was identical to a structure on the property to the west. Modern Lot 63 was at that time developed with a two-story wood frame dwelling with an undeveloped rear yard. The 1904 Sanborn map depicts Modern Lot 63 in the same manner and indicates that Modern Lot 64 was redeveloped with a three-story store with a one-story rear addition and a small undeveloped rear yard. No changes appear on either property on Sanborn maps published through 1950.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 405, Lots 63 and 64 are determined to have no archaeological sensitivity for resources associated with landfilling, agricultural use/milling, or 19th century occupation.

DEVELOPMENT SITE 6C—BLOCK 405, LOT 12

Development Site 6c is an irregular, L-shaped lot located near the southeast corner of Bond and Baltic Streets, with frontages on both roads. Now known as Block 405, Lot 12, the lot was historically known as Historical Lot 10 (454 Baltic Street) and 5 (215 Bond Street). The lot is currently developed with a one-story warehouse/garage that covers the footprint of the lot in its entirety. The early history of the lot is identical to that of Development Site 5a as described above.

Tax assessments dating to 1866 and 1872 indicate that the northern portion of Modern Lot 12 was owned by Nicholas Murray. Murray, who worked as a laborer, purchased the lot from Augustus J. and Sarah M. Brown in 1864 and members of the Murray family appear as residents of the property in directories published between 1865 and 1874.¹ The lot was included within a larger parcel of land that was sold by the Browns to Henry Warren in 1855 and that was transferred back to the Browns in 1864. The owner of the western portion of the lot as identified in tax records was Patrick Woods, who owned several adjacent lots. Woods had the lot from Henry Warren in 1855. Directories identify a variety of residents of the property between 1871 and 1875, including a junk dealer named Hugh McGee who resided on the property between at least 1871 until after 1875. McGee may have lived there as early as 1867, although directories at that time only indicate the intersection of either Bond Street and East Baltic or Bond Street and Butler Street as his address.

The building that extended onto Development Site 5a as seen on the 1869 Dripps map and as described above may have extended onto Development Site 5d along the southern side of Baltic Street. The map also depicts a building lining the eastern side of Bond Street that extended into the western section of Modern Lot 12. The 1880 Hopkins and 1880 Bromley depict wood frame buildings at the front of each of the two lots and the 1886 Robinson atlas depicts front and rear structures at 215 Bond Street and a wood frame building at the front of 454 Baltic Street.

The 1886 Sanborn map more clearly depicts the two lots now within Lot 12. The property at 454 Baltic Street was developed with a one-story dwelling with an undeveloped rear yard. The western section of the lot, located at 215 Bond Street, was developed with a one-story wood frame store at the front (west) of the lot and a one-story wood frame dwelling at the rear (east) of the lot, which was accessed via a narrow alley along the northern side of the lot. The 1904 Sanborn map indicates that the lot at 454 Baltic Street had been redeveloped with a two-story dwelling at the rear of the lot, which was separated from the street to the north with an undeveloped rear yard. The property at 215 Bond Street continued to be developed in a manner similar to that seen in 1888, though the building at the front of the property is identified as a dwelling and the rear dwelling is shown to have been constructed with a basement. The lots appear in a similar condition on the 1915 Sanborn map. The 1939 Sanborn map, however, reflects the demolition of all of the buildings previously seen on earlier maps. By that time, the property at 454 Baltic Street was redeveloped with a one-story commercial building and the property at 215 Bond Street was vacant. The 1950 Sanborn map depicts a one-story manufacturing facility at 454 Baltic Street and continues to indicate that the western portion of Modern Lot 12 remained vacant at that time. The western portion of the building therefore appears to have been constructed in the second half of the 20th century.

¹ Nicholas Murray appears as a resident of 458 Baltic Street in an 1875 directory, however this may be an error and later directories identify him as a resident of number 454.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 405, Lot 12 is considered sensitive for 19th century shaft features in the rear yards of historical buildings.

DEVELOPMENT SITE 57AA/AB—BLOCK 405, LOT 51

Development Site 57aa/ab is situated along the northern side of Butler Street and was historically divided into smaller lots between 223 and 237 Butler Street. The western half of the lot is a paved lot and the eastern half is developed with two nearly-identical two-story brick structures built in 1913 and 1922, which were recently designated as a New York City Landmark. Because of the designated landmark status, the buildings would not be impacted by the proposed rezoning and development would occur only in the western portion of the Site.

The early history of the lot is identical to that of Development Site 5a as described above. The 1869 Dripps map depicts Modern Lot 51 as entirely vacant, which is confirmed by tax assessment records dating between 1866 and 1872. A portion of the property was in use as a coal yard by the publication of the 1880 Bromley and 1880 Hopkins atlases, which depict the lot as divided into a series of irregularly sized Lots numbered 45 through 53. The western portion of the lot was in use as a coal yard and the eastern portion was in use as a stone yard. Several wood frame buildings or barns/sheds were located on the lots. The 1886 Sanborn map provides significantly more detail on the development on the Historical Lots within Modern Lot 51. The western portion of the lot was still occupied by a coal yard and was developed with at least four wood frame buildings, including a large coal shed. The eastern portion of the lot was included within the Halstead Brothers lumber yard, which extended east to Nevins Street and contained at least three wood frame buildings within Modern Lot 51, including a blacksmith shop. The 1904 Sanborn map depicts the lot in nearly the same manner, but suggests that the lumber yard had extended to the west to occupy the former coal yard property.

By the publication of the 1915 Sanborn map, the former lumber yard property had been divided into smaller properties, some of which were developed. The western portion of Modern Lot 51 was largely vacant with the exception of a small one- to two-story storage building near the southeast corner of what is now the paved lot. The western portion of the existing building on the eastern half of Modern Lot 51 was constructed by that time and the Sanborn map identifies it as a shelter operated by the American Society for the Prevention of Cruelty to Animals (ASPCA) constructed two years before the map was published. The eastern half of the building was constructed in 1922 and is shown on the 1939 Sanborn map. The western half of Lot 51 as shown on that map was developed with a number of small garages, sheds, and outbuildings. The 1950 Sanborn map depicts the same buildings and suggests that some were used as kennels associated with the adjacent animal shelter.

HISTORIC PERIOD SENSITIVITY DETERMINATION

The western portion of modern Block 405, Lot 51 is determined to have no archaeological sensitivity for resources associated with landfilling, agricultural use/milling, or 19th century occupation.

DEVELOPMENT SITE 15D—BLOCK 417, LOT 21

Development Site 15d (Block 417, Lot 21) is located along the western side of the Gowanus Canal and occupies the eastern portion of Block 417 with frontages along both Douglass and Degraw Streets. The L-shaped lot is currently developed with a one-story warehouse constructed across most of the lot's Degraw Street frontage in 1954. The remainder of the lot is paved and used for parking or storage. This property was included as Development Site 7 in LBG/HPI 2009 and a complete history of the property is included in that study, which determined that the lot was sensitive for resources associated with the Gowanus Canal bulkhead.

Modern Lot 21 was historically inundated by the marshes and waters of the Gowanus Creek and it was later included within the mill pond created in association with Freeke’s Mill, as seen on the 1776 Ratzler map. The 1834 Martin, 1839 Hammond, Cheever, and Tiffany, and 1846 Butt maps continue to depict the lot as inundated. The 1852 Connor map, which depicts the initial stages of the Canal’s construction, depicts a large basin northeast of the intersection of Bond and Degraw Streets, which is also shown on the 1860 Walling map of New York City. This lot was sold to Edward W. Fiske in 1854, who was presumably responsible for filling the lot and the adjacent Canal after 1858 (LBG/HPI 2009). By the publication of the 1869 Dripps map, the basin had been filled and the modern Canal’s shape had formed. Modern Lot 21 as shown on that map was entirely vacant.

The 1880 Hopkins and 1880 Bromley atlases depict a coal yard with several wood frame structures on Modern Lot 21. The 1886 Sanborn map identifies the southern portion of Modern Lot 21 as the property of the “W.H. Murtha and Sons” coal and wood yard, which was developed with a number of wood frame buildings and coal pockets. The Murtha family had acquired the property in 1878 and it was presumably developed after that time (LBG/HPI 2009). The northern portion of Modern Lot 21 was included in the larger property occupied by the P.G. Hughes lime, brick, and lath yard. That portion of Lot 21 was located within the footprint of a large, one-story wood frame structure on that yard. The same structures are depicted on the 1904 Sanborn map, which identifies the southern property as the “John H. O’Rourke” coal yard and the northern property as “Castle Bros. Cementine Sidewalks.” Similar uses are identified on the 1915 Sanborn map, though the 1939 and 1950 Sanborn maps indicate that the eastern portion of the former Cementine Sidewalks factory, that portion now included within Modern Lot 21, was incorporated into the coal yard property to the south and developed with coal sheds and chutes.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 417, Lot 21 is determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead.

DEVELOPMENT SITES 18A AND 18B—BLOCK 424, LOTS 1 AND 20

Development Sites 18A and 18B comprise all of Block 424 and are bordered by Degraw Street on the north; Bone Street on the west, Sackett Street on the south; and the Gowanus Canal to the east. The majority of the block is covered by Lot 1, representing Development Site 18a, and the southeast corner of the block is occupied by Lot 20 and is represents Development Site 18B. Modern Lot 1 is currently developed with a three one- to two-story commercial buildings at the western end of the block and the remainder of the lot is a paved lot. Modern Lot 20 is currently vacant and was until recently developed with a series of small commercial/industrial buildings. Lots 1 and 20 were included in the LBG/HPI 2009 Phase 1A Study as Development Site D. That document determined that the lots are sensitive for resources associated with the Gowanus Canal bulkhead.

The entire block was almost entirely located within the Freeke’s Mill Pond and remained inundated through the mid-19th century. Several historic maps, including the 1834 Martin map, the 1839 Cheevers and Tiffany map, the 1852 Connor map, and the 1874 Fulton atlas indicate that “Old Gowanus” or “Freeke’s Road” extended through the block across the water where it connected to the built road on the shore on either side. Shading along the eastern side of Bond Street as seen on the 1852 Connor map indicates that some development had occurred on Block 424 by that time. The sites were later owned by Edward W. Fiske, who purchased the lots in 1865 (LBG/HPI 2009). The 1856-1863 Gerdes map depicts several structures on the northern side of Lot 1, along the southern side of Degraw Street.

The 1869 Dripps map identifies all of Block 424 as developed with a coal yard that contained two buildings: a smaller one at the northwest corner of the block and a larger, three-winged building that

covered the eastern half of the block. The 1880 Hopkins and 1880 Bromley atlases depict a number of wood frame and brick buildings on the Historical Lots that formerly made up Block 424, some of which were still in use as a coal yard. By 1888, the majority of the block was developed with coal yards, including “Z. O. Nelson and Son coal yard” and “Quinn’s coal yard,” which occupied almost all of Modern Lot 1, and “Vanderbilt’s coal yard,” which was located on Modern Lot 20. Patrick Quinn had purchased the property within Lot 1 between 1869 and 1883, but Nelson never purchased the land on which his business was located until 1896 (LBG/HPI 2009).

Three Historical Lots located at the northwestern corner of the block were developed with wood frame or brick houses. The 1904 and 1915 Sanborn maps depict the block in a similar manner, although the former Historical Lots at the northwest corner were incorporated into the Z.O. Nelson and Son coal yard, which had expanded to cover all of Modern Lot 1. The building currently occupying the property at 283 Bond Street was constructed before the publication of the 1915 Sanborn. The 1939 Sanborn map indicates that the block was divided into smaller lots, with the western third by that time occupied by an auto repair facility occupying the buildings now located at 281 and 283 Bond Street, and the eastern two-thirds occupied by the Burns Brothers Coal company, which was not in operation at that time. The 1950 Sanborn map indicates that the Modern Lot 1 was occupied by the “Stulman Box and Lumber Company” while Lot 20 was the site of the “S. Sorano coal company.” The building now located at 267 Bond Street was constructed in 1950 and the remaining buildings on the block were subsequently demolished.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 424, Lots 1 and 20 are determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead.

DEVELOPMENT SITE 22B—BLOCK 431, LOT 17

Development Site 22b is situated on the western side of the Gowanus Canal and includes Block 431, Lot 17, between Sackett and Union Streets. The southern two-thirds of Lot 17 were until recently developed with earth-covered fuel oil tanks that were formerly capable of holding 1.5 million gallons of oil and were surrounded by a five-foot-thick concrete wall. The northern portion of the lot contains a one-story industrial building constructed in 1946 and an adjacent steel structure that formerly served as a truck filling facility associated with the adjacent fuel tanks. This Development Site was included in the LBG/HPI 2009 Phase 1A study as part of site D. The study concluded that the lot is sensitive for resources associated with the Gowanus Canal bulkhead.

Block 431 was an inundated area within Freeke’s Mill Pond until the mid-19th century. The 1852 Connor map depicts the Old Gowanus/Freeke’s Road through Block 431 in a manner similar to that seen on Block 424 to the north (see Development Sites 18a and 18b, described above) and shows that the Canal had been constructed along the eastern side of the block. The property was purchased by Edward W. Fiske in 1867 and a portion of the lot was sold to John Glover the following year (LBG/HPI 2009).

The 1869 Dripps map depicts the block as filled but entirely vacant. By the publication of the 1886 Sanborn map, the northern portion of the block was developed with the “Schmadeke Coal Yard” and the southern portion was developed with the “Dyleman’s Box Factory.” Wood frame buildings associated with both companies were located within the Development Site as was an elevated railway on the coal yard grounds. The 1904 Sanborn map shows that the coal yard had taken over the property on the entire eastern half of the block, including Lot 17 in its entirety, which was developed with coal pockets, coal sheds, and engine houses. Few changes to the property are depicted on the 1915 Sanborn map or the 1939 Sanborn map, although the latter identifies the company operating the coal yard as the

“Magnet Fuel Corporation.” The fuel tanks and associated office building and truck filling station described previously are depicted on the site on the 1950 Sanborn map.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 431, Lot 17 is determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead as well as with historic period agriculture and milling activity.

DEVELOPMENT SITE WB—BLOCK 432, LOT 15

Development Site Wb is situated on the eastern side of the Gowanus Canal between Sackett and Union Streets and comprise modern Block 432, Lot 15 (522 Sackett Street and 519 to 529 Union Street). The majority of the lot is developed with a one- to two-story factory complex with an undeveloped central courtyard. A portion of the northern side of the Development Site extends within a private section of Sackett Street.

Modern Lot 15 was partially inundated by Freeke’s Mill Pond until the mid-19th century and those portions of the property that were on dry land were in the immediate vicinity of the Freeke’s Mill complex. The Old Gowanus/Freeke’s Road crossed through the lot as shown on the 1834 Martin and 1869 Dripps maps. By the publication of the 1852 Connor map, the lot was filled and the bulkhead constructed to the west. The 1869 Dripps map indicates that the lot was in use as a lumber yard and while buildings are depicted on the property to the east, Lot 15 was undeveloped at that time. The 1880 Bromley atlas identifies Lot 15 as part of a yard used by the firm of “G&T Ross” and suggest that four barns or sheds were located across all of Block 432, at least two of which may have extended onto Lot 15, which was otherwise vacant. The 1888 Sanborn map indicates that the southern portion of Modern Lot 15 was located within the footprint of a large wood frame building on the grounds of the “Adams’ Lime, Brick, and Lath Yard” and the northern portion of the lot was included within “Woods’ Coal Yard” and was developed with a small coal shed.

The lot was still in use as a lumber yard by the publication of the 1904 Sanborn map. The majority of the lot was in use for lumber pile storage. Three buildings were developed in the southeast corner of the lot by that time that appear to be the buildings still extant in that location but which at the time contained boilers or were used for storage of sawdust or wood shavings. A “shaft tunnel” is depicted on the map along the eastern side of the lot. No changes to the lot appear on the Sanborn maps published in 1915 and 1939. The 1950 Sanborn map reflects the construction of the building that currently occupies the western and northern portions of Lot 15, which at that time was in use as a beverage warehouse.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 432, Lot 15 is determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead.

DEVELOPMENT SITE AHA—BLOCK 433, LOT 8

Development Site AHa (Block 433, Lot 8) is situated along the eastern side of Nevins Street south of its intersection with Sackett Street and is also known as 289 Nevins Street. The property is currently developed with a two-story (with basement) dwelling that has an undeveloped, paved front yard. Current Sanborn maps indicate that a shed occupies much of the rear yard; however, a smaller rear addition is visible at the eastern end of the home in current aerial photographs, such as those accessible

through NYCityMap.¹ Lot 8 was historically located in the immediate vicinity of Freeke's Mill and the property that surrounded it and the 1776 Ratzler map suggests that the property was situated on dry land throughout the historic period—although the 1839 Cheevers and Tiffany map suggests that a portion of the lot may have been inundated marshland. Tax assessment records indicate that Modern Lot 8 was owned by John Winn and developed with a two-story (with basement) house before 1866. Residents of the property identified in historical directories published before 1875 are included in **Appendix A**.

The 1869 Dripps map depicts the southwestern portion of Block 433 as divided into a number of lots and indicates that a building was located at the front (west) of Modern Lot 8. The 1880 Hopkins and 1880 Bromley maps depict a wood frame building on the lot set back from the street, identical to the building on the lot now, and indicate that the lot was historically known as Lot 3. The 1886 Sanborn map identifies the building on the lot as a two-story dwelling with a front porch and undeveloped front and rear yards. The 1904 Sanborn map depicts the same building as well as the rear extension that formerly stood behind the home. No changes are depicted on the property on the 1915, 1939, and 1950 Sanborn maps, although the latter map reflects the removal of the home's front porch.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 433, Lot 8 is determined to have archaeological sensitivity for resources associated with historic period agriculture and milling activity in the area as well as 19th century domestic shaft features in former rear yard areas.

DEVELOPMENT SITE AHe—BLOCK 433, LOT 13

Development Site AHe (Block 433, Lot 13) is situated along the southern side of Sackett Street east of its intersection with Nevins Street. The property is currently developed with a two-story (with basement) dwelling with two-story rear addition, known as 556 Sackett Street, that has an undeveloped rear yard. The early history of this lot is identical to that of Development Site AHa as described above. Tax assessment records dating between 1866 and 1872 indicate that the lot was undeveloped at that time. It was owned by Edward W. Fiske, a prolific real estate investor and developer who owned extensive amounts of land in the area. No historic directories associated with the address 556 Sackett were identified before 1875.

The 1869 Dripps map appears to depict two buildings partially located on Lot 13, which was at that time included within a larger portion of the block that had not yet been subdivided for development. The 1880 Hopkins and 1880 Bromley maps depict the lot, historically known as Block 271, Lot 40, as vacant. The 1886 Sanborn map depicts a two-story dwelling at the front of the property, presumably the structure presently located on the lot, as well as a one-story wood frame outbuilding to the rear. The 1904 Sanborn map depicts three additional outbuildings within the rear yard at the southern end of the lot, which were replaced with a one-story outbuilding and a one-story shed by the publication of the 1915 Sanborn map. All of the rear buildings were demolished by the publication of the 1939 Sanborn map and no changes to the lot are depicted on Sanborn maps published through the present.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 433, Lot 13 is determined to have archaeological sensitivity for resources associated with historic period agriculture and milling activity in the area.

¹ <http://maps.nyc.gov/doitt/nycitymap/>

DEVELOPMENT SITES AOA AND 28C—BLOCK 438, LOTS 7 AND 3

Development Site AOA occupies the northern half (Lot 7) of Block 438 and Site 28c (Lot 3) occupies nearly all of the southern half of the block with the exception of the extreme southwest corner (Lots 1 and 2). The northern side of Lot 7 is developed with a long, narrow building that was formerly used as a brass foundry but has since been converted into a banquet hall and restaurant space. The remainder of the property is a paved lot with one-story storage sheds and sheltered areas associated with the restaurant uses. Lot 3 is entirely occupied by a paved parking lot. These lots were assessed in the LBG/HPI 2009 Phase 1A, which determined that the lots are sensitive for resources associated with the Gowanus Canal Bulkhead.

The 1776 Ritzer map indicates that all of modern Block 438 was entirely inundated by marshland and the waters of the Gowanus Creek. The 1846 Butt map confirms the inundation of the site and depicts a small island, possibly a marshy hassock, within the block east of Bond Street. LBG/HPI 2009 determined that the southern portion of Lot 3 was likely filled by the early 1850s, during which time it was owned by Orasmus Bushnell. Bushnell may have been responsible for filling Lot 7, as well, although other contemporary owners—including Alexander Bergen or James Brady, both of whom also owned significant amounts of land in the area—could have been responsible (LBG/HPI 2009).

The 1869 Dripps map identifies all of Block 438 as the site of the “Knight & Co. Cement drain & Water pipe works” but does not identify any buildings on the block. Property in the area was purchased by Henry Knight and James Woodward by 1867 (LBG/HPI 2009). The 1880 Bromley atlas identifies the property as that of “E.E. Wilson” and “H. Knight” and depicts a number of wood frame buildings, including many large sheds or stables. The 1888 Sanborn map depicts the block as developed with the “Lidford’s Coal and Wood” Yard” which contained a number of wood frame buildings of various size and cement pipes that ran along the length of the largest buildings. Houses were located on Lots 1 and 2 at the southwestern corner of the lot, outside of the Phase 1A Study Area. The block appears in a similar manner on the 1904 Sanborn map, although additional sheds and other one-story buildings had been constructed on the coal and wood yard property. The 1915 Sanborn map indicates that the northern portion of the Block, including most of Modern Lot 7, was the property of the John Hynes Granite Works, which was no longer operating at that time, and which was largely vacant with the exception of a cutting shed and office building that lined the northern side of the site. The remainder of the Development Sites continued to be occupied by the Lidford Company.

By the publication of the 1939 Sanborn, all of the buildings on Lot 3 had been demolished and the lot was entirely vacant. The existing buildings on Lot 7 had been constructed by that time and were occupied by Thomas Paulson & Son, Inc., a brass foundry and engineering firm. The eastern portion of that lot contained coal hoppers and coal bunkers at that time. The 1950 Sanborn map depicts Lot 7 in the same manner and also depicts a one-story auto repair facility at the western end of Lot 3.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 438, Lots 3 and 7 are determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead.

DEVELOPMENT SITE 29A—BLOCK 439, LOT 1

Development Site 29a occupies the entirety of Block 439, Lot 1, which covers two consolidated blocks in the area bounded by Union Street, Nevins Street, Carroll Street, and the Gowanus Canal. The site is currently developed with a one-story commercial building constructed in 1958 that is surrounded by a paved parking lot. This lot was included in the LBG/HPI 2009 Phase 1A study, which determined that the property is sensitive for resources associated with the Gowanus Canal bulkhead.

The majority of Block 439 was inundated by the Gowanus Creek and its associated marshes, although its eastern side was located near dry land associated with both Denton's Mill and Freeke's Mill. The 1834 Martin map suggests that buildings associated with both mill complexes may have been partially situated within the eastern side of what is now Block 439. The 1839 Cheevers and Tiffany map indicates that the eastern portion of the modern block was dry land and that the Old Gowanus/Freeke's Road crossed through its northeastern corner. Like many of the other lots surrounding the Canal, the property was included within larger land parcels acquired by real estate speculators, including James Brady, in the early 1850s (LBG/HPI 2009). One structure appears to be identified within the lot on the 1856-1863 Gerdes coastal survey, near the southwest corner of Union and Nevins Streets.

The 1869 Dripps map does not depict many buildings on either of the two blocks that make up modern Block 439, which at the time was still bisected by the line of President Street. On that map, the northern historic block was part of the "McBain Lumber Yard" and was developed with a small structure along the eastern side of the block in the vicinity of the structure seen on the 1856-1863 Gerdes map. No information about this building could be located and it is assumed it was commercial or industrial in nature as extensive residential development had occurred along the eastern side of Nevins Street on both the 1856-1863 Gerdes maps in this area but little development had occurred in the newly filled area to the west of Nevins Street with the exception of a nearly identical structure on the lumber yard to the south. In addition, the waterfront areas adjacent to the Canal were advertised as perfect for industrial uses beginning in the 1850s (LBG/HPI 2009). As shown on the 1869 Dripps map, the southern block was the property of the "Kenyon & Newton Lumber Yard" and was similarly developed with a small building along the eastern side of the block. James A. McBain and Thomas McBain acquired land on the lot gradually between 1867 and 1871 and Kenyon and Newton purchased land in 1874 (LBG/HPI 2009). The lot was presumably developed for industrial purposes during that period.

The 1880 Bromley atlas indicates that the Kenyon and Newton lumber company had expanded across both historical blocks as well as the line of President Street, which is not shown as being built west of Nevins Street on that map. A smaller area along the southern side of Modern Block 439 was occupied by "J.S. Loomis' lumber yard." Two brick structures were located on the property at that time, one within the line of President Street and one at the extreme northeast corner of the modern block. At least seven wood frame sheds or barns were also located on the block at that time. The 1888 Sanborn continues to depict the occupation of the block by both the Kenyon & Newton and Loomis lumber yards. The Kenyon and Newton property was developed with a two-story dwelling within the line of President Street and wood frame lumber sheds and office buildings lining the northeastern and northern sides of the lot. The Loomis lumber yard to the south was developed with a large lumber shed and a smaller wood frame dwelling at the southeast corner of the lot.

The 1904 and 1915 Sanborn maps depict few changes to the block. The Loomis lumber yard continued to occupy the property at the southern end and the "Albro J. Newton Company's" lumber yard occupied the northern portion of the block. A series of dashed lines depicted across the Newton Company's property may depict the locations of large lumber piles. By the publication of the 1939 Sanborn map, the southern portion of the Development Site was redeveloped for occupation by the "Mortan Coal Company, Inc.," and the former lumber shed had been replaced by smaller structures and sheds used as coal pockets and boilers and the former dwelling at the southeast corner of the block was converted into an office and expanded with one- and two-story additions. The remainder of the Block was redeveloped with an industrial facility associated with "Kopper's Seaboard Coke Co." The property at that time contained a two-story (with basement) dwelling at the southeastern end of the company's property as well as iron conveying equipment, cranes, coal pockets, garages, and office buildings. The 1950 Sanborn map depicts the same development on the block, and identifies the occupant of the southern property as the "Hy-Grade Magnet Corp." that map also indicates that the dwelling at the

southeastern end of the Kopper’s Company property was vacant and boarded up. These buildings were demolished in the 1950s to allow for the construction of the existing building and its associated parking lot.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 439, Lot 7 is determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead as well as agricultural and milling activities in the area.

DEVELOPMENT SITES 28E AND 28F- BLOCK 445, LOTS 11 AND 20

Development Site 28e is an irregularly-shaped property that occupies the central and southeastern portion of Block 445 (Lot 11). The property is developed with a one-story warehouse at 385 Carroll Street, a one-story office/commercial building at 395-397 Carroll Street, and a two-story commercial building/restaurant at 383 Carroll Street. The remainder of the site is paved and used for parking or storage. Development Site 28f is located on Lot 20 of Block 445 and is situated at the northeastern corner of the block. The lot is largely occupied by a paved parking lot but also contains a two-story office building at 430 President Street at its western end. Lots 11 and 20 were included in the LBG/HPI 2009 Phase 1A Study, which identified these lots as sensitive for resources associated with the Gowanus Canal bulkhead.

Block 445 in its entirety was inundated by the Gowanus Creek and its associated marshes through the mid-20th century, as shown on the 1767 Ratzler map, the 1834 Martin map, and the 1839 Hammond, Cheever, and Tiffany Map. The 1852 Carroll map depicts the Canal constructed along the eastern side of Block 445, but does not include shading to suggest that either of the two Development Sites had been developed by that time. By the publication of the 1869 Dripps map, the block was occupied by two business: the J. Barney Stone Yard on the western half of the block, including a portion of Modern Lot 11, and the “Canda & Co. lime company,” which occupied the remainder of Lot 11 and Lot 20 in its entirety. Each property featured a building in the center of the lot that extended from President to Carroll Street.

The 1888 Sanborn map indicates that the western portion of Block 445 was by that time occupied by Loomis’ Lumber Yard, which also occupied property across the canal on Block 439/Development Site 30a. The eastern portion of the Block was occupied by the “John Morton & Sons Lime & Brick Shed.” At that time, Modern Lot 20 was a vacant part of the Morton property, although a two-story brick structure, possibly the structure still located on the property, was located at 430 President Street. At that time, a one-story extension was located at the rear of the building and a one-story wood frame building was adjacent to the building to the west, located on Modern Lot 11. Lot 11 was developed with a two-story wood frame office building that appears to still be extant at 395-397 Carroll Street and a large, two-story brick stable or shed was located to the west in the vicinity of what is now 383 Carroll Street. These buildings were still present on the site in 1904 and 1915, as shown on Sanborn maps published in those years. Both maps show that John Morton’s Sons & Co, identified as masonry material company, had expanded to occupy all of what is now Lots 11 and 20. The 1939 Sanborn map does not depict any additional development on the site with the exception of a coal pocket on the eastern end of Lot 20. The coal yard that was occupying the property until that time appears to have closed and the map identifies the property as “vacant and locked.” The 1950 Sanborn map depicts the buildings previously seen on the two Development Sites and also indicates that the southeastern portion of Lot 11 had been developed with a large public warehouse, the western portion of which may be represented by the extant building at 385 Carroll Street.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 445, Lots 11 and 20 are determined to have archaeological sensitivity for resources associated with landfilling and the Gowanus Canal bulkhead as well as agricultural and milling activities in the area.

DEVELOPMENT SITE BBA—BLOCK 447, LOT 50

Development Site BBa (Block 447, Lot 50) is located along the northern side of Carroll Street and is also known as 451 to 447 Carroll Street. The eastern third of the site is developed with a three-story commercial building with a one-story (with basement) extension at the rear and a one-story outbuilding in the northeast corner of the lot. The remainder of the site is a paved parking area. The lot was historically divided into three smaller lots.

The 1767 Ratzler map indicates that Modern Lot 50 was originally located on dry land south of the Denton's Mill complex. The 1834 Martin map depicts a building on the Denton property in the immediate vicinity of Modern Lot 50. Tax assessments dating between 1866 and 1872 identify the three Historical Lots included within the modern Development Site and indicate that each was developed with a two-story building before 1866. Each of these lots was included within a significantly larger parcel sold by the executors of the estate of Nehemiah Denton to Arthur W. Benson in 1852. As mentioned previously, Benson was a wealthy gas company executive who invested heavily in Brooklyn real estate (LBG/HPI 2009). The westernmost property, 447 Carroll Street, was sold by Benson to Ann M. Smith in 1864 and the easternmost property, 451 Carroll Street, was sold to Valentine Andrie by Benson the same year. The central lot, 449 Carroll Street, was sold by Benson to James A. Barrett in 1869, who sold it to Edward H. Babcock the following year. Babcock appears as the owner on the 1866 to 1872 tax assessment ledgers.

The 1869 Dripps map depicts the Development Site as divided into three smaller lots, each of which was developed with a structure at the front (southern end) of the lot. The 1880 Hopkins and 1880 Bromley atlases identify these three lots as Historical Block 271, Historical Lots 39 through 41, each of which was developed with a wood frame building. The 1886 Sanborn map depicts the existing two-story store at 451 Carroll Street, which had a one-story stable or shed at the rear (north) of the lot. The map indicates that a wood porch attached to the front of the house may have extended into the streetbed to the south. The Historical Lot in the center of Modern Lot 50, 449 Carroll Street, was developed with a two-story wood frame dwelling with a one-story rear dwelling at the northern end of the lot, which was accessed via a narrow alley along the western side of the front house. The Historical Lot at the western end of the Modern Lot, 448 Carroll Street, was also developed with a two-story wood frame house with a one-story wood frame building at the rear of the lot. The 1904 Sanborn map depicts the site in similar conditions, though it reflects the construction of additional outbuildings in the rear yards of each of the three lots and the addition of a second story to the rear dwelling located at 449 Carroll Street. No significant changes are evident on Sanborn maps published in 1915 and 1939. The 1950 Sanborn map reflects the demolition of the home at 447 Carroll Street and indicates that the rear dwelling at 449 Carroll Street was "old and vacant."

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 447, Lot 50 is determined to have archaeological sensitivity for resources associated with domestic shaft features and the 19th century occupation of the area.

DEVELOPMENT SITE 37A AND 37B—BLOCK 453, LOTS 1 AND 21

Development Site 37a (Block 453, Lot 1) is located on the eastern side of the Gowanus Canal between 1st and Carroll Streets. The property is currently developed with a one- to three-story

commercial/industrial building with an associated parking lot. Development Site 37b (Block 453, Lot 21) is an irregularly-shaped lot that fronts on Carroll Street to the north and the former First Street Turning Basin to the south. The site is developed with two adjacent one-story commercial/garage buildings (434 and 440 Carroll Street) and the remainder of the lot is a paved parking lot.

The northern portion of the sites was historically included within the property of the Denton's Mill complex and contained a segment of the Old Gowanus/Freeke's Road, while the southern portion was inundated. The 1852 Connor map does not depict the First Street Turning Basin, which was constructed in the early 1870s, but indicates that the Canal was open a short distance to the west of the site. The 2009 LBG/HPI report identified Lot 1 as sensitive for resources associated with 19th century occupation and for resources associated with the bulkhead lining the Canal and the former First Street Turning Basin. Lot 21 was identified as sensitive for resources associated with 18th and 19th century milling activity. The historic context of Lot 1 is presented in the 2009 LBG/HPI report and is only briefly summarized here.

Following the sale of Denton's Mill to Arthur W. Benson and subsequent filling of marshland and the construction of the Canal, Benson began to divide his vast land holdings into individual lots for sale (LBG/HPI 2009). Several single-family homes were located on the Sites by the late 1850s and early 1860s (*ibid*). The residents of these early homes are identified in the LBG/HPI study. The 1869 Dripps map depicts at least three buildings along the northern side of Development Site 38a and one at the site's southeast corner. Development Site 37a was developed at that time with a lumber yard and several buildings. At that time, First Street continued to run to the south of the Development Sites.

A paper mill was originally constructed on Lot 21 in 1860 but was soon destroyed by fire and rebuilt (LBG/HPI 2009). The 1880 Hopkins and 1880 Bromley atlases reflect the continued use of the lot of the manufacture of paper and depict the lot as developed with the "Brooklyn Paper Mill," or "Brooklyn Steam Paper Mill," which contained both brick and wood frame structures along the northern and eastern sides of the lot (a comprehensive history of the paper mill is included in LBG/HPI 200). Those buildings continued to be depicted on the 1886 Sanborn map, which identifies the site's occupant as the H.A. Philip & Co. Paper Mill. Lot 1 to the west continued to be developed with the Watson and Pittinger lumber yard as well as several residential buildings. The Turning Basin had been constructed along the southern side of the Sites by that time.

The 1904 and 1915 Sanborn maps depict both properties largely within the Loomis Lumber Yard (discussed above). At that time, Lot 21 was developed only with a 65-foot structure identified on the Sanborn map key as a brick chimney. Lot 1 contained a number of offices, dwellings, and lumber piles. By the publication of the 1939 Sanborn map, the lot had been redeveloped for occupation of the Colonial Sand and Stone Company. The property at that time was developed with an L-shaped one-story auto repair facility in the northeast corner of the site (at 434 and 440 Carroll Street). Seven small one- and two-story were located elsewhere on the property that were in use as office or storage space or a hoist house and gravel hoppers were also located on the grounds. The existing on-site buildings were constructed before the publication of the 1950 Sanborn and no changes to the site appear to have occurred since that time.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 453, Lot 21 is determined to have archaeological sensitivity for resources associated with landfill and the Gowanus Canal bulkhead. Lot 1 is determined to be sensitive for resources associated with the bulkhead as well as resources associated with agricultural/milling activities and 19th century domestic shaft features.

DEVELOPMENT SITE AIA—BLOCK 453, LOT 26

Development Site AIA (Block 453, Lot 26) is situated to the east of Site 38B and is an irregularly-shaped property with frontages on both Carroll Street to the north and the former First Street Turning Basin to the south. The property is undeveloped and is occupied only by a paved parking lot. As with Site 37B, the northern portion of the lot was included within the Denton’s Mill property and contained a portion of the Old Gowanus/Freeke’s Road and the southern end was inundated.

The 1869 Dripps map depicts the northern half of lot as divided into at least three smaller lots, each of which contained a structure. The southern half of the lot was included within a larger property that extended to both the east and west and contained at least two buildings wholly or partially included within what is now Lot 26. The 1880 Hopkins and 1880 Bromley atlases depict no buildings in the northern half of the property and indicate that the buildings that extended into the southern half were part of the J. Goldmark Percussion Cap Factory. The 1888 Sanborn map indicates that a small one-story wood frame stable or shed had been constructed in the extreme northeast corner of the lot, while the remainder of the property remained vacant with the exception of the percussion cap factory’s machine shop that extended into the southeast portion of the site. The small building at the northeast corner had been demolished by the publication of the 1904 Sanborn map, which identifies no other structures on the property, at that time occupied by the John Morton’s Sons & Co. storage yard and dock. The former percussion cap factory building in the southeastern portion of the lot was still standing at that time, but is depicted on the map as “dilapidated.” The entire lot is depicted as entirely vacant on both the 1915 and 1939 Sanborn maps. The 1950 Sanborn map identifies the property as a lumber yard and depicts a one-story wood post lumber storage structure at the northwestern corner of the lot.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 453, Lot 26 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal as well as with agricultural and milling activities in the area.

DEVELOPMENT SITE APA—BLOCK 453, LOT 31

Development Site APa (Block 453, Lot 31) is an L-shaped lot located at 454 Carroll Street. The lot is currently a paved lot separated from Carroll Street by an iron gate. As with other Development Sites on Block 453, the northern portion of the site was situated on the Denton’s Mill property and the Old Gowanus/Freeke’s Mill Road ran through the southern side of the property. The 1839 Hammond, Cheever, and Tiffany map depicts shading in the vicinity of this lot indicated that development had occurred there by that time. The 1869 Dripps map depicts a building at the northern end of the lot and indicates that the southern portion extended onto the grounds of the former percussion cap factory to the south.

The 1886 Sanborn map depicts a three-story wood frame store at the northern end of the lot, at 454 Carroll Street, and a two-story brick pattern and machinery storage facility and one-story wood frame smithy along the eastern side of the southern half of the lot. By the publication of the 1904 Sanborn map, the two halves of the Modern Lot had been split into separate lots. The three-story store remained at the northern end of the property and three one-story outbuildings had been constructed to the rear. The southern portion of the property had been incorporated into the John Morton’s Sons & Co. storage yard (see above) and was vacant with the exception of the previously described two-story brick industrial building, which by that time was “vacant and dilapidated.” The rear structure was demolished by the publication of the 1915 Sanborn map, and few changes to the northern half of the site are apparent on the 1915 and 1939 Sanborn maps with the exception of the gradual demolition of the outbuildings to the rear of 454 Carroll Street. The 1950 Sanborn map reflect the demolition of the front building and

the construction of two one-story garages, one at the northwestern corner of the Development Site and one along its southern border.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 453, Lot 31 is determined to have archaeological sensitivity for resources associated with agricultural and milling activities in the area.

DEVELOPMENT SITE BJAA/AB—BLOCK 453, LOT 54

Development Site BJaa/ab (Block 453, Lot 54) is situated at the northwestern corner of 3rd Avenue and the former First Street Turning Basin. The property is currently developed with a four-story self-storage facility that occupies most of the lot except for paved driveway along the southern side of the lot, a paved alley along the northern side of the lot, and a paved parking lot at the western side of the lot. The 1776 Ratzer and 1834 Martin map depict the northern portion of the site on the grounds of Denton’s Mill and indicate that a building associated with the mill property was situated within this lot in the 18th century. The southeastern portion of the lot was inundated.

The 1869 Dripps map identifies two buildings within this lot. The first was the previously discussed structure that extended onto Development Site Ala to the west, as described above. The second building was located on a smaller lot located along the eastern side of the site, fronting on 3rd Avenue. The 1880 Hopkins and 1880 Bromley atlases depict the percussion cap factory building discussed previously under Development Site Ala extending into the western end of Development Site BJaa/ab. A second brick building was located on the lot to the east of the cap factory within what is now the western end of Modern Lot 54. The 1886 Sanborn map identifies the eastern building as a charging shop associated with the percussion cap factory. That map also depicts a two-story wood frame paper box factory within the eastern half of Modern Lot 54.

As described previously, the buildings on the grounds of the former percussion cap factory were identified on the 1904 Sanborn map as “vacant and dilapidated.” The eastern portion of Modern Lot 54 at that time was occupied by the Gold & Nicoll Stone Yard. The stone yard was developed with a one-story wood frame stone cutter’s shed and saw mill at the northeast corner of Modern Lot 54 and a small one-story wood frame office at the southeast corner of the lot. The central portion of the stone yard contained a traveling crane and a “turnswith crane.” The 1915 and 1939 Sanborn maps reflect the development of a one- to two-story cutting shed as well as several small one-story structures across the site and the addition of more cranes, although the former percussion cap factory buildings had been demolished by that time. The 1950 Sanborn map identifies the property as a scrap metal yard and indicates that many of the former stone yard buildings had been expanded/enlarged and that new one-story office and storage structures had been added to the property. Records on file with the New York City Department of Buildings (NYCDOB) indicate that the existing building on the site was constructed in 2005 and that the building features a cellar.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 453, Lot 54 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal as well as with agricultural and milling activities in the area.

DEVELOPMENT SITE 36A—BLOCK 451, LOT 25

Development Site 36a (Block 451, Lot 25) is a large lot located on the eastern end of the block bounded by Carrol, Bond, First, and Hoyt Streets. The site is currently developed with an L-shaped, 6-story (with basement) nursing home surrounded by landscaped lawns and paved parking lots.

The 1776 Ratzler map, 1834 Martin, and 1839 Hammond, Cheever, and Tiffany maps depict the lot as inundated by the Gowanus Creek and its associated marshes. The 1852 Connor map depicts Block 451 as filled but does not include shading to indicate development and no buildings are depicted on the 1856-1863 Gerdes coastal survey. The 1869 Dripps map indicates that three small lots had been delineated along the southern side of Carroll Street on Block 451, although not all appear to have been situated within Modern Lot 25. The 1880 Hopkins and 1880 Bromley atlases depict two wood frame buildings on small (22.5- by 84-foot) lots at the northeastern corner of Modern Lot 25. The 1880 Bromley atlas also depicts the “Buchanan & Lyall tobacco factory” complex across the western and southern sides of the Development Site. The complex consisted of two large brick buildings.

By the publication of the 1886 Sanborn map, the western two-thirds of the Development Site had been largely redeveloped with a four-story (with basement) factory complex occupied by both the “American Machine & Foundry Co.” and the “Planet Mills Manufacturing Company.” The main factory building lined the northern and western side of the western section of Development Site 36a. A small courtyard was located to the south of the building and a two-story (with basement) stock building was located along the southern side of the property and one- and five-story buildings, including a boiler house and water tank were located along the eastern side of the factory property or the central section of Modern Lot 25. A row of identical three-story brick houses with undeveloped rear yards had been constructed along the western side of Bond Street by that time. The wood frame buildings at the northeast corner of the Development Site as seen on previous maps were identified as two- and two-and-a-half-story wood frame stores. The same buildings are depicted on the 1915 Sanborn map, which also indicates that a 75,000-gallon water tank was constructed in the central courtyard area of the factory complex in the western portion of Modern Lot 25. Few changes are depicted on the 1939 Sanborn map, which identifies the occupant of the factory complex as the “Maryland Baking Company,” or the 1950 Sanborn map. The existing nursing home facility was constructed on the Development Site in 1985.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 451, Lot 25 is determined to have no archaeological sensitivity for resources associated with landfilling, agricultural use/milling, or 19th century occupation.

DEVELOPMENT SITE BOA—BLOCK 462, LOT 6

Development Site BOa (Block 462, Lot 6) is an irregularly-shaped lot at the western end of the block bounded by 2nd, 3rd, and Bond Streets and the Gowanus Canal. The lot fronts on both 2nd Street (130-132 2nd Street) and 3rd Street (125-129 3rd Street). The lot is developed with a one-story cinder block freight depot/truck terminal in the center of the property with paved parking lots to the north and south. The site was formerly divided into five Historical Lots, two along 2nd Street and three along 3rd Street.

The Development Site was inundated by the Gowanus Canal and its associated marshland as seen on the 1776 Ratzler, 1834 Martin, and 1839 Hammond, Cheever, and Tiffany Maps. The lot was filled by the publication of the 1852 Connor map, the lot was filled. A large basin associated with the Gowanus Canal was located to the east of the block at that time. The 1856-1863 Gerdes coastal survey depicts the basin as a less formally constructed feature that continued to contain marshes and hassocks.

Tax assessment records from 1866 to 1879 identify the owner of the two lots fronting on 2nd Street as Patrick Judge and Cornelius Ryan and indicate that each of those properties was developed with a two-story building. Ryan had purchased his property from Domenicus S. Voorhees, the previously discussed real estate developer, in 1866. Judge had acquired his lot from Andrew and Eliza Benedict two years later. Two of the three lots along the southern side of the Development Site were owned by Michael Dowd and the third was owned by Voorhees. One of Benedict’s properties was developed with three-story building before 1866 and the other was developed with a building of similar size in 1870 while

Voorhees lot was developed two years later. The 1869 Dripps map depicts Modern Lot 6 divided into at least four Historical Lots: two in the northern part of the Development Site, both of which were developed with buildings, and one property was subdivided in the southern half of the Development Site, the westernmost of which was developed with a building, consistent with tax records. The 1869 Dripps map also identifies 2nd Street as “Balchen Place.”

The 1880 Hopkins and 1880 Bromley atlases depict wood frame structures on each of the lots within the Development Site. The 1886 Sanborn map provides additional detail about the buildings located on this Development Site in the late-19th century. The three buildings in the southern half of Modern Lot 6 (125, 127, and 129 3rd Street) were identified as three-story wood frame stores, and the buildings at 127 and 129 3rd Street each had a one-story wood frame outbuilding at the rear (northern end) of their Historical Lots. The two Historical Lots in the northern half of Modern Lot 6 were each developed with a two-story dwelling (130 and 132 2nd Street) each set back from the street with undeveloped front and rear yards. The 1904 and 1915 Sanborn maps depict the Historical Lots in a similar conditions, but suggests that additional small wood frame outbuildings had been constructed in the rear yards of many of the Historical Lots within the Development Site and that a wood frame extension had been added to the front (south) of the house at 129 3rd Street, extending it into the sidewalk/street right-of-way. The 1939 Sanborn map indicates that the buildings in the southern half of the Development Site had been demolished by that time and that the two buildings in the northern half, while still extant, were identified as “vacant” and “old.” The 1950 Sanborn map indicates that the entire Development Site was vacant at that time. YCDOB records indicate that the existing building on the site was constructed in the early 1950s.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 462, Lot 6 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal as well as with agricultural and milling activities in the area.

DEVELOPMENT SITE 40B—BLOCK 462, LOT 14

Development Site 40b (Block 462, Lot 14) comprises most of the eastern half of Block 462. It is bounded to the east by the Gowanus Canal, to the north by 2nd Street, and to the south by 3rd Street. The property is developed with a one-story commercial/industrial building along 2nd Street and the remainder of the Site is a paved parking lot or storage area. The early history of the Development Site is the same as that of Development Site BOa, described above. The archaeological sensitivity of this lot was assessed in the 2009 Phase 1A Study by LBG/HPI, which determined that the lot is sensitive for resources associated with the Gowanus Canal bulkhead.

Members of the Secor family purchased land within Modern Lot 14 between 1851 and 1858 and they may have been responsible for filling the property and constructing the adjacent Canal (LBG/HPI 2009). The family was heavily involved in the development of the area and owned a number of properties in the area. The 1869 Dripps map depicts a coal yard on this Development Site and indicates that buildings were constructed at the yard’s eastern end and near the southwestern corner of Modern Lot 14. The 1880 Hopkins and 1880 Bromley atlases depict two small brick structures in the eastern half of the Modern Lot, a large stable or barn in the lot’s northeast corner, and a long wood frame structure along the southern side of the lot in the western part of the Development Site. The 1886 Sanborn map depicts a number of commercial developments on the Site, including a stone yard across its western half, a horseshoer in the center of the site along 3rd Street, a kindling factory at the Site’s southeast corner, and the “Shaw & Truesdell” grain elevator and feed mill in the northeast corner. Each business featured a number of brick or wood frame buildings. Two brick two-story dwellings are shown

on the map in the locations of the brick structures seen on the 1880 atlases along 2nd and 3rd Streets. As seen on the 1904 Sanborn map, the eastern half of the Development Site continued to be in use as a stone yard associated with the firm of “S. Dean & Bro.” That portion of the Site was developed with at least seven buildings used as cutting sheds, a smith, office space, a carriage house, planning/saw mills, and an engine house. Two cranes were located in the yard. The southeastern quadrant of the Development Site was occupied by the “Gowanus Kindling Wood Works.” The brick structure formerly identified as a dwelling on that map is identified on the 1904 map as an office. The “Shaw Truesdell Company” continued to occupy the northeastern quadrant of the Development Site and the former dwelling on that property is identified as a shed or stable on the 1904 map.

By the publication of the 1915 Sanborn map, the buildings on the western half of the Development Site had been demolished and that area is depicted as almost entirely vacant. The Shaw Truesdell property had expanded to the west into the vacant area and a new one-story shed was constructed near the northwestern corner of the Development Site. The kindling wood factory continued to occupy the southeastern portion of the Site at that time. The 1939 Sanborn map shows the continued occupation of the Shaw Truesdell Company in the northern half of the Development Site and indicates that the company had constructed two large iron grain storage tanks on the western half of their property. The former kindling mill at the southeastern side of the Development Site was by that time replaced with the “Brooklyn Union Coal Co., Inc.,” which was developed with only three one-story office buildings/sheds at the southwestern corner of its property (near the center of the Development Site) and a number of large coal bins. A one-story building occupied by a wagon smith and a one-story shed were constructed at the southwestern corner of the Development Site. The 1950 Sanborn map depicts few changes to the Development Site with the exception of the construction of new one-story industrial buildings in the southwestern quadrant of the site. NYCDOB records indicate that the existing building on the site was constructed before the early 1960s.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 462, Lot 14 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal as well as with agricultural and milling activities in the area.

DEVELOPMENT SITES 42A AND 42B—BLOCK 465, LOTS 27 AND 28

Development Site 42a (Block 465, Lot 27) and Site 42b (Block 465, Lot 28) are located at 102 and 104 3rd Street, respectively. Both parcels are undeveloped and currently in use as a single parking lot. The lots were included within Coles Mill pond and were inundated through the mid-19th century. The 1856-1863 Gerdes coastal survey depicts the lots as filled but undeveloped.

The 1869 Dripps map indicates that Sites 42a and 42b were included within a row of three smaller lots that had been delineated from the rest of the block and each developed with a structure at the front (north) of the lot, along 3rd Street. The map’s accuracy is unclear as tax assessment records indicate that both properties were developed with houses in 1871 after previously having been undeveloped. The properties were part of the larger estate of Domenicus S. Voorhies, who sold a number of lots to Charles G. Waterbury in 1871 (Kings County Liber 981, Page 476) and who in turn sold a number of lots including Modern Lots 27 and 28 to Russell W. Adams later the same year (Kings County Liber 1005, Page 192). Adams retained ownership of Lot 28 but sold Lot 27 to Thomas Mullen in December 1871 in a deed recorded early the following year (Kings County Liber 1036, Page 271). Directories indicate that Mullen lived on the property in the mid-1870s while Adams lived elsewhere and presumably used the home as a rental property. Adams is identified in directories as a lumber dealer and it is presumed that he constructed the homes on Lots 27 and 28 given the fact that they were

constructed the year he purchased the property. However, former owner Domenicus Voorhies, who owned many properties in the area, was also an architect and builder before he was murdered in 1870 after a dispute in a saloon (*Brooklyn Daily Eagle* 1870).

The 1880 Hopkins and 1880 Bromley atlases each depict the two lots within a longer row of 20-foot-wide lots that had been developed with wood frame buildings. The 1886 Sanborn map depicts each lot as developed with a three-story dwelling and indicates that Modern Lot 27 also contained a one-story wood frame outbuilding in the rear yard. The street numbers appear to have been changed around that time, and Modern Lot 27 (now 102 3rd Street) had formerly been known as 102-104 Modern Lot 28 (now 104 3rd Street) had previously been known as 106. The site appears in the same manner on Sanborn maps published in 1904, 1915, 1939, or 1950 with the exception of the addition of a one-story outbuilding to the rear of Modern Lot 28 beginning in 1915.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 465, Lots 27 and 28 are determined to have archaeological sensitivity for resources associated with the 19th century residential occupation of the area and could contain shaft features in historical rear yard areas.

DEVELOPMENT SITES 43A AND 43B—BLOCK 466, LOTS 17 AND 60

Development Site 43a is an irregularly-shaped lot in the center of Block 466 (Lot 17) and includes frontages on both 3rd Street to the north and the Gowanus Canal to the south. The site is currently a paved parking/storage lot that is undeveloped with the exception of two small sheds at its extreme southwestern corner. Site 43B is also irregular in shape and occupies Lot 60 in the central portion of the block's southwest corner. The Site is entirely developed with a series of interconnected or adjacent one- to two-story commercial and industrial buildings.

The Development Sites were inundated by the Gowanus Creek and its associated marshes through the mid-19th century. The 1852 Connor map depicts the canal constructed to the east of the Development Sites and the 1856-1863 Gerdes coastal survey depicts the bulkhead walls lining the southern sides of the Sites but suggests that the Sites themselves were not developed and perhaps not completely filled.

The 1869 Dripps map suggests that these sites were included within a larger parcel of land that extended both to the east (see discussion of Development Site 44a, below) and was developed with at least one structure. The 1880 Bromley atlas indicates that the block had been further divided and Development Sites 43a and 43b were included within the larger property of the "Pease & Poillon" lumber yard. The lumber yard was developed with wood frame structures that along the southern side of 3rd Street. The 1886 Sanborn map identifies the occupant of the parcel as the "A. Lippitt's Planing Mill and Lumber Yard," which covered the entire western half of Block 466. At that time, Lot 17 was developed with only a small lumber shed at its northern end and the remainder of the western portion of the block was developed with a series of brick and wood frame buildings associated with the lumber company. The southern and eastern portions of the property were used for the storage of lumber.

The 1904 Sanborn map reflects the demolition of the buildings associated with the former lumber mill. At that time, Development Site 43a was entirely vacant with the exception of a corrugated iron and wood frame building located in the lot's northeastern quadrant. A set of scales was located to the west of the building, which appears to have been part of a masonry materials supply company property located on Development Site 43a to the east (see below). The southwestern portion of the Site extended onto the grounds of the "Empire City Hygeia Ice [sic] Company" located on a portion of Development

Site 43B. The ice company facility comprised a large brick and wood frame facility with space for ice storage, coal pockets, freezing tanks, and engines/condensers.¹

By the publication of the 1915 Sanborn map, the western half of Block 466 was consolidated into a single property occupied by the “Leonard Michel Brewing Company.” The eastern portion of the parcel (Development Site 44a) was developed with a wagon shed along the southern side of 3rd Street and an “inclined brewery” along the eastern and southern sides of the Site. The brewery is depicted with a dashed outline, suggesting that it was either under construction or demolition or that it was not a substantial structure. Many of the buildings associated with the former ice factory were still extant, and the 1939 Sanborn map indicates that the existing two-story building at to the rear of 409-411 Bond Street, which extends into Development Site 43b, had been constructed in 1914 and was at that time used for ice storage. The remainder of the Site was developed with freezing tanks and water storage tanks, an engine house, and a storage building were located at the southern ends of Sites 44b and 44a.

The 1939 Sanborn map depicts Development Site 43b as the property of the Burns Bros. Inc. coal yard, which was out of business at the time. The property was developed with one-story office buildings/garages at the northern end of the site (along the south side of 3rd Street), large circular coal pockets in the center of the Site, a long coal hopper along the Site’s southern end, and one-story storage and locker buildings at the southwestern corner, including the two buildings that are still extant on the site. Site 44b was occupied by the “Ebling Brewing Co., Inc.,” which was also identified as “not in operation” on the map and the remainder of the buildings occupying Site 43b through the present were constructed by that time, and were then used for ice storage, a beer cellar, wash and filter rooms, and a cooperage. Similar conditions appear on the 1950 Sanborn map, which identifies the occupant of Site 44b as the “Municipal Haulage Co., Inc.”

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 466, Lots 17 and 60 are determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

DEVELOPMENT SITE 44A—BLOCK 466, LOT 19

Development Site 44a is located on Lot 19, at the eastern end of Block 466 and is bounded to the north by 3rd Street, to the south by 4th Street, and to the east by the Gowanus Canal. The site is largely occupied by a paved storage lot and is developed with two buildings: a two-story office building at the northwest corner and a large, one-story cinder block commercial structure is located at the northeastern corner of the property. The 3rd Street Bridge over the canal is located to the north of the site and as a result, the elevation of 3rd Street is higher than that of the Development Site.

The early history of the Site through the mid-19th century is the same as that of Development Site 44a as described above. The 1869 Dripps map depicts the Site as filled and developed with an L-shaped building in its southern half. The 1880 Bromley atlas indicates that the Site at that time was divided into several commercial properties occupied by the “P.F. Sharp coal and wood yard” and a second property occupied by “Wm. Bergen” that was developed with a number of sheds or stables. The 1886 Sanborn continues to depict “P.T. Sharp’s coal and wood shed,” which was developed with a large, two-story wood frame structure with a small alley to the west. The eastern half of the site was entirely developed with a one-story wood frame coal shed occupied by “C.A. Francis.”

¹ The brick buildings included within the factory appear to be extant to the south of Development Site 44b at 421-427 Bond Street.

The 1904 depicts similar conditions on Development Site 44a. The western half continued to be developed with the previously-referenced building, at that time occupied by the “John H. Mahken Co.,” a masonry supply company. The eastern half of the site was redeveloped with a series of smaller wood frame buildings used as coal pockets, an engine house, and office space associated with the “J.F. Schmadeke coal yard.” The coal yard is depicted in the same manner on the 1915 Sanborn map. That map indicates that the western half of the site had been entirely redeveloped for the “Pure Oil Company” and was at that time developed with a number of small buildings used for storage and filling, as a cooperage, a wagon shed, and oil space in addition to large oil tanks and an oil pump house. The 1939 Sanborn map indicates that the two halves of the Development Site had been consolidated into one property occupied by the “Greason Son & Dalzell coal yard.” Several small buildings seen on previous maps continued to occupy the site, including the building currently at the lot’s northwest corner, though most of the on-site buildings and oil tanks had been demolished and replaced with a coal pile. The 1950 Sanborn map depicts the Site in a similar condition. The existing building at the northeastern corner of the lot was built in 1977.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 466, Lot 19 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

DEVELOPMENT SITE 47B—BLOCK 471, LOT 100

Development Site 47b (Block 471, Lot 100) is a large parcel of land situated along the curved western edge of the Gowanus Canal. The site is currently a paved lot used for the storage of sand and other materials for a local concrete business, and is developed only with small sheds, a small office, a cement mixer, and a hopper/conveyor. The property was historically inundated by the Gowanus Creek and its associated marshes as well as by the Coles Mill pond through the mid-19th century. The 1856-1863 Gerdes coastal survey reflects the construction of bulkhead walls along the creek’s shoreline to the east of the Development Site but suggests that the Site itself may have continued to contain marsh deposits.

The 1869 Dripps map depicts the site as completely filled and partially developed. At that time, the streetbeds of what are now Hoyt and 5th Street continued through the Development Site. At least three buildings are depicted within the Site as shown on that map, all of which were located northeast of the former intersection of Hoyt and 5th Streets, and the “Citizens’ Gas” compound was located on the block immediately to the west. The 1880 Hopkins and 1880 Bromley maps indicate that the Citizens’ Gas complex had expanded to the east to occupy the northeastern portion of Development Site 48b. The Site was developed with three brick structures northeast of the former intersection of Hoyt and 5th Streets and a large stable or shed south of the line of 5th Street.

The 1886 Sanborn map continues to depict 5th Street running through the Development Site. To the north of the street, the “Citizens Gas Light Co.” property was developed with at least two of the brick structures seen on the 1880 Bromley atlas, which included a one- to two- story L-shaped office building and a large, one-story factory with a purifying house, a lime room, a condensing room, and an engine house. A large two-story wood frame pipe room and a smaller wood frame pipe house were located in the northeastern portion of the Site. A large one-story wood frame coal shed occupied most of the portion of the Site located south of the line of 5th Street. The 1904 Sanborn map depicts the northern half of the Site in a similar manner, but indicates that 5th Street had been de-mapped east of Hoyt Street. Renamed the “Brooklyn Union Gas Co. Citizens Works,” the former coal shed to the south of the line of 5th Street had been replaced with an open coal pile with “elevated coal runs.” The 1915, 1939, and 1950 Sanborn maps depict few changes to the Site with the exception of the construction of a network

of pipes and small buildings (a paint shop and a hoister) in the northeastern part of the Site and a coal hopper and conveyor in the southwestern portion of the Site.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 471, Lot 100 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

DEVELOPMENT SITE 48A—BLOCK 471, LOT 200

Development Site 48a (Block 471, Lot 200) is a large, irregular property bounded to the west by Smith Street/Eileen C. Dugan Boulevard, to the south by Huntington Street, and to the east by the Gowanus Canal. The site is currently undeveloped and is a paved storage and parking lot in association with the cement company that occupies Development Site 47B to the northeast. The property was inundated through the mid-19th century and the 1834 Martin map suggests that the mill run associated with Coles Mill, located to the southwest of the Development Site, extended through the property. The 1856-1863 Gerdes coastal survey indicates that the site was not yet completely filled at that time.

The 1869 Dripps map depicts the site as largely undeveloped with the exception of three buildings located along the eastern side of Smith Street between Huntington Street and the former line of 7th Street, which ran through the Development Site at the time east of what is now Nelson Street. As shown on that map, the line of Huntington Street ran at a different angle than it does at present. The 1880 Hopkins and 1880 Bromley atlases depict a chemical fertilizer factory on the southern portion of the Site, south of the former line of 7th Street, which contained three wood frame buildings. Within the portion of the Site located north of 7th Street, at least four sheds or stables associated with either the chemical fertilizer plant to the south or the Citizens Gas works to the north extended into Development site 49a, but the two atlases published in 1880 depict these buildings differently.

The 1886 Sanborn map depicts the bulk of the development on this Site south of and within the mapped line of 7th Street, which is not shown to have been constructed on that map. The property was still occupied mostly by the “H.J. Baker & Bro.” chemical fertilizer factory which was developed with five wood frame buildings of various size that included a grinding room, saltpeter storage, a refining room, a “crystallizing” room, a phosphate room, a mixing room, engine house, a coal bin, and office and storage space. In the western portion of the Site and extending into the mapped streetbed of 7th Street were more than two dozen wood frame buildings, all but one of which were one-story, that are identified on the map as squatters’ housing. Squatters’ camps and clusters of “shanties” were present in the Gowanus region beginning in the mid-19th century as laborers, often of Irish descent, flocked to the area and required housing (LBG/HPI 2009). To the north of the line of 7th Street, the remainder of the Development Site appears to have been included within the Citizens Gas property and was developed only with an iron tank that was not in use at the time.

Sanborn maps published between 1915 and the present consistently depict the southern half of Development Site 48a as vacant land. Sanborn maps published in 1915, 1939, and 1950 depict the northern portion of the Site within the Brooklyn Union Gas Company site and indicated that it was developed with an increasing number of oil storage and oil purifying tanks and concrete catch basins of various size as well as small buildings, including oil and tar pump houses.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 471, Lot 200 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

DEVELOPMENT SITE 59A—BLOCK 471, LOT 125

Development Site 59a (Block 471, Lot 125) is situated along the northern side of the Canal, which forms the Site’s southern boundary, and is bounded to the east by Bone Street and to the north by 4th Street. The site is currently developed with a three- to four-story commercial building along 4th Street with a small paved rear yard adjacent to the canal. As with other properties on this block (see Development Sites 48a and 47b), the lot was inundated through the mid-19th century.

The 1856-1863 Gerdes coastal survey depicts the construction of at least a portion of the bulkhead wall lining the Canal in the vicinity of this Site. The 1869 Dripps map depicts the parcel as vacant land. The 1880 Bromley atlas depicts a single brick building along the extreme western side of the Site with the remainder of the property shown as undeveloped while the 1880 Hopkins atlas depicts only a wood frame structure in the westernmost portion of the property. The 1886 Sanborn map depicts the Site as split into two parcels. The eastern two-thirds were the property of the Ridgewood Ice Co. and were developed with one-story wood frame sheds and office buildings along the northern and western sides of the parcel, with the remainder undeveloped. The western third of Modern Lot 125 (at 98 to 100 4th Street) was occupied by a “roofing material” business that was entirely developed with a one- to two-story wood frame building featuring a tin smithy and a furnace. The 1904 Sanborn map depicts similar conditions on the two parcels, which were at that time occupied by the “American Ice Co.” and “C.S. Buell’s roofing material/cornice shop.”

The 1915 Sanborn map shows that the ice company—once again referred to as the Knickerbocker Ice Co.—had expanded to the west to cover Development Site 60a in its entirety. The site had been redeveloped in 1915 with a two-story factory building that appears to be the lower portion of the building that exists on the site today. The 1939 Sanborn map indicates that the factory was “to be occupied by [the] Lorraine Fibre [sic] Mills, Inc. Burlap Tap Mfg.” The company continued to occupy the building as shown on the 1950 Sanborn map, which also indicates that a one-story addition had been constructed to the rear of the building, which has since been demolished.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 471, Lot 125 is determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

DEVELOPMENT SITES 41A AND 41C—BLOCK 972, LOTS 1 AND 58

Development Site 41a (Block 972, Lot 1) is a long, narrow lot along the western end of the block lining the Gowanus Canal. The lot currently houses the controls for the adjacent 3rd Street Bridge. Development Site 41c (Block 972, Lot 58) is situated in the western half of Block 972 and is bordered by Lot 1 to the west, 2nd Street to the north (the de-mapped streetbed is within the Development Site), and 3rd Street to the south. The Site is developed with a paved parking lot with a small, one-story commercial structure near the Site’s center. Modern Lot 1 was included within the 2009 LBG/HPI Phase 1A Study, which determined that the lot is sensitive for archaeological resources associated with the Gowanus Canal bulkhead.¹

Both Development Sites 41A and 41C were entirely inundated and was part of Denton’s Mill Pond through the mid-19th century and was located within the previously referenced basin associated with the Gowanus Canal as seen on the 1852 Connor map. The 1869 Dripps map depicts the lot as filled but

¹ At the time the 2009 LB/HPI report was completed, Lot 1 also included an area on the opposite side of the Canal within what is now Block 462, Lot 14.

undeveloped. The 1880 Hopkins and 1880 Bromley atlases indicate that the Site was occupied by a coal yard and was developed only with a small number of wood frame sheds.

The 1886 Sanborn map indicates that three business occupied portions of Block 972 at that time. The northwestern portion of the block was occupied by the “F.J. Gellows planing mill,” which was developed with a large one- to two-story wood frame and brick structure/lumber shed and a smaller wood frame building that housed a steam dry kiln. The southwestern portion of the block was developed with the “A.P. Wernberg coal yard” which was developed with several small one- and two-story wood frame buildings used as office space and sheds. The eastern third of Development Site 42c was included within the “Curran & Cooper stone yard,” which extended to the east off the Site. That property was developed with two one-story wood frame sheds and a larger one-story wood frame building that housed an engine and a stone saw.

By the publication of the 1904 Sanborn, all of the buildings on the two Sites had been demolished and the properties were consolidated into one lot that covered the western two-thirds of the block. Occupied by the J. Hynes stone yard, the only developments within the Development Sites included two long, linear wood frame “temporary” coal conveyors and a small wood frame coal pocket that extended into the line of 2nd Street to the north. The 1915 and 1939 Sanborn maps depicts similar development and identifies the Site as part of the Brooklyn Rapid Transit company’s coal pile. The 1950 Sanborn depicts the lot as almost entirely vacant with the exception of a small one-story office building at 181 3rd Street and two adjacent one-story machine storage buildings at 187 3rd Street. The existing parking lot and building on Development Site 41c were constructed in the second half of the 20th century.

HISTORIC PERIOD SENSITIVITY DETERMINATION

Modern Block 972, Lots 1 and 58 are determined to have archaeological sensitivity for resources associated with landfilling and the bulkhead wall of the Gowanus Canal.

A. INTRODUCTION

It has long been speculated that soldiers who perished during the battle of Long Island in 1776 have been interred in a mass grave somewhere in the vicinity of the Gowanus Canal. Previous archaeological investigations have identified multiple possible locations for the mass burial while other researchers have suggested that such a burial site may not even exist. There is also evidence that multiple family burial grounds and cemeteries for free and enslaved individuals of African descent were located in the vicinity of the Project Area. This section therefore assesses previous research regarding the locations of these reported burials and determines the likelihood that the Project Area could contain human interments.

B. REPORTED MASS GRAVE ASSOCIATED WITH THE MARYLAND 400

Legend suggests that the soldiers interred there were associated with regiments from Maryland whose brave sacrifice allowed the majority of the American troops to retreat. While it has traditionally been estimated that of the 400 soldiers who fought, more than 250 were killed in the battle, that number has been disputed in recent research and it is currently assumed to be far less (Reno 2008). The Maryland State Archives has been embarking on an ambitious search of their records in an attempt to identify the soldiers who participated in the battle.¹ As of this writing, they have identified more than 925 men who fought with the regiment at some point during the war, many of whom were confirmed to have participated or who are thought to have participated in the Battle of Brooklyn. Of those, only four are known to have been killed in battle in Brooklyn, two of whom died shortly after the battle or in captivity. A total of 73 soldiers were identified as having been prisoners of war and many more were wounded or taken prisoner though records cannot identify the exact number of soldiers killed in battle.² It therefore appears that of the 256 casualties (which also included wounded and captured men) from the entire battle, not just the fighting that occurred in the vicinity of the Project Area, a much smaller percentage was actually killed on the battlefield, perhaps as few as 25 soldiers (Parry 2017).

There has been significant speculation over the last two centuries regarding the burial locations of those soldiers who were killed during the Battle of Brooklyn and at least five potential sites have been proposed that have been speculated as the site of a mass grave (see **Table 7-1**). Traditionally, these burials have been suspected to be of soldiers from Maryland regiments, but no information or speculation has been provided about those locations where deceased British soldiers may have been buried or regarding the potential that Americans from other regiments may also have been buried along with those from Maryland.

¹ See: <https://msamaryland400.wordpress.com/>.

² The records list many men who are identified as having been “probably KIA or POW,” suggesting that their exact fates are unknown.

Table 7-1
Previously Suggested Locations for the Maryland Soldiers Burial Ground

Source	Location	Notes
T.W. Field (1869) (repeated in numerous other sources, including OPRHP Site #A04701.014947)	Block bounded by 3rd and 4th Avenues and 7th and 8th Streets	
Fraser (1909)/ Hunter Research (2011) Site 1	Block bounded by 2nd and 3rd Avenues and 1st and 2nd Streets	
Hunter Research (2011) Site 2	Blocks bounded by 3rd and 4th Avenues and 6th and 8th Streets	
Dietrich and Loorya (2012)	Blocks bounded by 2nd and 3rd Avenues and 6th and 8th Streets	
Sign in front of American Legion at 195 9th Street	Vicinity of 3rd Avenue and 9th Street	
Maryland Park Proposal (2015)	Block bounded by 3rd and 4th Avenues and 8th and 9th Streets	AKRF (2018) confirmed the absence of burials or a cemetery in vicinity
Parry (2017)	No proper cemetery; remains likely buried in the adjacent marsh or in smaller graves near where soldiers fell.	

HISTORICAL DOCUMENTATION OF THE BURIAL SITE

No primary sources have been identified that describe the location of burials associated with the Battle of Brooklyn in the Gowanus area and the first references describing such a cemetery were published shortly after the end of the Civil War in the 1860s. The most commonly asserted location of the burial ground is on the block bounded by 3rd and 4th Avenues and 7th and 8th Streets. A portion of this block is within the Project Area but is not included in the Phase 1A Study Area.¹ This location was identified by T.W. Field in his 1869 work summarizing the history of the Battle of Brooklyn. Field even includes a map depicting the burial location within an oval-shaped boundary extending partially on the western side of 3rd Avenue. Field’s map is a late-19th century reconstruction of 18th century Brooklyn, and it is neither an accurate survey nor does it depict the topographic and environmental conditions of the area in a manner consistent with more accurate 18th and 19th century cartography.² Field provides this account of the burial of the Maryland soldiers:

On the shore of Gowanus Bay sleep the remains of this noble band. They were buried on the farm of Adrian Van Brunt, who, it is said, consecrated the spot for the sacred deposit; so that, while occupied by him, the plough and the axe never desecrated it. Out upon the broad surface of the level marsh rose a little island of dry ground, then and long after covered with trees and undergrowth. Around this little mound, scarcely an acre extant, clustered a few of the survivors of the fatal field and of the remorseless swamp, and here the heroic dead were brought, and laid beneath its sod, after the storm of battle had swept by. Tradition says that all the dead of the Maryland and Delaware battalions who fell on and near the meadow, were buried in this miniature island, which promised at that day the seclusion and sacred quiet which befit the resting place of the dead. Third avenue intersects the westerly end of the mound; and Seventh and Eighth streets indicate two of its sides.

¹ Two Development Sites on the block to the south, BXa and BXb, were identified by LPC as potentially sensitive for burials associated with the battle, but as described in **Chapter 1, “Introduction and Project Summary,”** these lots are currently being developed with a large residential building that is expected to disturb any archaeological resources on the site.

² For example, the map depicts the Cortelyou House on the wrong side of the former Gowanus Road.

The grade of these streets carries them much above the highest part of this burial mound and now, far below the present surface, mingled with the remains of the servile sons of Africa whose burial ground it also was, lies the dust of those brave boys who found death easier than flight, and gave their lives to save their countrymen (Field 1869: 202-203).

This description is repeated almost verbatim in Stiles' 1867 *History of Brooklyn*, which was written using an early draft of Field's text (Parry 2017). Stiles cites Field as his source as well as "T.G. Talmage and others" (Stiles 1867:280). In his 1956 investigation of the potential burial location, Frank Barnes of the National Park Service identified this site as "the most probable location of most of the graves" of the soldiers who died during the battle. In addition, contemporary sources, including Gallagher (1995), Reno (2008), and Alexiou (2015) have continued to identify this block as the burial location. William J. Parry, Ph.D., a professor of archaeology at Hunter College of the City University of New York and a board member of the Old Stone House in Brooklyn has conducted extensive research into the Battle of Long Island (Parry 2017). Dr. Parry's research has indicated that with the exception of some likely exaggerated newspaper accounts from 1776, there are no contemporary sources that describe the burial of the soldiers who perished after the battle and that all such accounts are from secondary sources beginning in the 19th century.

A second commonly referenced account of the burials in the vicinity of the Project Area was made by Henry Wildhack, who owned property on the block to the north of the most commonly referred-to location of the reported burial ground. In 1905, Wildhack allegedly identified fifteen 100-foot-long trenches extending in a northwest-southeast direction from 3rd Avenue to 8th Street (Barnes 1956, Dietrich and Loorya 2012). Writing many decades later, Wildhack's son reported finding "bones and metal" in the area and recalled that the "trenches" were 100 feet east of the curb of 3rd Avenue and 15 to 18 feet below grade, having been covered by up to 10 feet of fill during his father's ownership of the land (Dietrich and Loorya 2012). Parry (2016) indicates that there is a possibility that the trenches observed by Wildhack may actually have been ruts and ditches associated with a historic road that crossed through the area and was closed in the mid-19th century. A similar recollection was reported by Dr. Nicholas H. Ryan, who when interviewed in the 1950s informed archaeologist Frank Barnes that his father had observed "the bones of some thirty bodies in regular, or military order...in the course of the excavations which took place sometime in the period 1891-95" (Barnes 1956: 10).

The 1776 Ritzer map (see **Figure 4**) depicts two hills in the vicinity of the northwestern corner of 9th Street and 3rd Avenue, near the edge of the marsh outside of the Project Area. As seen on the map, one larger hill was adjacent to the marsh and another, smaller hill was located to the east, though neither hill could be described as an "island." Significant landscape modifications were subsequently made as a result of the cutting of streets through previously undeveloped areas and great efforts were made to standardize street grades. Barnes (1956) suggests that the hill extended as far south as 9th Street and states that:

The "island" could also have been the hill which the street profiles of 1850 seemed to indicate existed in the vicinity of Fourth Avenue and 8th Street. And it certainly could have been the knoll that the street profiles show to have existed between the later 8th and 9th Streets along Third Avenue. Still, the burials could just as well have been made on the lower slopes of the latter; this rise (between the later 7th and 8th Streets) was almost as convenient of access for bodies taken from the swamp as the westernmost...ridge; from another point of view, it was almost as unsuitable for agricultural use, lying just above the swamp as it did (Barnes 1956: 13-14).

The Ritzer map does depict an island of marsh further to the north near the mill dam that barricaded the mill pond to the southeast. This marshy hassock is identified as the site of the buried soldiers in

Fraser's 1909 history of the Old Stone House. This location is in the vicinity of modern 1st Street and would have been extensively disturbed as a result of the construction of the former 1st Street Turning Basin to the east of the Canal. Dietrich and Loorya (2012) speculated that the larger hill to the east between 2nd and 3rd Avenues and 6th and 8th Streets—outside the Rezoning Area—is actually the “island” on which the burial ground was located. Hunter Research's 2011 report identifies both the general location as described by Field and the former marshy island described by Fraser as possible locations for the burial ground.

Battlefield burials documented elsewhere in the region during the war indicate that many of those killed during battle or during imprisonment were not given respectful burials and that burials were improvised and utilitarian ways to dispose of the dead rather than meaningful burials. Historian Gabriel Furman described the burial of two British soldiers in an area “fenced in with some posts and rails, where their remains still rest” while the body of an American rifleman was “refused ...the rites of sepulture; and his remains were exposed on the ground, till the flesh was rotted, and torn off his bones by the fowls of the air” (Furman 1824: 51).¹ On the shores of the Wallabout Bay, more than a dozen prison ships were docked throughout the war, where American prisoners-of-war were subjected to brutal treatment and most died of starvation and disease. The dead from the prison ships were buried in shallow graves along the shores of the bay and bones were subsequently exposed by erosion caused by wind and waves (Stiles 1867). Similarly, after the Battle of White Plains, contemporary accounts indicate that the shallow battlefield burials were easily dug up and disturbed by local wildlife (Schechter 2002). Parry (2017) identified several contemporary reports describing the stench of decaying flesh of unburied American soldiers who were killed during the Battle of Brooklyn, though the exact locations of the bodies is not specified.

While an order was issued by the British army to bury the war dead after the conclusion of the battle, “there is no evidence that this order was carried out” (Parry 2017: 6). Therefore, it is entirely likely that if battlefield burials occurred in the vicinity of the Project Area, they would be expected to be shallow and utilitarian (*ibid*). These would not be expected to be honored military graves, but rather utilitarian burials intended to prevent further decomposition in the summer heat (*ibid*). Such a shallow burial would have made the remains extremely vulnerable to subsequent disturbance associated with the grading and paving of streets, installation of utilities, and construction and demolition of buildings.

C. FAMILY CEMETERIES IN THE VICINITY OF THE PROJECT AREA

In addition to the ambiguous references to military burials in the vicinity of the Gowanus Canal, similarly ambiguous references have been recorded to cemeteries for local families and enslaved persons in the vicinity of the Project Area. Many of the owners of the farmsteads that surrounded the Gowanus Creek maintained family cemeteries as well as burial grounds for the enslaved persons whose forced labor allowed their farms to operate. The exact locations of very few of these cemeteries are known with the exception of the Vechte-Cortelyou family cemetery, which was located near the southeast corner of 5th Avenue and 2nd Street, outside the Rezoning Area. Many family cemeteries are known only as a result of off-hand references made to funerals and burials in the previously mentioned 1828-1830 Van Brunt diary. Van Brunt made references to the burial of both his family members and at least one person of African descent who were buried on his own farm, which was located outside the Phase 1A Study Area.² Van Brunt also references attending burials on neighboring farms including

¹ This account is also recounted in T.W. Field's 1869 account of the Battle of Long Island, which attributes the story to an 1820 publication entitled, “Adventures of a Revolutionary Soldier.”

² For a full discussion of the Van Brunt family cemetery, see AKRF 2016 and AKRF 2018.

those that overlapped the Project Area, and were owned by Joseph Woodward (this burial was of a person of African descent); Richard Berry; and Theodorus Polhemus.

Colonial family cemeteries with separate sections for enslaved Africans have been documented throughout New York City. In northern Manhattan, the colonial-era Nagle family cemetery was located to the east of Tenth Avenue between 212th and 213th Streets and the cemetery of the family's enslaved Africans a short distance away to the west of Tenth Avenue between 211th and 212th Streets. While the remains within the Nagle cemetery were disinterred and reburied in Woodlawn Cemetery in the Bronx (Inskeep 2000), the slave cemetery was left in place and was disturbed during the construction of Tenth Avenue in 1903 (*New York Tribune* 1903). Similarly, the cemetery of the Hunt family in the Bronx was located in what is now Joseph Rodman Drake Park in the Bronx and featured a slave cemetery in a nearby, but separate plot (Inskeep 2000). Finally, the Lake family maintained a burial ground near their home in southeastern Staten Island in the late 18th and early 19th century and an African cemetery was also located in the vicinity of the family's property (Davis 1889). It was therefore common for colonial families to maintain both a family cemetery as well as a separate one for enslaved Africans owned by their family. It is also common that whereas the remains of family members were often disinterred prior to development, the remains of enslaved Africans were often left in place and were therefore more vulnerable to development-related disturbance.

It is therefore possible that any of the historic farms located in the vicinity of the Project Area/Phase 1A Study Area could have maintained a family cemetery and/or a cemetery for enslaved persons. Given the large size of these farms as identified on **Figures 7 and 10**, possible cemetery sites could have been located anywhere in the general Gowanus area. There is therefore no way to accurately predict the locations of human remains across the entirety of the Project Area.

A. INTRODUCTION

The Gowanus Canal bulkhead, which runs along the eastern edge of the Project Area, was determined eligible for the State and National Registers of Historic Places (S/NR) in connection with the 2004 Hunter Research, et al. study entitled, “National Register of Historic Places Eligibility Evaluation and Cultural Resources Assessment for the Gowanus Canal,” which was completed in connection with a Proposed Ecosystem Restoration Study. The Gowanus Canal, constructed between the 1850s and 1870s, is approximately 5,470 feet long and 100 feet wide and is lined by approximately 11,200 linear feet of bulkhead wall retaining the fill material that comprises the adjacent land. According to previous assessments, during the earliest period of Gowanus Canal construction in the 1850s, timber sheet piling was used to create the Canal’s bulkheads. However, “timber cribwork was the preferred and principal type of Gowanus Canal bulkhead beginning in the mid-1860s, and probably replaced most of the early sheet pile construction” (Hunter Research, et al. 2004: 3-2). Four canal basins, located at 4th, 5th, 6th, and 7th Streets were constructed by the Brooklyn Improvement Company between 1866 and 1874. The construction methods used to build these timber-crib bulkheads and the source of the fill used within them are relatively well documented (Hunter Research, et al. 2004: 2-27). Two additional basins, at 1st and 11th Streets, were added between 1872 and 1904. As documented in a number of sources, the Gowanus Canal bulkhead extends approximately 20 feet below the Canal’s mean low water level and extends to a height of 4 or 5 feet above the low water mark. The horizontal extent of the bulkhead, from the canal landward, measures between 14 and 20 feet in width (JMA 2010). Later repairs to the Canal bulkhead consist of concrete, steel sheet piling, and wood piles (ibid).

A number of replacements and repairs disturbed the original bulkhead, leading to a loss of integrity of its original historical features in many areas. The bulkhead has been altered through “private repair and, in places, replacement of canal walls since 1870...most of [which] remains undocumented” (Hunter Research, et al. 2004: 2-39). For example, a portion of the bulkhead and cribbing adjacent to the former Citizens Gas Works on Block 471 (adjacent to Development Sites 48b and 19a) collapsed in 1922 as a result of the over stockpiling of coal in areas behind the cribwork. This section of bulkhead was rebuilt as a relieving platform. Subsequently, the Brooklyn Union Gas Company, which operated the former Citizens Gas Works MGP, constructed a gas pipeline tunnel across the canal in this area (Hunter Research, et al. 2004).

B. THE EXISTING CONDITION OF THE BULKHEAD WALLS

The 2004 Hunter Research, et al. report did not identify contributing and non-contributing sections of the bulkhead. However, it did acknowledge that the age, construction type, and integrity of the bulkhead varies by canal segment and nine basic Gowanus Canal bulkhead construction types were identified and mapped. The typology was based in large part on an earlier investigation performed in 2000 by Adam Brown Marine Consulting, which had inspected the bulkhead at low water and created partially conjectural drawings of typical bulkhead construction types based on that inspection.

The report does not specify which concrete sections may retain significance or what the criteria for evaluation should be. It is further noted that in some areas, earlier cribwork may survive beneath later bulkhead repairs. Finally, it also stated that the Canal “was too narrow to allow for appending relieving

platforms to the front of older cribwork, but it is possible that relieving platform variations were installed on cribwork sections cut down to mean low water” (ACOE 2004: 3-6).

In December 2010, John Milner Associates, Inc. (JMA) and Douglas C. MacVarish prepared the Gowanus Canal Preliminary Bulkhead Study, commissioned by EPA. This study reviewed the bulkhead typology presented in the 2004 report, presenting Adam Brown’s 2000 bulkhead types, and restated the 2004 report’s conclusion that the bulkhead system as a whole constitutes a contributing feature within the Historic District. The report made the following recommendation:

That all portions of the bulkhead that can be dated to before 1960 be considered eligible for the National Register under Criterion A. In addition, it recommended that the timber crib portions of the bulkhead also be considered eligible under Criterion C as exemplifying the characteristics of nineteenth century timber crib construction and under Criterion D as having the potential to yield information about mid- to late nineteenth century timber crib construction practice (JMA 2010: 22).

The report prepared by Hunter Research in December 2011 relies on the previous two studies described above for information and evaluation relating to the Gowanus Canal bulkhead. A summary of bulkhead types/materials (as presented in previous reports) was presented in a map included in the study (Hunter Research 2011: Figure 2.8).

The 2004 Hunter Research, et al. report includes a map of the canal with bulkhead construction types identified based on low water inspection. It was estimated that, “bulkheads with confirmed timber cribwork components total 69% of inspected project areas, with probable cribwork foundations covered with rip-rap comprising another 4%” (Hunter Research, et al. 2004:3-6). Other portions of the bulkhead consisted of concrete, steel sheet piling, and wood piles. The report described the conditions of the bulkhead and the materials used to construct each segment along the entire length of the Gowanus Canal (Hunter Research, et al. 2004: Figure 3.1). It also classified the bulkheads into the following nine categories:

1. Timber Cribwork with Intact Faces above mean low water (MLW)
2. Timber Cribwork with New/Recent Sections above MLW
3. Timber Cribwork with Deteriorating but Visible Sections above MLW
4. Timber Cribwork with Collapsed Sections above MLW
5. Timber Cribwork with Concrete Replacement/Infill above MLW
6. Rip-rap slope, probably on Timber Cribwork Collapsed above MLW
7. Concrete wall or Relieving Platform
8. Steel Sheet Piling
9. Timber Sheet Piling

Table 8-1 includes a list of the Development Sites within the Phase 1A Study Area that are or formerly were adjacent to the Canal and its associated basins and the adjacent bulkhead wall conditions as identified in the 2004 and 2011 Hunter Research reports.

Table 8-1

Conditions of Development Sites Adjacent to the Canal/Basins

Development Site	Block	Lot	Bulkhead Condition as Identified by Hunter Research in 2004
15d	417	21	Concrete wall or relieving platform
18a	424	1	Concrete wall or relieving platform
18b	424	20	Steel sheet piling
22b	431	17	Steel sheet piling
Wb	432	15	Timber sheet piling
AOa	438	7	Timber cribwork with intact faces above MLW
28c	438	3	Timber cribwork with intact faces above MLW
29a	439	1	Timber cribwork with intact faces above MLW
28e	445	11	Timber cribwork with intact faces above MLW
28f	445	20	Timber cribwork with intact faces above MLW
37a	453	1	West: /south: Unknown (former 1st Street Basin)
37b	453	21	Unknown (former 1st Street Basin)
Ala	453	26	Unknown (former 1st Street Basin)
BJaa/ab	453	54	Unknown (former 1st Street Basin)
40b	462	14	Timber cribwork with deteriorating but visible sections above MLW
41a	972	1	Timber cribwork with concrete replacement/infill above MLW
44a	466	19	Steel sheet piling
43a	466	17	Timber cribwork with deteriorating but visible sections above MLW and Concrete wall or relieving platform
47b	471	100	Concrete wall or relieving platform
48a	471	200	Timber cribwork with intact faces above MLW
59a	471	125	Rip-rap slope, probably on timber cribwork collapsed above MLW and Timber cribwork with intact faces above MLW

Sources: Hunter Research, et al. 2004

C. PREVIOUS ARCHAEOLOGICAL ANALYSIS OF THE BULKHEAD WALLS

The conditions of the bulkhead have been observed through several archaeological investigations, as explained in **Chapter 2, “Summary of Previous Archaeological Assessments.”** A brief summary of observations made specifically regarding the bulkhead are summarized below:

- In 2013, Langan completed an archaeological investigation of the bulkhead at 365 Bond Street (Block 452, Lot 1) and 400 Carroll Street (Block 458, Lot 1), which are located outside but adjacent to the Project Area. The timber cribbing of the bulkhead in this area was visible but deteriorating at the time of the investigation and was determined to have experienced little disturbance in the vicinity of Block 458. Additional evidence of the bulkhead was observed on Block 452 beneath an approximately three-foot-thick concrete slab and one foot of fill material. The bulkhead in that location also included deteriorating timber cribbing, the upper portion of which had been replaced at some point in history and the upper three to five feet was constructed using a combination of timber and concrete. Langan hypothesized that the repairs to the bulkhead walls on Block 458 were necessary given the development on that block, which placed greater pressure on the bulkhead wall than occurred on Block 452. The report concluded that additional investigations would be necessary to more fully understand the construction and maintenance of the Canal and its bulkhead.

- Langan completed a similar investigation in 2014 on a site near the southern end of the Canal on Block 480, Lot 1. As part of the investigation, a 176-foot section of the bulkhead wall was excavated and determined to have been repaired/replaced in the mid to late-20th century. The upper portions of the wall in this area were replaced with concrete, which itself was deteriorating and in need of replacement at the time the investigation occurred.
- In a report that was completed but not submitted to LPC or OPRHP for review, AKRF monitored excavation in the vicinity of the Gowanus Canal bulkhead on the Citizens Gas property on Block 471, Lot 100 (Development Site 48b); Block 471, Lot 1; Block 471, Lot 200 (Development Site 49a); and Block 468, Lot 25. The bulkhead in these locations included both timber piles and concrete blocks but segments were determined to retain their historic integrity.
- Another analysis completed by AKRF in 2014 focused on the Citizens Gate project site on Block 990, Lot 138 near the southeastern end of the Canal. The bulkhead in this location was determined to have been constructed in 1924 to replace the original bulkhead wall fronting on the Gowanus Canal and while intact timber cribbing was believed to be located in the vicinity of the 6th Street Basin, the proposed project was not expected to result in impacts on that portion of the site being analyzed.
- Finally, AKRF prepared a report in January 2018 summarizing limited monitoring of six test pits excavated in the vicinity of the former First Street Turning Basin, which was constructed to the east of the Canal in the 1870s and filled in the 1960s. The bulkhead was observed in one of the pits beneath a five-foot-thick layer of fill. The 8-foot section of the bulkhead that was observed was in poor condition and had been constructed using squared timbers 9 to 12 inches in width fastened with iron spikes. Additional monitoring was recommended for future excavation in the vicinity of the former basin.

A. CONCLUSIONS

As part of the background research for this Phase 1A Archaeological Documentary Study, various primary and secondary resources were analyzed, including historical maps and atlases, historic photographs and lithographs, newspaper articles, and local histories. The information provided by these sources was analyzed to reach the following conclusions.

PRECONTACT SENSITIVITY ASSESSMENT

The precontact sensitivity of project sites in New York City is generally evaluated by a site's proximity to level slopes of less than 10 to 12 percent, water courses, well-drained soils, and previously identified precontact archaeological sites (NYAC 1994). As described in **Chapter 4, "Precontact Archaeological Resources,"** Native American activity has been documented to the northeast of the project site. While no sites have been documented on the southern or eastern sides of the Gowanus Creek, it is highly likely that Native Americans used the marshes in the vicinity of the Project Area as an important source of plant and animal food resources and it is likely that habitation sites were present on the eastern side of the creek. Marine life and wild game would have been abundant in this area during the precontact period, making western Brooklyn attractive to Native Americans. However, Native American archaeological sites are typically found at shallow depths, within the top 5 feet of the original ground surface.

Given the extent of development and landscape modification within the Project Area during the 19th and 20th centuries, it does not appear likely that precontact archaeological resources would have survived intact throughout much of the Project Area. For those areas that were dry land prior to landscape modification efforts that occurred in the 19th century, subsequent development efforts, including the dramatic industrial transformation of the neighborhood would likely have destroyed Native American sites, which were typically shallowly buried and within 5 feet of the original ground surface. Areas that were previously occupied by marsh deposits that have since been filled could possess limited archaeological sensitivity beneath the depths of fill in areas that were not disturbed by later construction activities such as canal/basin construction or the excavation of piles/deep basements. A geoarchaeological assessment of soil borings within Development Site Wa (which is not included within the Study Area for this Phase 1A Study) completed by Geoarchaeological Research Associates (GRA) in January 2019 identified soils with low to moderate archaeological sensitivity at depths as deep as 25 feet. GRA determined that the areas they identified as potentially sensitive were inundated during the precontact period, but that they may have served as resource acquisition areas. Additional areas, particularly those occupied by marshland prior to landscape modification activities in the 19th century, could potentially have been dry, inhabitable land prior to sea level rise thousands of years ago. Archaeological resources associated with those former ground surfaces could potentially be deeply buried.

The potential for additional deeply buried precontact sensitivity across the Project Area would only be determined through the completed of a larger geoarchaeological study of the broader Gowanus Canal Region. Therefore, the Project Area is determined to have low sensitivity for archaeological resources associated with the Native American occupation of the neighborhood, but the geoarchaeological analysis of a greater number of soil borings is recommended to further understand the formation of the

landscape in the area and its potential to yield archaeological resources in areas formerly occupied by marshland.

HISTORIC SENSITIVITY ASSESSMENT

Seven research topics were outlined in **Chapter 3, “Research Goals and Methodology,”** that are relevant to the Gowanus Canal area and its potential archaeological resources: 1) the Canal itself and associated landfill; 2) precontact archaeological occupation; 3) agriculture/milling in the area and the role of forced labor/enslavement in those efforts; 4) 19th century residential occupation; 5) 19th and 20th century industrial uses; 6) military activity (including possible burials); and 7) the presence of cemeteries or burial grounds. Sensitivity determinations associated with these topics that date to the historic period are explored below (precontact sensitivity is addressed in the previous section). **Table 9-1** includes a matrix of the sensitivity determinations for the Development Sites included within the Project Area as described above; these sensitivity characterizations are depicted in **Figure 13**. Specific determinations are not included in this table regarding precontact archaeological resources and sensitivity for human remains, which is considered low across the entire Project Area.

THE GOWANUS BULKHEAD AND ASSOCIATED LANDFILL

Previous archaeological assessments of the bulkhead have identified it as a significant resource that exemplifies the area’s industrial history. Those assessments that involved archaeological monitoring or in-depth examinations of the bulkhead wall and modifications that have been made to it have identified intact portions of the original wall in some locations and disturbance to/replacement of the wall with materials such as concrete and steel in others. The original timber bulkhead wall retains its sensitivity while other portions of the wall that have modified or replaced with other materials or with newer wood material (e.g., squared timbers as opposed to round timbers) after 1960 are not considered to be sensitive. Those Development Sites that front on the Gowanus Canal or the former 1st Street Turning Basin and where the bulkhead retains its pre-1960s construction typology are considered to have high sensitivity for archaeological resources associated with the bulkhead.

There is a possibility that at some point in the future, LPC will determine that the bulkhead has been sufficiently sampled and that no further analysis is necessary. Further analysis is needed and coordination with LPC required to determine what would be a sufficient sample before further analysis of the bulkhead is no longer needed.

Table 9-1

Summary of Archaeological Sensitivity by Development Site

Block	Lot	Site	Address	Sensitivity Category			
				Bulkhead/ Landfill	Agriculture/ Milling	19th Century Shaft Features	No Sensitivity
198	34	Aa	360 Dean Street			X	
198	35	Ab	362 Dean Street			X	
399	6	58a	195 Bond Street			X	
399	39	3a	196 Nevins Street			X	
399	41	3b	491 Baltic Street			X	
399	58	4a	463 Baltic Street			X	
399	59	4b	461 Baltic Street			X	
399	60	4c	459 Baltic Street			X	
405	12	6c	454 Baltic Street			X	
405	13	5a	456 Baltic Street			X	
405	16	5d	462 Baltic Street			X	
405	51	57aa /ab	233 Butler Street				X
405	63	6a	Butler Street				X
405	64	6b	Butler Street				X
417	21	15d	479 De Graw Street	X			
424	1	18a	267 Bond Street	X			
424	20	18b	495 Sackett Street	X			
431	17	22b	510 Sackett Street	X	X		
432	15	Wb	525 Union Street	X			
433	8	AHa	289 Nevins Street		X	X	
433	13	AHe	556 Sackett Street		X		
438	3	28c	319 Bond Street	X			
438	7	AOa	450 Union Street	X			
439	1	29a	300 Nevins Street	X	X		
445	11	28e	383 Carroll Street	X			
445	20	28f	426 President Street	X			
447	50	BBa	451 Carroll Street			X	
451	25	36a	344 Carroll Street				X
453	1	37a	420 Carroll Street	X	X	X	
453	21	37b	430 Carroll Street	X			
453	26	Ala	444 Carroll Street	X	X		
453	31	APa	454 Carroll Street		X		
453	54	BJaa /ab	312 3rd Avenue	X	X		
462	6	BOa	132 2nd Street			X	
462	14	40b	155 3rd Street	X			
465	27	42a	102 3rd Street			X	
465	28	42b	3rd Street			X	
466	17	43a	3rd Street	X			
466	19	44a	152 3rd Street	X			
466	60	43b	421 Bond Street	X			
471	100	47b	431 Hoyt Street	X			
471	125	59a	98 4th Street	X			
471	200	48a	459 Smith Street	X			
934	3	2c	93 4th Avenue			X	
934	4	2d	91 4th Avenue			X	
934	5	2e	89 4th Avenue			X	
934	6	2f	87 4th Avenue			X	
934	74	2j	607 Warren Street			X	
972	1	41a	169 3rd Street	X			
972	58	41c	225 3rd Street	X			

17TH THROUGH 19TH CENTURY AGRICULTURAL AND MILLING ACTIVITY AND THE ROLE OF ENSLAVEMENT IN THOSE PRACTICES

Nearly all of those portions of the Project Area that were on dry land before landscape modification activities in the 19th century were included within historic farmsteads. Two historic mills—Denton’s Mill and Freeke’s Mill—were also located within the Project Area. A third historic mill (Cole’s Mill) was southwest of the Project Area but its mill pond extended across several of the Development Sites. Subsequent development, including the construction and demolition of buildings; grading, paving, and maintenance of roads; the installation of utilities; and extended periods of industrial use would have had an impact on the locations of these historic properties. However, the majority of the buildings constructed on the Development Sites were not constructed with basements. Therefore, it is possible that remnants of historic mills and related outbuildings or farmhouses could be present within limited portions of the Project Area. As documentary research confirms that enslaved persons were responsible for the construction and operation of these mills, if archaeological resources related to these activities were encountered, they could potentially provide new information on the influence of slavery in colonial Brooklyn. Given the extent of previous disturbance, Development Sites in the vicinity of the former Freeke’s and Denton’s Mills are determined to have low to moderate archaeological sensitivity for agricultural and mill-related resources.

19TH CENTURY RESIDENTIAL OCCUPATION

Many of the Development Sites appear to have been developed with residential structures before the late-19th century when municipal water and sewer networks were available in the streets surrounding the Project Area. It is likely that on properties developed for residential purposes prior to circa 1875 would have featured domestic shaft features (e.g., privies, cisterns, and wells) for the purposes of water gathering and sanitation. Such features were typically filled with household refuse after they were no longer needed for the purpose for which they were originally constructed, and are therefore of high archaeological research value. Shaft features were typically constructed of brick or stone and extended to significant depths, often to 10 to 15 feet or more below the ground surface. As such, these types of features frequently survive disturbance episodes, even if the upper portions are truncated during development. Shaft features could be present in portions of the site that were not fully excavated as part of 19th and 20th century development. Those Development Sites developed for residential use before 1875 are therefore determined to have moderate sensitivity for shaft features including cisterns, privies, and wells.

19TH AND 20TH CENTURY INDUSTRIAL USE

The industrial history of the area began largely in the mid-19th century and industrial development continued into the 20th century. The majority of the earliest industrial development included coal and lumber yards that featured little substantial development. Later industries included a variety of manufacturing and commercial entities associated with larger facilities that would have resulted in a greater amount of ground disturbance. Given the limited development associated with the earliest industrial facilities in the Project Area and the nature of later development, it is not expected that the Development Sites included within the Phase 1A Study Area would include archaeological resources associated with the area’s industrial past that would be of high research value or that would not be recoverable from the documentary record alone. The Development Sites within the Phase 1A Study Area are therefore determined to have low sensitivity for archaeological resources associated with the area’s earliest periods of industrial use.

HUMAN REMAINS ASSOCIATED WITH MILITARY ACTIVITY OR FARMSTEAD BURIALS

The Battle of Brooklyn occurred in August 1776, long before the landscape modification that transformed the Project Area in the 19th century. As described in **Chapter 7, “Burial Grounds in the Vicinity of the Project Area,”** no primary sources have been located to confirm that human remains associated with those killed in battle were ever interred in a formal burial ground within or in the vicinity of the Project Area. It has also been suggested that far fewer soldiers were killed on the battlefield than has been previously documented, while many others may have died from infection in the days following the battle, after they had moved away from the battle site, while other reported casualties were wounded or taken prisoner rather than killed. If battlefield burials did occur, evidence from other Revolutionary War battles in the region suggests that the burials would have been improvised and shallow. Such burials would therefore have been less likely to have survived subsequent disturbance generated by the landscape modification and industrial development that formed the modern Gowanus neighborhood.

Similarly, several of the farms located within and around the Project Area maintained family cemeteries and others also maintained separate burial grounds for enslaved and free individual of African descent who worked on those farms. Such burial grounds are known or presumed to have been located on most of the farms at the southeastern end of the Project Area, but outside the Phase 1A Study Area. The locations of such graves are unknown and there is therefore no way to predict the presence or absence of human remains within the Project Area.

Given the amount of circumstantial evidence and even the low probability that human remains could be present within the Project Area, those portions of the Project Area that were located on dry land prior to the mid-19th century are considered to have low sensitivity for human remains represented by intact burials or disarticulated skeletal elements that were disturbed and redeposited during the course of the sites’ development.

B. RECOMMENDATIONS

In those locations that are sensitive for resources associated with the Gowanus Canal bulkhead and its associated landfill extending, archaeological monitoring is recommended during construction activities that would disturb or modify the bulkhead. As described previously, previous archaeological analyses have identified the sensitive portions of the bulkhead as those that continue to retain their original timber construction within an area that extends approximately 20 feet from the bulkhead’s water face.

Phase 1B Archaeological Testing is recommended for all properties that were identified as sensitive for 19th century resources, including shaft features. In the event that shaft features are found, additional documentary research may be necessary to more fully understand the residents of the Development Sites to supplement the information included in this study regarding the owners and occupants of the Sites before 1875.

Additional geomorphological analysis of soil borings is recommended to further understand the potential precontact archaeological sensitivity of the broader Gowanus Canal region.

No burial grounds have been identified within the Phase 1A Study Area, however, the entire Project Area was determined to have low sensitivity for human remains associated with both the Battle of Brooklyn and farmstead burial grounds for individuals of both European and African descent. The absence of documentation makes it impossible to predict those locations where human remains may have been buried at one time or where human remains may still be buried. It is recommended that a general Unanticipated Human Remains Discoveries Plan be prepared to outline the steps that would be followed in the event that human remains are encountered on any of the Development Sites to ensure the protection and respectful treatment of any human remains in the unlikely event that they are encountered during construction efforts.

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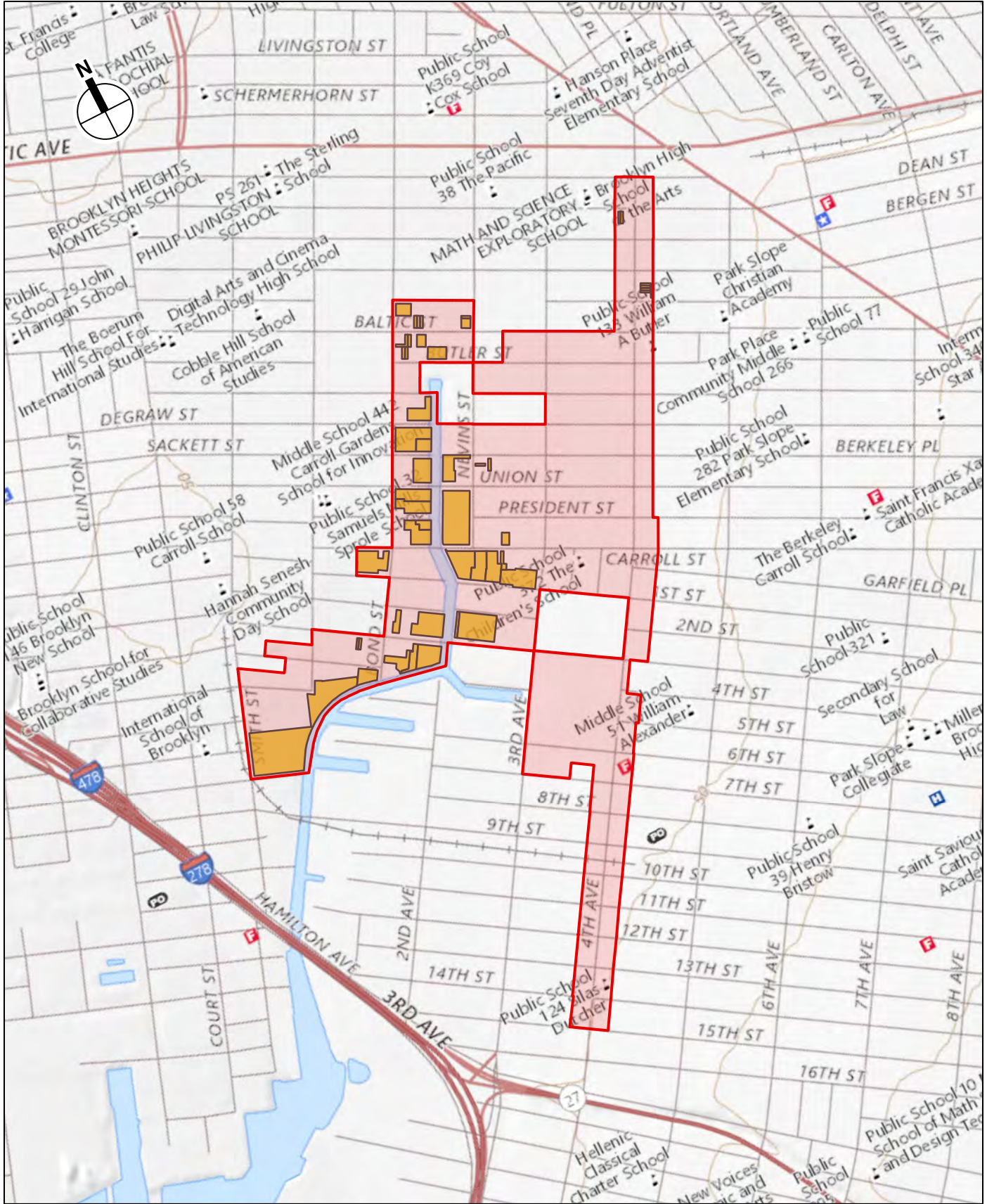
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Figures



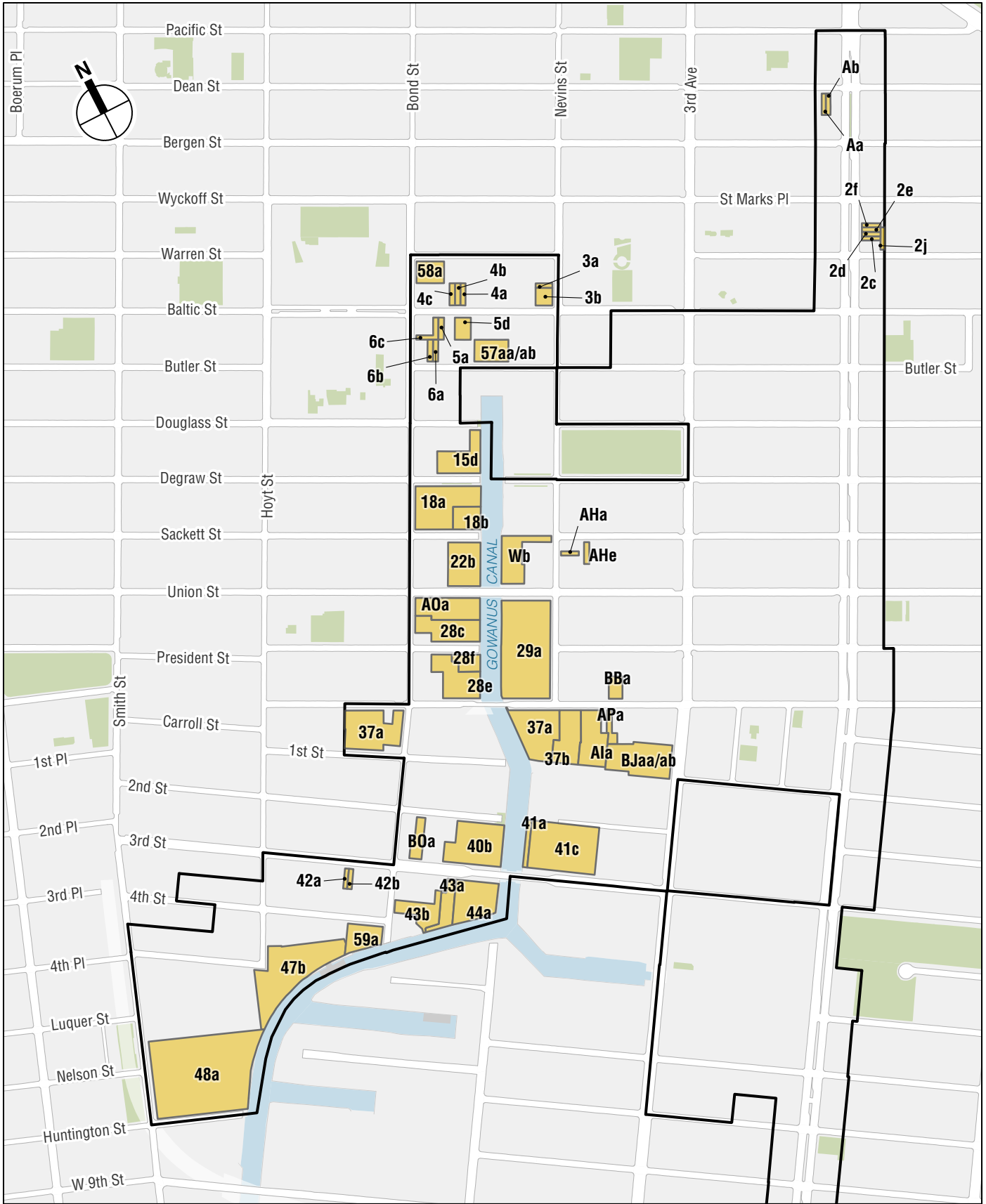
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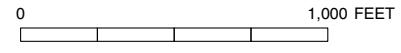
GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Figure 1



- Project Area
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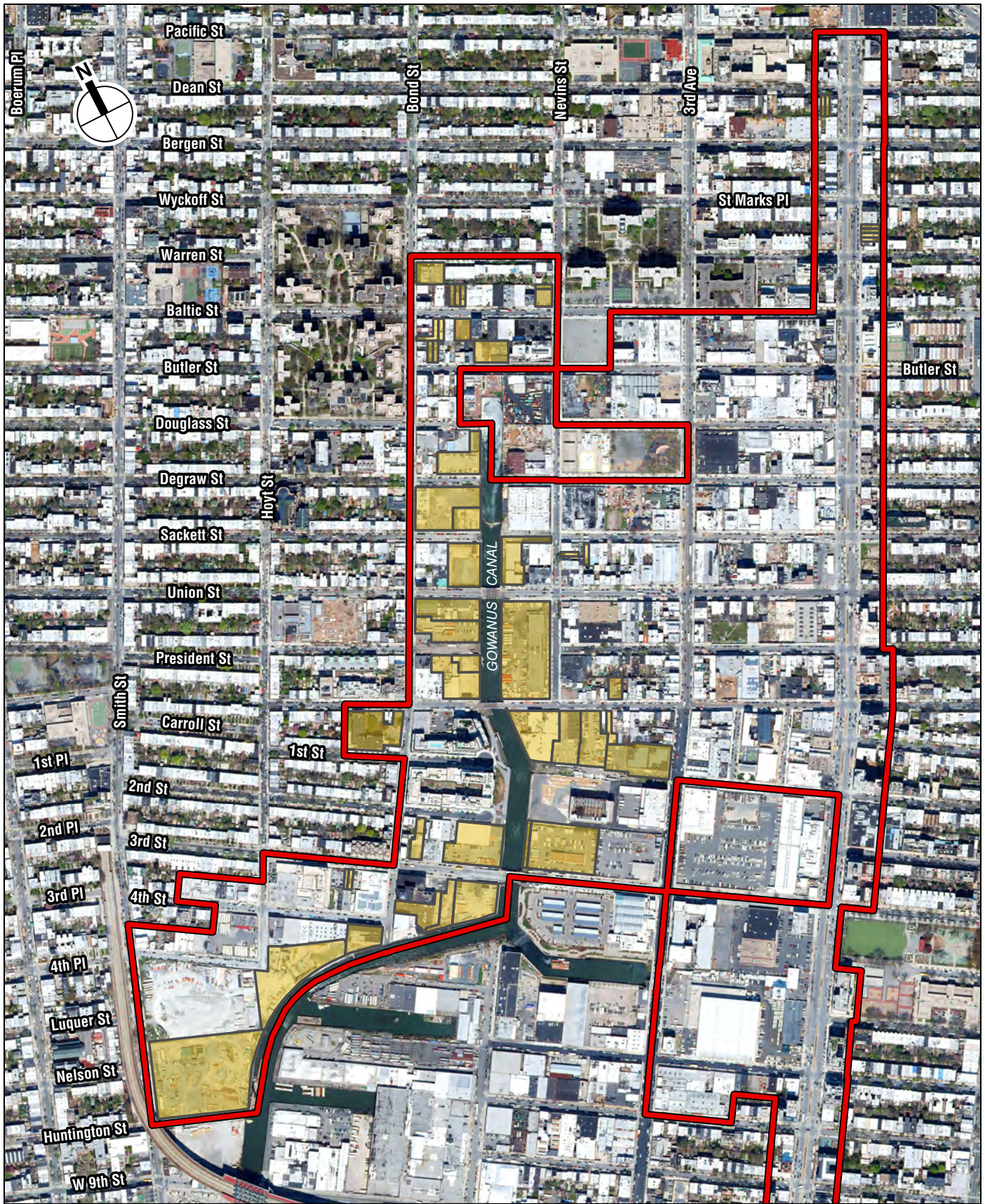
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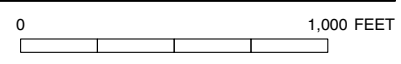
Project Location Map
Figure 2

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Data source for Project Area: NYC Department of City Planning

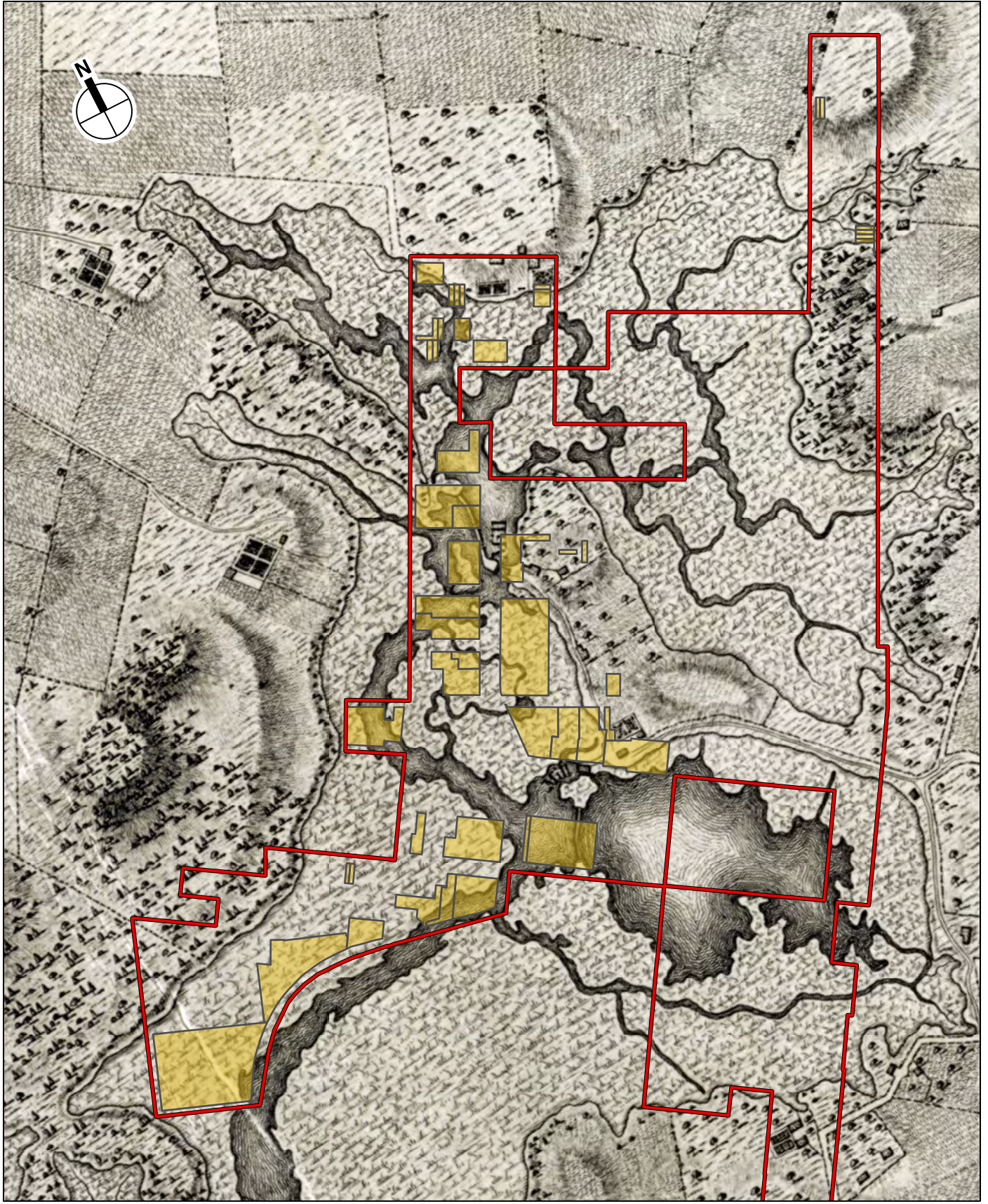




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Aerial Photograph
Figure 3

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

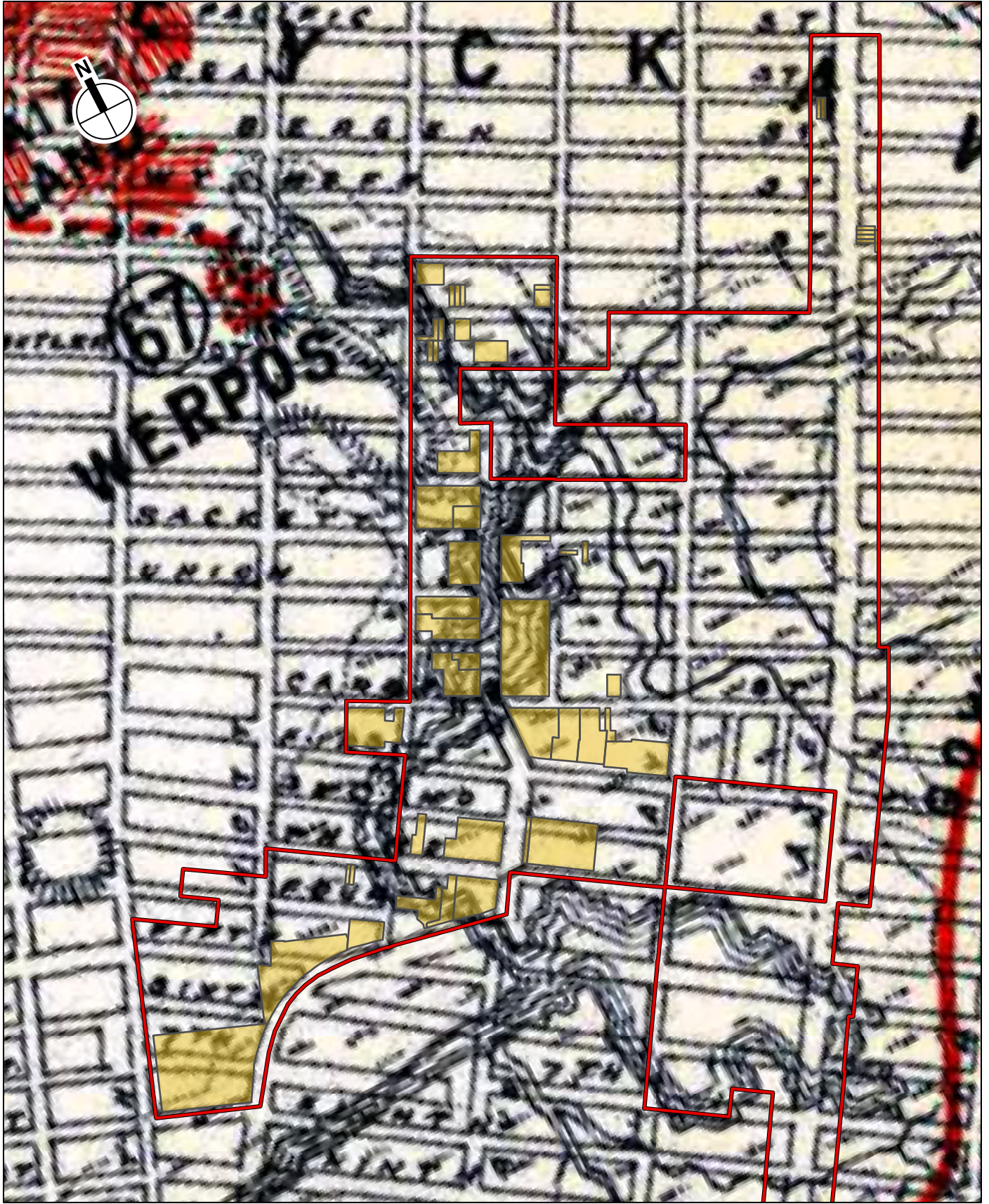


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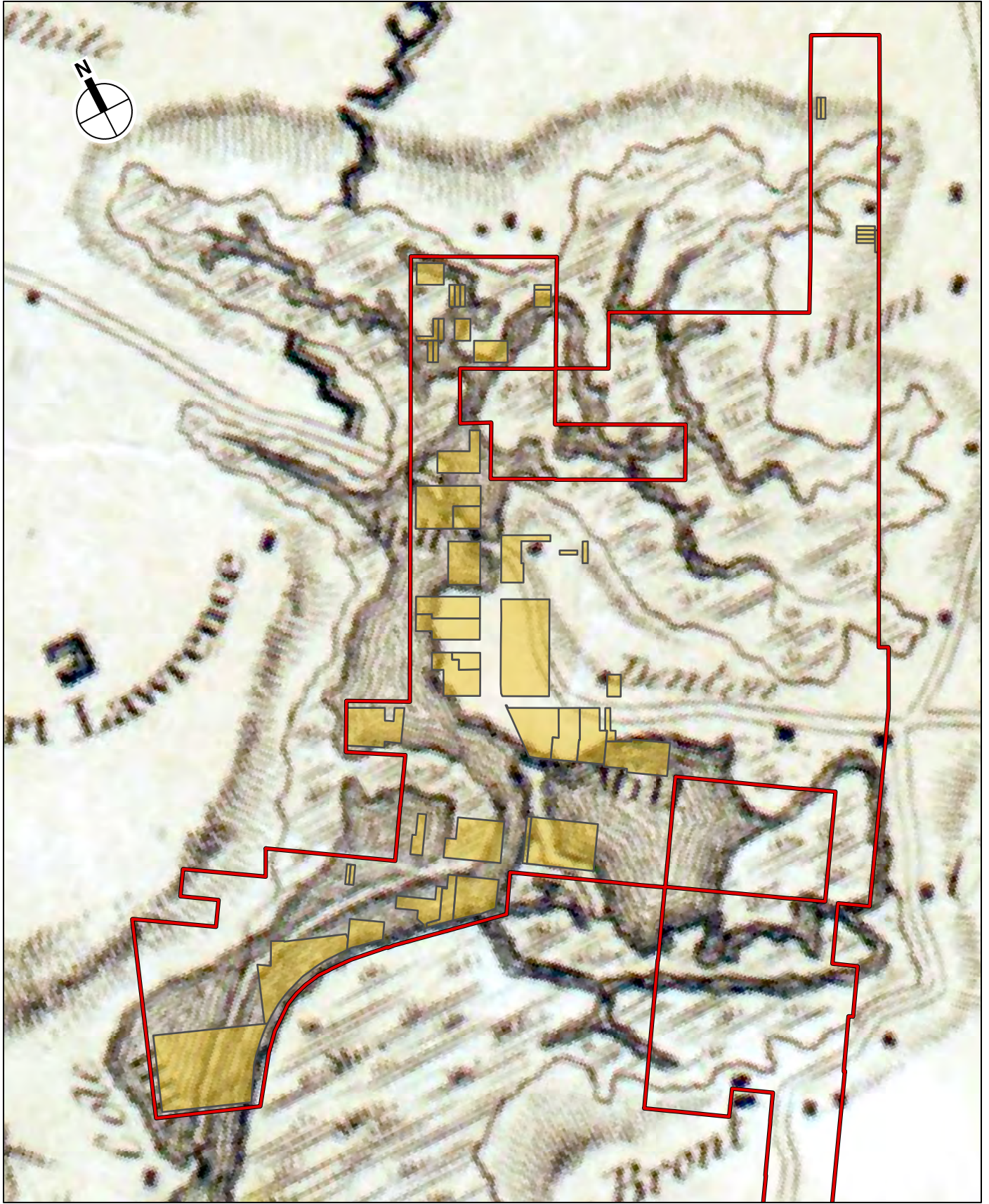
1776 Ratzer Map
Figure 4





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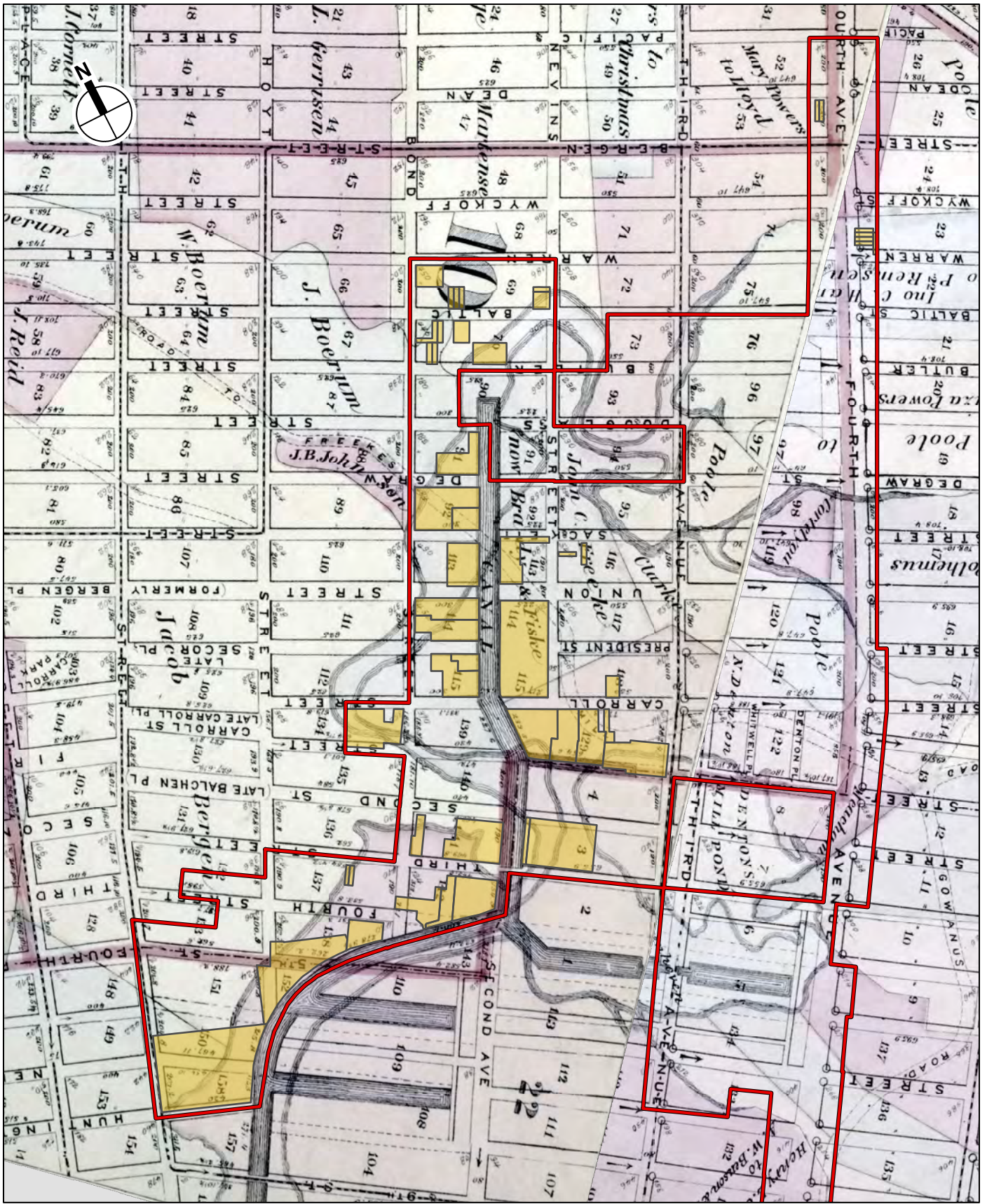
1922 Bolton Map of Native American Sites
Figure 5



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Data source for Project Area: NYC Department of City Planning



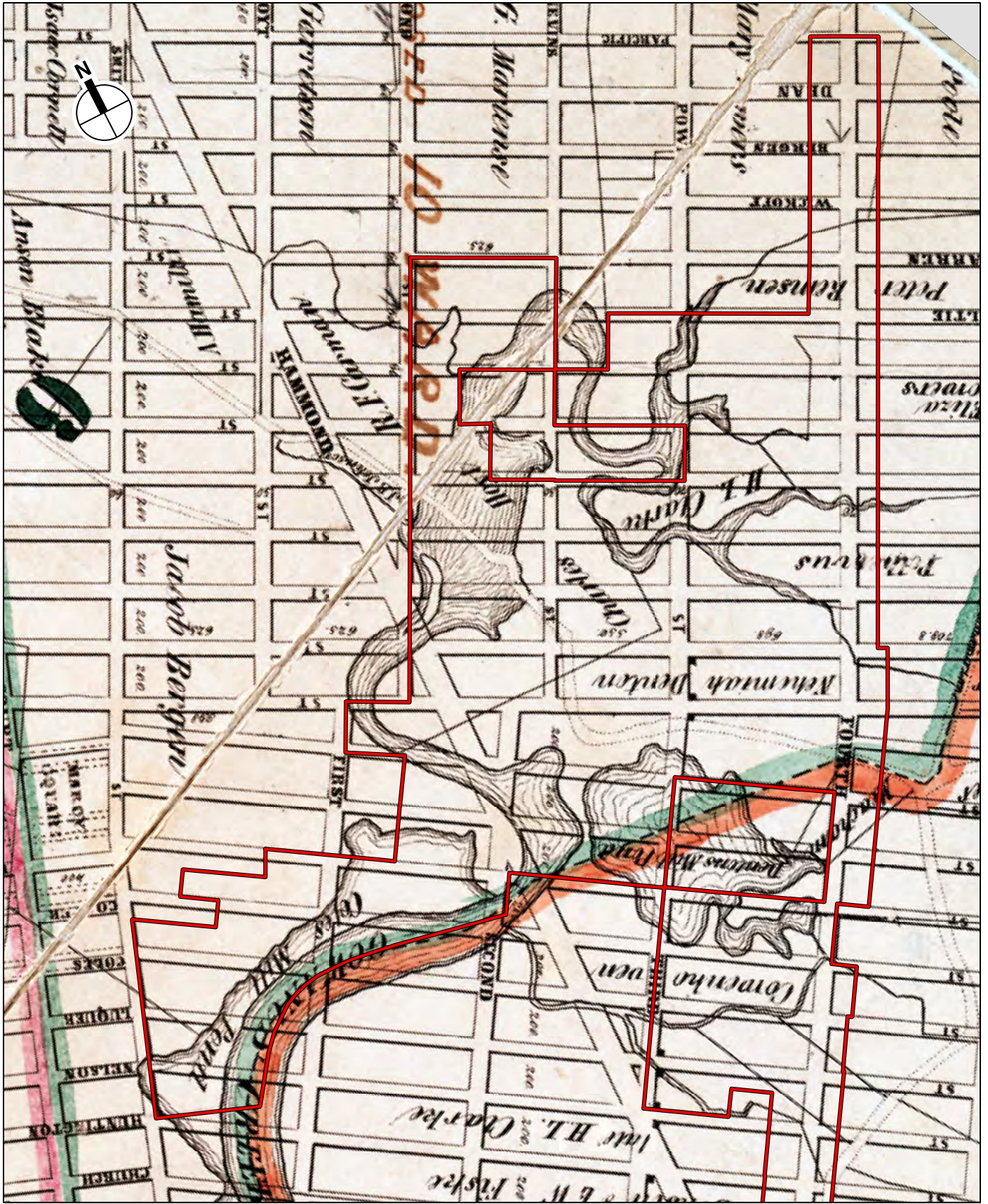
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1874 Fulton Farm Line Atlas
Figure 7



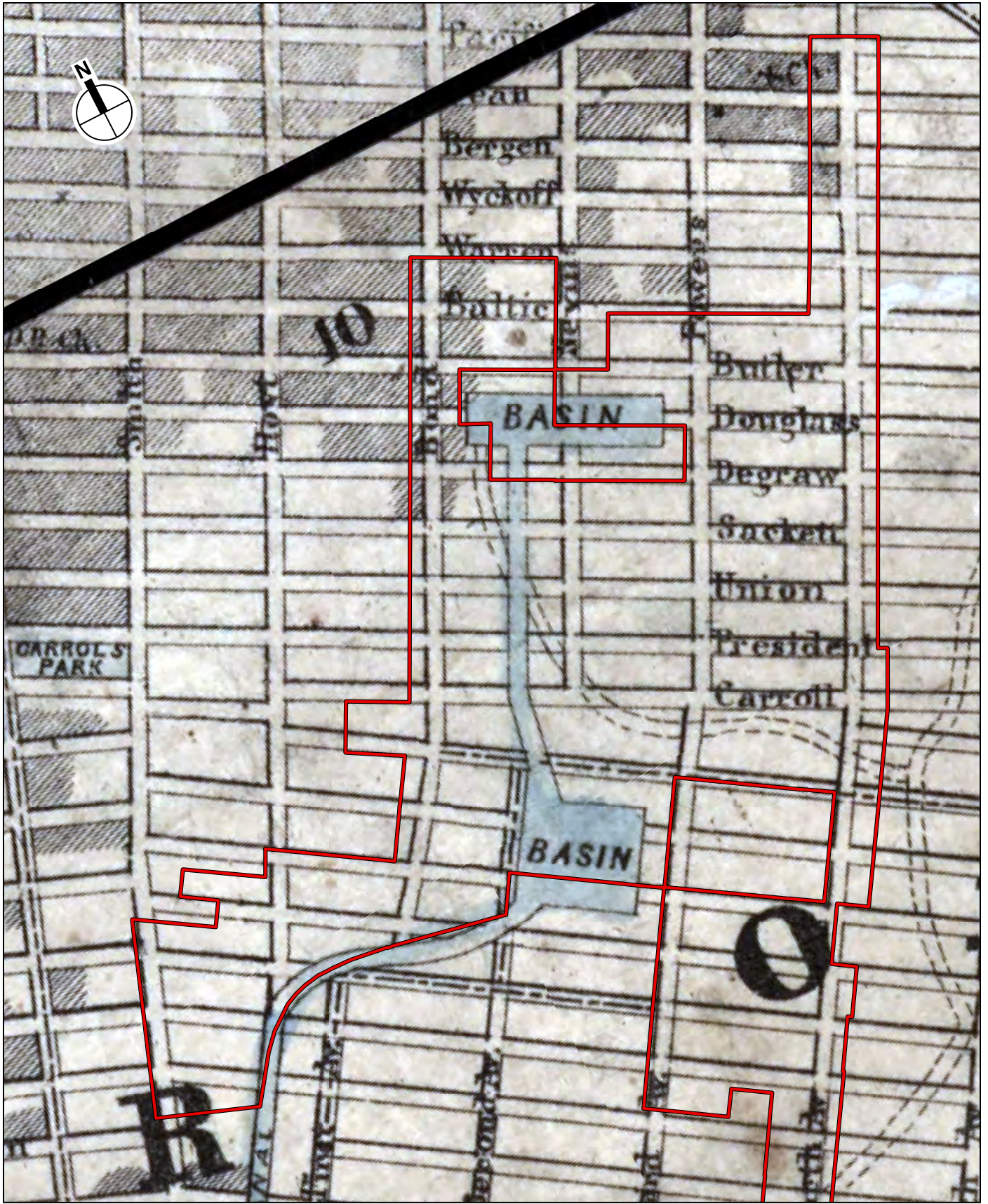
 *Project Vicinity*

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 Project Area

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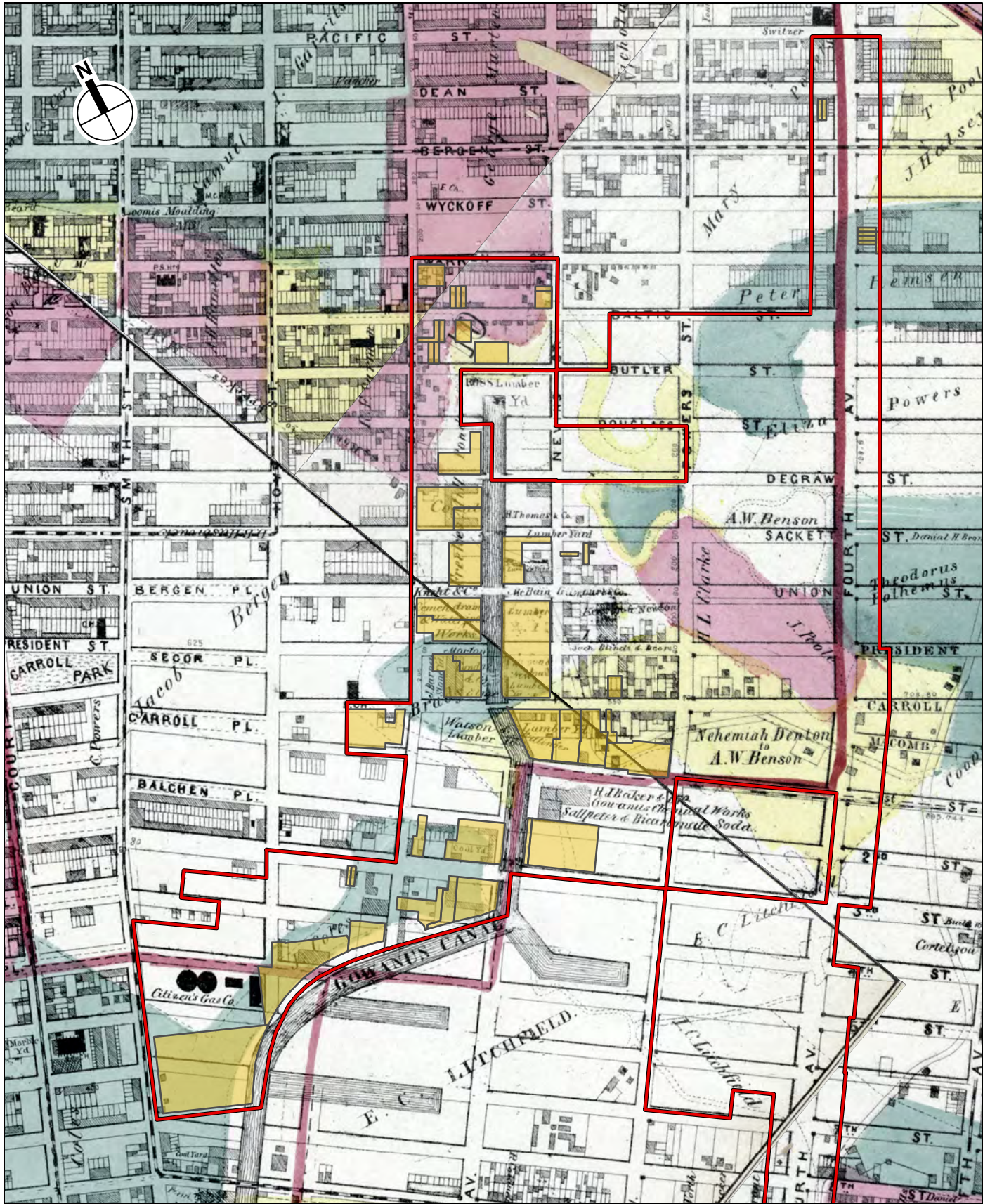




 Project Area

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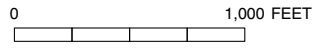


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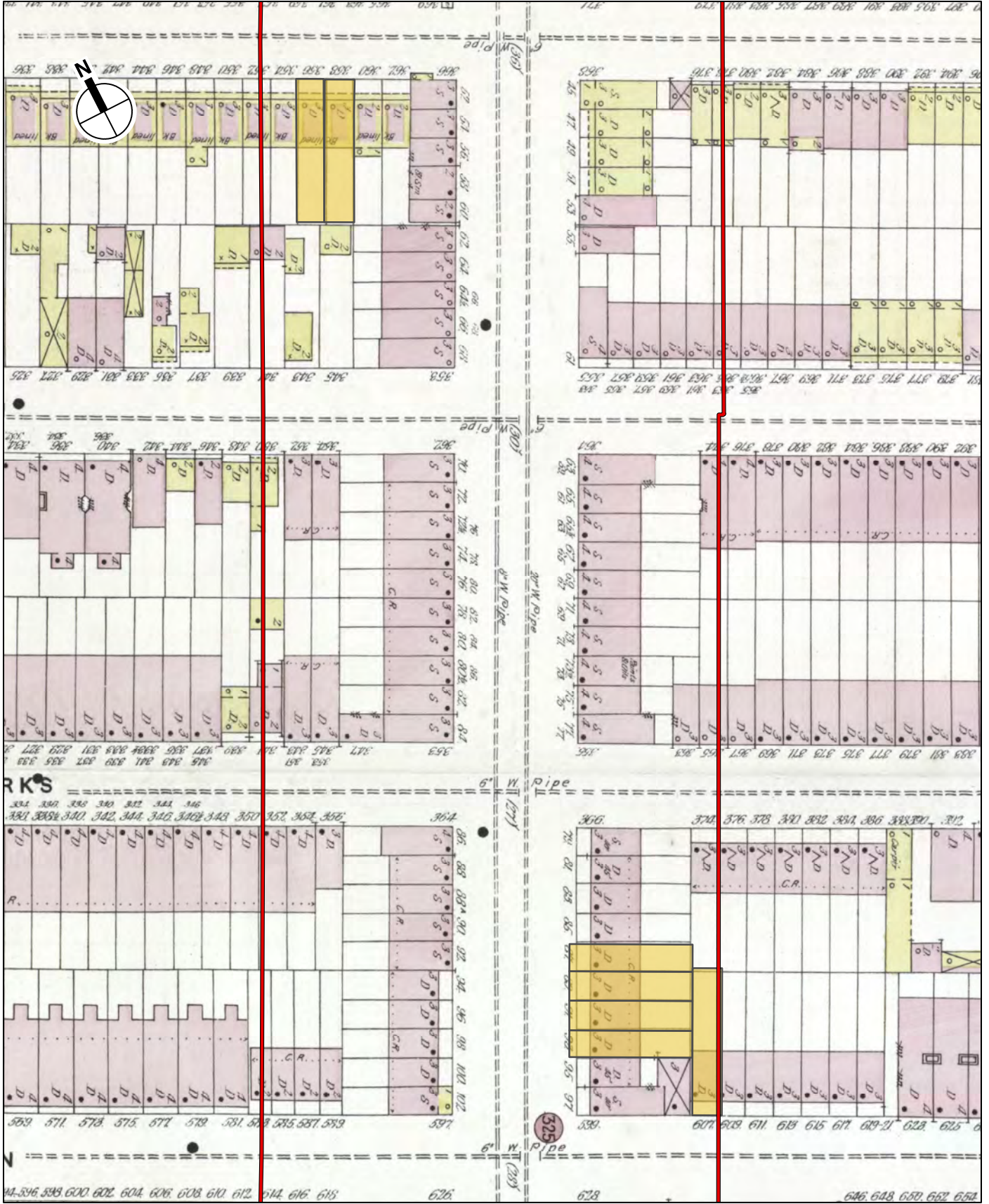
Note: This map was georeferenced to align current and historical landmarks to the greatest extent possible given inaccuracies in the original map.



GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

1869 Dripps Map
Figure 11

Data source for Project Area: NYC Department of City Planning



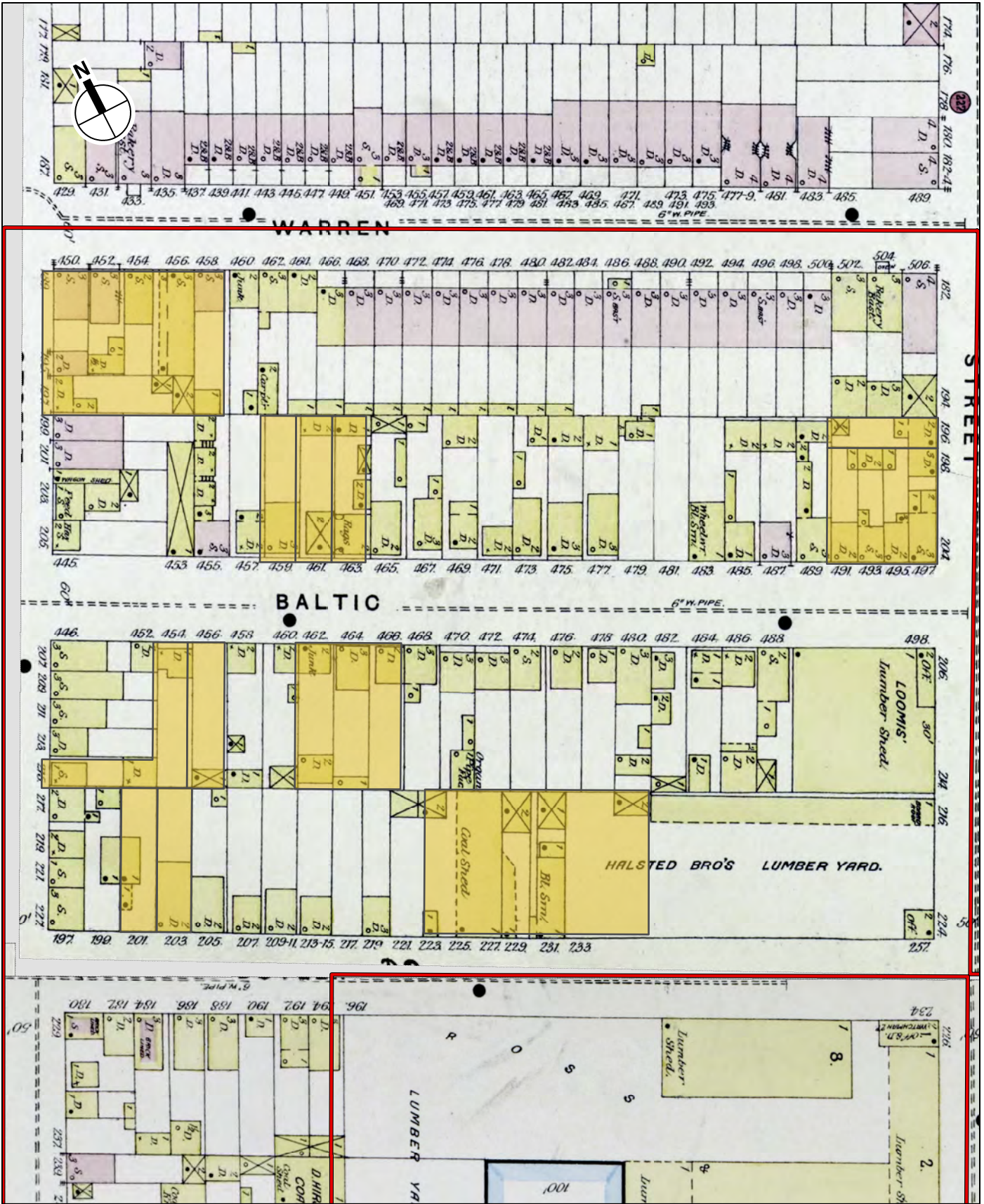
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Note: The maps to the west of 3rd Avenue were published in 1886, and the map to the east in 1888.

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1886–1888 Sanborn Maps
Figure 12a

Data source for Project Area: NYC Department of City Planning

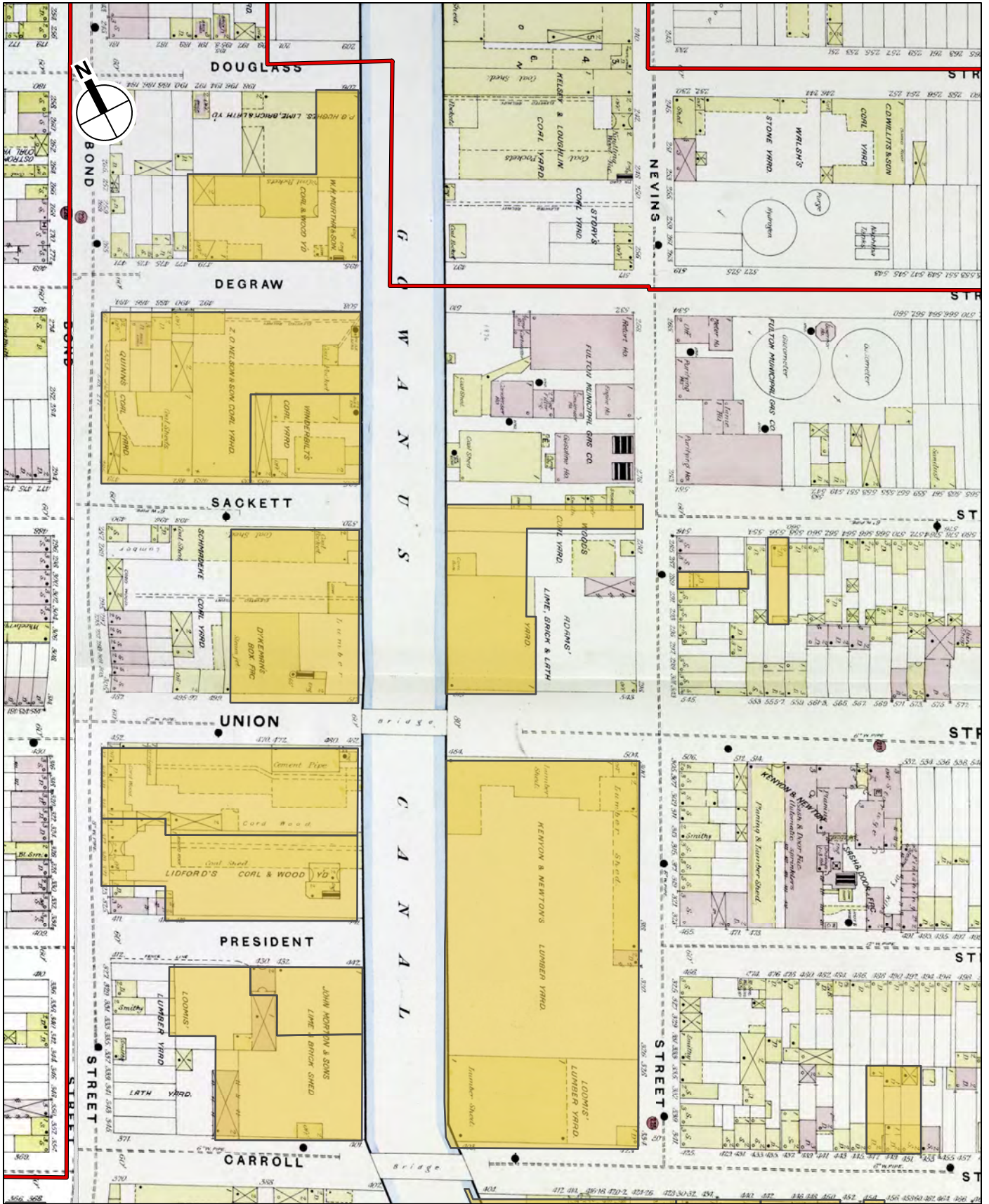


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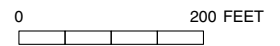
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1886-1888 Sanborn Maps
Figure 12b



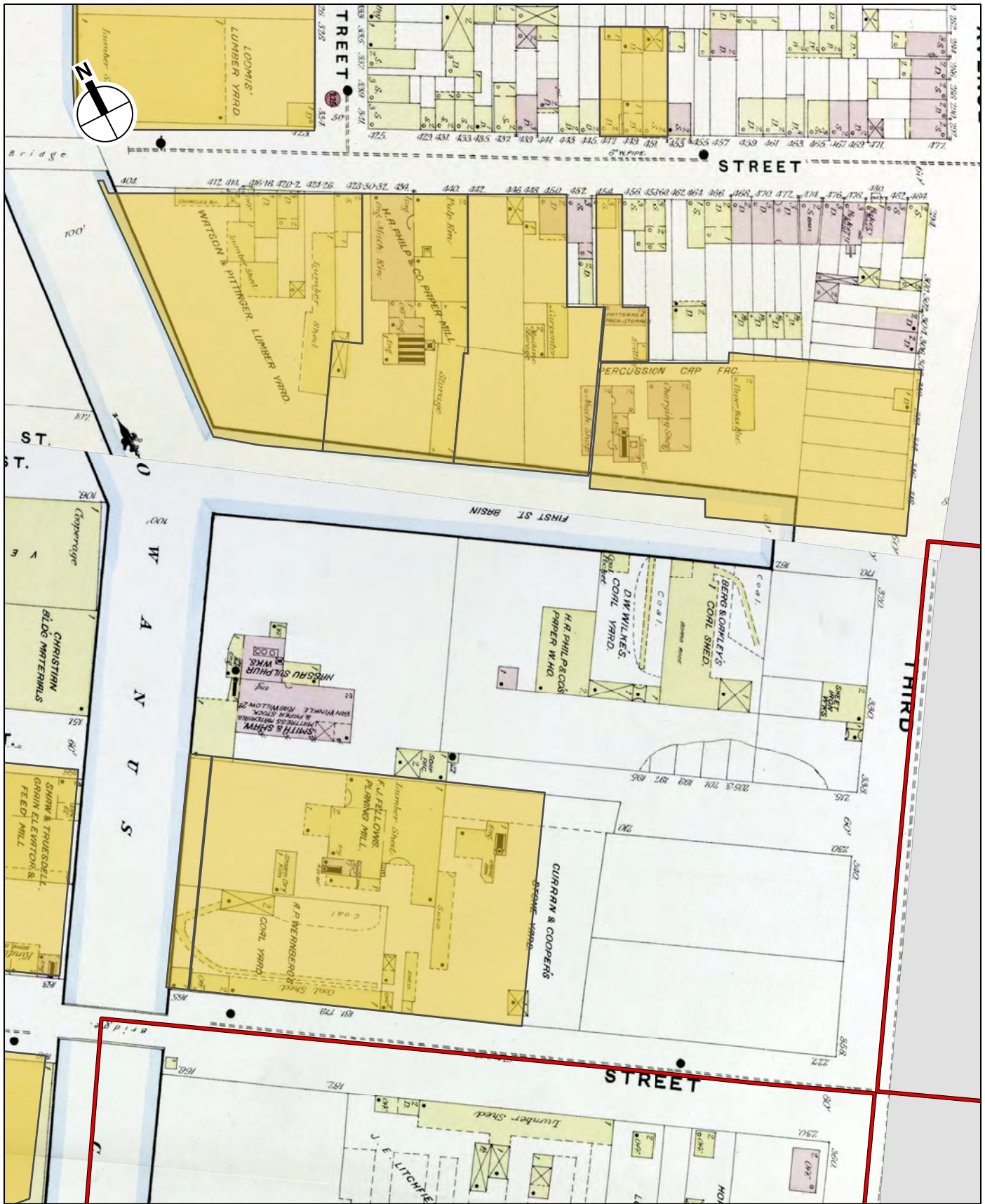
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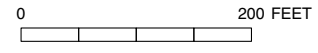
1886–1888 Sanborn Maps
Figure 12c

Data source for Project Area: NYC Department of City Planning

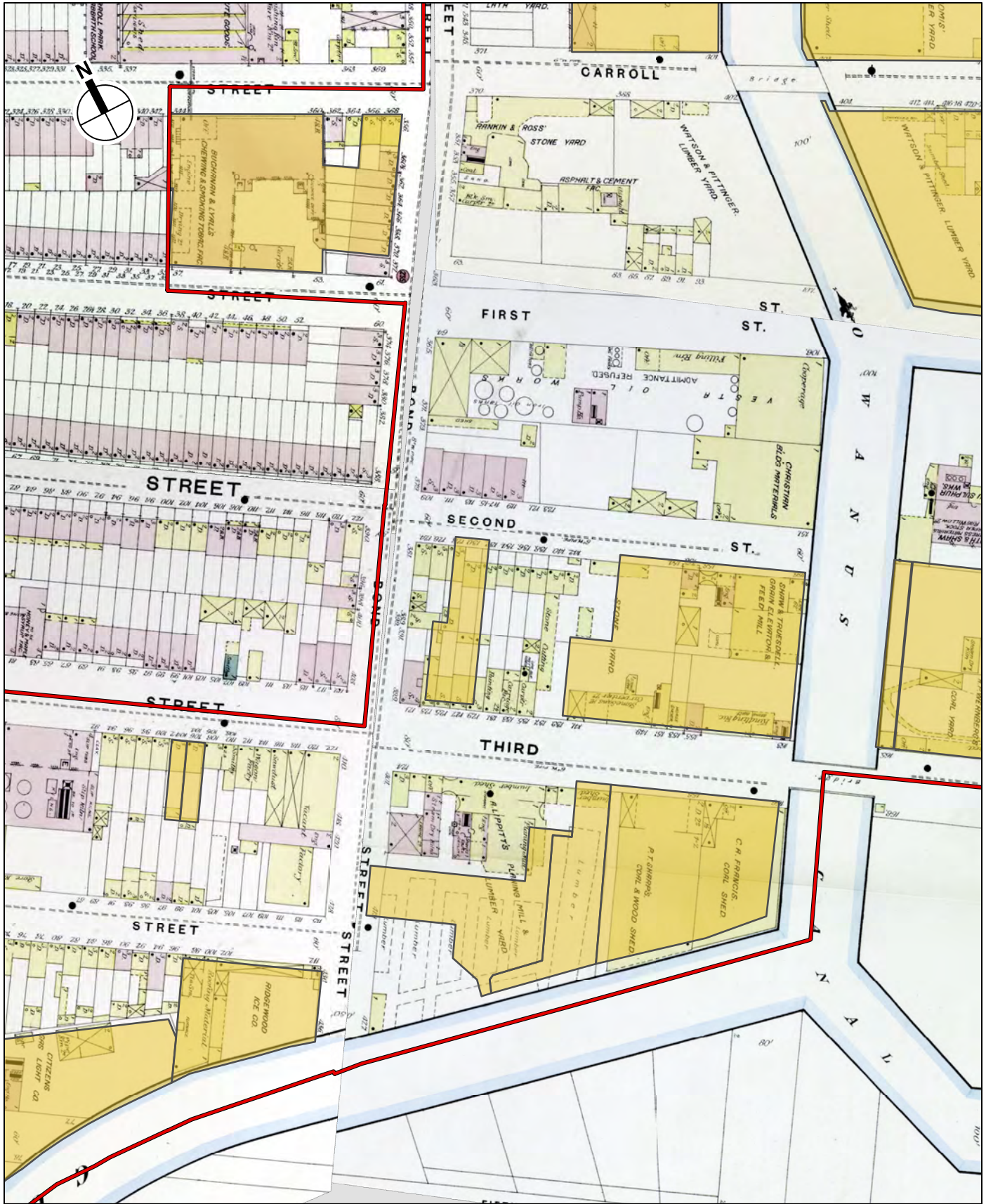


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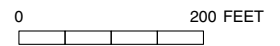


1886-1888 Sanborn Maps
Figure 12d

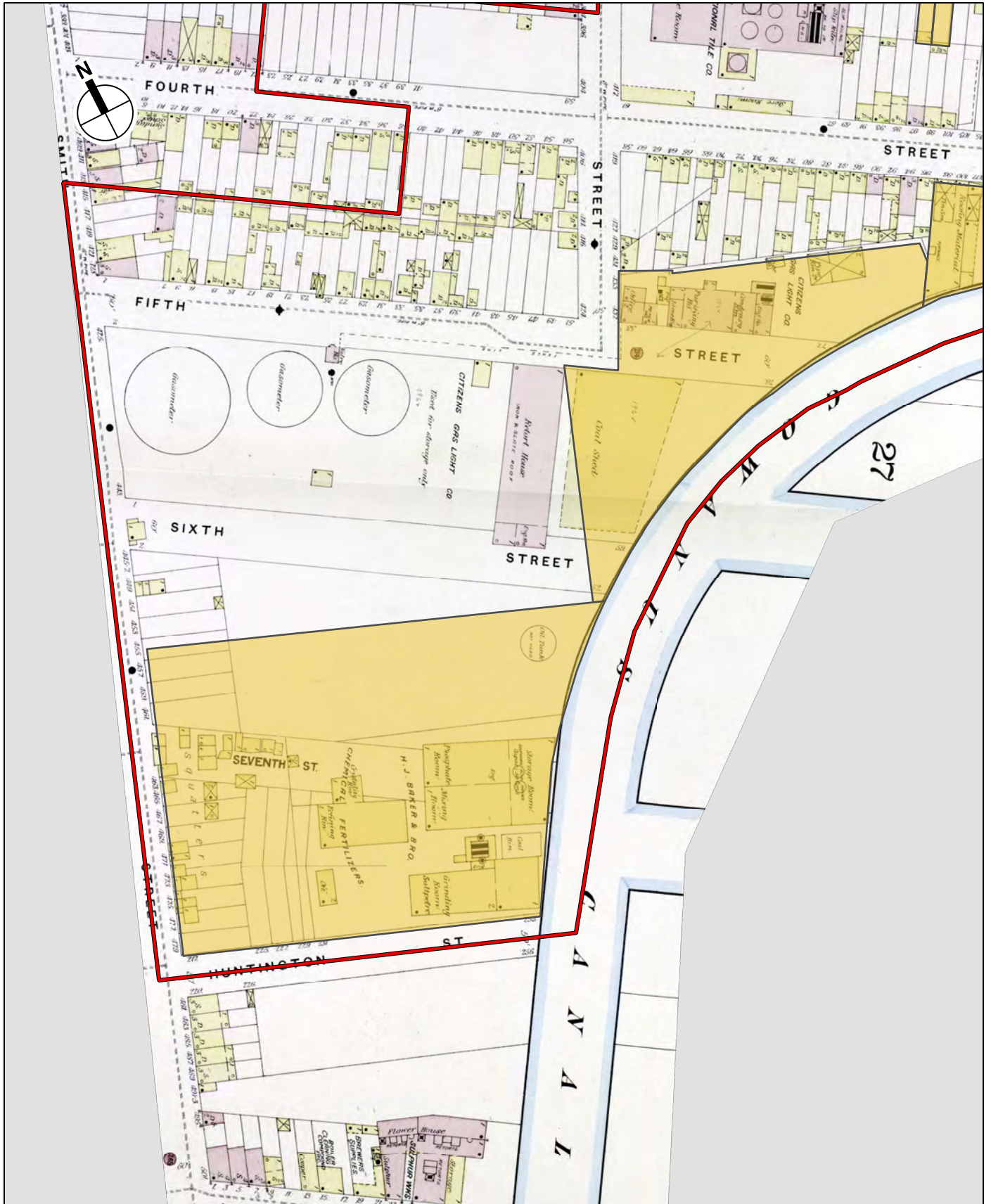


- Project Area
- Phase 1A Study Area

Note: The maps to the west of 3rd Avenue were published in 1886, and the map to the east in 1888.

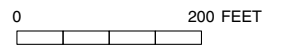


1886–1888 Sanborn Maps
Figure 12e

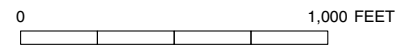
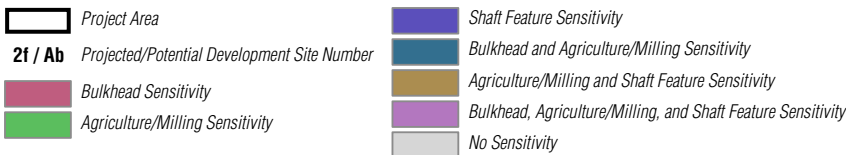
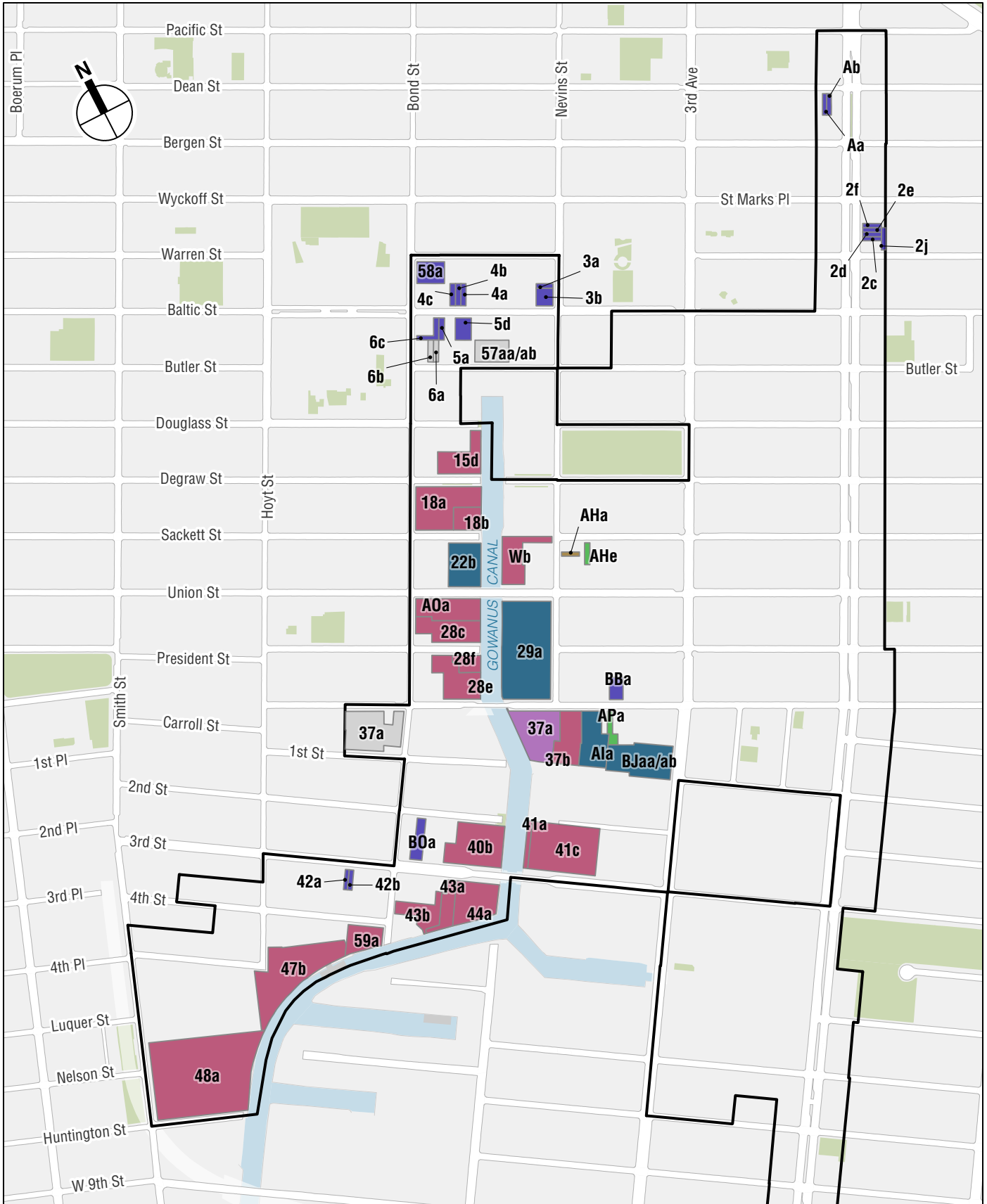


- Project Area
- Phase 1A Study Area

Note: The maps to the west of 3rd Avenue were published in 1886, and the map to the east in 1888.



1886–1888 Sanborn Maps
Figure 12f



Areas of
Archaeological Sensitivity
Figure 13

GOWANUS NEIGHBORHOOD REZONING AND RELATED ACTIONS

Appendix A:
Documentary Research

A. INTRODUCTION

This appendix includes information on the owners and occupants of those lots that were determined to have been developed for residential use prior to 1875. Those lots that were included in previous archaeological assessments (e.g., LBG/HPI 2009) are not included here unless supplemental information was found during the research for this Phase 1A Study. This information is largely derived from tax assessment records dating between 1866 and 1872. Conveyance records are included for the period between circa 1850, when many of these lots were landfilled and first developed, and 1875. Where possible, census records and historical directories were researched for residents of each of these properties. As a result of street numbering changes or inconsistent use of street numbers, such information was not available for all properties. **Table A-1** includes a summary of the properties referenced in this appendix as well as various block/lot and street name/number changes.

Table A-1
Summary of Street Number and Block/Lot Number Changes

Site	Block	Lot	1869 Block	1869 Lot	1880 Block	1880 Lot	Historic Address After 1871	Address Before 1871
Aa	198	34	53	81	1	32	362 Dean St	312 Dean
Ab	198	35	53	81.5	1	33	362 Dean St	314 Dean
58a	399	6	69	51	69	6	201 Bond?	
58a	399	6	69	51	69	7	450 Warren	328 East Warren
58a	399	6	69	52	69	8	452 Warren	330 East Warren
58a	399	6	69	53	69	9	454 Warren	332 East Warren
58a	399	6	69	54	69	10	456 Warren	334 East Warren
58a	399	6	69	55	69	11	458 Warren	336 East Warren
3a	399	39	69	76	69	36	196 Nevins Street	189 East Baltic
3b	399	39	69	76a	69	37	497 Baltic/198-204 Nevins	187 East Baltic
3b	399	39	69	77	69	38	495 Baltic	185 East Baltic
3b	399	39	69	77a	69	39	493 Baltic	183 East Baltic
3b	399	39	69	78	69	40	491 Baltic	181 East Baltic
4a	399	58	69	91	69	54	463 Baltic Street	151 East Baltic
4b	399	59	69	92	69	55	461 Baltic Street	149 East Baltic
4c	399	60	69	93	69	56	459 Baltic Street	147 East Baltic
6c	405	12	70	105	69	10	454 Baltic Street	140 East Baltic
6c	405	12	70	102.5	69	21	215 Bond Street	119 Bond
5a	405	13	70	106	69	11	456 Baltic	142 East Baltic
5d	405	16	70	109	260	14	462 Baltic	148 East Baltic
5d	405	16	70	110	260	15	464 Baltic	150 East Baltic
5d	405	16	70	111	260	16	466 Baltic	152 East Baltic
6a	405	63	70	147	69	59	203 Butler Street	Unknown
6b	405	64	70	149	69	60	201 Butler Street	Unknown
AHa	433	8	116	3	271	3	289 Nevins Street	Unknown

Table A-1

Summary of Street Number and Block/Lot Number Changes

Site	Block	Lot	1869 Block	1869 Lot	1880 Block	1880 Lot	Historic Address After 1871	Address Before 1871
AHe	433	13	116	33	271	40	556 Sackett Street	Unknown
BBa	447	50	118	103f	273	41	447 Carroll	Unknown
BBa	447	50	118	103e	273	40	449 Carroll	Unknown
BBa	447	50	118	103d	273	39	451 Carroll	Unknown
BOa	462	6	141	87	246	4	130 2nd Street	Unknown
BOa	462	6	141	88	246	5	132 2nd Street	Unknown
BOa	462	6	141	98	246	42	125 3rd Street	Unknown
BOa	462	6	141	99	246	41	127 3rd Street	Unknown
BOa	462	6	141	100	246	40	129 3rd Street	Unknown
42a	465	27	137	196a	242	6	102 3rd Street	Unknown
42b	465	28	137	197	242	7	104 3rd Street	Unknown
2c	934	3	Unknown	Unknown	23	3	93 4th Ave	81 4th Ave
2d	934	4	Unknown	Unknown	23	4	91 4th Ave	79 4th Ave
2e	934	5	Unknown	Unknown	23	5	89 4th Ave	77 4th Ave
2f	934	6	Unknown	Unknown	23	6	87 4th Ave	75 4th Ave
2j	934	74	Unknown	Unknown	23	59	607 Warren Street	Unknown

Notes: 1869 Block/Lot numbers determined using tax assessment records; ca. 1871 street number changes determined using historical directories; 1880 block/lot numbers determined based on the 1880 Bromley atlas.

B. TAX ASSESSMENT RECORDS

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
198	34	53	81	1866	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		1800
198	34	53	81	1867	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		1800
198	34	53	81	1868	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		2000
198	34	53	81	1869	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		2000
198	34	53	81	1870	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		2500
198	34	53	81	1871	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		2500
198	34	53	81	1872	81	Dean Street	South	Powers Street and 4th Avenue	Jane Crommelin	312 Dean Street	2B		2500
198	35	53	81.5	1866	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		1800
198	35	53	81.5	1867	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		1800
198	35	53	81.5	1868	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		1800
198	35	53	81.5	1869	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		1800/2250
198	35	53	81.5	1870	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		2500

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
198	35	53	81.5	1871	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		2500
198	35	53	81.5	1872	81.5	Dean Street	South	Powers Street and 4th Avenue	Jn. H. Galloway	314 Dean Street	2B		2500
399	6	69	51	1866	51	Warren Street	South	Bond and Nevins	James E. Bailey		3	2	2600
399	6	69	51	1867	51	Warren Street	South	Bond and Nevins	James E. Bailey		3	2	3000
399	6	69	51	1868	51	Warren Street	South	Bond and Nevins	James E. Bailey		3	2	3000
399	6	69	51	1869	51	Warren Street	South	Bond and Nevins	James E. Bailey		2		3750
399	6	69	51	1870	51	Warren Street	South	Bond and Nevins	James E. Bailey		2		3750
399	6	69	51	1871	51	Warren Street	South	Bond and Nevins	James E. Bailey		2		3700
399	6	69	51	1872	51	Warren Street	South	Bond and Nevins	James E. Bailey		2		3700
399	6	69	52	1866	52	Warren Street	South	Bond and Nevins	James McFarland				400
399	6	69	52	1867	52	Warren Street	South	Bond and Nevins	James McFarland				400
399	6	69	52	1868	52	Warren Street	South	Bond and Nevins	James McFarland				400
399	6	69	52	1869	52	Warren Street	South	Bond and Nevins	James McFarland		3		500
399	6	69	52	1870	52	Warren Street	South	Bond and Nevins	James McFarland		3		500
399	6	69	52	1871	52	Warren Street	South	Bond and Nevins	James McFarland		3		500
399	6	69	52	1872	52	Warren Street	South	Bond and Nevins	James McFarland		3		500
399	6	69	53	1866	53	Warren Street	South	Bond and Nevins	Margaret Percell		2		400

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
399	6	69	53	1867	53	Warren Street	South	Bond and Nevins	Margaret Percell				400
399	6	69	53	1868	53	Warren Street	South	Bond and Nevins	Margaret Percell				400
399	6	69	53	1869	53	Warren Street	South	Bond and Nevins	Margaret Percell		2		1000
399	6	69	53	1870	53	Warren Street	South	Bond and Nevins	Margaret Percell				1000
399	6	69	53	1871	53	Warren Street	South	Bond and Nevins	Margaret Percell				1000
399	6	69	53	1872	53	Warren Street	South	Bond and Nevins	Margaret Percell				1000
399	6	69	54	1866	54	Warren Street	South	Bond and Nevins	Margaret Percell				400
399	6	69	54	1867	54	Warren Street	South	Bond and Nevins	Margaret Percell				400
399	6	69	54	1868	54	Warren Street	South	Bond and Nevins	Margaret Percell				400
399	6	69	54	1869	54	Warren Street	South	Bond and Nevins	Margaret Percell		3		650
399	6	69	54	1870	54	Warren Street	South	Bond and Nevins	Margaret Percell				650
399	6	69	54	1871	54	Warren Street	South	Bond and Nevins	Margaret Percell				2000
399	6	69	54	1872	54	Warren Street	South	Bond and Nevins	Margaret Percell				2000
399	6	69	55	1866	55	Warren Street	South	Bond and Nevins	James M. McGarvey		[illeg]		1600
399	6	69	55	1867	55	Warren Street	South	Bond and Nevins	James M. McGarvey		[illeg]		1600
399	6	69	55	1868	55	Warren Street	South	Bond and Nevins	James M. McGarvey		[illeg]		1300
399	6	69	55	1869	55	Warren Street	South	Bond and Nevins	John A. Horgan		2		1700
399	6	69	55	1870	55	Warren Street	South	Bond and Nevins	John A. Horgan		2		1700

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
399	6	69	55	1871	55	Warren Street	South	Bond and Nevins	John A. Horgan		2		1700
399	6	69	55	1872	55	Warren Street	South	Bond and Nevins	John A. Horgan		2		1700
399	39	69	76	1866	76	Baltic Street	North	Bond and Nevins	Helen Martense		2	2	425
399	39	69	76	1867	76	Baltic Street	North	Bond and Nevins	Helen Martense		2	2	425
399	39	69	76	1868	76	Baltic Street	North	Bond and Nevins	Helen Martense		2	2	675
399	39	69	76	1869	76	Baltic Street	North	Bond and Nevins	Helen Martense		2		900/1100
399	39	69	76	1870	76	Baltic Street	North	Bond and Nevins	Helen Martense		2		1200
399	39	69	76	1871	76	Baltic Street	North	Bond and Nevins	Helen Martense		2		1200
399	39	69	76	1872	76	Baltic Street	North	Bond and Nevins	Helen Martense		2		1200
399	39	69	77	1866	77	Baltic Street	North	Bond and Nevins	John Graham				400
399	39	69	77	1867	77	Baltic Street	North	Bond and Nevins	John Graham				400
399	39	69	77	1868	77	Baltic Street	North	Bond and Nevins	John Graham				225
399	39	69	77	1869	77	Baltic Street	North	Bond and Nevins	John Graham		2		400/425
399	39	69	77	1870	77	Baltic Street	North	Bond and Nevins	John Graham		2		700
399	39	69	77	1871	77	Baltic Street	North	Bond and Nevins	John Graham		2		700
399	39	69	77	1872	77	Baltic Street	North	Bond and Nevins	John Graham		2		700
399	39	69	76a	1866	76a	Baltic Street	North	Bond and Nevins	Helen Martense				
399	39	69	76a	1867	76a	Baltic Street	North	Bond and Nevins	Helen Martense				

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
399	39	69	76a	1868	76a	Baltic Street	North	Bond and Nevins	Helen Martense				475
399	39	69	76a	1869	76a	Baltic Street	North	Bond and Nevins	David Higgins				none/660
399	39	69	76a	1870	76a	Baltic Street	North	Bond and Nevins	David Higgins				400
399	39	69	76a	1871	76a	Baltic Street	North	Bond and Nevins	David Higgins				400
399	39	69	76a	1872	76a	Baltic Street	North	Bond and Nevins	David Higgins				400
399	39	69	96a	1866	96a	Nevins Street	West	Warren and Baltic	David Higgins				400
399	39	69	96a	1867	96a	Nevins Street	West	Warren and Baltic	David Higgins				
399	39	69	96a	1868	96a	Nevins Street	West	Warren and Baltic	David Higgins				500
399	39	69	96a	1869	96a	Nevins Street	West	Warren and Baltic	David Higgins				650
399	39	69	77a	1866	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell		3	2	
399	39	69	77a	1867	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell				
399	39	69	77a	1868	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell				225
399	39	69	77a	1869	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell		3		425
399	39	69	77a	1870	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell				550
399	39	69	77a	1871	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell				550
399	39	69	77a	1872	77a	Baltic Street	North	Bond and Nevins	S.C. Campbell				600
399	58	69	91	1866	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2B		250
399	58	69	91	1867	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2B		250

Table A-2
Tax Assessment Records

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
399	58	69	91	1868	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2B		600
399	58	69	91	1869	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2		600/750
399	58	69	91	1870	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2		750
399	58	69	91	1871	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2		750
399	58	69	91	1872	91	Baltic Street	North	Bond and Nevins	Matthew Farrell		2		750
399	59	69	92	1866	92	Baltic Street	North	Bond and Nevins	Helen Martense		2, Old Shanty		250
399	59	69	92	1867	92	Baltic Street	North	Bond and Nevins	Helen Martense		2, Old Shanty		250
399	59	69	92	1868	92	Baltic Street	North	Bond and Nevins	Helen Martense		2, Old Shanty		300
399	59	69	92	1869	92	Baltic Street	North	Bond and Nevins	Helen Martense		2, Old Shanty		300/400
399	59	69	92	1870	92	Baltic Street	North	Bond and Nevins	Helen Martense		2		400
399	59	69	92	1871	92	Baltic Street	North	Bond and Nevins	Helen Martense		2		400
399	59	69	92	1872	92	Baltic Street	North	Bond and Nevins	Helen Martense		2		400
399	60	69	93	1866	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		250
399	60	69	93	1867	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		250
399	60	69	93	1868	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		650
399	60	69	93	1869	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		650/800
399	60	69	93	1870	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		800
399	60	69	93	1871	93	Baltic Street	North	Bond and Nevins	Helen Martense		2		800

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
399	60	69	93	1872	93	Baltic Street	North	Bond and Nevins	Helen Martense		4		800
405	12	70	105	1866	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		150
405	12	70	105	1867	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		250
405	12	70	105	1868	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		250
405	12	70	105	1869	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		250/320
405	12	70	105	1870	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		350
405	12	70	105	1871	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		350
405	12	70	105	1872	105	Baltic Street	South	Bond and Nevins	Nicholas Murray		2		350
405	12	70	102.2	1866	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	300
405	12	70	102.2	1867	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	300
405	12	70	102.2	1868	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	300
405	12	70	102.2	1869	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	300/400
405	12	70	102.2	1870	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	400
405	12	70	102.2	1871	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	400
405	12	70	102.2	1872	102.2	Bond Street	East	Baltic and Butler	Patrick Woods		1	2	400
405	13	70	106	1866	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		150
405	13	70	106	1867	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		175
405	13	70	106	1868	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		175

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
405	13	70	106	1869	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		175/220
405	13	70	106	1870	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		250
405	13	70	106	1871	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		250
405	13	70	106	1872	106	Baltic Street	South	Bond and Nevins	Helen Martense		1		250
405	16	70	109	1866	109	Baltic Street	South	Bond and Nevins	Helen Martense		1		150
405	16	70	109	1867	109	Baltic Street	South	Bond and Nevins	Helen Martense		1		150
405	16	70	109	1868	109	Baltic Street	South	Bond and Nevins	Helen Martense		1		200
405	16	70	109	1869	109	Baltic Street	South	Bond and Nevins	Helen Martense		1		250
405	16	70	109	1870	109	Baltic Street	South	Bond and Nevins	John Morris		1		350
405	16	70	109	1871	109	Baltic Street	South	Bond and Nevins	John Morris		1		350
405	16	70	109	1872	109	Baltic Street	South	Bond and Nevins	John Morris		1		350
405	16	70	110	1866	110	Baltic Street	South	Bond and Nevins	Margaret Conway				150
405	16	70	110	1867	110	Baltic Street	South	Bond and Nevins	Margaret Conway				150
405	16	70	110	1868	110	Baltic Street	South	Bond and Nevins	Margaret Conway				150
405	16	70	110	1869	110	Baltic Street	South	Bond and Nevins	Margaret Conway				300/400
405	16	70	110	1870	110	Baltic Street	South	Bond and Nevins	Margaret Conway				400
405	16	70	110	1871	110	Baltic Street	South	Bond and Nevins	Margaret Conway				600
405	16	70	110	1872	110	Baltic Street	South	Bond and Nevins	Margaret Conway				800

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
405	16	70	111	1866	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		1B		150
405	16	70	111	1867	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		1B		450
405	16	70	111	1868	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		1B		450
405	16	70	111	1869	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		1B		450/560
405	16	70	111	1870	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		2B		600
405	16	70	111	1871	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		2B		600
405	16	70	111	1872	111	Baltic Street	South	Bond and Nevins	Mary J. O'Neil		2B		600
405	63	70	148	1866	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				100
405	63	70	148	1867	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				100
405	63	70	148	1868	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				100
405	63	70	148	1869	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				100/150
405	63	70	148	1870	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				150
405	63	70	148	1871	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				150
405	63	70	148	1872	148	Butler Street	North	Bond and Nevins	Jacob D. Bergen				150
405	64	70	149	1866	149	Butler Street	North	Bond and Nevins	F.W. Barwick				100
405	64	70	149	1867	149	Butler Street	North	Bond and Nevins	F.W. Barwick				100
405	64	70	149	1868	149	Butler Street	North	Bond and Nevins	F.W. Barwick				100
405	64	70	149	1869	149	Butler Street	North	Bond and Nevins	F.W. Barwick				100/150

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
405	64	70	149	1870	149	Butler Street	North	Bond and Nevins	F.W. Barwick				150
405	64	70	149	1871	149	Butler Street	North	Bond and Nevins	F.W. Barwick				150
405	64	70	149	1872	149	Butler Street	North	Bond and Nevins	F.W. Barwick				150
433	8	116	3	1866	3	Nevins Street	East	Sackett and Union	John Winn		2B		750
433	8	116	3	1867	3	Nevins Street	East	Sackett and Union	John Winn		2B		800
433	8	116	3	1868	3	Nevins Street	East	Sackett and Union	John Winn		2B		800
433	8	116	3	1869	3	Nevins Street	East	Sackett and Union	John Winn		2B		800/1000
433	8	116	3	1870	3	Nevins Street	East	Sackett and Union	John Winn		2B		1000
433	8	116	3	1871	3	Nevins Street	East	Sackett and Union	John Winn		2B		1000
433	8	116	3	1872	3	Nevins Street	East	Sackett and Union	John Winn		2B		1000
433	13	116	33	1866	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				200
433	13	116	33	1867	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				200
433	13	116	33	1868	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				200
433	13	116	33	1869	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				200/250
433	13	116	33	1870	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				300
433	13	116	33	1871	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				300
433	13	116	33	1872	33	Sackett Street	South	Bond and Powers	Edward W. Fiske				300
447	50	118	103D	1866	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		750

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
447	50	118	103D	1867	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		800
447	50	118	103D	1868	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		800
447	50	118	103D	1869	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		800/1000
447	50	118	103D	1870	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		1000
447	50	118	103D	1871	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		1000
447	50	118	103D	1872	103D	Carroll Street	North	Nevins and Powers	Valentin Andree		2		1000
447	50	118	103E	1866	103E	Carroll Street	North	Nevins and Powers	Elijah R. Groves		2		500
447	50	118	103E	1867	103E	Carroll Street	North	Nevins and Powers	Elijah R. Groves		2		600
447	50	118	103E	1868	103E	Carroll Street	North	Nevins and Powers	Elijah R. Groves		2		600
447	50	118	103E	1869	103E	Carroll Street	North	Nevins and Powers	E.H. Babcock		2		600/750
447	50	118	103E	1870	103E	Carroll Street	North	Nevins and Powers	E.H. Babcock		2		750
447	50	118	103E	1871	103E	Carroll Street	North	Nevins and Powers	E.H. Babcock		2		750
447	50	118	103E	1872	103E	Carroll Street	North	Nevins and Powers	E.H. Babcock		2		750
447	50	118	103F	1866	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		500
447	50	118	103F	1867	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		600
447	50	118	103F	1868	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		600
447	50	118	103F	1869	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		600/750
447	50	118	103F	1870	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		750

Table A-2
Tax Assessment Records

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
447	50	118	103F	1871	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		750
447	50	118	103F	1872	103F	Carroll Street	North	Nevins and Powers	Mrs. Ann Smith		2		750
462	6	141	87	1866	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		500
462	6	141	87	1867	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		600
462	6	141	87	1868	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		600
462	6	141	87	1869	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		600/750
462	6	141	87	1870	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		750
462	6	141	87	1871	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		750
462	6	141	87	1872	87	2nd Street	South	Bond and 2nd Ave (Canal)	Patrick Judge		2		750
462	6	141	88	1866	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		400
462	6	141	88	1867	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		600
462	6	141	88	1868	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		600
462	6	141	88	1869	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		600/750
462	6	141	88	1870	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		750
462	6	141	88	1871	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		750
462	6	141	88	1872	88	2nd Street	South	Bond and 2nd Ave (Canal)	Cornelius Ryan		2B		750
462	6	141	123	1866	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		600
462	6	141	123	1867	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		600

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
462	6	141	123	1868	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1200
462	6	141	123	1869	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1200/1500
462	6	141	123	1870	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	123	1871	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	123	1872	123	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	124	1866	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		100
462	6	141	124	1867	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		200
462	6	141	124	1868	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		400
462	6	141	124	1869	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		400/500
462	6	141	124	1870	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	124	1871	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	124	1872	124	3rd Street	North	Bond and 2nd Ave (Canal)	Michael Dowd		3		1500
462	6	141	125	1866	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees				100
462	6	141	125	1867	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees				200
462	6	141	125	1868	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees				400
462	6	141	125	1869	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees				400/500
462	6	141	125	1870	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees		3		500
462	6	141	125	1871	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees		3		300

**Table A-2
Tax Assessment Records**

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
462	6	141	125	1872	125	3rd Street	North	Bond and 2nd Ave (Canal)	D.S. Voorhees		3		300
465	27	137		1866		3rd Street	South	Hoyt and Bond	D. Voorhees				combined with adjacent vacant properties
465	27	137		1867		3rd Street	South	Hoyt and Bond	D. Voorhees				
465	27	137		1868		3rd Street	South	Hoyt and Bond	D. Voorhees				
465	27	137		1869		3rd Street	South	Hoyt and Bond	D. Voorhees				
465	27	137	196a	1870	196a	3rd Street	South	Hoyt and Bond	Thomas Mullen		3		900
465	27	137	196a	1871	196a	3rd Street	South	Hoyt and Bond	Thomas Mullen		3	"New 1871, Unfinished"	
465	27	137	196a	1872	196a	3rd Street	South	Hoyt and Bond	Thomas Mullen		3		2000
465	28	137		1866		3rd Street	South	Hoyt and Bond	D. Voorhees				combined with adjacent vacant properties
465	28	137		1867		3rd Street	South	Hoyt and Bond	D. Voorhees				
465	28	137		1868		3rd Street	South	Hoyt and Bond	D. Voorhees				
465	28	137		1869		3rd Street	South	Hoyt and Bond	D. Voorhees				2200
465	28	137	197	1870	197	3rd Street	South	Hoyt and Bond	R.W. Adams		3		650
465	28	137	197	1871	197	3rd Street	South	Hoyt and Bond	R.W. Adams			"New 1871, Unfinished"	

Table A-2
Tax Assessment Records

Modern Block	Modern Lot	Historic Block	Historic Lot	Year	Historic Lot	Street	Side	Cross Streets	Owner/ Occupant	Address	Stories High	Houses on Lot	Value
465	28	137	197	1872	197	3rd Street	South	Hoyt and Bond	R.W. Adams				2000
<p>Notes: Tax assessments collected from two ledgers dating 1866-1869 and 1869-1872; duplicate values for 1869 represent different values in each of the two ledgers. Recorded from handwritten records and transcription errors may be present.</p> <p>Source: Brooklyn Ward 10 Tax Assessment reels, New York City Municipal Archives</p>													

C. CONVEYANCE RECORDS

**Table A-3
Conveyance Records**

Modern Block	Modern Lot	Date Recorded	Grantor	Grantee	Liber	Page	Remarks	Notes
198	34	4/23/1859	Isaac and Sarah A. Embree	Jane Crommelin	499	63		dwelling house in 10th Ward
198	34	6/6/1878	Executor of Jane Crommelin	William Downes	1321	72		
198	35	1/28/1864	Anthony F. Campbell, sheriff	Austin Dunham and George Beach	618	450		Isaac Embree, et al. defendants
198	35	10/24/1865	Austin and Martha M. Dunham and George and Sarah S. Beach	George G. Cochran	680	178		
198	35	3/9/1867	George G. and Adelaide Cochran	John H. Gallaway	753	207		
198	34 and 35	3/24/1856	William H. Blashfield as trustee Amelia Lloyd (formerly Perry)	Austin Dunham, George Beach Jr., and John W. Seymour	418	362		Multiple properties
198	34 and 35	5/7/1858	John W. Seymour	Austin Dunham and George Beach Jr.	476	46		Multiple properties
198	34 and 35	10/12/1858	Austin and Martha M. Dunham and George and Sarah S. Beach	Isaac Embree	485	447		
399	6	12/11/1847	Helen Martense	Peter Bagley	172	4		
399	6	4/4/1854	Peter and Rose Bagley	Thomas Falls	357	426		
399	6	12/5/1868	Thomas and Cecelia Falls	Lambert Freeman	681	179		
399	6	10/9/1868	Helen Martense	Margaret Purcell	850	539		
399	6	12/5/1868	Lambert Freeman	John C. Bailey	861	182		
399	6	10/5/1869	Charles Crosby, et al. referee	Thomas Lynch	917	413		
399	6	10/11/1869	Thomas and Rose Lynch	John A. Horgan	918	228		
399	6	12/9/1869	James McFarlan	Caroll Martin	926	393		
399	6	1/25/1873	Julia and James McFarlan	Michael McCarran	1086	95		
399	6	6/23/1874	John A. and Mary Horgan	John O. Mahaney	1165	516		
399	39	12/1/1868	Helen Martense	John Graham	860	180		
399	39	3/11/1869	Helen Martense	Sarah C. Campbell	878	195		
399	58	3/3/1864	Helen Martense	Matthew Farrell	804	247		

**Table A-3
Conveyance Records**

Modern Block	Modern Lot	Date Recorded	Grantor	Grantee	Liber	Page	Remarks	Notes
405	12	11/28/1855	Augustus J. and Sarah M. Brown	Henry Warren	410	125		75 by 100 foot lot property including northern portion of Lot 12 and properties to the west
405	12	12/4/1855	Augustus J. and Sarah M. Brown	Patrick Woods	410	334		Western portion of Modern Lot 12
405	12	5/19/1864	Henry Warren	Augustus J. Brown	631	526		Included 100x100' lot in northwest corner of block except for western portion of Modern Lot 12
405	12	6/29/1864	Augustus J. and Sarah M. Brown	Nicholas Murray	635	459		Northern portion of Modern Lot 12
405	12	12/13/1872	William and Mary Beard	Hugh McGee	1080	501		215 Bond Street
405	13	1/17/1871	Helen Martense	Margaret Moran	979	253		
405	16	2/10/1865	Helen Martense	Henry Clinton	691	289		
405	16	2/11/1867	Henry and Elizabeth Clinton	Mary J. O'Neill	741	419		
405	16	5/19/1868	Helen Martense	Margaret Conway	826	22		454 Baltic Street
405	16	6/1/1875	Margaret Conway	Francis Kelly	1205	123		454 Baltic Street
405	63	5/21/1869	Edward J. and Mary N. Jacques	Jacob D. Bergen	878	315		100x100' swuare parcel including modern Lot 63
405	63	5/7/1875	Jacob D. Bergen	John Hayes	1202	246		Modern Lot 63
405	64	12/14/1861	Henry Warren	Joseph Warner	565	199		
405	64	5/10/1869	Heirs of Joseph Warner	Frederick W. Barwick	896	79		Modern Lot 64
433	8	2/8/1866	Thomas Golden	Francis J. Barrett	691	146		
433	8	5/7/1869	Francis J. and Marie C. Barrett	John Winn	893	751		
433	8	4/15/1871	John Winn	John Alwill	991	228		
447	50	11/12/1852	Exrs of Nehemiah Denton	Arthur W. Benson	300	275		
447	50	4/6/1864	Arthur W. and Jane A. Benson	Valentin Andrie	550	354		451 Carroll Street
447	50	2/24/1864	Arthur W. and Jane A. Benson	Ann M. Smith	620	440		447 Carroll Street
447	50	9/22/1869	Arthur W. and Jane A. Benson	James A. Barrett	915	366		449 Carroll Street
447	50	10/31/1870	James A. and Jane J. Barrett	Edward H. Babcock	969	558		449 Carroll Street

Table A-3
Conveyance Records

Modern Block	Modern Lot	Date Recorded	Grantor	Grantee	Liber	Page	Remarks	Notes
462	6	5/15/1869	Andrew C. and Eliza Benedict	Patrick Judge	397	253		
462	6	4/22/1865	Domenicus S. and Ellen L. Vorhees	William Smith	660	70		
462	6	9/11/1866	Domenicus S. and Ellen L. Vorhees	Cornelius Ryan	722	27		
462	6	1/30/1867	John D. Snedeker, Referee	Michael Dowd	740	9		
462	6	7/10/1868	William and Mary Smith	Sarah A. Smith	836	300		
462	6	3/11/1869	Sarah A. and Milton G. Smith	Andrew C. Benedict	878	191		
465	27	2/24/1872	Russell W. and Lydia A. Adams	Thomas Mullon	1036	271		
465	27 and 28	2/7/1871	Executors of Domenicus S. Voorhees	Charles G. Waterbury	981	476		
465	27 and 28	4/6/1871	Charmes G. and Mary Waterbury	Russell W. Adams	1005	192		Multiple properties
934	5	7/8/1870	Ethelbert S. and Ellen L. Mills	Emeline J. Dodd	956	88		
934	5	7/8/1870	Emeline J. and Goerge F. Dodd	Ethelbert S. Mills	956	89		
<p>Notes: Conveyance records are indexed by block, but not lot. The above represents a best attempt to identify conveyance records for each development site during the period of earliest development in the 19th century.</p> <p>Sources: Conveyance records accessed at the Brooklyn Office of the City Register, New York City Department of Finance</p>								

D. HISTORICAL DIRECTORIES

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
198	34	1862	Crommelin	Jane	widow		312 Dean
198	34	1864	Crommelin	Jane	widow		312 Dean
198	34	1866	Crommelin	Jane	widow		312 Dean
198	34	1867	Crommelin	Jane	widow		312 Dean
198	34	1868	Commelin [sic]	Jane	widow		312 Dean
198	34	1869	Crommelin	Jane	widow		312 Dean
198	34	1872	Crommelin	Jane	widow		360 Dean
198	34	1873	Crommelin	Jane	widow		360 Dean
198	34	1874	Bokee	William B.	jewler		360 Dean
198	34	1875	Bokee	William B.	jewler		360 Dean
198	35	1863	Smith	Orasmus T.	measurer	135 Broad, NY	314 Dean
198	35	1863	DeHanne	Jean V.	physician		314 Dean
198	35	1864	Schwacofer	George C.			314 Dean
198	35	1865	Gillan	Thompson	tailor		314 Dean
198	35	1867	Williams	Calvin C.	Rev.		314 Dean
198	35	1867	Cochran	George G.	hayscales	4th av c. Atlantic av.	314 Dean
198	35	1868	Williams	C.C.	Rev.		314 Dean
198	35	1870	Wesley	George	iron		314 Dean
198	35	1870	Galaway	John H.	engraver		314 Dean
198	35	1871	Galaway	John	engraver		314 Dean
198	35	1873	Galaway	John	engraver		362 Dean
399	6	1871	Thomas	Frank	auctioneer	3 Pine NY	328 E. Warren
399	6	1872	Noland	William	lab.		450 Warren
399	6	1872	Thomas	Francis R.	real estate	3 Pine NY	450 Warren
399	6	1872	Byrnes	Julia	dressmkr		452 Warren
399	6	1872	Drake	Olof	shoemkr		452 Warren
399	6	1872	Leavy	John	driver		r. 452 Warren
399	6	1872	McFarland	James			r. 452 Warren
399	6	1872	Bintcer	John	liquors		452 Warren
399	6	1872	Kennedy	R.	MD	454 Warren	
399	6	1872	Brown	Jacob	cooper		456 Warren

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
399	6	1872	Welsh	James	lab.		458 Warren
399	6	1872	Quinrey	John	lab.		458 Warren
399	6	1872	Horan	John	leather		458 Warren
399	6	1872	Borestrum	John	tailor		458 Warren
399	6	1873	Thompson	Edward	liquor	450 Warren	
399	6	1873	Glavey	John	lab.		r. 452 Warren
399	6	1873	Thompson	Peter	chairmkr	452 Warren	162 Butler
399	6	1873	Moran	Julia	wid.		452 Warren
399	6	1873	McFarley	James	lab.		r. 452 Warren
399	6	1873	Purcell	John	carpenter		454 Warren
399	6	1873	Kennedy	Richard			454 Warren
399	6	1873	Frank	Charles	baker		456 Warren
399	6	1873	Nolan	Patrick	lab.		456 Warren
399	6	1873	Healy	Owen	lab.		456 Warren
399	6	1873	Kelly	Edward	lab.		456 Warren
399	6	1873	Walsh	James	lab.		458 Warren
399	6	1873	Barrett	Patrick	lab.		458 Warren
399	6	1873	McCauley	Annie	wid		197 Bond
399	6	1874	Purcell	John	carpenter		454 Warren
399	6	1874	Brenan	DC	dress maker	454 Warren	
399	6	1874	Ryan	James	lab.		458 Warren
399	6	1874	Sullivan	Daniel	segarmkr		458 Warren
399	6	1874	Walsh	James	lab.		458 Warren
399	6	1874	McGauley	Thomas	carman	197 Bond	
399	6	1875	McGan	James	lab.		452 Warren
399	6	1875	McDonald	Patrick	lab.		452 Warren
399	6	1875	McFarland	James	lab.		r. 452 Warren
399	6	1875	Brenan	DC	drugs	454 Warren	
399	6	1875	Jones	Elizabeth	wid.		456 Warren
399	6	1875	Keenan	James	lab.		456 Warren
399	6	1875	Okland	Mary	wid.		456 Warren
399	6	1875	Smith	John	shipsmith		456 Warren
399	6	1875	Brady	James	police		456 Warren

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
399	6	1875	Quentin	Henry	farmer		458 Warren
399	6	1875	Ryan	James	driver		458 Warren
399	6	1875	McGauley	wid. Thomas			197 Bond
399	6	1875	McGauley	Thomas	driver		197 Bond
399	39	1872	Ronhan	Mary A.	widow		493 Baltic
399	39	1872	Tiernay	Thomas	shoemkr		495 Baltic
399	39	1872	Kane	Mary	wid.		491 Baltic
399	39	1872	Thomas	James	lab.		491 Baltic
399	39	1872	Moloy	Kate	wid.		491 Baltic
399	39	1873	Cunningham	Robert	carpenter		493 Baltic
399	39	1873	Rouhan	Edward	wheelwright		493 Baltic
399	39	1873	Tiernay	Thomas	shoemkr		495 Baltic
399	39	1873	Corcoran	Peter	liquors		497 Baltic
399	39	1874	Rohan	Edward	wheelwright		493 Baltic
399	39	1874	Close	James	bricklayer		r 493 Baltic
399	39	1875	Gould	Catherine	wid.		r 493 Baltic
399	39	1875	Close	James	bricklayer		r 493 Baltic
399	39	1875	Gahan	John	mason		495 Baltic
399	39	1875	Gahan	Matthew	mason		495 Baltic
399	39	1875	Conroy	Robert	shoemkr		495 Baltic
399	39	1875	Tiernay	Thomas	shoemkr		495 Baltic
399	58	1870	Heleghy	Dennis	lab.		r. 151 E. Baltic
399	58	1870	Wilson	Andrew	shoemkr		151 E. Baltic
399	58	1873	Brady	Rose	wid.		463 Baltic
399	58	1873	Wilson	Andrew	boots and shoes		463 Baltic
399	58	1875	Cronen	Timothy	Junk dealer		463 Baltic
399	58	1875	Ryan	Catherine			463 Baltic
399	59	1872	Fasetty	Rose	wid/		461 Baltic
399	59	1873	Hurley	Dennis			r. 461 Baltic
399	59	1873	Curtis	Joseph	lab.		r. 461 Baltic
399	59	1874	Ferraty	Rose	wid.		461 Baltic
399	60	1870	Stone	Daniel	lab.		147 E. Baltic
399	60	1871	Close	James	bricklayer		147 E. Baltic

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
399	60	1872	Close	James	mason		459 Baltic
399	60	1872	Doyle	Bastel	lab.		459 Baltic
399	60	1872	Hatten	Patrick	lab.		r. 459 Baltic
399	60	1872	Terriough	George	lab.		459 Baltic
399	60	1872	Muldoon	James	lab.		459 Baltic
399	60	1873	Farrell	James	lab.		459 Baltic
399	60	1873	Quinn	Thomas	driver		459 Baltic
399	60	1874	Neary	Mary	wid.		459 Baltic
399	60	1875	Nerrey	Mary	wid.		459 Baltic
399	60	1875	Nerrey	John	plasterer		459 Baltic
399	60	1875	Geraghty	Patrick	lab.		459 Baltic
399	60	1875	McGonley	John	lab.		459 Baltic
399	60	1875	O'Day	Michael	lab.		459 Baltic
399	60	1875	Gillon	Margaret	wid.		459 Baltic
399	60	1875	Muldoon	James	lab.		459 Baltic
405	12	1865	Murray	Michael	lab.		E. Baltic n. Bond
405	12	1867	McGee	Hugh	junk		Bond n. E. Baltic
405	12	1869	McGee	Hugh	junk		Bond n. Butler
405	12	1869	McGee	Hugh	junk		Bond n. E. Baltic
405	12	1870	McGee	Hugh	junk		Bond n. Butler
405	12	1870	Murray	James	plumber		E. Baltic n. Bond
405	12	1871	Murray	Nicholas	lab.		E. Baltic n. Bond
405	12	1871	McGee	Hugh	junk		119 Bond
405	12	1873	Murray	Nicholas	lab.		454 Baltic
405	12	1873	McGee	Hugh	Junk dealer		215 Bond
405	12	1874	Murray	Nicholas	lab.		454 Baltic
405	12	1874	McGee	Hugh	peddler		215 Bond
405	12	1874	Killman	Mary	wid.		r. 215 Bond
405	12	1875	Murray	Nicholas	lab.		458 Baltic
405	12	1875	McGee	Hugh	junk		r. 215 Bond
405	12	1875	Burns	James	confectionary	215 Bond	
405	13	1871	Moran	Margaret	wid.		E. Baltic n. Bond
405	13	1872	Moran	Margaret	wid.		456 Baltic

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
405	13	1875	Moran	Patrick	lab.		456 Baltic
405	16	1870	Conway	Margaret	wid. grocer		150 E. Baltic
405	16	1871	Conway	Margaret	grocer		464 Baltic
405	16	1871	Conway	Margaret	wid. grocer		150 E. Baltic
405	16	1871	O'Veil [sic]	Patrick	lab.		152 E. Baltic
405	16	1872	Conway	Margaret	wid. grocer		464 Baltic
405	16	1872	Cowen	John	lab.		464 Baltic
405	16	1872	Cross	John	lab.		464 Baltic
405	16	1872	Cosgrove	John	lab.		466 Baltic
405	16	1872	O'Neil	Patrick	mason		466 Baltic
405	16	1873	Keane	Joseph	lab.		462 Baltic
405	16	1873	Cross	John	lab.		464 Baltic
405	16	1873	McCauley	Peter	lab.		464 Baltic
405	16	1873	Stueuart	John	tailor		464 Baltic
405	16	1873	Conway	Margaret	grocer		464 Baltic
405	16	1873	O'Neill	Patrick	mason		466 Baltic
405	16	1873	Deering	THomas	lab.		466 Baltic
405	16	1873	Stanyought	Thomas	agt.		466 Baltic
405	16	1874	Gallagher	John	lab.		462 Baltic
405	16	1874	Conway	Michael	groceries		464 Baltic
405	16	1874	Stanyought	Thomas	collector		466 Baltic
405	16	1874	Kelly	William	lab.		466 Baltic
405	16	1875	Cane	Bridget	widow		464 Baltic
433	8	1873	Alwell	John	lab.		289 Nevins
433	8	1873	Alwill	John	store	Nvins c. Sackett	289 Nevins
433	8	1874	Donlon	James	lab.		289 Nevins
433	8	1874	Allwin	Annie	wid.		289 Nevins
447	50	1865	Smith	David	carpenter		Carroll n. Nevins
447	50	1867	Andrie	Valentine	shoes		Carroll n. Powers
447	50	1868	Smith	David	carpenter		Carroll n. Nevins
447	50	1870	Andrie	Valentine	shoemkr		Carroll n. 3d av
447	50	1870	Groves	Elijah R.	carpenter		Carroll n. Nevins
447	50	1871	Hollinge	Mary A.	fancy goods		449 Carroll

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
447	50	1871	Andrie	Valentine	boot and shoe maker		451 Carroll
447	50	1871	Roth	Philip	butcher		451 Carroll
447	50	1871	Shandley	Mary	laundress		14 Carroll
447	50	1871	Groves	Elijah R.	carpenter		Carroll n. 3d av
447	50	1872	Smyth	David	carpenter		447 Carroll
447	50	1872	Hollings	Mary A.	fancy goods		449 Carroll
447	50	1872	Andrie	Valentine	shoemkr		451 Carroll
447	50	1873	Hollengs	John	comr.		449 Carroll
447	50	1873	Andrie	Valentine	boots and shoes		451 Carroll
447	50	1874	Cooper	John	printer		449 Carroll
447	50	1874	Holling	Mary A.	fancygods		449 Carroll
447	50	1874	Andre	Valentine	bootmkr		451 Carroll
447	50	1875	Smith	David	carpenter		447 Carroll
447	50	1875	Cooper	John	compositor		449 Carroll
447	50	1875	Hollins	Mary	fancygds		449 Carroll
462	6	1870	Dowd	Michael	grocer		3d n. Bond
462	6	1871	Ryan	Cornelius	mason		2d n. Bond
462	6	1872	Judge	Patrick	lab.		130 2d
462	6	1873	Judge	Patrick	lab.		130 2d
465	27	1873	Fahy	Edward	marble		102 3d
465	27	1873	Mackay	Joseph	foreman		102 3d
465	27	1874	Mullen	Thomas	foreman		102 3d
465	27	1875	Lyddy	Daniel	clk		102 3d
465	27	1876	Mullen	Thomas	insp.		102 3d
465	28	1872	Adams	Russell W.	lumber	Van Brunt c. Bowne and 116 Wall, NY	710 St. Mark's Av
465	28	1873	Adams	Russell W.	lumber	Van Brunt c. Bowne and 116 Wall, NY	710 St. Mark's Av
465	28	1873	Tallan	George	blacksmith		104 3d
465	28	1876	Mullen	Thomas	lab.		104 3d
934	3	1871	Dobb	Oliver R.	hats	10 Bowery NY	81 4th av
934	4	1866	Horne	William C.	dentist		79 4th av
934	4	1871	Stuart	Geroge A.W.	sec.		79 4th av
934	4	1872	Stuart	Geroge A.W.	sec.		91 4th av
934	4	1874	Blau	Gustavus	bookkpr		91 4th av

**Table A-4
Historical Directories**

Modern Block	Modern Lot	Year	Last Name	First Name	Occupation	Primary Address	Home Address
934	5	1871	Dodd	George F.	trimmings		77 4th av
934	5	1872	Dodd	George F.	clk		89 4th av
934	6	1872	Rogers	William F.	painter		87 4th av
934	6	1874	Bates	Isaac	carman		87 4th av
934	6	1875	Bates	Isaac	driver		87 4th av

Sources: Historical directories accessed through www.Fold3.com and the Brooklyn Public Library digital directory collection.

F. CENSUS RECORDS

Table A-5
Selected Census Records

Modern Block	Modern Lot	Suspected Address	Census Location	Year	House #	Family #	First Name	Last Name	Age	Occupation	Birthplace	Real Estate Value	Personal Estate Value						
405	16	466 Baltic	Brooklyn Ward 10	1870	954	1965	Patrick	O'Neil	37	Journeyman Bricklayer	Ireland		100						
							Mary J.	O'Neil	23		New York	1800							
							Mary	O'Neil	5		New York								
											1966	Thomas	Dearing	25	General Laborer	England			
										Margaret		Dearing	24		England				
										John T.		Dearing	7		New York				
										Edward		Dearing	4		New York				
											1967	Michael	Shepherd	24	Works in retail carpet store	Ireland		100	
										Ellen		Shepherd	22		Ireland				
										William		Shepherd	2 1/2		New York				
													Michael	Burns	24	Works in tobacco factory	Ireland		
													Julia	Burns	22		New York		
													John	Burns	1		New York		
405	16	464 Baltic	Brooklyn Ward 10	1870	955	1968	Margaret	Connaway	48	Keeps a grocery store	Ireland		150						
											1969	John	Cowen	60	General Laborer	Ireland			
													Ann	Cowen	45		Ireland		
													John	Cowen	14		New York		
													Joseph	Cowen	7		New York		
						Richard	Cowen	4		New York									
						Mary	Cowen	1		New York									
					1970	Michael	Kane	33	General Laborer	Ireland									
							Ann	Kane	32		Ireland								
							John	Kane	1		New York								
					1971	Thomas	McNamee	45	General Laborer	Ireland									
							Mary	McNamee	45		Ireland								
							Margaret	McNamee	16		Ireland								
					1972	Mary	McCormack	43		Ireland									

**Table A-5
Selected Census Records**

Modern Block	Modern Lot	Suspected Address	Census Location	Year	House #	Family #	First Name	Last Name	Age	Occupation	Birthplace	Real Estate Value	Personal Estate Value
							Patrick	McCormack	23	General Laborer	New York		
405	16	462 Baltic	Brooklyn Ward 10	1870	956	1973	Catherine	Lyman	45	Washwoman	Ireland	1800	100
							John	Lyman	20	Apprentice to bricklayer	New York		
							Mary	Lyman	18		New York		
							James	Lyman	12		New York		
						1974	Patrick	Fanning	30	Private Coachman	Ireland		
							Catherine	Fanning	25		Ireland		
							Annie	Fanning	3		New York		
							Thomas	Fanning	1		New York		
405	13	456 Baltic	Brooklyn Ward 10	1870	960	1981	Margaret	Moran	35	Washwoman	Ireland		
							John	Moran	15		New York		
							James	Moran	12		New York		
							Mary A.	Moran	10		New York		
405	12	454 Baltic	Brooklyn Ward 10	1870	961	1982	Nicholas	Murray	66	General Laborer	Ireland	1600	150
							Mary	Murray	50		Ireland		
							William	Murray	18	Apprentice to plumber	New York		
							Julia	Murray	26	Working in a hoop skirt factory	New York		
							Catherine	Murray	22		New York		
							Ann	Murray	17	Apprentice to dressmaker	New York		
							Mary	Murray	12		New York		
462	6	132 2nd Street	Brooklyn Ward 10	1870	722	927	Cornelius	Ryan	37	Blue-stone cutter	Ireland	5000	600
							Sarah	Ryan	35		Ireland		
							Thomas	Ryan	15	at school	New York		
							Mary	Ryan	13	at school	New York		
							John	Ryan	9	at school	New York		
							Dennis	Ryan	7	at school	New York		

**Table A-5
Selected Census Records**

Modern Block	Modern Lot	Suspected Address	Census Location	Year	House #	Family #	First Name	Last Name	Age	Occupation	Birthplace	Real Estate Value	Personal Estate Value
							Michael	Ryan	5	at school	New York		
							Sarah	Ryan	3		New York		
							Cornelius	Ryan	1 1/2		New York		
462	6	129 3rd Street	Brooklyn Ward 10	1870	729	937	Michael	Dowd	52	Grocer	Ireland	12000	500
							Martha	Dowd	35		Ireland		
							Thomas	Dowd	12	At school	New York		
447	50	447 Carroll	Brooklyn Ward 10	1870	868	1155	Thomas	Shandley	27	Carpenter	New York		
							Mary	Shandley	33		New York		
							Annie	Shandley	1		New York		
							James	Shandley	1/2		New York		
447	50	449 Carroll	Brooklyn Ward 10	1870	869	1156	Elijah	Groves	38	Carpenter	New York	3000	
							Mary	Groves	35		New York		
							Mary E.	Groves	16		New York		
							Emma	Groves	12		New York		
							Charles	Groves	5		New York		
							Harriet	Groves	3		New York		
						1157	Eliza	Brown	23		New York		
							George	Brown	28	Machinist	New York		
							George	Brown	6		New York		
							Adelia	Brown	3		New York		
447	50	451 Carroll	Brooklyn Ward 10	1870	870	1158	Valentine	Vandrie	56	Boot and shoe maker	France	6500	
							Philipine	Vandrie	56		France		
934	6	87 4th Ave	Brooklyn Ward 22	1870	114	126	William F.	Rogers	48	House painter	Connecticut		
							Elizabeth A.	Rogers	47		Massachusetts		
							William C.	Rogers	18	House painter	Connecticut		
							Lizzie L.	Rogers	12		Connecticut		

**Table A-5
Selected Census Records**

Modern Block	Modern Lot	Suspected Address	Census Location	Year	House #	Family #	First Name	Last Name	Age	Occupation	Birthplace	Real Estate Value	Personal Estate Value
						127	Benjamin	Robbins	44	Contractor	Maine	25000	
							John T.	Robbins	42	Contractor	Maine	20000	
							Ebbert K.	Robbins	39	Contractor	Maine	10000	
934	5	89 4th Avenue	Brooklyn Ward 22	1870	115	128	George F.	Dodd	39	Clerk at trimmings store	New Jersey	6000	
							Emmaline J.	Dodd	36		New York		
							Freeman	Dodd	16		New York		
							Samuel C.	Dodd	10		New York		
							Margaret	Simpkins	35	Domestic Servant	Ireland		
						129	Henry	Randall	40	Fruit Store (Retired)	England	5000	
							Eliza	Wilson	23		Massachusetts		
							George	Wilson	39	Clerk at Fruit Store	New Jersey		
							Harry	Wilson	4		New York		
							Henry	Wilson	6 1/2		New York		
934	3	93 4th Avenue	Brooklyn Ward 22	1870	116	130	Olivia R.	Dobbs	46	Hatter (retired)	Connecticut		
							Mary	Dobbs	45		Virginia		
							Edwin H.	Dobbs	16	Clerk at hat store	Michigan		
							Charles R.	Dobbs	1		Connecticut		
							Minnie S.	Dobbs	5		Connecticut		
						131	Albert V.	Honecker	38	Clerk milling	Virginia		
							Alice F.	Honecker	18		Virginia		
							Mabel L.	Honecker	1		New York		
							Adrienne	Honecker	20		Virginia		
198	34	81 Dean Street	Brooklyn Ward 10	1860	769	1260	Jane	Crumley	43		New York	3000	1000
							Adrian	Crumley	30	Mustard Manuf.	New York		
							Theodore	Crumley	26	Mustard Manuf.	New York		
							Mary	Crumley	24		New York		

Table A-5
Selected Census Records

Modern Block	Modern Lot	Suspected Address	Census Location	Year	House #	Family #	First Name	Last Name	Age	Occupation	Birthplace	Real Estate Value	Personal Estate Value
							Emily	Crumley	22		New York		
							Harriet	Crumley	15		New York		
							Gertrude	Crumley	12		New York		
							Maurice	Crumley	9		New York		
Sources: Census records accessed through www.Ancestry.com													