

GO Broome Street Development, Projected Development Site 2

PREPARED FOR

384 Grand Street Housing
Development Fund Company, Inc.
384 Grand Street, New York, NY, 10016

PREPARED BY



**VHB Engineering, Surveying,
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Section 1

Introduction

VHB Engineering, Surveying, Landscape Architecture, and Geology P.C. (VHB), New York, New York, has completed a Phase 1B archaeological investigation in connection with the potential redevelopment of a portion of the 384 Grand Street site (Block 346, Lot 95) in Manhattan, referred to as Projected Development Site 2. The archaeological investigations were performed in accordance with a Phase 1B Work Plan for archaeological testing that was approved by NYC Landmarks Preservation Commission (LPC) on April 20, 2020. All archaeological work has been conducted in accordance with the City Environmental Quality Review (CEQR) process in connection with an application to the Department of City Planning (“DCP”) that was made for a separate project, the GO Broome Street Development project, on behalf of GO Broome LLC and The Chinatown Planning Council Housing Development Fund Company, Inc..

Project Name:	GO Broome Street Development
Project Address:	384 Grand Street (Manhattan Block 346, Lot 95, identified as “Projected Development Site 2” in the project’s CEQR review)
Applicant Name:	GO Broome LLC and The Chinatown Planning Council Housing Development Fund Company, Inc. (CPC) c/o GO Broome Street Development
Applicant Contact:	Simeon Maleh, Vice President, Gotham 423 Park Avenue, 2 nd Floor, New York, NY 10016 SMaleh@GothamOrg.com
Lead Agency:	New York City Department of Planning (DCP)
Lead Agency Contact:	Olga Abinader, Director, Environmental Assessment and Review Division
Secondary Agency:	Landmarks Preservation Commission (LPC)
Secondary Agency Contact:	Amanda Sutphin, Director; Jessica MacLean, Review Archaeologist

Archaeology PI: Allison McGovern, PhD, RPA, Senior Archaeologist at VHB
Mechanical Services: StructureTech NYC
Lot 95 Owner: 384 Grand Street Housing Development Fund Company, Inc.

Project Description and Review Summary

VHB has prepared this Phase 1B Archaeological Report in connection with the proposed redevelopment of a portion of the site located at 384 Grand Street (Manhattan Block 346, Lot 95, also known as Projected Development Site 2). The redevelopment is anticipated to consist of the increase in commercial space at the site by approximately 4,759 gsf; the existing 5-story mixed-use building on the site would remain.

This commercial enlargement was studied as part of the environmental review for a mixed-use project undertaken by GO Broome LLC and The Chinatown Planning Council Housing Development Fund Company, Inc., located at 60 Norfolk Street (Manhattan Block 346, Lots 37 and 75, also known as Projected Development Site 1). This GO Broome Street Development project included several discretionary land use actions from the New York City Planning Commission and was subject to review under the New York City Environmental Quality Review (CEQR) and Uniform Land Use Review Procedure (ULURP). A Final Environmental Impact Statement (FEIS), following CEQR procedures and guidelines, was prepared for the project (19DCP119M). NYC Department of City Planning (DCP), on behalf of the New York City Planning Commission, the lead agency for the project's environmental review under CEQR, issued a Notice of Completion for the FEIS on January 10, 2020. The project was approved by the City Council in February 2020.

This report includes the results of Phase 1B archaeological investigation for Projected Development Site 2, which was completed in consultation with LPC. This report has been prepared for archaeological review by NYC LPC for CEQR¹.

¹ Consistent with a Restrictive Declaration for Projected Development Site 2.

Section 2

Environmental and Historical Context

Projected Development Site 2 comprises Manhattan Block 346, Lot 95 (former Block 351²), located at the northwest corner of the intersection between Suffolk and Grand Streets in the Lower East Side neighborhood, a densely settled urban landscape. It is bounded to the north by GO Broome Projected Development Site 1 (Block 346, Lot 75), to the east by Suffolk Street, to the south by Grand Street, and to the west by Block 346, Lot 1 in Community District 3 (**Figure 2-1** through **Figure 2-3**).

Topography of the area is gently sloping, but the ground surface within Projected Development Site 2 is relatively level with an average elevation of 30 feet (9 meters) above mean sea level (**Figure 2-1**). As mentioned in the Phase 1A report, the modern-day gently sloping landscape was well-established by the 19th century. Indeed the 1865 *Viele Sanitary and Topographical Map of the City and Island of New York* shows the streets laid out over original terrain and water courses (in Phase 1A report); the elevation is shown as similar to the 1995 USGS topographic map. The Viele map also shows marshland northeast and southeast of the Projected Development Site and the Collect Pond approximately 4,000 feet to the southwest; these freshwater resources were filled in by the mid-19th century.

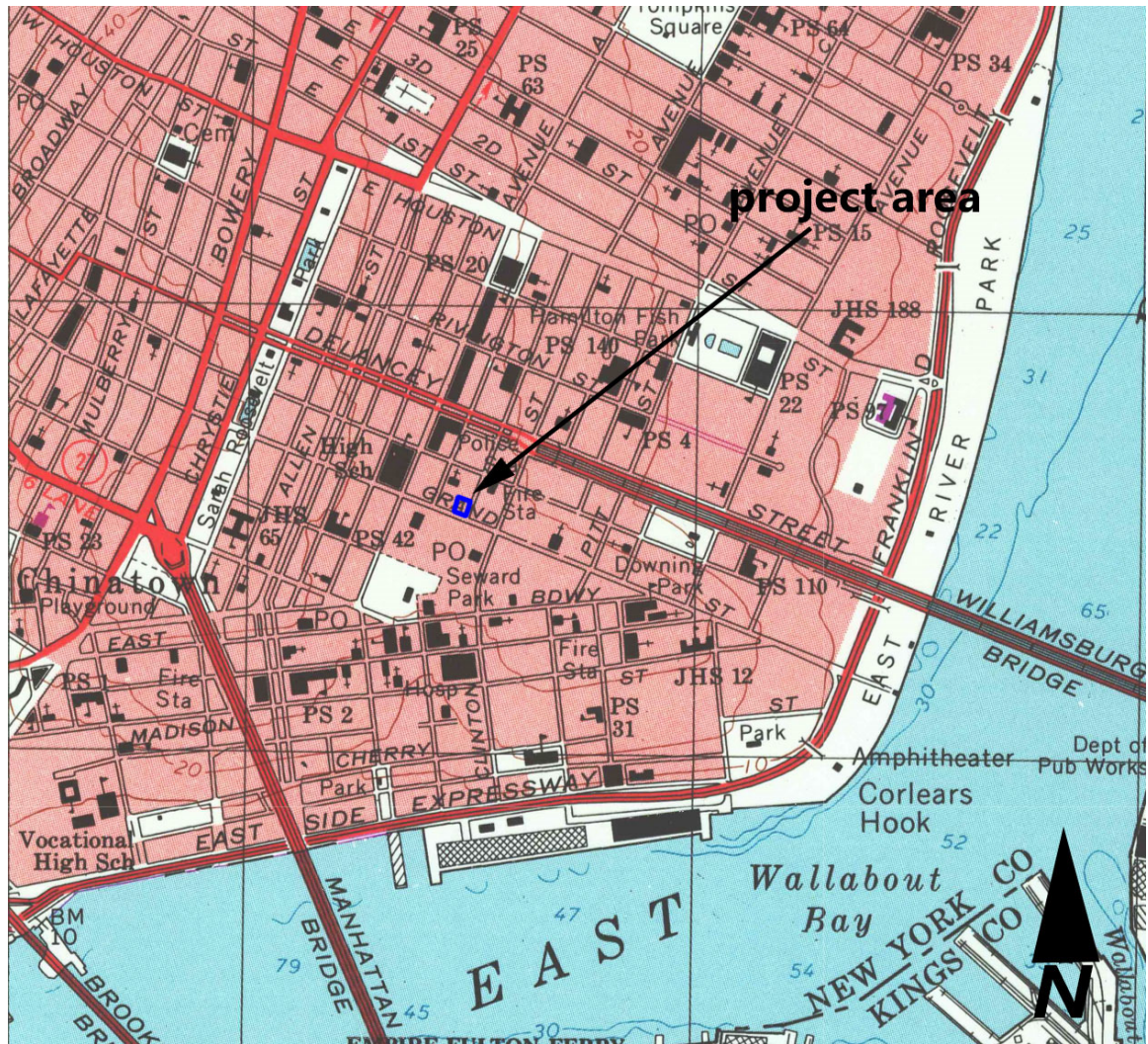
According to the “Surficial Geologic Map of New York” by the New York State Museum State Geological Survey, the surficial geology at the site consists of till. The till is underlain by the Ravenswood Granodiorite which consists of granitic to gneissic granite and diorite. Geotechnical investigations have not been conducted at Projected Development Site 2. However, recent geotechnical investigations at Projected Development Site 1 revealed subsurface conditions consisting of fill, described as gray to brown sand with varying proportions of gravel, silt, and construction debris, below a surface layer of asphalt. A layer of brown sand (upper sand) with varying proportions of gravel and silt was encountered below the fill layer in all borings within Projected Development Site 1. The stratum was first encountered at depths ranging from approximately 6 feet to 15 feet below existing grades.

² The Block and Lots were renumbered in the 1980s.

Groundwater was encountered at 26.5-29 feet below grade within the test borings at Projected Development Site 1.³ There are no surface forms of fresh water within or adjacent to the site. The nearest source of water is the East River, located 0.55 mile (885 meters) to the east.

One extant building is located within Lot 95. Built c.1894, the building at 384 Grand Street is a row of three 5-story brick tenements. The building has been determined not eligible for listing on the S/NR (USN 06101.018341). Minimal patchy grass is evident along the north and west elevations of the building; these vacant areas comprise the archaeological Area of Potential Effect (APE) (Figure 2-3; Photo 4-1, Photo 4-7).

Figure 2-1 1995 USGS Topographic Map, Brooklyn, New York (1:24,000)



³ Geotechnical Investigation Report Proposed Broome Street Development- Norfolk Building (Block 346, Tax Lots 37 and 75) New York, New York, Langan Project No.: 100646801. Prepared by Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., October 21, 2020; Geotechnical Investigation Report Proposed Broome Street Development- Suffolk Building (Block 346, Tax Lot 75) New York, New York, Langan Project No.: 100646801. Prepared by Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., October 21, 2020.

Figure 2-2 Tax Map Showing Location of the Project Area

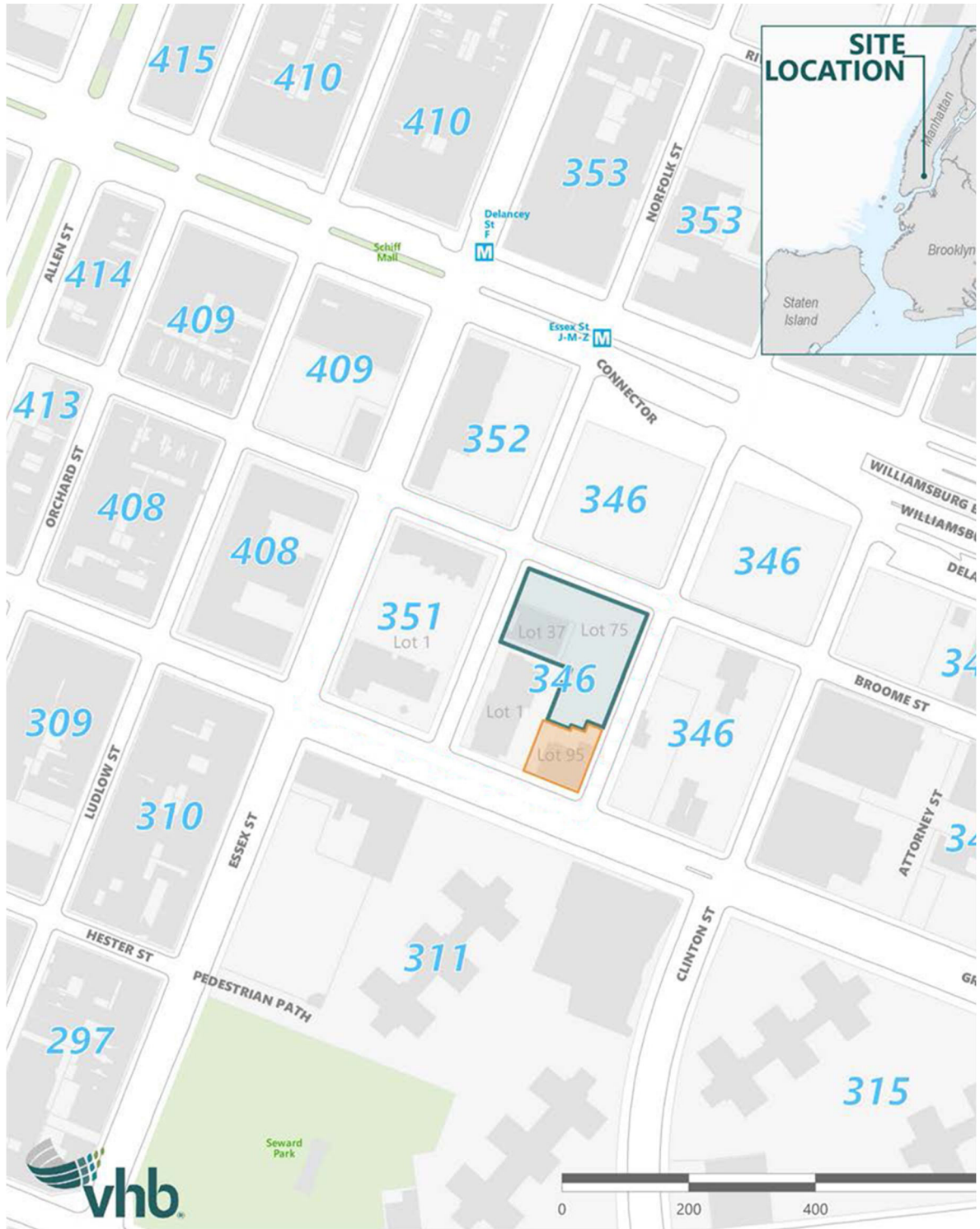
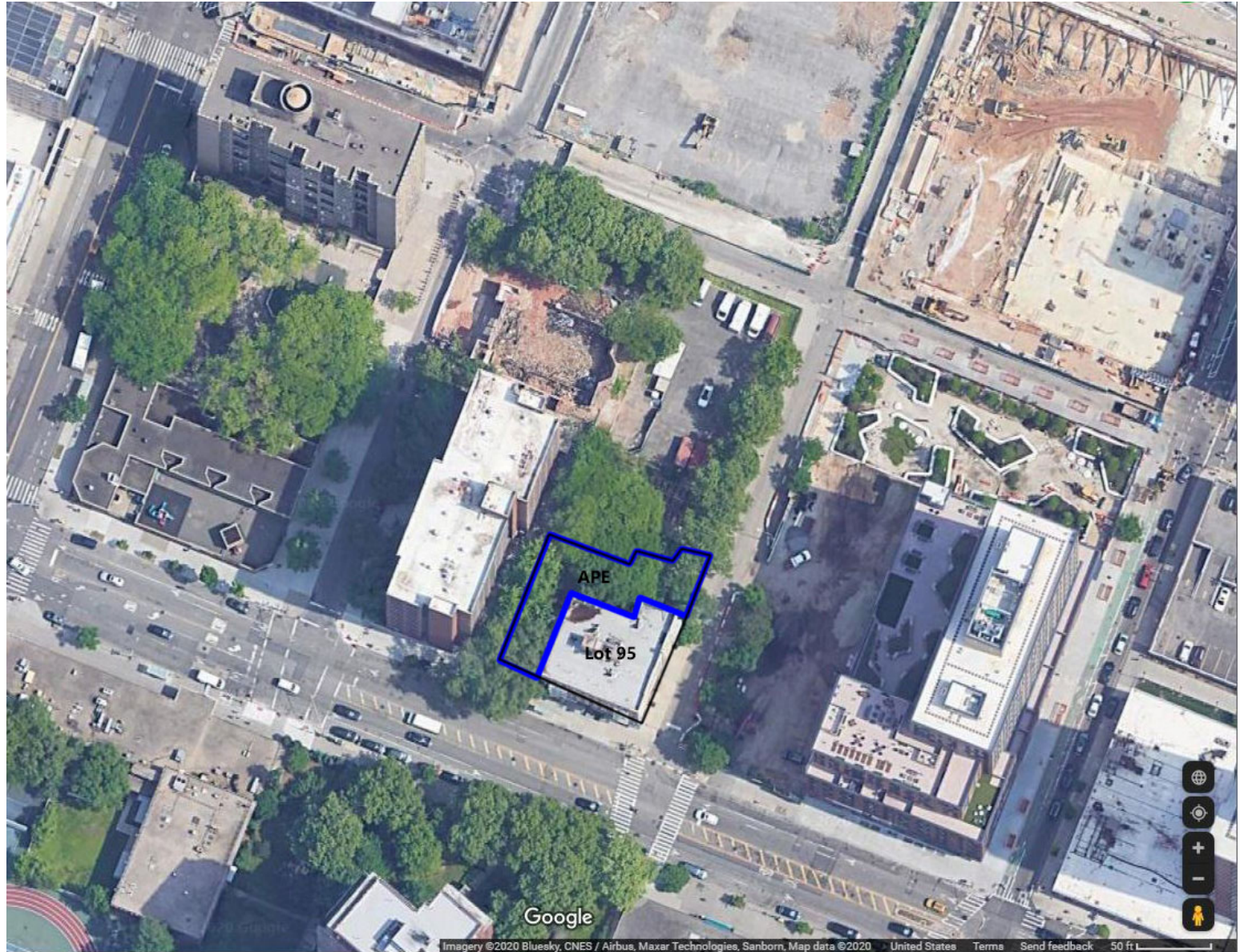


Figure 1 - Site Location Map

Projected Development Site 1 Projected Development Site 2

Figure 2-3 Aerial View of the Project Site



Previous Archaeological Work

In a letter dated November 26, 2018, LPC identified the Project Area (called “Projected Development Sites 1 and 2” in the environmental review documents for the project) as having the potential for archaeological sensitivity and recommended “that an archaeological documentary study [Phase 1A] be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary.”

A Phase 1A Archaeological Documentary Study was prepared for the GO Broome Projected Development Sites 1 and 2 in January 2019 and updated based on consultation with the Archaeology Department at LPC. The study concluded that portions of Projected Development Sites 1 and 2 have a moderate to high sensitivity for the presence of 19th century archaeological features. If present, expected site types might include shaft features (e.g., privies, wells, cisterns), as well as archaeological evidence for residential and/or commercial use of rear yard space. Based on this assessment, Phase 1B testing was recommended to determine the presence or absence of suspected archaeological features and other archaeological materials on site. In a letter dated August 1, 2019, LPC concurred with the findings of the Phase 1A and requested that a Work Plan be developed to determine the scope of Phase 1B testing.

VHB prepared an Archaeological Work Plan for Phase 1B testing of Projected Development Site 2. The Phase 1B Work Plan was approved by LPC on April 20, 2020.

Sensitivity Assessment for Projected Development Site 2

As discussed in the Phase 1A report, three archaeological sites have been documented within a half-mile radius of the Projected Development Sites and approximately 12 archaeological survey reports have been completed and filed with the OPRHP and/or LPC. The archaeological documentation for these sites and survey areas were reviewed for the Phase 1A report to develop a contextual understanding of the archaeological sensitivity of the area, the range of potential site types that might be encountered in field investigations, the field methods that have been used to investigate similar project areas, and the results of similar investigations in the area. A review of previous archaeological work also provides important information about site formation processes and disturbance at similar sites.

Previous archaeological work in the Lower East Side area includes mostly Phase 1A documentary studies, some of which have led to Phase 1B and Phase 2 testing for the presence of archaeological features. At least two of these studies have been conducted for rezoning and redevelopment projects: the Lower East Side Rezoning Project in 2018 and the Seward Park Mixed-Use Development Project in 2011. The latter examined blocks north and east of the Projected Development Sites. Recommendations were made for subsurface testing of select blocks within the Seward Park Mixed-Use Development area as a result of a Phase IA study (AKRF 2011), but Phase IB testing yielded no evidence of archaeological sites (AKRF 2014).

According to LPC sensitivity models, the archaeological sensitivity of the Project Area is based on documentary and archaeological evidence for Colonial and 19th century settlements in the area. However, as indicated in the Phase 1A report, the potential to recover Colonial-era archaeological sites within Projected Development Site 1 is low, due to the development and re-development of the city block in the 19th and early 20th centuries.

In the 19th century especially, tenement buildings lined the streets of the Lower East Side, often with associated features like cisterns, wells and privies and school sinks which are occasionally recovered archaeologically. The archaeological remains at 97 Orchard Street—the Lower East Side Tenement Museum—is a prime example, as a backyard privy/school sink as well as historic artifacts were recovered from the rear lot of the building (Geismar 1999; Howe 2000).

Recent Phase 1B/2 archaeological investigations at the neighboring GO Broome Projected Development Site 1 revealed three brick privy vaults behind demolished tenement buildings that lined Broome Street, and the remains of a brick oven extension off one of the demolished tenement buildings that fronted Suffolk Street (McGovern 2020). There are no National Register listed or previously determined eligible archaeological sites within or adjacent to the Projected Development Sites. Projected Development Site 2 is not located within any State, National, or LPC-designated historic districts.

Historic Land Use within Projected Development Site 2

The following review of historic land use within the Project Area is based on research performed for and presented within the Phase 1A report. It is included here again as a context for understanding archaeological potential and relevant field testing strategies.

Prior to the 19th century, the area in and around the Projected Development Sites was primarily agricultural. This Manhattan Block was part of the farm and extensive landholdings of the Delancey family. Large farms that were laid out by the Dutch in the 17th century were acquired by English settlers when the British seized the New Amsterdam colony. Following the end of the American Revolution, English landholdings like the Delancey farms (of which the Projected Development Sites were a part) were reclaimed from Loyalists and resold. Shortly thereafter, development of the Lower East Side accelerated with the division of farms into small, platted lots.

The Projected Development Sites evolved to include frame dwellings and stores in the 1820s and 1830s. As immigration increased through the 19th century, the neighborhoods swelled with new arrivals. Shortly after the middle of the 19th century, frame dwellings were replaced by more substantial, 5-story brick tenements. In some cases, historic lots within the Projected Development Sites 1 and 2 included two multi-floor residential structures—one facing the street and one at the rear of the lot. A review of Census Data from 1880 and 1900 indicates that renters comprised most if not all of these properties, and those residents changed between the decades of the Census. Stores were located in the first floor of most of the buildings. Mixed within these buildings in the Projected Development Sites were Christian and Jewish houses of worship.

Between 1905 and 1950, several businesses were listed in the City Directories for the lots in Block 346, including printing services (1905-1950), a coppersmith and tinsmith (1920), and laundry services (1922, 1947-1968), plumbers, grocers, and a delicatessen. The 1950 Sanborn Fire Insurance Map continues to show the presence of 5-story tenements along Broome, Suffolk, and the southeast corner of Suffolk and Grand Streets within Projected Development Site 2. The Projected Development Sites witnessed minimal change through the 20th century until the 1970s, when the block was targeted for urban renewal. At that time, many of the late 19th century buildings were demolished and replaced by paved parking lots and gardens.

Below is a review of the history of development on Block 346, Lot 95, and potential archaeological sensitivity.

The Archaeological APE

The archaeological APE was part of the Delancey farm and landholdings in the 18th century and appears to be a part of the same subsequent ownership and partition as Lots 37 and 75 (as outlined in the Phase 1A report). Prior to the 1980s, this section of the Projected Development Sites was identified as Block 351, Section 2, Lots 54 (25'x50'), 55 (25'x75'), 56 (25'x75'), 57 (25'x100') and 58 (25'x100'). The historic addresses and functions with Lot 95 are illustrated in **Table 2-1**.

Table 2-1 Historic Lots by Historic Address Within Present-Day Lot 95, and Their Descriptions Based on Historic Maps

Historic Address	1854	1857	1894	1903
43 Suffolk St	Brick dwelling with store under, rear brick extension	Brick dwelling with store under, rear brick extension	Brick 5-story dwelling with store with extension; framed outbuilding	Brick 5-story dwelling with store; framed outbuilding
41 Suffolk St	Framed dwelling with store under			
39 Suffolk St				
390 Grand Ave	Framed dwelling with store under	[Not within block]	[Not within block]	[Not within block]
388 Grand Ave	Framed dwelling with store under; brick dwelling in rear lot		Brick 5-story dwelling with store built to the limits	Brick 5-story dwelling with store built to limits
386 Grand Ave	Framed dwelling with store under; brick dwelling in rear lot	Framed dwelling with store under; brick dwelling in rear lot	Brick 5-story dwelling with store	Brick 5-story dwelling with store; one 1-story frame outbuilding
384 Grand Ave	Framed dwelling with store under; brick dwelling in rear lot	Framed dwelling with store under; brick dwelling in rear lot	Brick 5-story dwelling with store and dumbwaiter; brick 4-story residence in rear lot	Brick 5-story dwelling with store and dumbwaiter; one 1-story frame outbuilding; brick 4-story residence in rear lot
382 Grand Ave		Framed dwelling with store under and brick rear extension; brick dwelling in rear lot	Frame 3-story dwelling with brick 1-story extension; one 1-story frame outbuilding; brick 3-story residence in rear lot	Frame 4-story dwelling with store with brick 1-story extension; brick 3-story dwelling in rear lot

Currently, Lot 95 is improved with one extant building at 384 Grand Street that, according to NYC DoITT Map, was constructed in the 1920s. However, historic maps and consultation with

LPC suggest that the 1920 construction date is inaccurate. A review of historic maps from the mid-19th through the mid-20th century suggests that these historic lots were mostly occupied by frame dwellings with rear yards space in the 1850s. The mid-19th century buildings were replaced by more substantial, 5-story brick buildings by the 1890s. Interestingly, the extant building shares a footprint with three buildings constructed in this location as early as 1894. In 1903 and 1950, additional single-story and multi-story buildings were built north and west of the extant building in the rear of the historic lots, but they were apparently demolished in the second half of the 20th century. Historic maps suggest that the buildings fronting Grand Street were storefronts with residences, and the rear-lot buildings were also residences. All of the historic residents may have shared access to single-story outhouses and school sinks, which are mapped on the 1903 Sanborn map (**Figure 2-6**). Today, narrow stretches of vacant land are evident north and west of the building at 384 Grand Street where these map-documented structures once stood.

The presence of map-documented structures (single story structures that may have served as privies, sheds, or other functions, in addition to small domestic structures) in the yards of historic properties suggests that portions of Lot 95 have a moderate to high sensitivity for the presence of 19th-century archaeological features.

Figure 2-4 Conveyance Records Tax Map for Section 2, Block 351

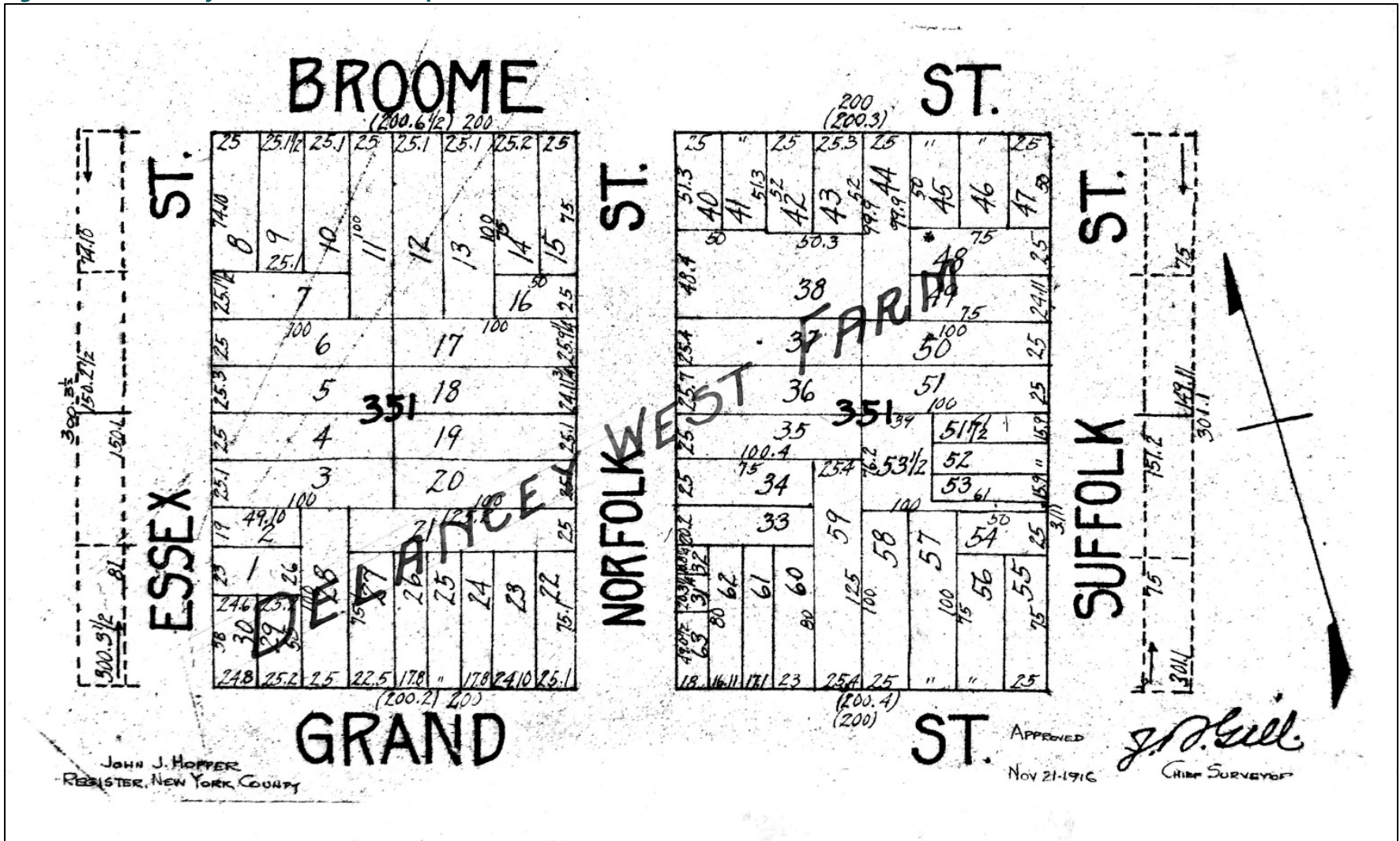


Figure 2-5 1854 and 1857 Perris Map of the City of New York

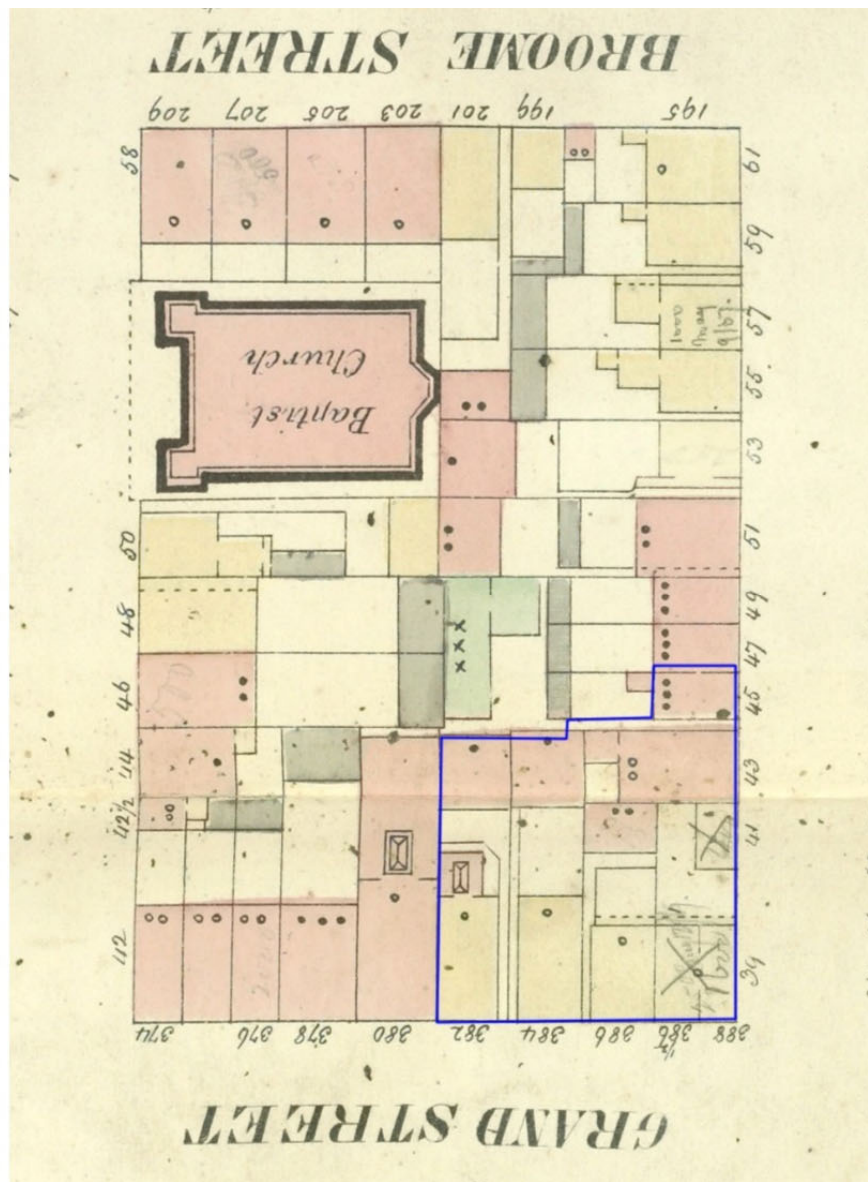
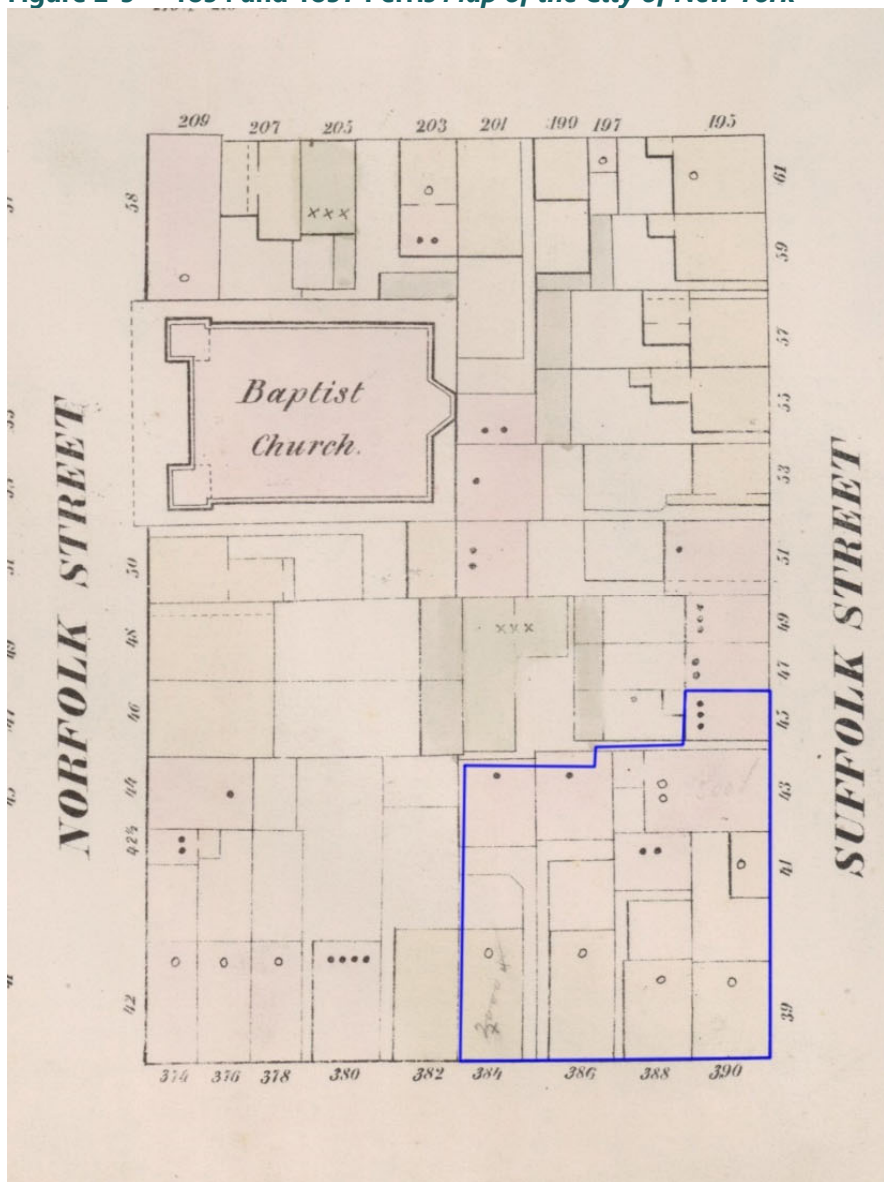
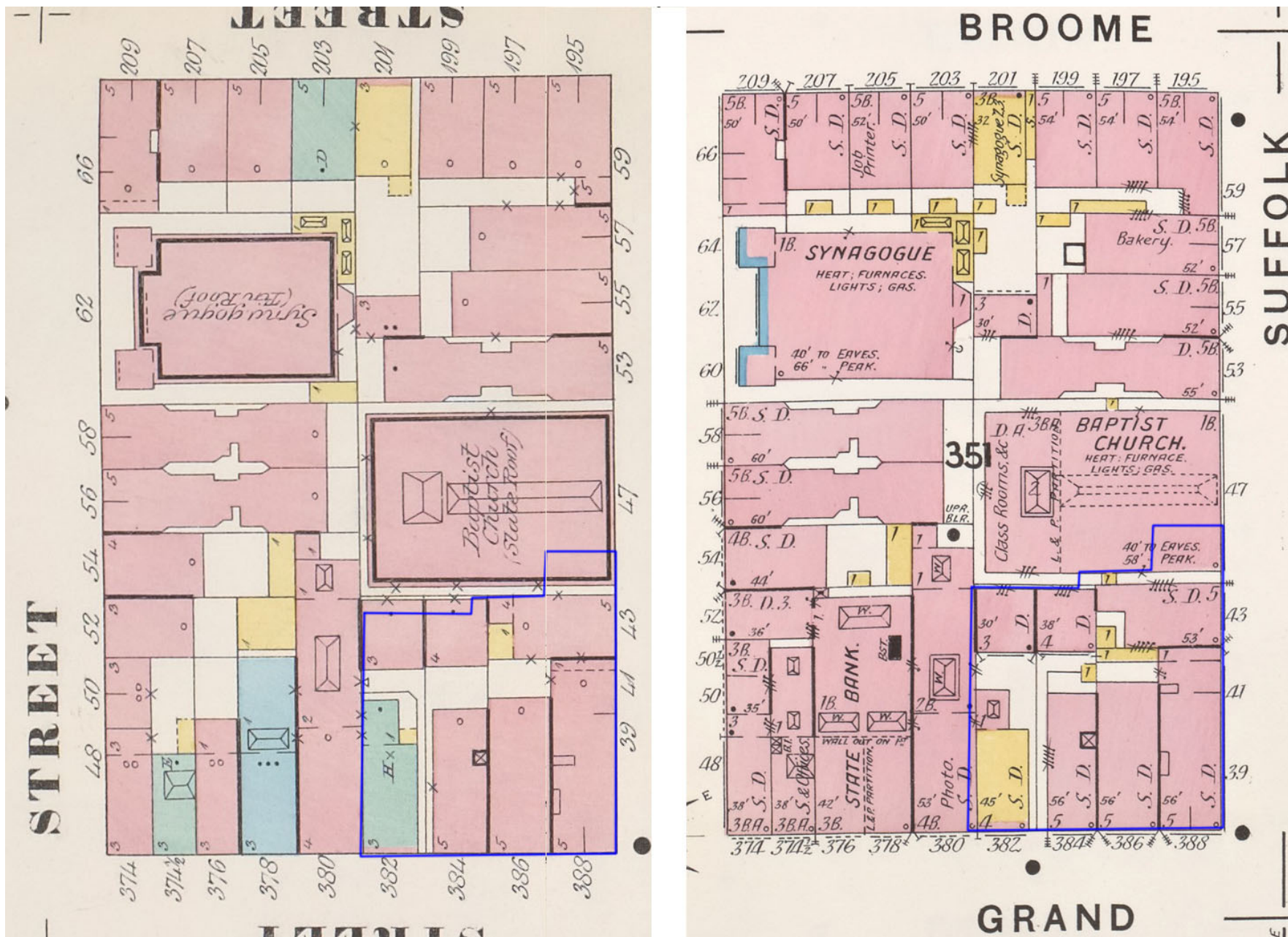


Figure 2-6 1894 and 1903 Sanborn Fire Insurance Maps



Section 3

Phase 1B Research Design and Methodology

As mentioned above, the Phase 1A Documentary Study was prepared to determine the archaeological sensitivity and potential historic-era disturbances within Projected Development Sites 1 and 2. While a Phase 1A determines the research potential of a site, it is not possible to know if a project site contains archaeological resources until the site is physically tested (*2014 CEQR Technical Manual*).

The purpose of Phase 1B archaeology testing is to:

- › Determine the presence or absence of archaeological deposits and features on the project site
- › Determine the significance of any archaeological resources that are encountered during the testing
- › Document the resources that may be encountered by the proposed development/construction

According to the guidelines for cultural resources as laid out in the *CEQR Technical Manual*, the determination of significance of a project site is directly related to whether the identified resource type “is likely to contribute to current knowledge of the history of the period in question” (2001 Section 321.2.5: 3F-9). In order to evaluate significance, a list of research topics has, therefore, been developed based on the suspected archaeological features and site types that may be encountered within the APE.

In general, the APE is sensitive for the presence of various 19th century features. These features, described in more detail below, may yield important information about consumer choices and lived experiences for the site’s 19th century residents, if remnants of these features remain buried within the site.

Potential Archaeological Resources

Historic Rear Yard Areas, Portion of Lot 95

Archival and historic map research of the Projected Development sites indicates that Lot 95 was developed with residential and mixed-use residential and commercial buildings by the mid-19th century. During that time, present-day Lot 95 was divided into approximately 5 lots of smaller size, many of which included a structure that contained a store front with residences above (see **Table 1**). Historic maps from 1850 to 1903 suggest that some of the mid-19th century buildings (especially the southeast corner of Lot 95) were replaced by more substantial brick buildings by the 1890s. Nonetheless, in nearly all cases, rear yard spaces are shown to have existed behind these buildings, and some of these spaces included backhouses and/or outbuildings.

A review of the 1880 Federal Census indicates 10 families lived at 386 Grand Street; 5 families lived at 384 Grand Street (one in the building fronting Grand Street and four in the rear tenement); and 11 households were listed at 382 Grand Street (six in the building fronting Grand Street and seven in the rear tenement). Most of the residents at that time were from Ireland, Germany or Scotland. The number of households at these addresses is relatively similar in 1900, but the census does not differentiate between the street lined tenements and back tenements. In 1900, 1910 and 1920 most of the residents were enumerated as of Russian heritage (Russian Yiddish in 1910 and 1920); all residents were renters.

Because the back tenements and outbuildings were razed by the 1970s (with the exception of the building at 384 Grand Avenue) and no subsequent development occurred, portions of Projected Development Site 2 have a moderate to high sensitivity for the presence of archaeological features associated with the 19th century occupation of these lots. Anticipated archaeological features might include shaft features associated with residential activities on site, including privies, cisterns and wells, which would have been constructed in 19th century rear yards, as well as dwellings located in the rear of lots. Cisterns and wells (which would have been used to collect water) were typically built into the ground close to a dwelling, whereas privies (which were constructed below outhouses) were located along rear lot lines, further away from the dwelling. These features would have remained in use until connections to municipal water and sewer would have been available. Additional archaeological features that might be encountered in historic rear yards include retaining walls, paving stones, outbuilding foundations, and midden deposits.

Research Topics for this Phase 1B Archaeological Survey

Historic Rear Yard Areas

Archaeological resources recovered from historic rear yard areas can provide particular information about the individuals who lived and worked at the site during the 19th and early 20th centuries. In particular, archaeological research can provide information that supplements the archival record regarding daily lived experiences, and consumer choices. This information can be attained from both structural and artifactual resources.

In this study, special attention will be devoted to identifying and recording domestic shaft features in the rear yards of residential buildings that might pre-date 1903, if present. By 1903, school sinks appear to have been in use within the Projected Development Sites, as evident on the 1903 Sanborn Fire Insurance map. A school sink would have required a reliable water source, as well as cesspool or connection to municipal sewers to flush human waste from the vault (Geismar 2003). Because there is minimal documentation regarding water and sanitation resources for this site in the mid to late 19th century, this project seeks to answer the following question:

- › Prior to public water and sanitation connections, what provisions were available for fresh water (e.g., wells, cisterns) and sanitation (e.g., privies) for historic residents at Projected Development Site 2?

When privies were closed and replaced (either by school sinks, or by indoor toilets), they were often filled with trash and capped. The trash that was deposited into shaft features can provide information about the abandonment date for the feature (and, possibly, the construction date). Historic trash deposits can also provide data on household behavior and consumer choice, which is often influenced by socio-economic factors, ethnicity, and household composition. Therefore, if artifacts are present in shaft features within Projected Development Site 2, this investigation will seek to answer the following question:

- › Were consumer choices at the site influenced by household size/composition, socioeconomic status, and/or ethnicity?

Because these sites were occupied by multiple households comprised of mostly renters who may not have lived at the site for more than a few years (as suggested by a review of the 1880 and 1900 census rolls), it may be difficult to associate an assemblage with a particular household. Therefore, a clear temporal analysis will be required to associate an assemblage with residents from a particular time frame. This will require a detailed analysis of dateable artifacts to establish a *terminus post quem* (TPQ) (an earliest possible date for an artifact) for dating the use of the feature. This analysis will also be important for correlating the feature and its artifacts with the site's inhabitants, which may be discerned from census data.

Archaeological deposits from domestic assemblages (if present) can be compared with similar data from other comparable sites in the Lower East Side, including those that were uncovered in Projected Development Site 1, to identify broad patterns in lived experiences in the 19th century. This will also be the case if archaeological deposits associated with commercial use are uncovered at the site.

Field Methods

The Phase 1B testing protocol was developed based on the results of archival research conducted for the Phase 1A Documentary Study, supplemental archival research performed in preparation for approved Work Plan, and research questions outlined above. The testing protocol was developed in accordance with the LPC's *Guidelines for Archaeological Work in New York City* (2018), the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (1994), and the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) *Phase I Archaeological Format Requirements* (2005).

Prior to archaeological testing, the APE was mapped using a grid system utilizing a mapping datum at the northwest corner of Lot 95. Horizontal grid coordinates were mapped west and south of the mapping datum. Stratigraphic elevations were measured in relation to the North American Vertical Datum of 1988 (NAVD88) unless otherwise noted.

Subsurface testing consisted primarily of mechanically excavated trenches. Where necessary, mechanical excavation was paused in favor of shovel-skimming or shovel test pit (STP) excavation. The field strategy followed the testing protocol outlined in the approved Work Plan. However, decisions were made in the field regarding placement, location, and depth of excavations based on observations of field conditions (such as site access; surface conditions; indications of modern fill or recent disturbance; detection of suspected historic ground surface; and suspected clean soil or subsoil). Subsurface archaeological testing was performed only within areas that were identified as sensitive for the presence of buried archaeological deposits in the Phase 1A Documentary Study.

Two trenches were excavated in the locations of former rear yards of buildings that once fronted Grand Street and Suffolk Street (**Table 3-1** and **Figure 3-1**). The trenches were excavated by backhoe with a two-foot bucket. Occasionally, mechanical excavation was paused to allow for shovel-skimming to clear away loose dirt and examine stratigraphy, suspected features, or suspected artifact deposits. No excavation units or other hand-excavation was performed as part of the Phase 1B.

Table 3-1 Phase 1B Subsurface Testing (Trenches)

Trench Number	Historic Address	Location
1	382, 384 and 386 Grand Street	Rear yard space of historic lots
2	382 Grand Street	Side of historic lot

All archaeological fieldwork was documented through site photography, measured drawings (where possible), and field notes (**Appendix 1**). When safe to do so, soil profiles within the walls of the excavation trenches were recorded and drawn. Soil colors were identified using Munsell soil color charts and recorded along with soil textures and depositional descriptions.

When artifacts were encountered during the Phase 1B testing, they were sampled from within the trenches. Artifacts were also recovered from excavated backdirt piles. Collected artifacts were bagged in the field in 4 mil polyethylene zip-lock bags and labeled with provenience information (that is, Site Name, phase of testing, trench identification, strata/depth, date excavated, and field crew).

Laboratory Methods and Artifact Curation

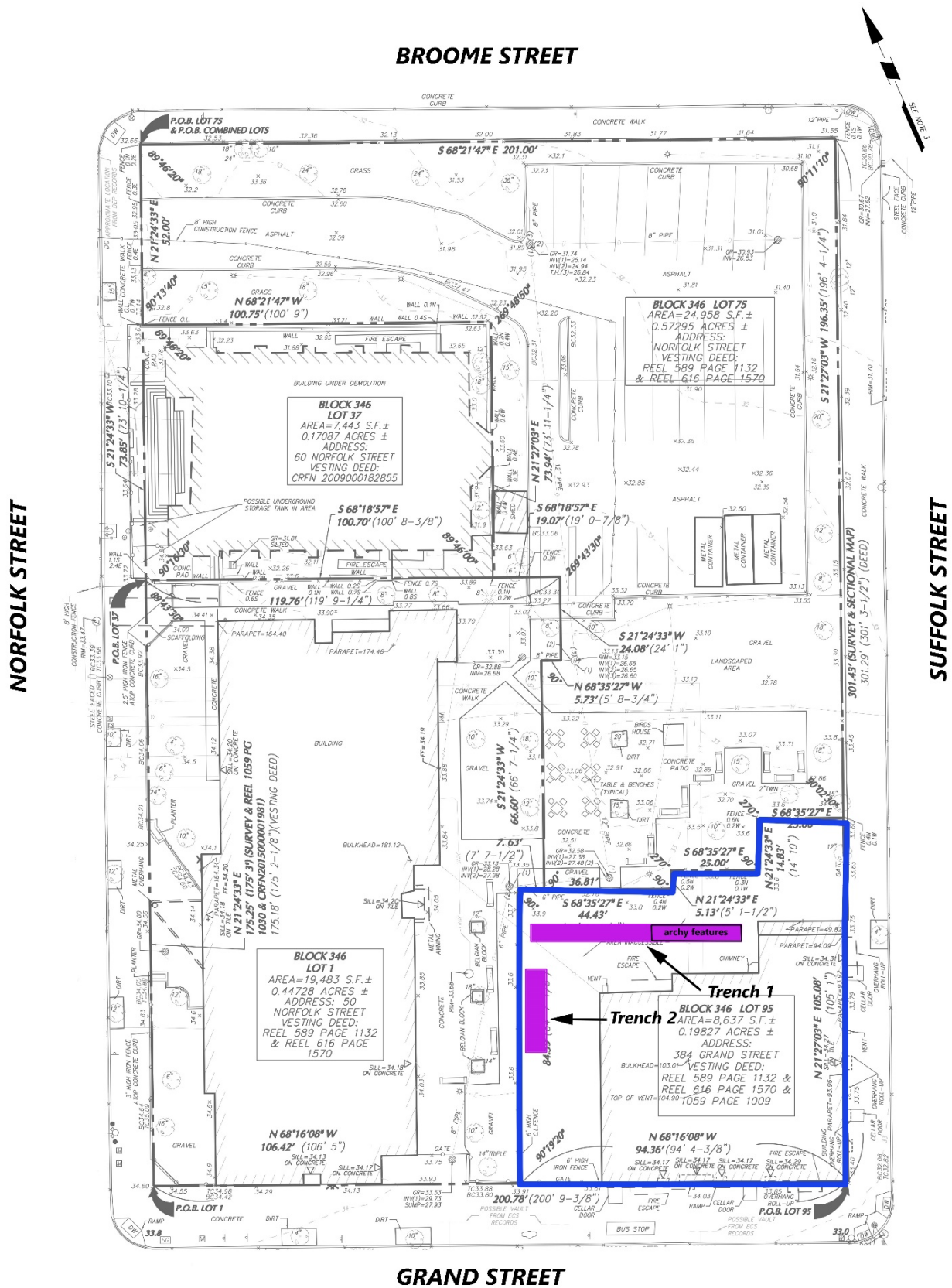
Upon completion of the Phase 1B testing, artifacts were transported to the VHB laboratory in Hauppauge. Artifact bags were checked against bag lists created in the field to confirm receipt of all excavated/recovered material. Artifacts were washed, sorted, and divided by class/type. Artifacts were placed in resealable polyethylene bags with provenience information enclosed. Artifact bags were placed in archival stable acid-free boxes.

Analysis of the artifacts focused on determining specific cultural and temporal affiliations. Artifacts were sorted by material (i.e., ceramics, metal, glass, and other). Further analysis of

historic material focused on determining the method of manufacture in order to produce a working chronology for the site. Relative dating of ceramics was based on the manufacture chronology developed by Brown (1982) and Miller (1980). Glass artifact dates are based on chronologies developed by the Society for Historical Archaeology (2013). Metal artifacts, specifically nails, are dated (where possible) using the chronology developed by Elliott (2010). All provenience and catalog information were compiled in an Excel database.

All field notes, photographs, and other information produced throughout the course of archaeological investigations will be temporarily stored at the Hauppauge facilities of VHB until a suitable repository can be identified.

Figure 3-1 Trench Locations Within the APE



Section 4

Phase 1B Results

Phase 1B fieldwork commenced on August 25, 2020. Trench excavations were performed in sensitive areas of the APE as outlined in the Phase 1B Archaeological Work Plan for the GO Broome Development.⁴ The purpose of the Phase 1B archaeological investigation was to investigate the presence or absence of potential archaeological features within the site. Based on the Phase 1A Archaeological Documentary Study and the Phase 1B Work Plan, the site was determined sensitive for the presence of 19th century shaft features (such as privies, cisterns, or wells).

In general, the APE is a yard space adjacent to and behind the building at 384 Grand Street. Surface conditions consisted of dirt with patchy grass. Two trenches were excavated for the Phase 1B investigation. Excavation was done in natural layers, where possible. The results of those trenches are listed below by location within the APE.

Trench 1

Trench 1 was excavated east-west from the western boundary of Lot 95 along the rear of the building, and approximately 12 feet (3.65 meters) south of the fence along the northern boundary of the Lot. Surface elevations are generally level at approximately el 32. The surface conditions consisted of a recent topsoil that extended to el 30 (approximately 12 inches [30cm] below grade) (**Photo 4-1** and **Appendix 1**). This stratum was underlain by a layer of mottled brown redeposited fill with brick rubble that extended in the western portion of the trench to el 27 (**Appendix 1**).

The trench was dug in this location to investigate the potential presence of shaft features, as well as remnants of outbuildings that were identified on historic maps in the Phase 1A. The trench measured approximately 4-5 feet (1.2-1.5 meters) wide, 61 feet (18.6 meters) long, and was excavated to el 27 (about 5 feet [1.5 meters] bgs) in the western portion of the

⁴ The Phase 1B Work Plan for Projected Development Site 1 was approved by Landmarks Preservation Commission on December 20, 2019.

trench. In the western portion of the trench, remnant brick walls (likely associated with the back tenement that was associated with 382 Grand Street) were encountered at el 29 (**Photo 4-2**), but these showed evidence of damage from previous demolition (possibly dating to the late 20th century).

The eastern portion of the trench revealed evidence of two adjacent brick features consisting of brick walls, occasionally with flagstone lining the top of the brick walls at el 30.4 (**Photo 4-3** and **Figure 4-1**). The brick feature further east, identified as Feature 1, is rectangular measuring roughly 3.3 feet (1 meter) wide by 6 feet (1.8 meter) long (**Photo 4-4**). The top of Feature 1 was identified at el 30.4 and was characterized by flagstone underlain by brick walls that appear to be two courses wide. In the eastern wall, a layer of subbase is visible below the flagstone and above the brick; a ceramic pipe was detected below the brick (**Photo 4-5** and **Figure 4-2**).

Feature 1 is immediately adjacent to another brick-walled feature, labeled Feature 2, which measures less than 3 feet (0.9 meter) square (**Photo 4-6**). The relationship between these two features is unclear, but both were built below-grade and were identified in the location of a 19th century outbuilding (a possible school sink) identified during the Phase 1A.

A total of 35 artifacts was recovered from the fill above Features 1 and 2. These artifacts include fragments of bottle glass and two intact glass bottles; two porcelain beer bottle enclosures; fragments of 19th century earthenware dining wares; fragments of window glass; one 20th century porcelain floor tile; unidentified animal bone; unidentified metal; and one shell button (**Appendix 2**). No artifacts were recovered from within the Features.

The archaeological features were measured and photographed. Following a call to LPC to report the find, the features were delineated with 6 mil plastic sheeting and backfilled to preserve it until a Phase 2 Work Plan could be developed.

Photo 4-1 Northwest View of Surface Conditions at the Beginning of Mechanical Excavation of Trench 1



View is west

Photo 4-2 Remnant Brick Walls and Pipes Uncovered in the Western Portion of Trench 1; View of Northern Trench Wall



Photo 4-3 Eastern View of Trench 1 Excavation



Photo 4-4 Trench 1, Feature 1



Figure 4-1 Plan View of Feature 1

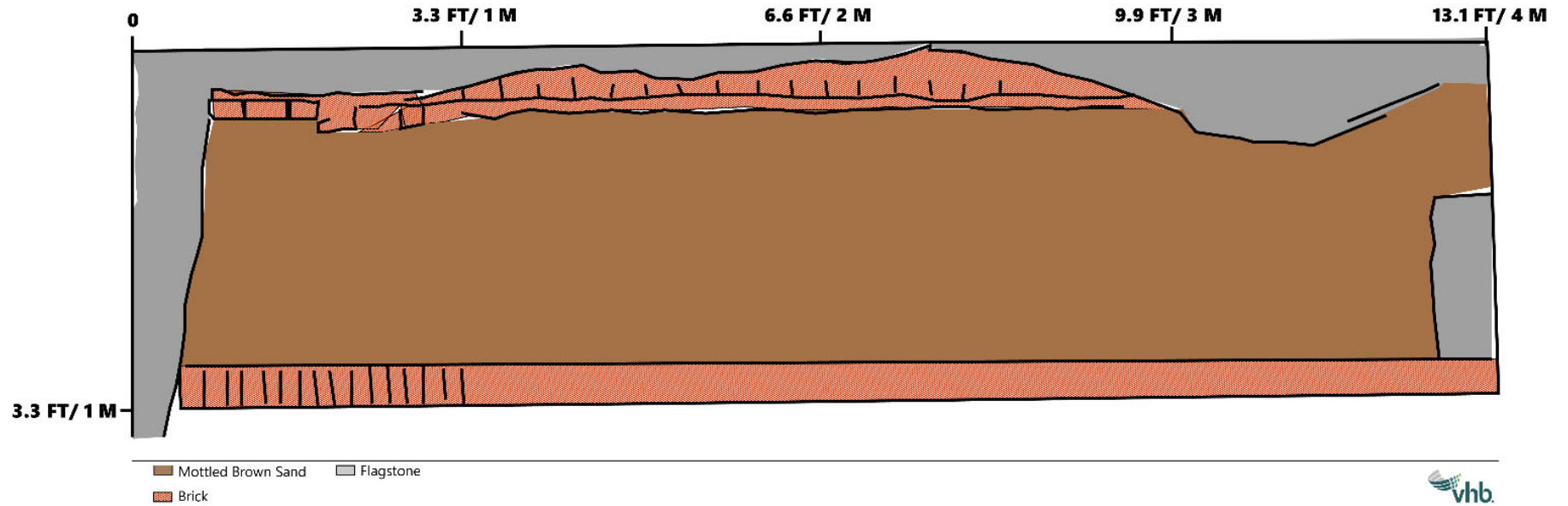


Photo 4-5 Feature 1, East Wall Profile



Figure 4-2 Plan View of Feature 1

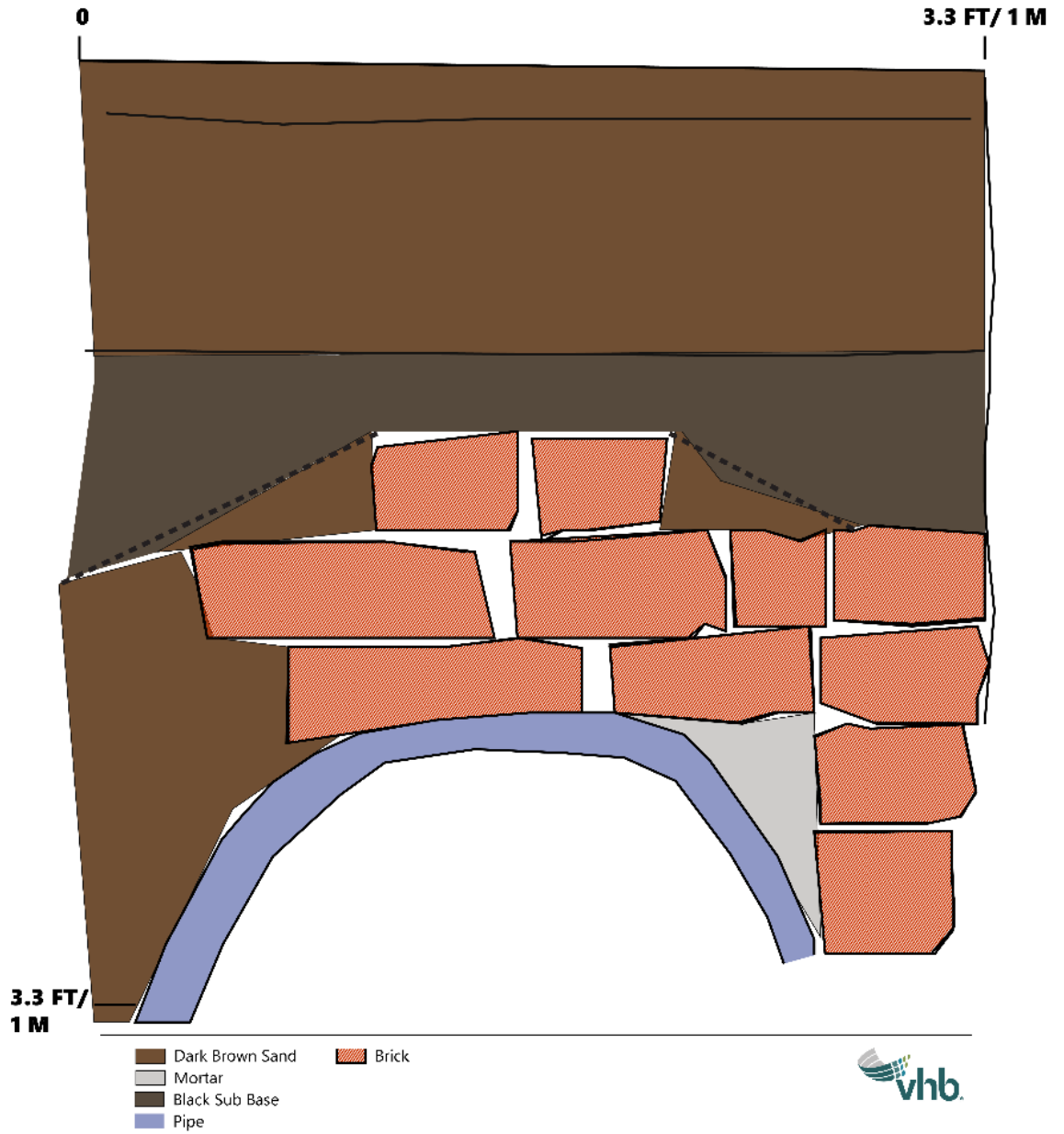


Photo 4-6 Northern View of Feature 2 in Trench 1

Trench 2

Trench 2 was excavated north-south along the western boundary of Lot 95. The trench was mapped in this location due to the presence of a mapped historic wood-framed tenement building with an extension in this portion of the site. Surface elevations are generally level at approximately el 32. The surface conditions consisted of topsoil that extended to el 30 (approximately 12 inches [30cm] below grade) (**Appendix 1**). The topsoil was underlain by a layer of redeposited mottled brown soil characteristic of demolition and redeposition, with brick rubble and few artifacts. The trench was excavated roughly 4-5 feet (1.2-1.5 meters) wide and to a maximum depth of 6.6 feet (2 meters) below ground surface (bgs). Excavations ceased at el 25.4 due to site safety and the apparent presence of clean soil (**Appendix 1**). Overall, this trench was characterized by evidence of 20th century demolition and its debris, including brick, tile floor fragments, telephone wiring, and metal. Metal piping (likely water) was encountered at el 27.5. A representative soil profile is illustrated in **Figure 4-3**.

A total of 12 artifacts were recovered from the disturbed/fill layer (9.8-30 inches below grade). These artifacts include fragments of 20th century porcelain dining and storage vessels, bottle glass, and 20th century porcelain floor tiles (**Appendix 2**). The low density and diversity within the heavily disturbed context suggest that the artifact assemblage lacks integrity and has minimal research potential. No historic features were identified. The trench was photographed then backfilled. No additional work is recommended in this location of the site.

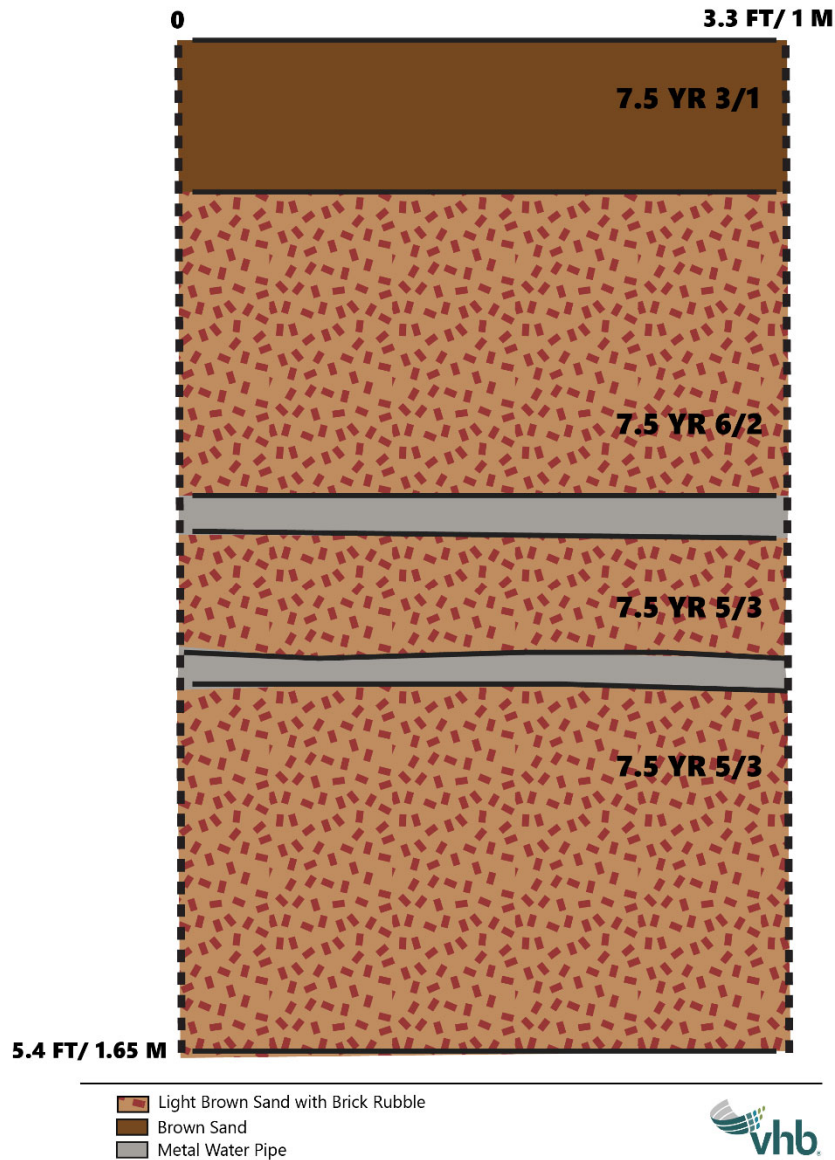
Photo 4-7 Surface Conditions at the Beginning of Mechanical Excavation of Trench 2



Photo 4-8 View of Western Wall of Trench 2



Figure 4-3 Soil Profile of Trench 2, West Wall



Summary of Phase 1B Testing Results

The purpose of the Phase 1B investigations was to test for the presence or absence of potential archaeological features. Trench excavations were performed in two locations within the APE as outlined in the Phase 1B Archaeological Work Plan for the GO Broome Projected Development Site 2.⁵ Trenches were excavated in areas that were sensitive for the presence of 19th century shaft features (such as privies, cisterns, or wells) associated with map-documented structures.

Two trenches were excavated for the Phase 1B investigation. Two archaeological features were identified during the investigation: Feature 1 was identified in the eastern portion of

⁵ The Phase 1B Work Plan for Projected Development Site 1 was approved by Landmarks Preservation Commission on December 20, 2019.

Trench 1 and Feature 2 was identified in the central portion of Trench 1. These features are comprised of brick and flagstone and are located in the rear yard space of historic tenements at 382, 384 and 286 Grand Street. Artifacts were recovered from fill around these features in the excavation trenches. The features were reported to LPC, then they were covered with 6 mil plastic and the trenches were refilled to ensure the preservation of the features until they could be investigated in greater detail. Because the features appeared to be intact, a Phase 2 investigation is recommended to further investigate the integrity of these features, identify an occupation and/or abandonment date, and evaluate their eligibility for the National Register.

Trench 2 showed evidence of disturbance from 20th century building demolition and grading at the site. No archaeological features were encountered in this trench. Therefore, no further archaeological investigations are recommended for this location of the APE.

Section 5

Conclusions and Recommendations

This report includes the results of Phase 1B archaeological survey for GO Broome Projected Development Site 2, completed in consultation with LPC. This report has been prepared for archaeological review by NYC LPC for CEQR⁶.

The purpose of the Phase 1B investigation was to test for the presence or absence of potential archaeological features. Two trenches were excavated in sensitive areas of the APE as outlined in the Phase 1B Archaeological Work Plan for the GO Broome Projected Development Site 2.⁷ Trenches were excavated in areas that were sensitive for the presence of 19th century shaft features (such as privies, cisterns, or wells) associated with map-documented structures.

Two archaeological features were identified during the investigation: Feature 1 was identified in the eastern portion of Trench 1 and Feature 2 was identified in the central portion of Trench 1. These features are comprised of brick and flagstone and are located in the rear yard space of historic tenements at 382, 384 and 286 Grand Street. Artifacts were recovered from fill around these features in the excavation trenches. The features were reported to LPC, then they were covered with 6 mil plastic and the trenches were refilled to ensure the preservation of the features until they could be investigated in greater detail. Because the features appeared to be intact, a Phase 2 investigation is recommended to further investigate the integrity of these features, identify an occupation and/or abandonment date, and evaluate their eligibility for the National Register.

Trench 2 showed evidence of disturbance from 20th century building demolition and grading at the site. No archaeological features were encountered in this trench. Therefore, no further archaeological investigations are recommended for this location of the APE.

⁶ Consistent with a Restrictive Declaration for Projected Development Site 2.

⁷ The Phase 1B Work Plan for Projected Development Site 1 was approved by Landmarks Preservation Commission on December 20, 2019.

VHB recommends that a Phase 2 Work Plan be developed in consultation with LPC for additional investigations at the site before redevelopment at the site, especially to evaluate the integrity of Features 1 and 2. VHB understands the current owner of Projected Development Site 2 (384 Grand HDFC) will be solely responsible for contracting an archaeological consultant to develop a Phase 2 excavation plan for the finds that were identified during the Phase 1B investigation, and GO Broome, LLC will have no further responsibility with respect to archaeological requirements (including but not limited to undertaking any additional excavation, mitigation, and curation of archaeological resources that may be required by LPC) and shall not be obligated to make any submission to LPC. 384 Grand HDFC's obligations with respect to archaeological investigations have been formalized in an archaeological restrictive declaration that was executed by 384 Grand Street Housing (as named in the document) on December 23, 2020 and recorded with CRFN 2021000022742.

Section 6

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Appendix 1: Table 1 – Lot 95, Phase 1B Excavation Notes

Table 1 Lot 95, Phase 1B Excavation Notes

Trench Number	Length	Width	Depth	Level	SD (in)	ED (in)	Soil Color	Soil Texture	Notes	
1	61 ft	4-5 ft	El 28-27	1	0	12	Very Dark Brown (7.5 YR 2.5/3)	Silty Sand	Topsoil with some recent trash.	
				2	12	60	Brown (7.5 YR 4/3)	Silty Sand	Mottled redeposited soils w/ few artifacts; remnant brick walls of demolished building in western portion of trench; revealed the top of brick Features 1 and 2 at el 30.4 in eastern portion of trench.	
				Feature 1		20	39.6	Brown (7.5 YR 4/3)	Silty Sand	Mottled redeposited fill
				Feature 2		20	39.6	Brown (7.5 YR 4/3)	Silty Sand	Mottled redeposited fill
2	6.6	4-5 ft	El 25.4	1	0	9.8	Dark Brown (7.5 YR 3/1)	Sand	Topsoil with some recent trash.	
				2	9.8	30	Light Brown (7.5 YR 6/2)	Sand	Mottled redeposited fill with brick rubble and demolition debris.	
				3	30	65	Light Brown (7.5 YR 5/3)	Sand	Mottled redeposited fill with brick rubble and demolition debris.	
				4	65	80	Light Brown (7.5 YR 6/2)	Sand	No artifacts.	

Appendix 2: Artifact Catalog

GO Broome Street Development, Projected Development Site 2 – Phase 1B Archeological Investigation

Site	Phase	Date	Prov 1	Prov 2	Prov 3	Count	Material 1	Material 2	Material 3	Form 1	Form 2	Notes
Trench 1												
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	2	ceramic	porcelain		bottle enclosure		NATHAN GOLDBERG, 10 AVE C, NY
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	2	ceramic	whiteware		possible bowl	rim, scallop	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	ceramic	whiteware	blue sponge decoration		rim, scallop	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	ceramic	milkglass			body	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	ceramic	porcelain		architectural	floor tile, small circle	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	glass	aqua		bottle	body	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	glass	clear		bottle	body	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	glass	clear		bottle	base	"...BEACH..."
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	2	glass	clear		bottle	base, body	"NATHAN GOLDBERG...10 AVE C NEW YORK...ROCKAWAY BEACH"
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	glass	clear		bottle	intact	"PEPSI COLA" (wave design, c. 1940)
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	glass	clear		bottle	intact	"PROPERTY OF COMO BOTTLING COMPANY"
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	4	glass	aqua		window		
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	shell			button	2 hole, sew through	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	7	bone	unidentified				
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	bone	large mammal				
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	2	metal	iron		unidentified		
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	metal	iron		architectural	unidentified nail	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	12-60 in	1	plastic	bakelite		watering can spout		
Trench 2												
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	2	ceramic	porcelain		storage vessel	body	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	porcelain		possible mug	base, handle	"SHENANGO CHINA NEW CASTLE PA USA"

GO Broome Street Development, Projected Development Site 2 – Phase 1B Archeological Investigation

GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	porcelain	beige body, brown annular and leaf	plate	rim, body, base	"MAYTHORNE CARR CHINA"
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	milkglass	ridged		body	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	5	ceramic	porcelain		architectural	floor tiles, small hexagons	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	glass	clear		bottle	base	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	glass	light green		bottle, apothecary	base	
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	brick				"[Star]DK[Star]"
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	brick				"... J.J.J."
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	brick				"1XL"
GO Broome Lot 95	Phase 1B	August 25 2020	redeposited fill	level 2	9.8-65 in	1	ceramic	brick				"BENNETT"