

Jennings Hall Expansion/819 Grand Street Redevelopment

BLOCK 2922, LOT 3

EAST WILLIAMSBURG; BROOKLYN; KINGS COUNTY; NEW YORK

Phase 1B Archaeological Investigation

SHPO PROJECT NUMBER: 24PR03570

LPC PUID: 36603

Prepared for:

St. Nicks Alliance
2 Kingsland Avenue Brooklyn, NY 11211-1695

Prepared by:



AKRF, Inc.

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MAY 2024

Management Summary

SHPO Project Review Number: 24PR03570

LPC Unique Project Identifier: 36603

Involved Agencies: New York City Department of City Planning
New York City Housing Authority
New York City Department of Housing Preservation and Development
U.S. Department of Housing and Urban Development

Phase of Survey: Phase 1B Archaeological Investigation

Location Information

Location: 75 Bushwick Avenue; Brooklyn
(Block 2922, Lot 3)
Minor Civil Division: 04701
County: Kings

Survey Area (Area of Archaeological Sensitivity Identified in the Phase 1A Study):

Length: Approximately 193 feet
Width: Approximately 150 feet
Area: Approximately 0.4 acres (19,000 square feet)

USGS 7.5 Minute Quadrangle Map: Brooklyn

Archaeological Survey Overview:

Number of Trenches: 5
Number of Shovel Tests/Units: 0
Width of Plowed Strips: n/a
Surface Survey Transect Interval: n/a

Results of Archaeological Survey:

Number of Prehistoric Sites Identified: None
Number of Historic Sites Identified: None
*Sites Recommended for
Phase 2/Avoidance:* None

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Date of Report: May 2024

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A. INTRODUCTION AND PROJECT DESCRIPTION

St. Nicks Alliance is proposing to expand its existing facility at Jennings Hall in the East Williamsburg neighborhood of Brooklyn, NY (see **Figures 1 and 2**). The project site is located at 819 Grand Street and comprises Tax Block 2922, Lots 1 and 3. Lot 1 is currently developed with a three-story bank constructed on Lot 1 in 1924. Lot 3 is developed with “Jennings Hall,” an assisted living facility comprising an seven-story (with basement) building constructed as a nurse’s residence in 1929 and an eight-story (with basement and sub-cellar) rear wing constructed in 1980. The undeveloped portions of Lot 3 contain green space with landscaped gardens and a parking lot. The project site also contains small slivers of adjacent lots 20 and 47.

St. Nicks Alliance is proposing to construct a new fourteen-story addition to the south of Jennings Hall on Lot 1 and a portion of Lot 3. With the proposed project, the existing bank on Lot 1 would be demolished. The project will also include landscaping improvements within the existing gardens on Lot 3 that would involve subsurface disturbance to a depth of up to 2 feet below the current ground surface. Existing trees and subsurface utilities located within the interior courtyard are expected to remain in place as part of the proposed work. A new parking lot would also be constructed within a portion of Lot 3.

B. PROJECT BACKGROUND AND PREVIOUS ENVIRONMENTAL REVIEW

The proposed actions are subject to New York City Environmental Quality Review (CEQR). The New York City Department of City Planning (DCP) is serving as the lead agency for the environmental review. In addition, the Proposed Project was awarded Projects Based Vouchers (PBV) allocated by the New York City Housing Authority (NYCHA) and originating with the U.S. Department of Housing and Urban Development (HUD) (the “requested funding”). The allocation of PBV requires an environmental review in accordance with the National Environmental Policy Act (NEPA) and other HUD environmental regulations and consultation pursuant to Section 106 of the National historic Preservation Act of 1966 (“Section 106”). It is expected that the New York City Department of Housing Preservation and Development (HPD) will be the Responsible Entity (RE) under NEPA and Section 106.

Pursuant to CEQR, a Phase 1A Archaeological Documentary Study (“Phase 1A Study”) of the project site was prepared by Celia Bergoffen, PhD, PRA in June 2023. The conclusions of the Phase 1A Study, as well as the conclusions of the supplemental historical documentary research conducted by AKRF, Inc. in 2024, are summarized below in “Project Site History and Summary of Phase 1A Study Conclusions.” Following Dr. Bergoffen’s initial report, the New York City Landmarks Preservation Commission (LPC) requested additional information regarding how potentially archaeologically sensitive areas within Lot 3 would be protected during the construction of the project.

A Phase 1B Archaeological Work Plan summarizing the scope of work for the Phase 1B Archaeological Investigation was drafted by AKRF in February 2024. In a comment letter issued on February 20, 2024, LPC concurred with the Work Plan. Subsequent to the initiation of the CEQR review, consultation was initiated with the New York State Historic Preservation Office (SHPO) pursuant to Section 106. The 2023 Phase 1A Study was submitted to SHPO for review in May 2023.

C. PROJECT SITE HISTORY AND SUMMARY OF PHASE 1A STUDY

The 2023 Phase 1A Study concluded that Lot 1 is not archaeologically sensitive and that Lot 3 was sensitive for archaeological resources dating to the historic period. Lot 3 was determined to have no sensitivity for archaeological resources associated with the precontact occupation of the area. Dr. Bergoffen's Phase 1A Study documented the project site's historical use at the residence of Brooklyn mayor Martin Kalbfleisch between the mid-19th and early 20th centuries. The Phase 1A Study concluded that Lot 1 was not archaeologically sensitive and a small area to the rear of the historic Kalbfleisch residence within the undeveloped portion of Lot 3 was sensitive for historic shaft features associated with water-gathering and sanitation (e.g., privies, cisterns, and wells). The Phase 1A Study recommended a Phase 1B Archaeological Investigation within the undeveloped portion of Lot 3 (see **Figure 3**).

REVISED HISTORY OF THE PROJECT SITE BASED ON SUPPLEMENTAL RESEARCH

AKRF, Inc. conducted additional background research to supplement the Phase 1A Study while preparing the Archaeological Work Plan for this Phase 1B Archaeological Investigation. The 2023 Phase 1A Study determined that the project site was included within a parcel sold by Charles and Leah Debevoise to Abraham Van Alst in 1821 (Bergoffen 2023). AKRF confirmed that while this deed (Kings County Conveyance Liber 12, Page 653) was recorded with Kings County in 1821, the conveyance record was dated December 10, 1806, suggesting a much longer period of ownership for the Van Alst family. The property purchased by Van Alst at that time was 15 acres in size. Maps of historical farm line boundaries suggest that the extreme southern portion of Lot 1 was not included within the limits of the historical Van Alst farm. The 1810 federal census recorded Van Alst as a resident of Bushwick and indicated that his household included three enslaved persons of African descent. Therefore it appears that stolen labor was utilized on the Van Alst farm and in the home situated on the project site before slavery was banned in New York State in 1827.

As described in the Phase 1A Study, Elizabeth Van Alst, the widow of Abraham, sold the 15-acre farm to Ebenezer Jennings in 1847 (Kings County Conveyance Liber 164, Page 359). Jennings sold the farm to William A. Britton several months later. The 1844 Hassler and 1850 and 1856 Dripps maps of Brooklyn depict two structures on the former Van Alst property along the eastern side of Bushwick Avenue north of the line of Grand Avenue. The approximate locations of the 1850s buildings as shown on the Dripps map are depicted on **Figure 3**.

Several subsequent owners appeared to have owned the property in the 1850s, with Van Alst and Britton retaining a financial interest in the property through their role as mortgagee—one who provides the loan to a buyer—to future owners (Howard 1864). As a result of a foreclosure on the part of the estate of John Thursby, a legal case was initiated by Samuel Willets against defendants Elizabeth Van Alst, William Britton, and Hezekiah D. Hull, who also served as a mortgagee (*ibid*). In 1861, following the conclusion of the legal case, the property was sold at auction by court referee Samuel E. Johnson to Hull—then a resident of Connecticut—as part of his consolidation of ownership and recouping of funds lost as a result of earlier transactions (*ibid*; Kings County Conveyance Liber 573, Page 542).

The same 15-acre parcel was then sold by Hull to Martin Kalbfleisch in December 1862 (Kings County Conveyance Liber 586, Page 508). Kalbfleisch therefore appears to have been responsible for dividing the property into lots for development, a process which may have delayed the construction of his own home on the project site, which occurred in 1867. The 1868 Higginson¹ and 1869 Dripps maps are the first to depict

¹ The version of this map in the collection of the New York Public Library was initially published in 1868 and includes updates pasted over certain properties at an unknown date. No paste-overs are depicted on the Kalbfleisch property on this map,

the former Kalbfleisch house on a parcel approximately the size of the project site. The 1868 map depicts a greenhouse and stable in the rear yard but does not depict an outhouse or privy although “outbuildings” likely serving that function are identified on the map’s key and are depicted behind other buildings in the neighborhood. Finally, the 1875 Adams map of sewer lines in Brooklyn indicates that 12-inch-diameter sewers were present within Grand Street, Powers Street, and Bushwick Avenue by that time.

REVISED ASSESSMENT OF SENSITIVITY AND DISTURBANCE

The supplemental research concurred with the conclusions of the 2023 Phase 1A Study and confirmed that the project site is sensitive for shaft features associated with the occupation of the project site by the Van Alst and Kalbfleisch families as well as other occupants who may have resided on the property. As described previously, because the property boundaries of the 15-acre farm extended to the east and southeast of the current project site, shaft features associated with the Van Alst house could have been situated outside current project site boundaries. While urban archaeological investigations typically involve testing of a rear lot line when searching for privy pits, in this case, no such line exists within the project site for features associated with the Van Alst occupation. Any shaft features within undisturbed portions of the project site could therefore be situated anywhere within the area of sensitivity.

Historically, cisterns and wells were typically situated in close proximity to the rear facades of houses to provide easier access to clean water for cooking and household activities. If the locations of the ca. 1850 buildings on the Van Alst farm are generally correct, any shaft features and foundation remnants in the immediate vicinity of those buildings are expected to have been disturbed by the construction of the existing buildings on Lots 1 and 3. Shaft features such as privies could have been present within the undeveloped portions of Lot 3 to the east, in the area previously determined to be sensitive for shaft features associated with the Kalbfleisch mansion. However, because those features would have been situated relative to the historical boundaries of the 15-acre farm and not to the current project site, it is unclear where exactly any privy pits may have been located within the larger 15-acre area. Privy pits possibly associated with the former Kalbfleisch mansion might have been located in an undeveloped area at the eastern end of Lot 3. However, this area is occupied by the rear yard of the apartment occupied by the family of the existing facility’s superintendent and the current project design will not involve impacts in this portion of the site.

AKRF’s review also included an analysis of disturbance related to an extensive network of subsurface utilities that is present within the undeveloped areas of Lot 3, including the parking lot and grassy lawn areas (see **Figure 4**). The locations of live utilities limited the undisturbed areas that could be tested as part of the project. Drainage infrastructure and light poles/electrical lines are present beneath the western patio. Gas and electrical lines run east-west through the grassy area that separates the former nurse’s residence from the former bank building on Lot 1 to the south and through the southwest corner of the existing parking lot. Sewers and manholes extend through portions of the grassy lawns that are located south of Jennings Hall as well as in the paved parking area in the southern part of Lot 3. Because AKRF’s review of available utility plans concluded that there was a possibility that undocumented utilities may be present, AKRF retained Coastal Environmental Solutions, Inc. to complete a non-invasive geophysical survey using ground-penetrating radar (GPR) of the areas where archaeological testing was proposed. The survey concluded that additional electrical, gas, and drainage lines were present throughout the parking lot and adjacent grassy areas. As a result of the survey, AKRF revised the locations of some of the proposed trenches as originally proposed in the Phase 1B Archaeological Work Plan. LPC was notified of these changes and in comments emailed on March 22, 2024, LPC approved the revisions to the testing plan.

suggesting that it was unaltered from its 1868 condition; however, the properties to the east of the Kalbfleisch lot/modern Lot 3 are not depicted in their 1868 condition on the map.

D. SITE CONDITIONS AT THE TIME OF THE PHASE 1B INVESTIGATION

Lot 1 is almost entirely developed with a three-story former bank building constructed in 1924 that is currently vacant. No archaeological sensitivity has been identified within Lot 1 and no testing will be completed in that portion of the project site.

As described previously, Lot 3 is developed with two buildings: the former Saint Catherine's Historical nurse's residence fronting on Bushwick Avenue and a rear wing known as Jennings Hall to the east. The undeveloped interior of the lot is developed with concrete patios, drainage infrastructure and light poles and associated electrical feeder lines (see **Figure 4**). Gas and electrical lines run east-west through the grassy area that separates the former nurse's residence from the former bank building on Lot 1 to the south and through the southwest corner of the existing parking lot. Stormwater sewers and manholes that extend to depths of 2.5 to 8 feet extend through portions of the grassy lawns that are located south of Jennings Hall as well as in the paved parking area in the southern part of Lot 3.

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the project site was completed between April 9 and 10, 2024. The Phase 1B Archaeological Investigation of the project site was supervised by Elizabeth D. Meade, PhD, Registered Professional Archaeologist (RPA) #16353, who served as Principal Investigator and Laboratory Director. Dr. Meade exceeds the requirements for the professional qualifications standards for archaeologists as defined by the Secretary of the Interior (36 CFR 61)¹ and complies with the codes and standards outlined by the RPA.² The fieldwork was supported by archaeologist Theresa Imbriolo, MA, RPA #5161 who served as a field technician for the project and assisted with laboratory processing and artifact analysis.

B. POTENTIAL ARCHAEOLOGICAL RESOURCES IDENTIFIED IN THE PHASE 1B WORK PLAN

As stated in the 2018 LPC guidelines, although documentary research determines archaeological potential, testing is required to confirm the presence of those resources and to determine their significance. LPC's guidelines indicate that "archaeological resources are significant if they provide new insight about the past and answer important research questions" (LPC 2018: 19). As described in the Phase 1B Work Plan, the objective of the Phase 1B Archaeological Investigation of the project site was to document the subsurface conditions of the project site to determine if soil levels are present that could potentially contain intact archaeological resources associated with the historic period occupation of the site. As described below, the Phase 1B Archaeological Work Plan outlined possible archaeological resource types that could be present on the project site.

POTENTIAL ARCHAEOLOGICAL RESOURCES

As described above, the Phase 1A Study (Bergoffen 2023) and the supplemental research completed by AKRF concluded that undisturbed portions of the site have moderate sensitivity for archaeological resources associated with the 18th and 19th century occupation of the project site. Given the site's development and disturbance as documented in the Phase 1A Study, the site is considered sensitive for archaeological resources associated with domestic shaft features.

As described above, those portions of the project site that were not fully disturbed by excavation associated with the construction of buildings or installation of utilities were determined to be sensitive for archaeological resources associated with the 19th century residential occupation of those lots. These archaeological resources were expected to include domestic shaft features such as privies, cisterns, and wells, in the historic lots' rear yards. These features would have remained in use until municipal water and sewer networks became available in the mid- to late 19th century, and possibly for decades after.

¹ https://www.nps.gov/history/local-law/arch_stnds_9.htm

² <https://rpanet.org/page/CodesandStandards>

Because the Van Alst farm later incorporated into the Kalbfleisch estate were significantly larger than the current project site, it was determined that shaft features that were utilized by the occupants of either the Van Alst or Kalbfleisch homes may not align with modern property boundaries. As such, typical methods of predicting the locations of such features (e.g., cisterns being located near the rear wall of a house and privies near a rear lot line) did not apply given the difference between the historical and modern property boundaries. As such, testing was completed in areas that did not contain active utility lines and that were therefore determined to be the least disturbed with the goal of confirming the presence or absence of shaft features or buried ground surfaces or dense artifact deposits that would suggest that shaft features may still be present on the site.

C. RESEARCH QUESTIONS AND GOALS

The determination of an archaeological site's significance is directly related to whether the identified resources on that site are considered to be of high research value. In order to determine if any archaeological resources from the project site would be considered to have significant research value, a list of research questions was developed that can be applied to any identified archaeological resources within the project site in an attempt to determine their research value. These research topics were specific to the types of potential archaeological resources that could be encountered within the project site as described in the previous section, e.g., domestic shaft feature.

Domestic shaft features—such as those that may be located within the former rear yards of the houses formerly within the project site—can contain important archaeological resources. As described above, these features were frequently filled with domestic refuse after they were no longer used for their original purposes. In the case of privies, such refuse deposition would typically also have occurred during the period of active use, as there were few alternate methods of garbage disposal at the time. As such, filled shaft features often contain valuable information about the daily lives of a site's residents.

Artifacts recovered from trash or surface deposits are the material remains of what an individual purchases and/or uses on a daily or routine basis and they can provide insight into certain aspects of his or her life. Such consumption patterns are strongly influenced by socioeconomic status, occupation, household composition, and ethnicity. Archaeological evidence from residential lots can provide information on how different characteristics, such as socioeconomic status or ethnicity, have influenced consumer choice behavior. Information that can be gathered from domestic shaft features can be used to make generalizations about what life was like for the individuals and families that resided on a property. This information can then be compared and contrasted with data associated with similar populations elsewhere in the City. Similarly, if resources associated with the industrial use of the project site are encountered, they can be compared and contrasted with other archaeological sites in the region to identify broader patterns. These comparisons could yield previously unknown insights into the ways of life of the individuals living in this area of Bushwick during the 19th century.

D. FIELD AND ANALYTICAL METHODS

As described previously, this Phase 1B Archaeological Investigation was designed to confirm the presence or absence of archaeological resources and to determine if additional fieldwork would be required to evaluate the site's potential eligibility for listing on the State and National Registers of Historic Places (i.e., a Phase 2 Archaeological Survey/Evaluation). The Phase 1B Archaeological Investigation was conducted in accordance with LPC's "Guidelines for Archaeology work in New York City," issued in 2018;¹ with the standards for Historic and Cultural Resources analyses as specified in the *CEQR Technical Manual* as

¹ <http://www.nyc.gov/html/lpc/downloads/pdf/pubs/ayguide.pdf>

amended in 2014;¹ SHPO's *Phase I Archaeological Report Format Requirements* as issued in 2005;² and the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by OPRHP in 1995.³

All archaeological testing occurred within the areas of archaeological sensitivity identified in the Phase 1A Study depicted on **Figure 3**. The testing strategy as outlined below is consistent with that proposed in the approved Phase 1B Work Plan except in areas where excavation was prevented by the undocumented presence of active utility lines.

METHODOLOGY FOR SUBSURFACE TESTING

The subsurface testing consisted of four mechanically excavated trenches supported with limited hand excavation. As no historical ground surfaces or archaeological features/artifact deposits were observed, the hand-excavation of shovel test pits (STPs) or testing units was not required. The length, width, and depth of trenches varied based on location and any associated obstructions. All trenches were a minimum of 5 feet in width with the exception of Trench 1, which was narrower given the presence of a subsurface drainage line to the east. Trenches were placed in areas free of obstructions (e.g., subsurface utilities) and where there was sufficient room for the backhoe to operate (e.g., sufficient space for the safe rotation/operation of the machine and for stockpiling of excavated soils) without presenting safety hazards to either the archaeological team or staff or residents of the on-site facility.

Trenches placed in unpaved areas where excavated through grass surfaces. Trench 2 was located within the extant parking lot. In that location, the asphalt pavement was saw cut and the asphalt removed for proper disposal before the trench was excavated. In each trench, the backhoe slowly and gently excavated soils within the trench under the direction and observation of the archaeological team. When trench depths were less than 5 feet below grade, the archaeological team entered trenches to shovel skim surface deposits, make observations about soils, and collect artifacts where relevant. Soils at depths greater than 5 feet below grade were observed from the stable ground surface and observations regarding soils and artifacts were collected from backdirt piles or from soils within the backhoe bucket before they were dumped. Some measurements of deeply buried soil stratigraphy are therefore approximate except for those locations where it is noted that more specific measurements could be directly recorded. At each trench, excavation proceeded until seemingly undisturbed subsoil was observed or until the machine could no longer excavate to greater depths. Each test location was backfilled following its excavation.

The archaeological team regularly troweled through the backdirt to make observations and collect artifacts. Collected artifacts and samples were placed in labeled zip-top polyethylene archaeological specimen bags.⁴ Modern refuse (e.g., 20th/21st century trash and Styrofoam) and faunal remains in a poor state of preservation were not collected.

SITE DOCUMENTATION AND LOCATIONAL CONTROLS

Professional standards for excavation, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources were applied during the Phase 1B Archaeological Investigation. All fieldwork was documented through notes, photographs, and drawings,

¹ http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf

² <https://parks.ny.gov/documents/shpo/environmental-review/PhaseIReportStandards.pdf>

³ <http://nyarchaeology.org/wp-content/uploads/2013/12/NYACStandards.pdf>

⁴ Consistent with the LPC guidelines, all artifacts collected in the field will be placed in standard polyethylene specimen bags of at least 4 millimeters in thickness and 3 by 4 inches in size with zip-top closures and write-on blocks.

and all relevant professional standards were applied. Soil profiles including colors—recorded using Munsell® soil color charts—and texture/inclusions were recorded in field notes. Testing locations were recorded in field notes and field maps using standard nomenclature and established using measuring tapes. During testing, depths were recorded relative to the ground surface and converted to NAVD88 using nearby spot elevations as mapped on recent site surveys. The North American Datum of 1983 (NAD83) was used as a permanent horizontal datum.

E. LABORATORY METHODS

All laboratory activity was conducted in compliance with guidelines established by the U.S. Department of the Interior/National Park Service for the Curation of Federally Owned and Administered Archaeological Collections (*36 CFR 79* and *36 CFR 66*). An archaeologist cleaned and inventoried the small number of artifacts collected during fieldwork. Information on collected artifacts is included in the following chapter. The artifacts (see **Appendix A**) are determined to have low research value and are not recommended for conservation or long-term curation.

A. SUMMARY OF TRENCH EXCAVATION

As described in the previous chapter, four complete trenches and one partial trench were excavated within undisturbed locations within the area of archaeological sensitivity as identified in the Phase 1A Study (see **Figure 3**). As described previously, the typical urban archaeological strategy for confirming the presence or absence of shaft features would involve the placement of trenches near the rear wall of a house (where cisterns and wells would be expected) and near the rear lot line (where privies would be expected). The locations near the rear walls of the pre-1867 buildings were disturbed as a result of the construction of the existing on-site buildings. It is possible that any privy pits associated with these houses may also have been disturbed if they were situated within 60 to 80 feet of the buildings. The placement of privies to the rear of the pre-1867 buildings is difficult to predict given the scale of the 15-acre farm that was present before modern property boundaries were established in the late 19th century. The former rear lot line of the ca. 1867 Kalbfleisch mansion is situated within a portion of the project site that will not be impacted as a result of the construction of the proposed project. Therefore, the trenches were placed in locations determined to be free of utilities or other obstructions to confirm the presence or absence of intact buried historical ground surfaces or artifact deposits of such density that they could suggest the presence of nearby shaft features or middens.

As shown in **Table 3-1** and shown on **Figures 5 through 8**, all of the trenches encountered either disturbed and redeposited soils or intact subsoils beneath a layer of topsoil and/or disturbed material/fill. The soils observed within each of the five trenches were consistent with soils documented elsewhere on the site during a geophysical investigation completed by GeoDesign in 2022. No evidence of shaft features; historical building foundations; *in situ* historical artifact deposits; or intact buried ground surfaces was observed. Observations and artifact analysis associated with individual trenches are outlined in the following section.

Table 3-1
Summary of Trenches

Trench	Size (feet)			Approximate Surface Elevation (NAVD88)*	Observed Soil Levels		
	L	W	D		Depth (feet)	Description/ Soil Color	Notes
1	11.5	3	6	45 feet	0 to 1	Topsoil: silty sandy loam Very dark grayish brown (10YR3/2)	Has sprinkler infrastructure and roots; some demolition debris in lower levels. Trench narrower than originally planned due to presence of an 8-foot-deep drainage line to the east/northeast
					1 to 6	Subsoil: slightly silty clayey sand Yellowish brown (10YR5/6)	Rocky soil with large cobbles; mostly sterile with occasional demolition debris, some disturbance in the northern and eastern walls closer to the extant drainage line. Soils closer to the drainage line were looser and collapsed more easily.

Table 3-1 (cont'd)
Summary of Trenches

Trench	Size (feet)			Approximate Surface Elevation (NAVD88)*	Observed Soil Levels		
	L	W	D		Depth (feet)	Description/ Soil Color	Notes
2	13	5	8	45 feet	0 to 0.5	Asphalt and bedding material	Multiple layers
					0.5 to 2.5/3	Compact mixed fill Black (10YR2/1)	Demolition debris; deeper in east wall of trench
					2.5 to 4.5/5	Disturbed and redeposited subsoil: silty sand Dark yellowish brown (10YR3/4)	Low concentration of historic period artifacts; deeper in east wall of trench
					4.5/5-8	Subsoil: Slightly silty sand with clay inclusions Yellowish brown (10YR5/6)	Sterile soil with large cobbles/small boulders
3	7	5.5	7.5	45 feet	0 to 2	Topsoil: sandy silty loam Black (10YR2/1)	Sod layer with roots
					2 to 5	Disturbed and redeposited subsoil: damp silty sand Dark yellowish brown (10YR3/4)	Contained occasional demolition debris/porcelain plumbing fixture fragments and a buried asphalt layer observed at a depth of 2.25 feet below the ground surface in association with foundation for adjacent concrete walkway. Disturbance was more extensive in west side in association with the construction of the walkway. Occasional large cobbles/small boulders.
					5 to 7.5	Subsoil: slightly silty sand Dark yellowish brown (10YR3/6)	Sterile subsoil with gravel and small rocks
4	14	5	6	44 feet	0 to 6	Mixed topsoil and compact demolition debris	Topsoil immediately underlain by very compact demolition debris; older asphalt layer observed at a depth of 2 feet
					~6	Subsoil: damp slightly silty sand Dark yellowish brown (10YR4/6)	Seemingly sterile, only observed at the base of the trench and not examined further.
5	9	5	1	44 feet	0 to 1	Mixed topsoil and compact demolition debris	Trench abandoned due to the presence of an undocumented utility line (possibly a cable connection) within the topsoil. Immediately under topsoil was a layer of very compact demolition debris.
Notes: *Estimated using spot elevations as seen on recent site surveys (see Figure 4).							

B. OBSERVATIONS WITHIN INDIVIDUAL TRENCHES

TRENCH 1

Trench 1 was oriented north-south and was 3 feet in width, 11.5 feet in length, and 6 feet in depth, terminating at an elevation of approximately 39 feet NAVD88. The trench was slightly narrower than the other trenches as a result of the presence of a drainage line in the immediate vicinity. The non-invasive geophysical survey completed prior to the excavation determined that the drainage line was situated at a depth of approximately 8 feet. The trench was situated within a grassy area to the east of the former bank on Lot 1 and was approximately 80 feet to the east (rear) of the buildings depicted on the 1850 Dripps map and 55 feet southeast of the former Kalbfleisch mansion.

The ground surface in the vicinity of this trench was underlain by a 1-foot-thick layer of a very dark grayish brown (10YR 3/2) silty sandy loam. This sod layer contained roots and infrastructure associated with the

facility's sprinkler system was well as traces of demolition debris and asphalt. The topsoil was underlain by yellowish brown (10YR 5/6) slightly silty/clayey sand that appeared to be sterile subsoil. The subsoil was rocky and contained large cobbles. Increased disturbance was observed in the northern and eastern walls of the trench, likely associated with the construction of the adjacent drainage line. One very thick porcelain fragment—likely related to a plumbing fixture—and one piece of modern-looking brown beer bottle glass were collected from the disturbed subsoil within this trench. No intact historical artifact deposits, a buried ground surface, or shaft features were observed in this trench nor was any evidence observed that would suggest that archaeologically sensitive soils are present.

TRENCH 2

Trench 2 was oriented north-south within the existing parking lot. This trench was 13 feet in length, 5 feet in width, and was excavated to a maximum depth of 8 feet, terminating at an elevation of approximately 37 feet NAVD88. This trench was situated approximately 100 feet to the rear of the buildings depicted on the 1850 Dripps map and was approximately 30 feet southeast of the Kalbfleisch mansion.

The ground surface in this location was underlain by two layers of asphalt measuring a total of 3 inches in thickness followed by a 3-inch-thick layer of light gray ashy bedding material. Directly beneath the bedding material was a layer of black (10YR2/1) compact mixed fill with demolition debris that extended to a depth of 2.5 feet below grade in the west wall of the trench and 3 feet below grade in the east wall. The fill layer was underlain by a layer of what appeared to be disturbed and redeposited subsoil or fill. This layer included dark yellowish brown (10YR3/4) silty sand with low concentrations of historic period artifacts. The layer appeared to slope down to the east and extended to a maximum depth of 4.5 feet in the west wall of the trench and 5 feet in the east wall of the trench. Beneath the disturbed layer was what appeared to be sterile subsoil made up of yellowish brown (10YR 5/6) slightly silty sand with clay inclusions. This layer contained large cobbles/small boulders and no artifacts were collected from that level.

Artifacts recovered from the disturbed and redeposited fill layer are described below. No buried ground surfaces or shaft features were observed in this trench nor was any evidence observed that would suggest that archaeologically sensitive soils are present.

ARTIFACTS RECOVERED FROM TRENCH 2

Forty-nine artifacts were recovered from the disturbed subsoil layer observed within Trench 2, the majority of which were small ceramic fragments that were highly damaged, suggesting a repeated pattern of disturbance and redeposition. This disturbance was likely the result of redevelopment and landscape modification on the property as part of its initial subdivision into smaller urban parcels in the 1860s; the initial development of the nurse's residence and associated landscaping and rear yard use in the first half of the 20th century; and the construction of the existing parking lot and associated infrastructure in the late 20th century.

Faunal remains collected included small and highly weathered fragments of clam and oyster shells and butchered bones likely from a large mammal. Additional crumbling faunal remains in a poor state of preservation were not collected or analyzed. Architectural debris within the assemblage included a fragment of a thick possible limestone tile, a partial white earthenware doorknob with white glaze, and aqua flat glass that may have been from a window or fixture. At least three small fragments of olive green, bright green, and brown bottle glass—some seemingly modern—were recovered from this layer. At least two fragments of aqua glass paneled medicine bottles were included within the disturbed fill layer. One featured a partially embossed mark "...LYN..." and the other had a molded base with a jagged pontil scar that may have been produced in the mid-19th century. A total of 24 ceramic fragments were recovered, most of which had broad date ranges spanning the 18th through 20th centuries, including lead-glazed redware; red-bodied

stoneware; white earthenware; white granite; shell edge; and dipped earthenware. Finally, two personal artifacts were recovered: a pipe stem fragment with stripes and small stars or fleurs-de-lis and a blue and white glass marble with no mold seams or marks, suggesting that it was produced after the 1920s (Samford 2018). The low concentration of artifacts, the heavy damage/weathering observed, and the wide variety of historical ceramics suggests that the artifact assemblage does not represent an intact deposit that would suggest the presence of archaeological resources in the vicinity.

TRENCH 3

Trench 3 was oriented north-south in a small patch of grass next to and slightly above the grade of the parking lot. This trench was excavated as close to the rear wall of the former Kalbfleisch mansion as physically possible given existing structures associated with extant building on Lot 3. The Trench was approximately 5 to 6 feet east of the rear wall of the former mansion and was separated from the existing building by a sub-grade concrete walkway approximately 2 to 3 feet lower than the grade of the parking lot to the east. The non-invasive geophysical survey documented active electrical lines within a sub-grade walkway located to the west of this portion of the parking lot and along the northern end of the patch of grass north of the trench. Due to the presence of these utilities and other obstructions, the lower portion of this trench was excavated at an angle and measured 7 feet in length and 5.5 feet in width. The maximum depth of the trench was 7.5 feet below ground surface, or an elevation of 37.5 feet NAVD88.

The ground surface was underlain by a layer of black (10YR 2/1) sandy silty loam topsoil with roots and evidence of sprinkler-related infrastructure that extended to a depth of 2 feet. Underneath the topsoil was a layer of disturbed and redeposited subsoil that extended to a depth of 5 feet below ground surface. Within this layer, a buried asphalt surface was encountered at a depth of approximately 3 feet, seemingly in association with the foundation wall of the adjacent walkway that was encountered at the same depth in the west wall of the trench. As a result of the construction of the adjacent walkway, there was greater soil disturbance observed in the west wall. In the east half of the trench, where soils appeared to be less disturbed, the soil was a dark yellowish brown (10YR3/4) damp silty sand with occasional large cobbles/small boulders. The disturbed soils included fragments from porcelain plumbing fixtures, bricks, and other demolition debris that was not collected or analyzed. Between depths of 5 and 7.5 feet below the ground surface was a sterile subsoil comprised of dark yellowish brown (10YR 3/6) slightly silty sand with gravel, small rocks, and clay inclusions. Low concentrations of demolition debris observed within these soils appears to have fallen in from upper levels during excavation. No buried ground surfaces or shaft features were observed in this trench nor was any evidence observed that would suggest that archaeologically sensitive soils are present.

TRENCHES 4 AND 5

As shown in the approved Archaeological Work Plan, Trenches 4 and 5 were initially planned to be excavated as two separate trenches within the grassy area to the south of Jennings Hall. However, during the excavation of Trench 5, an undocumented active utility line—possible a cable television connection—was encountered within the top foot of the trench. The trench—which measured approximately 5 by 9 feet—was therefore abandoned. Trench 4 was opened 6 feet to the west and was 5 by 14 feet and was excavated to a depth of 6 feet, or an elevation of approximately 38 feet NAVD88.

The ground surface of Trench 4 was immediately underlain by very compact construction/demolition debris. A buried asphalt surface was encountered in the eastern section of the trench at a depth of 2 feet below ground surface. Historical aerial photographs from the 1950s¹ appear to depict a rectangular paved

¹ <https://www.arcgis.com/apps/instant/media/index.html?appid=c011fd05a86a4c09bd0b91fbc387f3eb>

area in this general vicinity. Beneath the very disturbed and compacted material, subsoil was encountered at a depth of 6 feet. The subsoil was composed of dark yellowish brown (10YR 4/6) damp slightly silty sand. No buried ground surfaces or shaft features were observed in this trench nor was any evidence observed that would suggest that archaeologically sensitive soils are present. It is believed that this portion of the project site was extensively disturbed during the construction of the adjacent Jennings Hall.

A. CONCLUSIONS

Each of the five trenches excavated for this Phase 1B Archaeological Investigation exhibited signs that the entire project area was heavily disturbed during the construction of Jennings Hall. Generally, three stratigraphic levels were encountered: (1) topsoil with evidence of roots or landscaping infrastructure; (2) a layer of disturbed and redeposited subsoil or other fill material, often containing demolition debris or low concentrations of disturbed and redeposited historical artifacts; and (3) sterile subsoil. Trench 2, excavated within the parking lot, was the only trench where low concentrations of historic period artifacts were recovered. The artifacts included fragments of architectural and personal objects, both modern and historical glass bottle fragments, and a wide range of ceramics with production date ranges spanning the 18th through the 20th century. The ceramic artifacts were small and featured extensive damage, suggesting the disturbance and redeposition of the soils in this area on multiple occasions. The disturbed soils observed in Trench 2 sloped down to the east and were at least one foot deeper in the eastern wall of the trench, likely the result of landscape modification resulting from the transition of the project site from an early-19th century farm to a late-19th century mansion; from the construction of the existing bank and former nurse's residence in the early 20th century; and the construction of the Jennings Hall wing and redevelopment of the interior courtyard and parking lot in 1980 and the associated utilities that extend beneath the undeveloped portions of Lot 3.

B. RECOMMENDATIONS

The results of the testing appear to suggest that the disturbance from the construction of Jennings Hall and the surrounding buildings has removed traces of historical building foundations and backyard deposits, including any potential shaft features. Given the extent and depth of this disturbance, it is unlikely that the construction of the proposed project would result in the disturbance of archaeological resources, including domestic shaft features. No further archaeological analysis is recommended.

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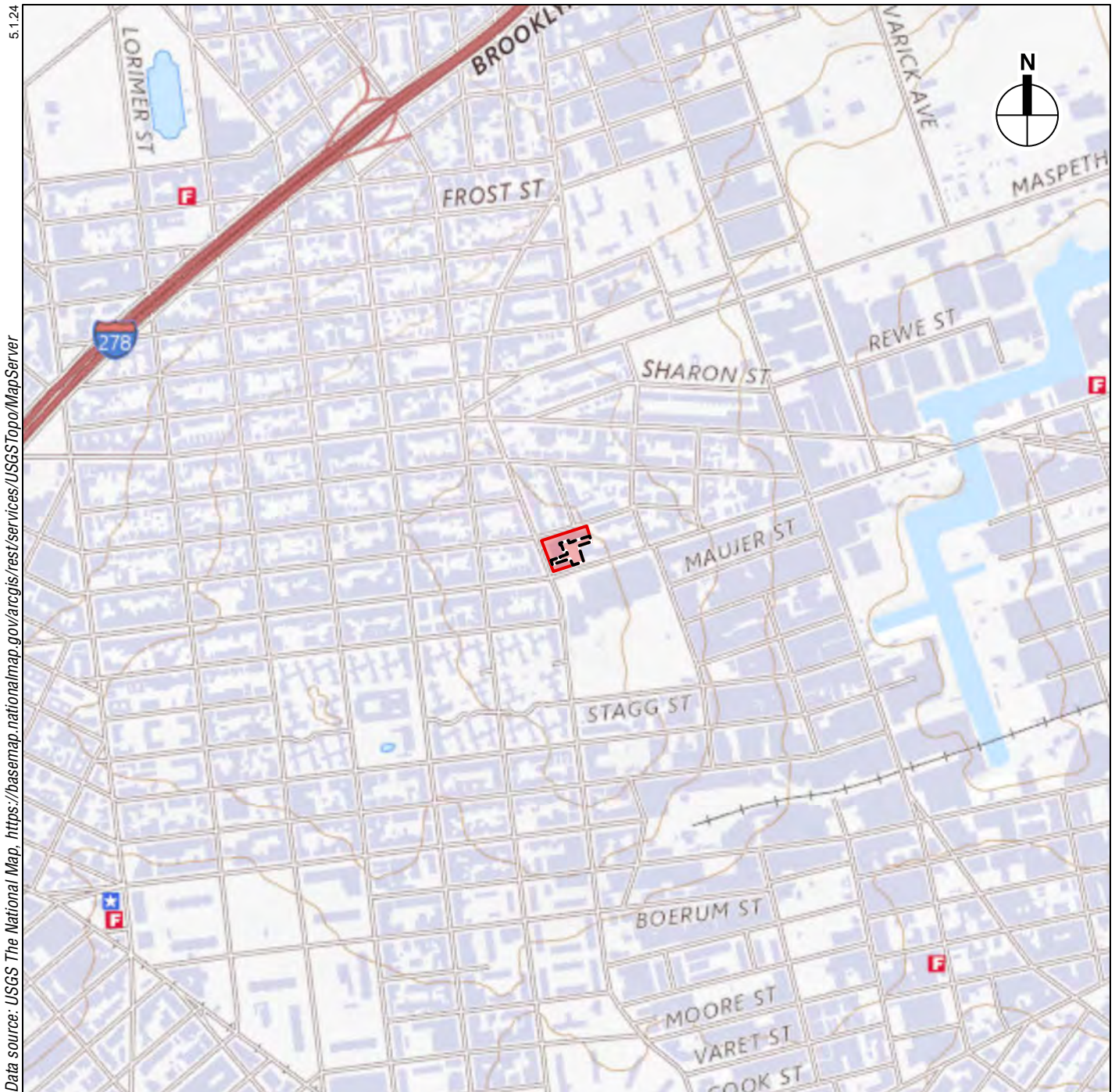
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Figures



0 2,000 FEET

- Project Site
- Area of Archaeological Sensitivity

Approximate coordinates of Project Site:
73°56'25"W 40°42'45"N

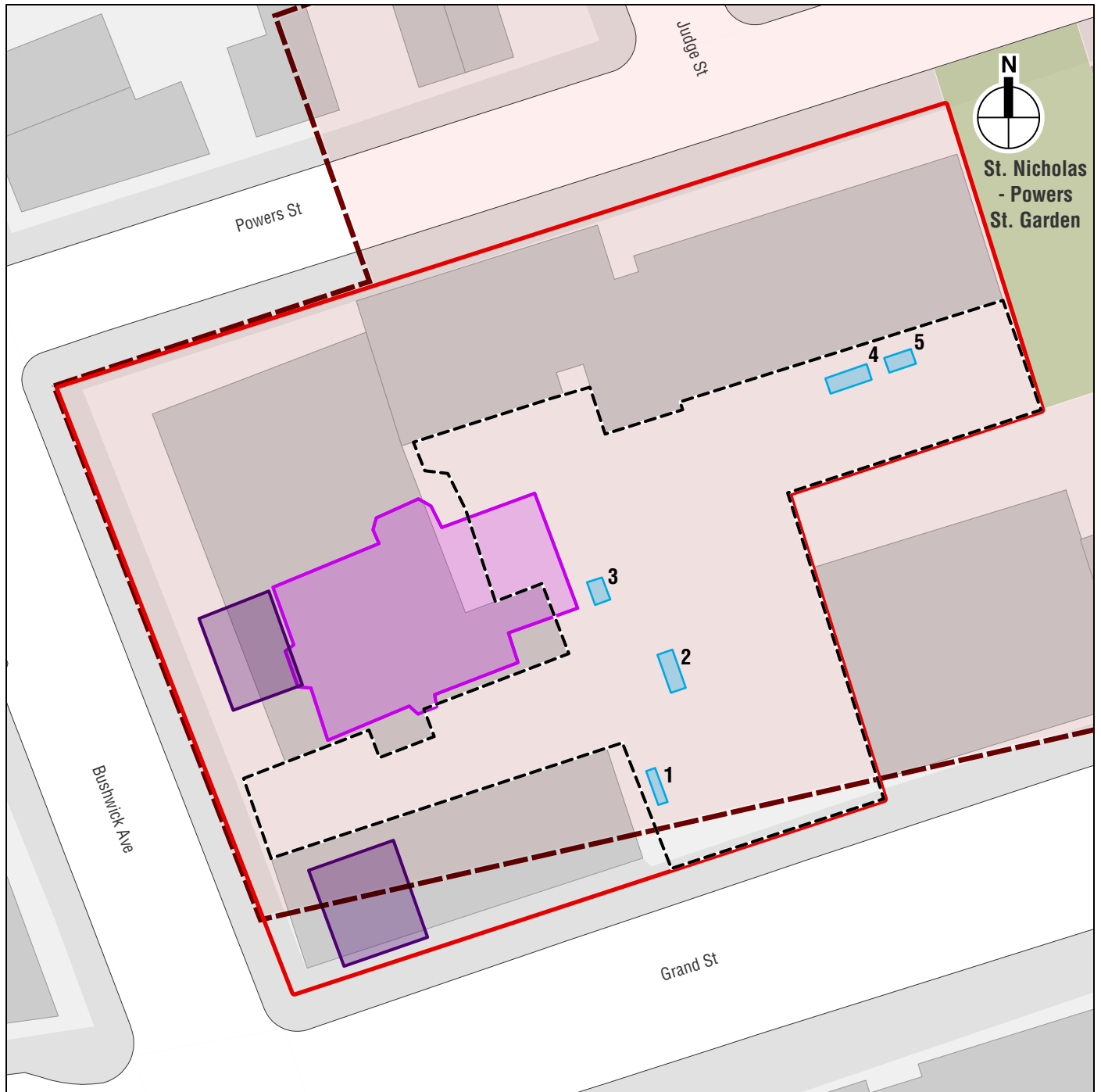


USGS Topographic Map – Brooklyn Quadrangle



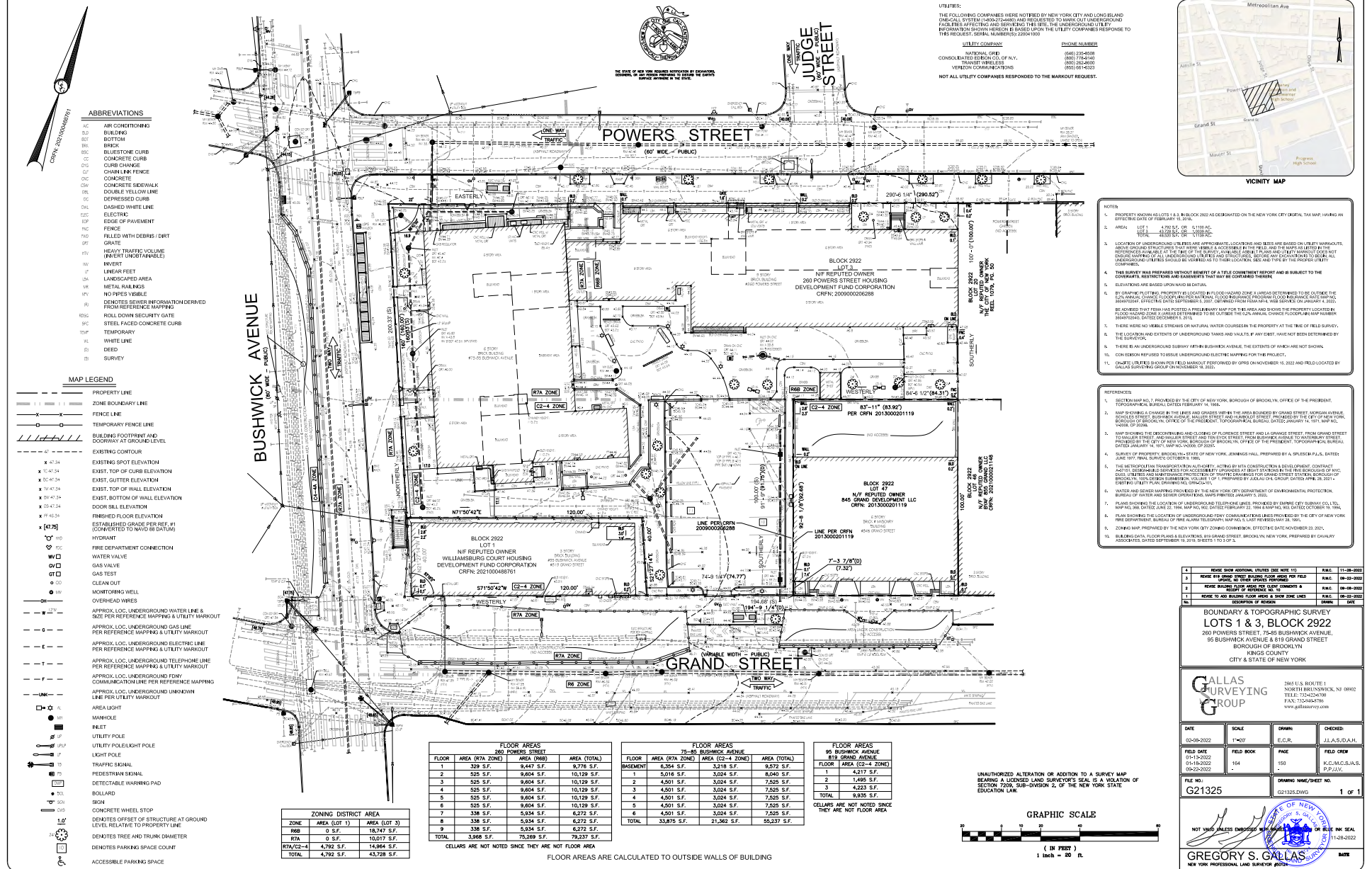
-  Project Area
-  Area of Archaeological Sensitivity

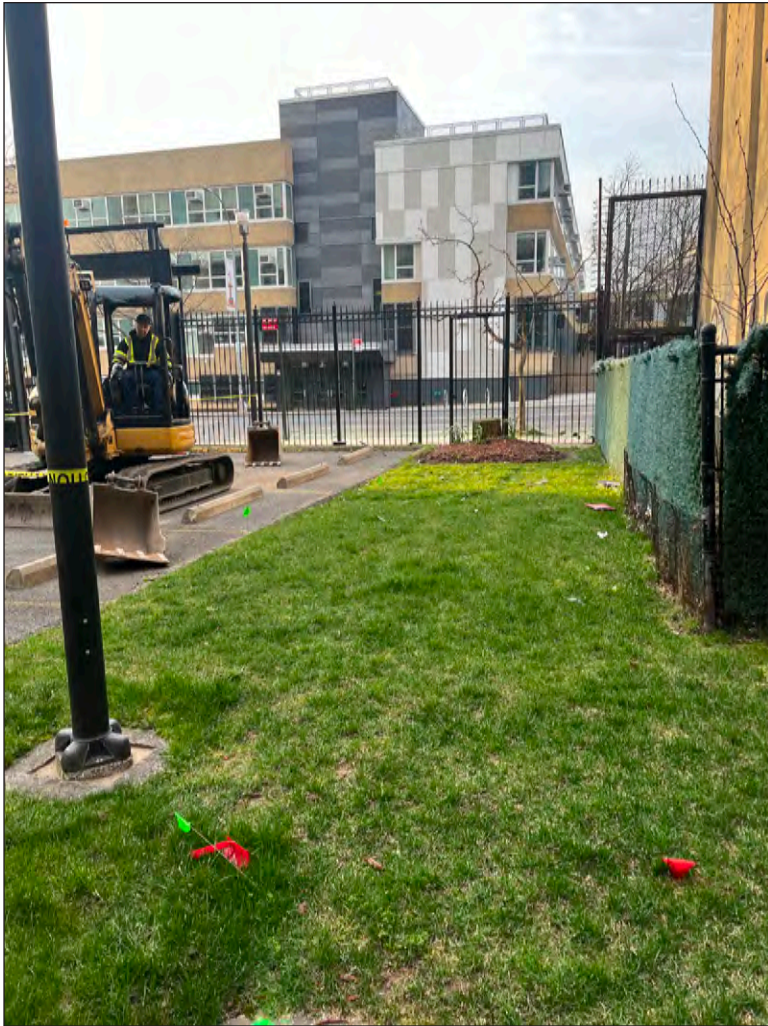
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- Project Site
- Phase 1A Area of Sensitivity (Bergoffen 2023)
- Van Alst Farm Boundary
- Buildings on 1850 Dripps Map (Approximate)
- Kalbfleisch Mansion
- Location of Trench

0 100 FEET





Looking south at the location of Trench 1; the red and green pin flags mark the locations of existing gas and drainage utility lines, respectively.

1



View north of Trench 1 after excavation, showing clean subsoil below the depth of the existing sod layer; a damaged sprinkler line is visible on the left side of the photograph.

2



View of the eastern wall of Trench 2, showing the layers of disturbed fill between the pavement/bedding and the clean subsoil.

3



View of the western wall of Trench 2, where the disturbed fill layers were slightly shallower; note: the indentation in the wall is situated near the interface between the disturbed soils and the subsoil and was formed by the removal of a large cobble, seen in the trench to the right of the photograph.

4



Looking northwest at the location of Trench 3 showing the grade change to the north and west; electrical lines extend in the walkway west of the grassy area and in the vicinity of the lamppost along the northern side of the parking lot.

5



Image of Trench 3 after excavation, showing clean subsoils with disturbed soils in the western end (bottom of photograph)

6



Looking north at an undocumented utility line at a shallow depth within the abandoned Trench 5.

7



Looking west at Trench 4, showing densely packed disturbed soils throughout the entire depth of the trench; project-related impacts in this area will not exceed the depth of disturbed soils.

8

Appendix A: Artifact Catalog

Appendix A: Artifact Catalog

Trench	Provenience	Group	Object	Part	Material/ Ware Type	Color	Count	Production Date(s)	Comments	Source
1	Backdirt	Architectural	Unknown fixture	Fragment	Porcelain?	White	1		Very thick; molded lines on one side	
		Kitchen	Beer Bottle	Neck/finish fragment	Glass	Brown	1	20th c.?	Crown finish with mold seams, appears modern	
2	Backdirt from disturbed and redeposited layer 2.5 to 5.5 feet below ground surface	Faunal	Clam	Whole	Shell		1		Highly weathered	
		Faunal	Oyster	Fragment	Shell		5		Highly weathered	
		Faunal	Clam	Fragment	Shell		2		Highly weathered	
		Faunal	Large Mammal	Fragment	Bone		5		Highly weathered; all have butcher marks	
		Architectural	Brick or Tile	Fragment	Limestone?		1		3/4-inch thick and flat on all sides	
		Architectural	Doorknob	Fragment	White earthenware	White	1		Half doorknob with white glaze	
		Architectural	Window	Fragment	Glass	Aqua	1		Very thick (almost 0.25 inch)	
		Kitchen	Bottle	Body fragment	Glass	Olive Green	1		Small	
		Kitchen	Bottle	Body fragment	Glass	Bright Green	1	20th c.?	Small, appears modern	
		Kitchen	Bottle	Body fragment	Glass	Brown	1	20th c.?	Small, appears modern	
		Kitchen	Unknown	Fragment	Lead glazed redware	Red	1	18th–19th c.?	Small, curved, dark brown glaze	Jefferson Patterson Museum ("JeffPat") n.d.
		Kitchen	Unknown	Fragment	Red bodied stoneware	Red	1	18th–19th c.?	Small and curved, dark brown glaze exterior, light brown glaze interior	JeffPat n.d.
		Kitchen	Unknown	Fragment	White earthenware with white glaze	White	7	18th–20th c.	Highly fragmented and missing glaze, all different thickness	JeffPat n.d.
		Kitchen	Unknown	Fragment	White granite	White	2	1840–20th c.	Thick; one is a rim fragment and both are molded; fragmentary and damaged	JeffPat n.d.
		Kitchen	Unknown	Rim fragment	Green shell edge white earthenware	White and green	1	Mid-19th c.?	Very small and damaged; appears incised	JeffPat n.d.
		Kitchen	Unknown	Rim fragment	Dipped earthenware	Green/gray	1	18th–20th c.	Small fragment with incised marks around rim	JeffPat n.d.
		Kitchen	Unknown	Body fragment	Dipped earthenware	White and brown	1	18th–20th c.	Three parallel dark brown stripes	JeffPat n.d.
		Kitchen	Unknown	Body fragment	Dipped earthenware?	White	1	18th–20th c.	Very small and damaged; has dark brown and white glaze on one side	JeffPat n.d.
		Kitchen	Unknown	Body fragment	Dipped earthenware?	Blue and white	1	18th–20th c.	Very small; blue glaze on exterior and white on interior	JeffPat n.d.
		Kitchen	Unknown	Body fragment	White earthenware	White	1	c. 1818-1867	Molded; light blue transfer print with geometric design on one side	JeffPat n.d.
		Kitchen	Plate?	Base fragment	White earthenware	White	1	c. 1818-1867	Damaged, molded; partial light blue transfer print remnant on one side and partial foot ring on the other	JeffPat n.d.
		Kitchen	Hollowware	Body fragment	White earthenware	White	1	c. 1818-1867	Molded; light blue transfer print with landscape scene on exterior	JeffPat n.d.

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Trench	Provenience	Group	Object	Part	Material/ Ware Type	Color	Count	Production Date(s)	Comments	Source
2 (cont'd)	Backdirt from disturbed and redeposited layer 2.5 to 5.5 feet below ground surface	Kitchen	Plate?	Rim fragment	White earthenware	White	1	c. 1818-1867	Damaged, light blue transfer print floral pattern on interior	JeffPat n.d.
		Kitchen	Unknown	Body fragment	White earthenware	White	2	c. 1800-1850	Very small and damaged, remnant dark blue transfer print on one side	JeffPat n.d.
		Kitchen	Plate?	Rim fragment	White earthenware	White	1	c. 1800-1850	Very small; remnant dark blue transfer print on one side	JeffPat n.d.
		Kitchen	Unknown	Body fragment	White earthenware	White	1	c. 1829-1867	Very small and damaged; remnant dark red/purple transfer print floral pattern on one side	JeffPat n.d.
		Medicine	Bottle	Body fragment	Glass	Aqua	1	19th c.	Badly damaged; thick; heavy patina; remnant embossing "...LYN..."	JeffPat n.d.
		Medicine	Bottle	Base and body fragment	Glass	Aqua	1	19th c.	Panel bottle with molded base where mold seam continues across a deep (0.2 inch), jagged pontil scar	JeffPat n.d.
		Personal	Pipe	Stem fragment	White ball clay	White	1	19th c.	Mold seams; three stripes at one end with 4 to 5 stars or fleurs-de-lis on either side; possible TD pipe?	
		Personal	Marble	Whole	Glass	Blue and white swirls	1	After 1926	Highly scratched, small dings; machine made with no marks	Samford 2018
TOTAL:							49			