

Proposed Development at 3966 Tenth Avenue

BLOCK 2229, LOT 25

NEW YORK, NEW YORK

Phase 1B Archaeological Investigation

Prepared for:

Bowery Residents' Committee, Inc. (BRC)
131 West 25th Street, 12th Floor
New York, New York 10001

Prepared by:



AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

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A. INTRODUCTION AND PROJECT DESCRIPTION

Bowery Residents' Committee, Inc. ("BRC," or the "Client") is contemplating the redevelopment of the property located at 3966 Tenth Avenue in the Inwood neighborhood of Manhattan, New York County, NY (see **Figure 1**). The project site includes Tax Block 2229 Lot 25 and is currently privately owned and occupied by a single-story auto repair shop and parking lot. The proposed project is expected to involve the construction of a new building with a homeless shelter and administrative office space. The project would be developed under existing zoning and would be facilitated with funding from the New York City Department of Homeless Services (DHS). Because of the funding action, the project is subject to New York City Environmental Quality Review (CEQR). DHS is serving as the lead agency for the environmental review. This Phase 1B Archaeological Investigation Work Plan has been prepared pursuant to CEQR and in compliance with the *Guidelines for Archaeological Work in New York City* as issued by the New York City Landmarks Preservation Commission (LPC) in 2018.¹

B. PROJECT SITE HISTORY

This section extracts the site history information as summarized in Bergoffen (2017) and (AKRF 2020). The project site was historically included within a larger tract of land occupied by the Dyckman and Nagel families and the cemetery that occupied the project site was located near a stone fence that marked the boundary line between the lands of the two families. Both families were enslavers and enslaved persons of African descent lived on and in the vicinity of the Dyckman and Nagel farms before slavery was ended in New York State in 1827. A cemetery that formerly occupied the project site and the surrounding area was first disturbed during a road construction project in 1903. Evidence exists to suggest that local residents had long assumed that the site had been used for the burial of enslaved Africans whose forced labor was used on neighboring farms, including those of the Dyckman, Vermilye, and Hadley families (*New York Times* 1903). The homestead cemetery established by these families for the interment of members of their kinship network was nearby and remained well-preserved and well-documented into the 20th century (Haacker 1954; Inskeep 2000). An initial archaeological investigation was completed in 1903 and a second, more intensive investigation occurred in 1904. The cemetery is depicted on a map prepared by Reginald P. Bolton in 1912, which shows that its boundaries extended to the north, east, and south of modern Lot 25. Between 30 and 50 graves are believed to have been situated within the boundaries of the hillside cemetery. As mapped by Bolton in 1912, modern Lot 25 is entirely included within the boundaries of the cemeteries, which continued in all directions around the project site into what are now adjacent properties and streetbeds.

In the early 20th century, the hilltop upon which the cemetery was situated was graded in association with the construction of Tenth Avenue. Following the discovery of human remains during these efforts, two archaeological investigations were completed in 1903 and 1904, resulting in the excavation of additional graves as well as a precontact archaeological site. The project site was vacant for several decades following

¹https://www1.nyc.gov/assets/lpc/downloads/pdf/2018_Guidelines%20for%20Archaeology_Final_high%20res.pdf

the documentation of the burial ground and in the middle of the 20th century was developed with a parking lot and small structures, including a small restaurant constructed ca. 1950. The existing on-site buildings were constructed on the site in the late 20th century.

Comparisons of late 19th century topographical information with modern data suggest that the early 20th century grading efforts appears to have lowered the ground surface of the project site by as much as 7.7 to 11.7 feet since the late 19th century (AKRF 2020). The disturbance assessment included in the 2020 AKRF study identified four major phases of development and disturbance that have affected the project site, including: (1) the grading of the hill and subsequent archaeological excavation during the construction of Tenth Avenue in 1903; (2) additional archaeological investigations in 1904; (3) the conversion of the project site into a parking lot by the 1940s; and (4) the construction of the existing on-site buildings and associated subsurface infrastructure in the late 20th century.

C. CURRENT SITE CONDITIONS

The project site is currently developed with two one-story commercial buildings occupied by an auto repair shop and an auto parts store, neither of which was developed with a basement. These buildings line the northern and western sides of the site (see **Figure 1**) and are connected to underground storage tanks, subsurface hydraulic equipment, and electrical and plumbing connections. The interior of the lot between the buildings is paved and is undeveloped, though it contained unenclosed hydraulic lifts used for auto repairs in the recent past. A retaining wall lines the western side of the garage and separates it from an adjacent public school parking lot, which is at a higher elevation. A brick building with a partial basement extending to depths of approximately 4 to 6 feet below grade (12 to 10 feet NAVD88) is situated on the property to the south of the project site. Subsurface electrical lines run along the eastern side of the project site parallel to Tenth Avenue and through the center of the parking lot in an east-west direction (Enviroprobe 2021).

D. PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS OF THE PROJECT SITE

The project site has been the subject of numerous archaeological investigations that have resulted in the documentation of a precontact archaeological site and a historic period cemetery. These historical and modern investigations are described below.

EARLY 20TH CENTURY ARCAHEOLOGICAL INVESTIGATIONS

Archaeological investigations of the former burial place and the underlying precontact archaeological site were completed in 1903 and 1904 by early New York State archaeologists including Reginald P. Bolton (the previously-discussed maker of the 1912 map of the site) and his associates at the American Museum of Natural History's American Scenic and Historic Preservation Society (ASHPS), which was affiliated with the American Museum of Natural History (AMNH). The 1903 investigation largely documented the historic period cemetery situated on the site while the 1904 investigation focused more on the underlying precontact archaeological site. Nearly all of the knowledge regarding the cemetery for enslaved persons on the project site was collected by Bolton and his colleagues during these investigations.

The initial excavation occurred following the discovery of human remains during road-grading work in 1903 (*New-York Tribune* 1903; *New York Times* 1903; ASHPS 1905). The early archaeologists, including Bolton and AMNH anthropologist Ales Hdlicka, identified the individuals buried on the site as enslaved persons of African descent whose stolen labor was likely utilized on the Dyckman and Nagel farms. By the time of ASHPS's 1904 investigation, "the knoll had been brought down to the level of the adjacent meadow" (ASHPS 1905: 42). Given the extent of the grading, the historical ground surface appears to have

been removed or otherwise disturbed, and the 1904 investigation appears to have focused solely on precontact archaeological features that remained on the project site and the adjacent properties. The precontact features were described as roughly one dozen “pockets or holes in the ground, each about 36 inches in diameter...arranged approximately in a semi-circle...[at the] western base of the knoll” (ibid:43). It was in these features that dog burials and other animal bones were documented (ibid). Bolton’s 1905 map of the area (reproduced in Bergoffen 2017) indicates that two additional graves in coffins located within what is now the streetbed of West 212th Street were excavated during the 1904 work.

Contemporary newspaper accounts and reports provide conflicting accounts of the fate of the remains and indicate that some skeletal material was removed from the site. Some remains were reported to have been used as toys by neighborhood children; collected as souvenirs by local residents; abandoned or discarded by construction workers; or reburied on-site or elsewhere (*Evening Telegram* 1903; ASHPS 1903). Research completed by the Dyckman Farmhouse suggests that some of the human remains examined by Hdlicka may remain in the AMNH collection (Rice 2021). The AMNH records indicate that some of the remains may have been collected from fill deposits that originated on the project site and surrounding area and were later used to grade nearby blocks (ibid). Bolton’s photographs and notes from this and other excavations are in the collection of the Dyckman House Museum, the New York Historical Society, National Museum of the American Indian, and Cornell University, among others.

INWOOD REZONING/PHASE 1A ARCHAEOLOGICAL DOCUMENTARY STUDY (2017)

A 2017 archaeological investigation identified the project site as the northern half of “Potential Development Site E” (which also included Lot 32) in the *Inwood Rezoning Final Environmental Impact Statement* (FEIS) as issued in 2018. The archaeological sensitivity of development sites in the rezoning area was assessed in a Phase 1A Archaeological Documentary Study (“Phase 1A Study”) prepared by Celia J. Bergoffen, PhD in 2017. The Phase 1A Study summarized the development history and the site’s use as a burial ground and determined that the project site is archaeologically sensitive.

TOPIC INTENSIVE ARCHAEOLOGICAL DOCUMENTARY STUDY (AKRF 2020)

AKRF was retained by BRC in 2020 to complete a Topic Intensive Archaeological Documentary Study (“Topic Intensive Study”) designed to further refine the sensitivity determinations made in the 2017 Phase 1A Study. The Topic Intensive Study was designed to expand on and supplement the previous research as described in the following sections. The 2020 Topic Intensive Study concluded that extensive subsurface disturbance associated with previous archaeological excavations and development-related disturbance between the early 1900s and the late 20th century appear to have resulted in the extensive disturbance of the project site and the apparent removal of the hill on which the former cemetery for enslaved persons of African descent was located. It is expected that upper limits of each grave would have been situated at depths ranging from 3 to 6 feet below the original ground surface, and as such, the soil levels potentially containing human remains could have been removed in their entirety. This appears to be confirmed by historical and modern soil borings, which indicate only the presence of what appear to be glacial sands underlying the disturbed fill layer beneath the lot’s asphalt pavement.

Given the possibility that disturbed sediments containing human remains could have been redeposited on the project site, the Topic Intensive Study concluded that the site remains sensitive for disarticulated human remains that may have originated in the cemetery documented on the project site. The study recommended a Phase 1B archaeological Investigation of the project site to confirm the presence or absence of human remains or precontact archaeological resources on the project site. In a comment letter dated December 21,

2020, LPC¹ concurred with the conclusions and recommendations of the Topic Intensive Documentary Study.

PHASE 1B ARCHAEOLOGICAL INVESTIGATION WORK PLAN (AKRF 2021)

In the comment letter dated December 21, 2020, LPC stipulated that “a Work Plan should be developed to address any remains that may be impacted by the proposed project which includes consultation with a descendant community.” To satisfy this request, AKRF prepared a Phase 1B Archaeological Work Plan in April 2021 (see **Appendix A**). The Work Plan summarized previous archaeological investigations of the site and outlined the scope of work for the Phase 1B testing and associated descendant community consultation. In a comment letter dated April 22, 2021, LPC approved the Work Plan and requested supplemental information regarding the ongoing descendant community consultation. The supplemental information was provided to LPC (see **Appendix B**) and in a comment letter dated April 28, 2021, LPC determined that the consultation completed to date was appropriate and provided authorization for the testing to proceed.

¹ LPC Project Unique Identification Number (PUID): 35199

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the project site was completed between May 3 and May 4, 2021. 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 for non-osteological artifacts. 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 Rachel Watkins, PhD, Associate Professor in the Department of Anthropology at American University, served as the bioarchaeological consultant and the Oversight Coordinator (OC) for the project. As the OC, Dr. Watkins is responsible for facilitating all previous and ongoing consultation with the descendant community and will provide general oversight over the entire investigation. Dr. Watkins was also responsible for the bioarchaeological analysis of any osteological artifacts observed during the work.

B. IDENTIFICATION OF/CONSULTATION WITH THE DESCENDANT COMMUNITY

Pursuant to the 2018 LPC guidelines, for any site with sensitivity for human remains, “a good faith effort” must be made to identify and consult with a descendant community that will represent the interests of the mortuary population (LPC 2018: 15). The community can be represented by an institution (e.g., a successor church); a kinship network with genetic links to the burial population; or individuals with social or community ties to the burial population. An advisory group—known as the Advisory Group for the Inwood Sacred Sites (AGISS)—was assembled to facilitate and coordinate the descendant community consultation. A series of public meetings was announced to provide an opportunity for self-identified stakeholders (in the preservation and documentation of the Native American and African descendant histories associated with the site) to connect with researchers and AGISS. These self-identified stakeholders and AGISS are being recognized as Descendant Community members who participated in the review and final approval of the Phase 1B Work Plan and who continue to receive regular updates during the archaeological investigation. The expanded memorandum requested by LPC regarding the formation of and consultation with AGISS is included as **Appendix B**.

Consultation with the Descendant Community resulted in beginning the archaeological investigation with a Ceremony of Reconciliation on the site May 2, 2021. The ceremony involved community and ritual acknowledgement of the site’s significance in the past and present to Native American communities and African descendant communities and prayers and remarks were offered. The ceremony also acknowledged how the past, present, and future of the site reflects ways that the local and U.S. culture and economy benefitted from enslavement of Africans and settler colonialism.

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

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

C. 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 (see **Appendix A**), the objectives of the Phase 1B Archaeological Investigation of the project site were therefore to (1) document the subsurface conditions of the project site to determine if soil levels are present that could potentially contain intact archaeological resources from the precontact or historic period occupation of the site or its use as a cemetery; and (2) to confirm the presence or absence of human remains in the form of intact graves or disarticulated/redeposited human skeletal elements. As described below, the Phase 1B Work Plan outlined possible archaeological resource types that could be present on the project site. Those resources were expected to include the following:

- **Precontact Archaeological Resources:** it was expected that any precontact archaeological resources present on the site would be similar to the artifacts and features that were documented on the site 1903 and 1904. Those resources included shell midden deposits; filled pits; and dog burials and other animal bone deposits.
- **Historic Period Archaeological Resources:** given the project site's use as a burial place, it was expected that it could contain human remains in the form of intact graves, secondary burials/reburied remains, or disarticulated skeletal elements in disturbed and redeposited soils. Any human remains on the project site could have been in contexts with funerary artifacts associated with burial (e.g., shroud pins, coffin nails or other hardware, or coffin fragments) or with funerary offerings/grave goods that may have been interred with the deceased.

D. RESEARCH DESIGN

The Phase 1B Work Plan also outlined the basic research questions that could be used to interpret any recovered resources in to determine their significance. 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. The following research questions were developed to determine the research value of any identified archaeological resources or recovered artifacts and to outline the need for further archaeological and/or bioarchaeological analysis. 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.

RESEARCH QUESTIONS FOR PRECONTACT ARCHAEOLOGICAL RESOURCES

Archaeological resources recovered from the site could produce new data about the Native American occupation of northern Manhattan. The Native American occupation of the site and the larger Inwood area has been the subject of numerous archaeological investigations between the 19th and mid-20th centuries. In the event that intact precontact archaeological resources remain on the project site, a professional/ethical, modern archaeological investigation could produce valuable new data about the site that could be compared and contrasted with previously collected data as well as information collected at more recently excavated precontact sites in the region. This could provide new insight into the precontact occupation of northern Manhattan and its transition into a colonial settlement in the 17th century.

RESEARCH QUESTIONS ASSOCIATED WITH THE FORMER CEMETERY ON THE PROJECT SITE

Previous archaeological investigations completed between 1903 and 2020 documented the project site's use as a burial ground. Later, modern archaeological investigations determined that the burial ground had been disturbed at several points in history as a result of the development and redevelopment of the site. The Phase 1B Archaeological Investigation was therefore designed to determine the presence or absence of human remains (including both disarticulated human remains and intact burials). No additional research (e.g., disinterment, analysis of mortuary practices, etc.) was proposed as part of the Phase 1B Archaeological Investigation. Had any human remains or suspected human remains been observed, they would have been treated in a dignified, respectful manner pending the development of a scope of work for future testing efforts developed in consultation with the OC, the Descendant Community, and LPC and would require careful planning.

Research questions that can be answered through the further archaeological investigation of the project site are expected to be similar to those postulated during the investigation of the New York African Burial Ground in Lower Manhattan, one of the only sources of archaeological information regarding 17th and 18th century populations of African descent in New York City (LaRoche and Blakey 1997). These research questions included “what are the origins of the populations, what was their physical quality of life, and what can the site reveal about the biological and cultural transition from African to African-American identities?” as well as questions regarding modes of resistance (ibid: 86). Additional information regarding the history of the burial ground's usage and the population interred within its boundaries could reveal new information regarding the practice of slavery in New York City; the cultural interactions between early Dutch and English colonial occupiers and individuals of African descent (including those who were enslaved) during the burial ground's use could supplement this effort. Any human remains recovered from the project site could have been compared with mortuary populations documented at other contemporary burial sites in New York City, including the African Burial Ground and the Harlem African Burial Ground. Such a comparison could help better document the ways of life of African and African American populations living in northern Manhattan as compared with individuals who lived elsewhere on the island or within the African Diaspora.

E. FIELD AND ANALYTICAL METHODS

As described previously, this Phase 1B Archaeological Investigation was designed to confirm the presence or absence of archaeological resources of human remains 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 amended in 2014,² and with 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 1994.³

All archaeological testing occurred within the parking lot in the locations depicted on **Figure 1**. This testing strategy was outlined in the approved Phase 1B Work Plan and was designed to result in the excavation of between 5 and 10 percent of the project site (e.g., between 500 and 1,000 square feet of the approximately

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

² http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf

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

10,000-square-foot site). The testing occurred while the on-site business was in operation and as such, certain areas were inaccessible for archaeological testing. Those inaccessible areas included site access points/driveways and areas immediately adjacent to work areas/buildings to ensure safe egress for the employees and customers and to ensure the safety of the archaeological team given the movement of vehicles throughout the site. Testing locations were also placed to avoid active utilities and subsurface infrastructure.

NON-INVASIVE GEOPHYSICAL SURVEY

Prior to the completion of the Phase 1B survey, a non-invasive geophysical/GPR survey was completed to identify utilities within the parking lot where the Phase 1B Archaeological Investigation occurred. In general, GPR can be used to identify the location of undocumented burial places in undisturbed areas. However, given the extent to which the site has been disturbed and the extent of subsurface infrastructure or other sources of interference, the survey's focus was to identify active utility lines. The survey was completed by Enviroprobe Service, Inc. and confirmed the location of active electrical lines (see **Appendix C**).

METHODOLOGY FOR SUBSURFACE TESTING

The subsurface testing consisted of five mechanically excavated trenches supported with limited hand excavation. As no historical ground surfaces or soils potentially containing human remains, suspected human remains, or other archaeological features/artifact deposits were observed, the hand-excavation of shovel test pits (STPs) or testing units was not required. Backhoe operation and related services were provided by Brookside Environmental, Inc. Each trench measured 5 feet in width by 20 feet in length. The placement of the trenches was determined by the archaeological team in the field and trenches were placed in areas free of utilities or other obstructions (e.g., visible concrete or evidence of current or former subsurface obstructions, such as monitoring wells) 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 employees or customers of the on-site business. Attempts were made to stagger the trench locations and to orient some trenches north-south and others east-west to better assess the subsurface conditions across the site. Given safety constraints and the presence of an active electrical line, the trenches were clustered in the southern half of the parking lot on the project site as depicted on **Figure 1**.

All trenches were measured and marked with spray paint prior to their excavation. The breakup and removal of existing asphalt was completed using a traditional, toothed backhoe bucket and the excavation of all underlying soils was completed using a grading bucket fitted with a straight-edged metal plate/blade rather than teeth. The grading bucket was utilized to minimize any potential damage to human remains in the event that skeletal material was present within the trench locations. To minimize intrusions onto the use of the parking lot by the on-site business, each trench was excavated in two halves with the first half excavated, and backfilled before reorienting the machine to excavate the second half. Each test location was backfilled following its excavation or at the end of each workday.

Following the removal of the asphalt, the bladed bucket was used to slowly and gently scrape away the soils within the trench under the direction and observation of the archaeological team. When the trenches were shallow enough to permit entry (e.g., less than 5 feet in depth), the archaeologists entered the trenches at regular intervals upon the observation of changes in soil texture or color to skim the surface of the underlying soils with shovels. The archaeologists did not enter any unshored trenches deeper than 5 feet pursuant to relevant safety guidance. The archaeological team regularly troweled through the backdirt to make observations and collect artifacts. Selected samples of soils hand-excavated in natural subsoils were screened through quarter-inch mesh by the archaeological team and any resulting artifacts were collected.

The backhoe trenches were excavated to depths of 5 to 8 feet, well into sterile subsoil. Collected artifacts and samples will be placed in labeled zip-top polyethylene archaeological specimen bags.¹ Modern refuse (e.g., 20th century trash) was 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, and all relevant professional standards were applied. The archaeological team documented the excavation through both photographs and video, and all raw footage was transmitted to BRC and the Descendant Community as appropriate.

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. All on-site testing was recorded relative to an on-site datum (e.g., the paved ground surface) and converted to the North American Vertical Datum of 1988 (NAVD88) based on spot elevations included on recent site surveys (see **Figure 1**). The North American Datum of 1983 (NAD83) was used as a permanent horizontal datum.

ANALYSIS OF OSTEOLOGICAL MATERIALS IN THE FIELD

A small number of faunal remains that were observed in disturbed/fill contexts during the excavation of the trenches were examined by Rachel Watkins, PhD acting as the project's OC and bioarchaeologist. Any examined osteological material was confirmed to be of animal origin/faunal remains. The faunal remains were brushed clean and photographed in the field and were not collected for analysis. On May 7, 2021, Dr. Watkins submitted a brief report to BRC confirming that no human remains were identified on site (see **Appendix D**).

F. 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. Given the limited number of artifacts collected and the lack of their research value, a formal artifact catalogue was not prepared. Information on collected artifacts is included in the following chapter. The artifacts are determined to have low research value and are not recommended for conservation or long-term curation.

¹ 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.

A. SUMMARY OF TRENCH EXCAVATION

As described in the previous chapter, five trenches were excavated in the southern half of the parking lot on the project site (see **Figure 1**). The trenches were placed to avoid hazards including active electrical lines, access/egress points, and moving vehicles. As shown in **Table 3-1** and shown on **Figures 2A and 2B**, a consistent soil profile was observed across all five trenches. That profile included the following stratigraphic levels: (1) asphalt and bedding material (7.5 to 12 inches in thickness); (2) 20th century fill material (4 to 15.5 inches in thickness); (3) lighter-brown sterile subsoil (variable thickness between 25 and 40 inches); and (4) reddish-brown sterile subsoil (at variable depths greater than 48 to 60 inches). No evidence of human remains, suspected human remains, grave shafts, or original or buried ground surfaces were observed. Observations and artifact analysis associated with individual trenches are outlined in the following section.

Table 3-1
Summary of Trenches

Trench	Size (feet)			Surface El. (NAVD88)	Observed Soil Levels		
	L	W	D		Depth (inches)	Description	Soil Color/Texture
1	20	5	8	15.01	0 to 7.5	Asphalt and bedding material	n/a
					7.5 to 23	Fill with brick rubble, rock, ash, and modern refuse	Dark yellowish-brown (10YR4/4) sandy silt, compact; fill/disturbance deeper in southern third of trench
					23 to ~48	Sterile subsoil	Dark yellowish-brown (10YR4/6) silty sand, very compact and slightly damp
					~48+	Sterile subsoil	Reddish-brown (2.5YR4/4) coarse silty sand
2	20	5	8	15.36	0 to 10	Asphalt and bedding material	n/a
					10 to 23	Fill with rock and modern refuse	Brown (10YR4/3) sandy silt, compact
					23 to ~60	Sterile subsoil	Dark yellowish-brown (10YR4/4) silty sand
					~60+	Sterile subsoil	Reddish-brown (2.5YR4/4) coarse silty sand, damp
3	20	5	7	~15.36	0 to 10	Asphalt and bedding material	n/a
					10 to 20	Fill with rock, brick rubble, coal ash, and modern refuse	Dark yellowish-brown (10YR4/4) silty sand
					20 to ~60	Sterile subsoil	Dark yellowish-brown (10YR4/4) coarse silty sand
					~60+	Sterile subsoil	Reddish-brown (2.5YR4/4) coarse silty sand; reddish hue increases with depth
4	20	5	6	14.85	0 to 12	Asphalt and bedding material	n/a
					12 to 16	Fill with rock, brick rubble, coal ash, and modern refuse	Dark yellowish-brown (10YR4/4) silty sand
					16 to ~48	Sterile subsoil	Variable: Dark yellowish-brown (10YR4/4) silty sand with bands of yellowish-brown (10YR5/4) coarser sand and yellowish-brown (10YR5/4) clay lenses
					~48+	Sterile subsoil	Reddish-brown (2.5YR4/4) coarse silty sand

Table 3-1 (continued)
Summary of Trenches

Trench	Size (feet)			Surface El. (NAVD88)	Observed Soil Levels		
	L	W	D		Depth (inches)	Description	Soil Color/Texture
5	20	5	5.6	15.01	0 to 11	Asphalt and bedding material	n/a
					11 to 26	Fill with rocky rubble and modern refuse	Yellowish-brown (10YR5/6) silty sand mixed with dark brown (10YR3/3) sandy silt
					26 to ~54	Sterile subsoil	Dark yellowish-brown (10YR4/4) coarse silty sand, damp
					~54+	Sterile subsoil	Dark yellowish-brown (10YR3/6) coarse silty sand, damp
Notes: Surface elevations were determined using the nearest spot elevations as identified on the site survey included as Figure 1 (Geoland 2019).							

B. OBSERVATIONS WITHIN INDIVIDUAL TRENCHES

TRENCH 1

Trench 1 was oriented east-west and was located near the extreme southeast corner of the project site. As shown in **Table 3-1**, four soil levels were observed within the majority of the trench. Beneath the asphalt and its underlying bedding material was a layer of compact fill material containing brick rubble, decaying rock, and modern refuse. A second asphalt layer may have been observed at a depth of approximately 2.5 feet (30 inches) in the eastern portion of the trench (see **Figure 3A, Photograph 1**). This may have been in association with an area of deeper disturbance observed in the southern third of the trench/in the trench's south wall. This greater disturbance may have occurred during the construction of the building to the south of the project site or during the construction/demolition of the ca. 1950 restaurant that formerly occupied the project site. Disturbed rocky fill was observed in the south wall of the trench that included what appeared to be modern garbage (e.g., bottle glass and aluminum foil) and food waste (including butchered animal bone and shell) in association with what appeared to be decaying black plastic garbage bags (see **Figure 3A, Photograph 2**). These deposits are presumed to have been 20th century refuse that was deposited in backfill materials and are not believed to be of historical origin. The disturbed rocky fill was observed to greater depths in the western half of the trench, where the rocky fill in the south wall extended to a depth of approximately 6 feet and ultimately hindered excavation (see **Figure 3B, Photograph 3**).

Across the northern two thirds of the trench and below the depth of the rocky fill in the southern third, the soil profile was more clearly defined as layers of clean, undisturbed subsoil (see **Figure 3B, Photograph 4**). At least two layers of clean subsoil were observed beneath disturbed modern fill layers. The subsoil layers were culturally sterile and did not appear to contain artifacts; no historical materials or artifacts were observed during examinations of the backdirt.

A total of five artifacts were collected from Trench 1, all of which originated in the modern fill layers (see **Table 3-2 and Figure 3C, Photographs 5 and 6**). The artifacts included modern-looking glass fragments, an undecorated porcelain fragment, and a milk glass jar fragment. A small number of faunal remains from the fill material, some of which were butchered and originated in the 20th century garbage deposit, were examined by the OC in the field but were not collected for analysis.

Table 3-2
Trench 1 Artifact Inventory

Trench	Soil Context	Count	Object	Material	Observations
1	South half; 24 to 26 inches below ground surface	1	Jug handle	Clear glass	Very thick
1		1	Unknown	Porcelain	White/undecorated
1	South half, backdirt associated with soils from 48 to 60 inches below ground surface	1	Wine or liquor bottle	Dark green glass	Shoulder fragment with embossed decorative "B"
1		1	Cosmetics jar?	Milk glass	Curved/circular
1		1	Bottle	Light aqua glass	Very thick

TRENCH 2

Trench 2 was opened perpendicular to Trench 1 (oriented north-south) along the eastern side of the site. The trench was situated to the west of a concrete block that was set into the asphalt and visible from the ground surface. The trench was shifted further west after the backhoe initially encountered a concrete wall and an undocumented but seemingly inactive utility line along the eastern wall of the trench (see **Figure 4, Photograph 7**). The profile of the trench was similar to that seen in Trench 1, but with an increased amount of industrial refuse within the fill underlying the asphalt, including a greater amount of broken glass and several pipes believed to represent older, inactive utility lines. Under the fill layer were two layers of clean subsoil, including a brown layer of silty sand over a layer of reddish-brown silty sand (see **Figure 4, Photograph 8**). No artifacts were observed within the subsoil layers and modern artifacts were observed in the fill layer but not collected for analysis.

TRENCH 3

Trench 3 was placed west of and parallel to Trench 2 and was situated to avoid a patch of repaired asphalt that was suspected to be evidence of current or former subsurface infrastructure. The southern and northern halves of the trench were excavated on consecutive days but exhibited generally the same profile (see **Figures 5A and 5B, Photographs 9 through 12**). The soils immediately under the asphalt in the southern side of the trench had a foul odor and contained coal ash and modern (20th century) refuse including ceramics, glass, rusted metal, and fire brick/tile. A total of twelve artifacts believed to have been associated with this fill layer were collected, as shown in **Table 3-3** and **Figure 5C**. Of these, five were thick porcelain chunks that appeared to be part of a toilet or other plumbing equipment. Other artifacts included modern glass or glass fragments with markings suggesting production date ranges between the late 19th and early to mid-20th centuries. A small number of faunal remains from the fill layer were examined by the OC and were not collected for analysis.

Table 3-3
Trench 3 Artifact Inventory

Trench	Soil Context	Count	Object	Material	Observations
3	South half; 24 inches below ground surface (fill)	1	Mug	White granite	Very thick; no decorations or marks
		1	Jar base	Clear glass	Very thick; embossed with large "4" with machine-made scar on base
3	North half; backdirt from fill	5	Toilet or plumbing hardware	Porcelain	Very thick
3	North half; screened soil (30 to 32 inches below ground surface)	1	Unknown	Gray-bodied stoneware with brown glaze	Small, fragment
3		1	Fire brick	Terra cotta	Fragment
3	North half, backdirt associated with soils from 48 to 60 inches below ground surface (may have fallen from above)	1	Bottle Mouth	Clear glass	Tooled prescription finish (late-19th to 20th century), remnants of mold seams
3		2	Panel bottle	Clear glass	Fragments

Two layers of culturally sterile subsoil were observed beneath the 20th century fill layer. A sample of the upper dark yellowish- brown sandy soil level from between 30 and 32 inches below the top of the asphalt was selected for screening. The sand was largely determined to be clean and damp with small pebbles, although a single small fragment of glazed grey-bodied stoneware was recovered, representing the only artifact clearly associated with subsoils that was recovered from any of the five trenches. The small and fragmentary nature of the stoneware artifact suggests that it may have been disturbed and redeposited at some point and that it likely migrated down into the subsoil as a result of settling following a past episode of soil disturbance. No other artifacts were observed in this subsoil layer or in the layer that underlaid it.

TRENCH 4

Trench 4 was opened to the west of and parallel to Trenches 2 and 3 and was placed at a safe distance from the adjacent automobile repair facility (see **Figure 6A, Photograph 17**). The soil profile observed in Trench 4 matched that seen in the other trenches (see **Figure 6A, Photograph 18 and Figure 6B, Photographs 19 and 20**). The fill layer observed underneath the asphalt appeared to extend to a slightly greater depth in the southern end of the trench and contained a greater amount of rusted metal and slag than that seen in the other trenches.

Beneath the fill layer, the upper level of subsoil once again appeared to be culturally sterile. Samples of soil selected for screening from the north and south halves of the trench from depths of 36, 38-42, 45, and 52 inches contained no cultural material and were found to be damp sand with small pebbles. The stratigraphic profile observed in the western wall of the trench included fine linear striations that may represent the past hydrological activity/flow of water resulting in the deposition of finer layers of silt and sand.

TRENCH 5

Trench 5 was oriented immediately north of Trench 1 but was moved slightly to the north to avoid the disturbed fill material that hindered excavation in the southern end of Trench 1 and was also placed at a safe distance from the adjacent buildings (see **Figure 7A, Photographs 21 and 22**). However, the trench was found to contain similar rocky fill with modern refuse to depths of 26 to 28 inches below the asphalt surface (see **Figure 7B, Photograph 23**). A wire was observed protruding from the trench's northern wall

in the west half at the base of the fill at its interface with the first sterile subsoil layer. Samples of the underlying subsoils in the east and west halves of the trench were selected for screening at depths of 30 to 34 inches and 36 to 42 inches (see **Figure 7B, Photograph 24**). The screened soils included damp sand with small pebbles and no cultural material. No artifacts were collected from Trench 5 for analysis.

A. CONCLUSIONS

Each of the five trenches excavated for this Phase 1B Archaeological Investigation exhibited the same four stratigraphic levels with minimal variation in thickness/depth: (1) asphalt and bedding; (2) 20th-century fill material; (3) lighter-brown sterile subsoil; and (4) reddish-brown subsoil (see **Figures 1 and 2**). This consistent profile appears to confirm the landscape modification analysis described in the Topic Intensive Study prepared by AKRF in 2020. It therefore appears that the upper soil strata—including the soil deposits containing both the former cemetery and the precontact archaeological site—were stripped away as a result of historical grading. The two subsoil levels observed during this Phase 1B Archaeological Investigation were therefore at one time buried at greater depths, possibly between 8 to 12 feet below the historical ground surface. The thin layer of 20th century fill observed under the asphalt likely dates to the initial development of the site with a parking lot and restaurant in the mid-20th century. Of the small number of artifacts that were recovered, almost all came from the fill layer underlying the asphalt. The artifacts within the fill appeared to be largely of modern origin and some were associated with refuse deposits of little research value. Limited screening of the subsoil levels identified a single fragment of stoneware that may have migrated down into the subsoil layers as a result of natural settling processes.

No remaining traces of either the cemetery or the precontact archaeological site were observed in any of the five trenches excavated. Given the extent of landscape modification observed in the trenches, the likelihood of the site containing intact graves/human remains or archaeological sites remains low.

B. RECOMMENDATIONS

Given the confirmation of the extent of landscape modification through the excavation of an approximately 5 percent sample of the project site, it does not appear that further archaeological investigation is warranted or that such investigation would result in the collection of meaningful data. However, BRC is committed to the completion of additional efforts to ensure that in the unlikely event that human remains are present in the untested portions of the site, those remains will be protected and handled with respect.

These additional efforts will include the implementation of what will be referred to henceforth as the Unanticipated Human Remains Discovery Plan (see **Appendix E**). The Unanticipated Human Remains Discovery Plan is a version of the Human Remains Discovery Plan that was included within the approved Phase 1B Work Plan. Whereas the previous plan addressed the potential discovery of human remains during the archaeological investigation, the Unanticipated Human Remains Discovery Plan included in **Appendix E** addresses outlines the steps that must be taken in the event that human remains are unexpectedly encountered during the construction of the proposed project, when archaeologists are not expected to be present on site. BRC will also implement a contractor training program during the project's construction phase. The training will be designed to educate on-site workers about the site's history as a burial place; provide preliminary information about recognizing human remains or suspected human remains; and outline the steps and requirements of the Unanticipated Human Remains Discovery Plan. These additional efforts will be completed in consultation with LPC, the AGISS, and other parties as necessary and appropriate.

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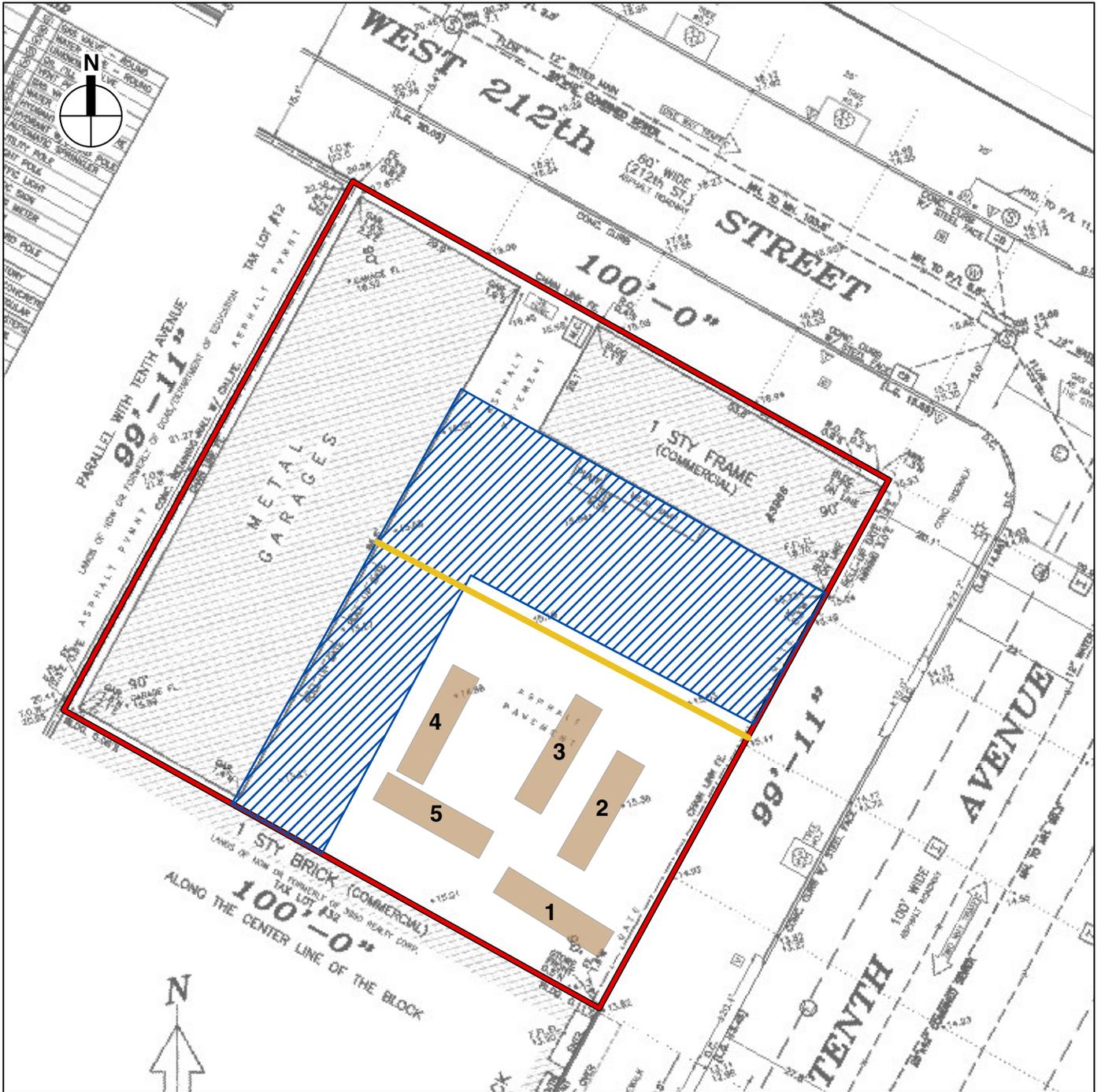
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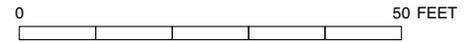
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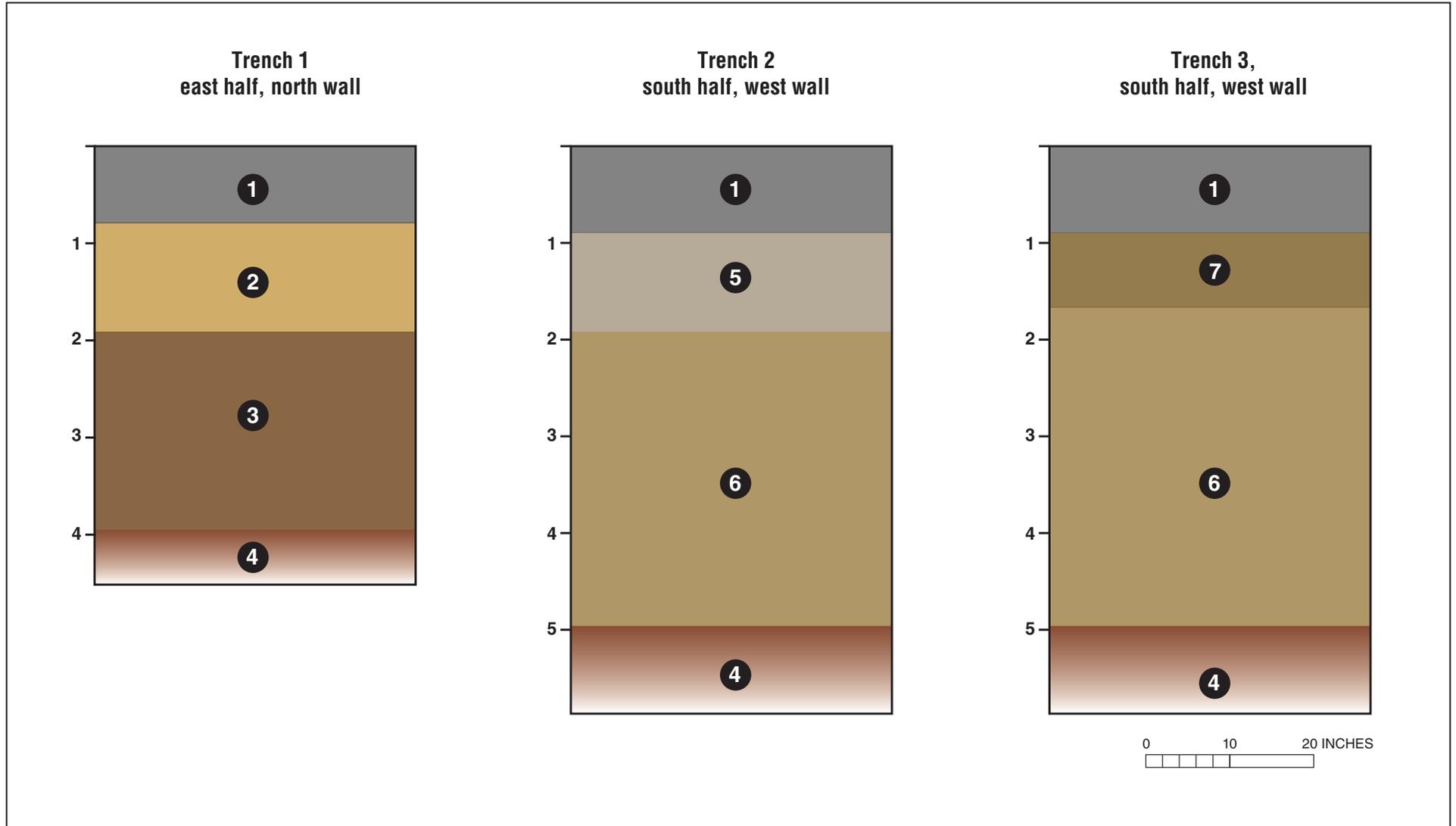
Figures



- Project Site
- Trenches
- Active Vehicle Zone
- Electrical Line

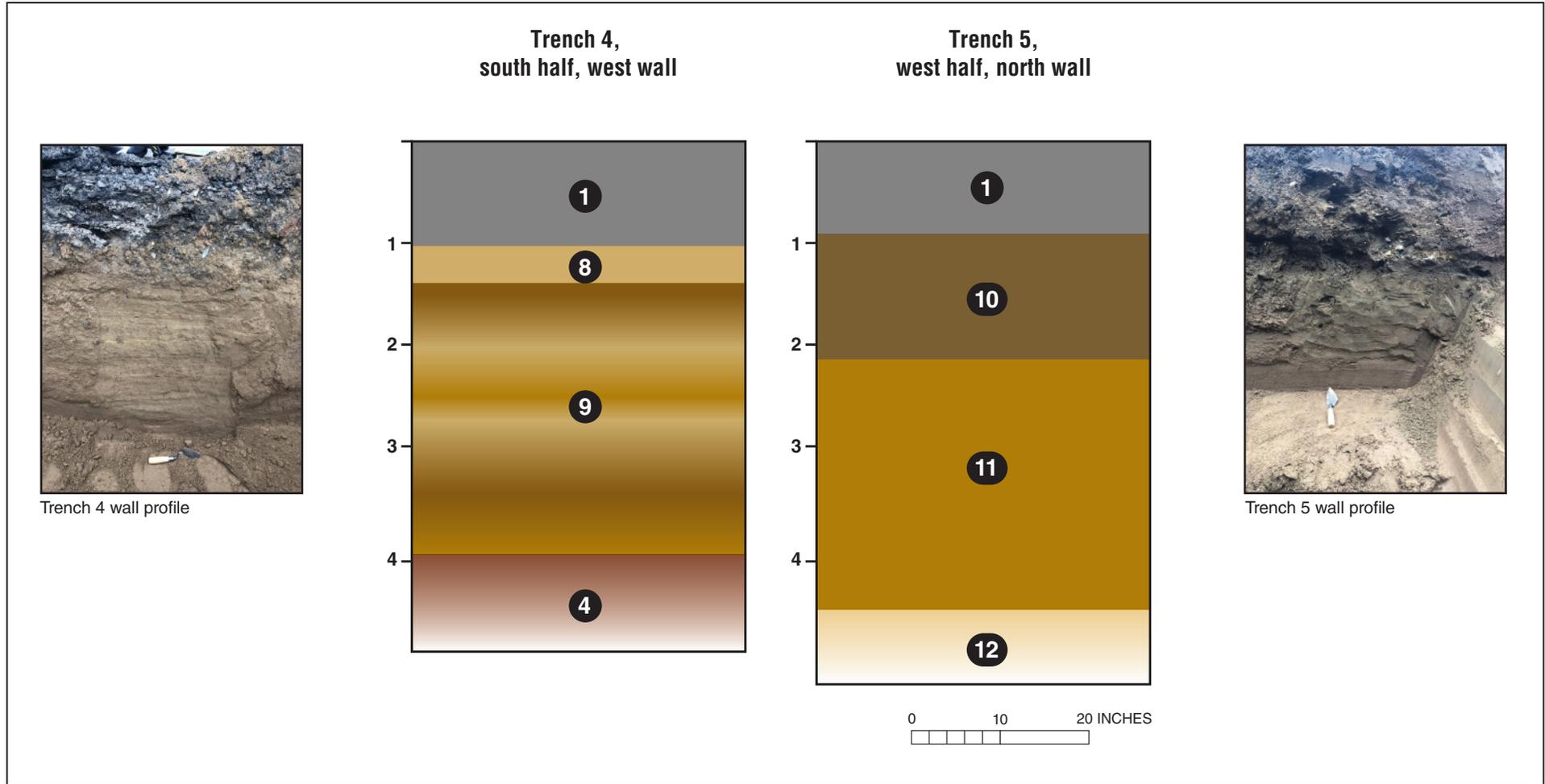


Site Plan and Testing Locations
Figure 1



- ❶ Asphalt and bedding
- ❷ Fill: Dark Yellow Brown (10yr4/4) sandy silt with rubble and refuse
- ❸ Sterile subsoil: Dark Yellow Brown (10yr4/6) silty sand, very compact
- ❹ Sterile subsoil: Reddish Brown (2.5yr4/4) coarse silty sand

- ❺ Fill: Brown (10yr4/3) compact sandy silt with rock and refuse
- ❻ Sterile subsoil: Dark Yellow Brown (10yr4/4) silty sand
- ❼ Fill: Dark Yellow Brown (10yr4/4) silty sand with rock, rubble, ash, and refuse



- ❶ Asphalt and bedding
- ❷ Fill: Dark Yellow Brown (10yr4/4) sandy silt with rubble and refuse
- ❸ Sterile subsoil: Dark Yellow Brown (10yr4/6) silty sand, very compact
- ❹ Sterile subsoil: Reddish Brown (2.5yr4/4) coarse silty sand
- ❺ Fill: Brown (10yr4/3) compact sandy silt with rock and refuse
- ❻ Sterile subsoil: Dark Yellow Brown (10yr4/4) silty sand
- ❼ Fill: Dark Yellow Brown (10yr4/4) silty sand with rock, rubble, ash, and refuse

- ❽ Fill: Dark Yellow Brown (10yr4/4) silty sand
- ❾ Sterile subsoil: variable color/ texture, Dark Yellow Brown (10yr4/4) silty sand with bands of Yellow Brown (10yr 5/4) coarse sand and clay lenses
- ❿ Fill: Yellow Brown (10yr5/6) silty sand with Dark Brown (10yr3/3) sandy silt
- ⓫ Sterile subsoil: Dark Yellow Brown (10yr4/4) coarse silty sand
- ⓬ Sterile subsoil: Dark Yellow Brown (10yr3/6) silty sand



View of the excavation of the eastern half of Trench 1 showing disturbed rocky fill in the southern wall and a possible buried asphalt layer above the first level of subsoil

1



Disturbed modern refuse deposits spilling from collapsing fill in the south wall of the trench; the refuse was found in context with what appeared to be decaying black plastic garbage bags

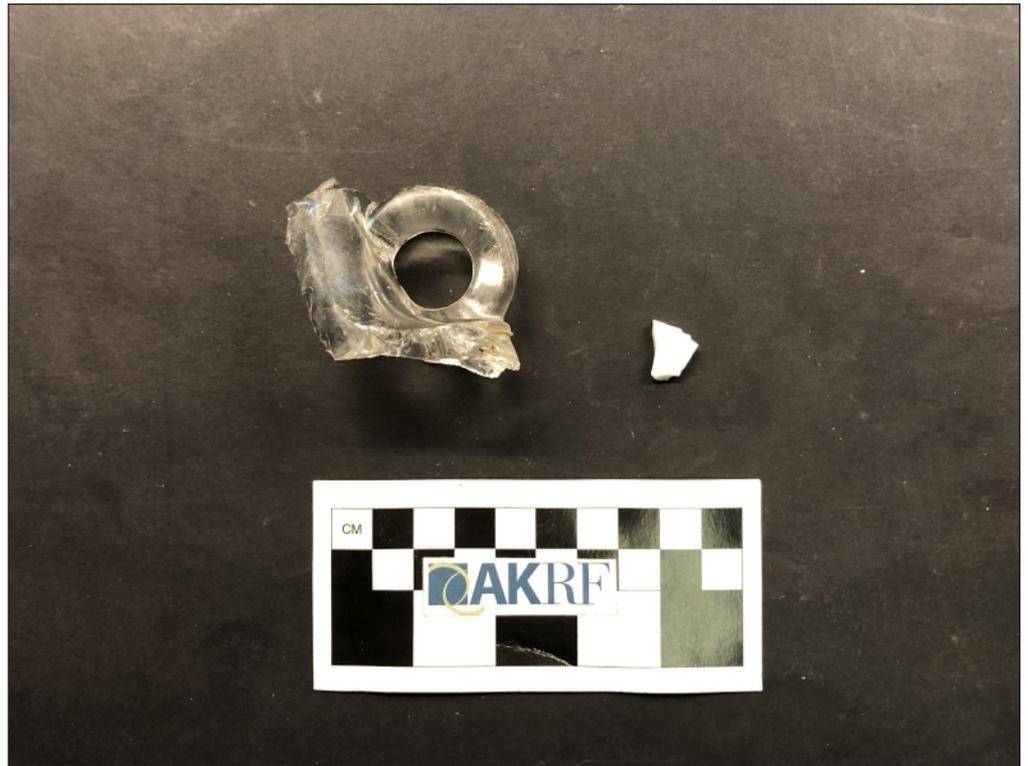
2



Deeper deposits of rocky fill in the west half of Trench 1 3



The transition between dark yellow brown and reddish-brown subsoil layers in the west half of Trench 1 beneath the rocky fill 4



Modern glass and ceramic artifacts from the fill layer in Trench 1 5



Modern glass and ceramic artifacts believed to have originated in the fill layer in Trench 1 6



Looking south at Trench 2 following the removal of the asphalt and fill layers; the concrete wall and associated pipe are visible to the left of the photograph 7



The lower level of sterile reddish-brown subsoil observed in Trench 2 8



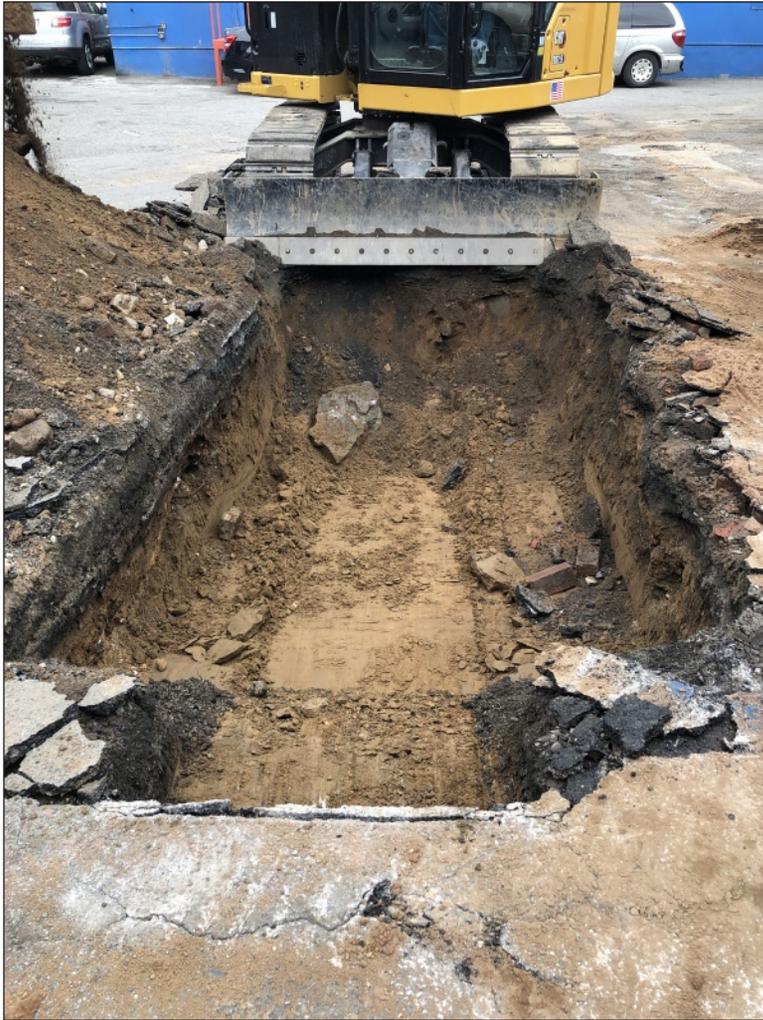
The excavation of the south half of Trench 3, showing the 20th century fill layer after the removal of the asphalt

9



The underlying layers of dark yellow brown and reddish-brown subsoil in the south half of Trench 3

10



View of the first subsoil layer in the north half of Trench 3 11



The underlying reddish brown subsoil layer in the north half of Trench 3 12



Stoneware fragment recovered from clean subsoil approximately 30 to 32 inches below ground surface in the north half of Trench 3; this is the only artifact observed in the subsoil for any of the five trenches **13**



White granite mug fragment from the fill layer in the south half of Trench 3 **14**



Modern refuse from the Trench 3 fill layer including porcelain plumbing hardware **15**



Modern refuse from the Trench 3 fill layer **16**



The start of excavation of Trench 4, showing the access/egress area adjacent to the building to the west; the bladed backhoe bucket used for sub-asphalt excavation is shown at left **17**



The upper subsoil layer visible following the removal of asphalt and fill in Trench 4 **18**



The lower reddish brown subsoil layer in the south half of Trench 4 **19**



The profile of the eastern wall of the north half of Trench 4, showing all four identified soil strata **20**



Looking north at the unexcavated portion of the site where excavation would have posed safety issues for the archaeological team and customers/employees of the on-site business 21



The initial excavation of the east half of Trench 5, showing previously excavated Trench 1 in the background at left and Trench 4 in the foreground 22



View of the south wall of the east half of Trench 5, showing the rocky fill layer **23**
over the two underlying subsoil layers



Looking west at the west half of Trench 5, showing all **24**
four identified soil strata

Appendix A: Approved Phase 1B Work Plan

Proposed Development at 3966 Tenth Avenue

BLOCK 2229, LOT 25

NEW YORK, NEW YORK

Work Plan for Phase 1B Archaeological Investigation

LPC PUID: 35199

Prepared for:

Bowery Residents' Committee, Inc. (BRC)
131 West 25th Street, 12th Floor
New York, New York 10001

Prepared by:



AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

APRIL 2021

Work Plan for Phase 1B Archaeological Investigation

1. PROJECT DESCRIPTION AND BACKGROUND

Bowery Residents' Committee, Inc. (BRC) is contemplating the redevelopment of the property located at 3966 Tenth Avenue in the Inwood neighborhood of Manhattan, New York County, NY (see **Figure 1**). The project site includes Tax Block 2229, Lot 25. The site is currently privately owned and occupied by an active single-story auto repair shop and parking lot. The proposed project is expected to involve the demolition of the existing on-site buildings and the construction of a new building with a homeless shelter and administrative office space on the project site.

SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW AND IDENTIFICATION OF INVOLVED AGENCIES

The project would be developed under existing zoning and would be facilitated with funding from the New York City Department of Homeless Services (DHS). Because of the funding action, the project is subject to New York City Environmental Quality Review (CEQR). DHS is serving as the lead agency for the environmental review. This Phase 1B Archaeological Investigation Work Plan has been prepared pursuant to CEQR and in compliance with the *Guidelines for Archaeological Work in New York City* as issued by the New York City Landmarks Preservation Commission (LPC) in 2018.¹

The project site has been the subject of numerous archaeological investigations since the first decade of the 20th century that have resulted in the documentation of a precontact archaeological site and a historic period cemetery (see **Section 2, "Environmental and Historical Context"**). Two of the previous archaeological investigations were completed in 1903 and 1904 by early New York State archaeologists including Reginald P. Bolton and his associates at the American Museum of Natural History's American Scenic and Historic Preservation Society (ASHPS). With respect to modern archaeological investigations resulting from environmental review legislation, the project site was identified as the northern half of Potential Development Site E (which also included Lot 32) in the Inwood Rezoning Final Environmental Impact Statement (FEIS) as issued in 2018. The archaeological sensitivity of development sites in the rezoning area was assessed in a Phase 1A Archaeological Documentary Study (Phase 1A Study) prepared by Celia J. Bergoffen, PhD in 2017. The results of the Phase 1A Study and its documentation of the development and occupation history of the project site are summarized in this report as necessary.

Subsequent to the Phase 1A Study, AKRF, Inc. prepared a Topic Intensive Archaeological Documentary Study (Topic Intensive Study) in November 2020 that was designed to further refine the sensitivity determinations made in the 2017 Phase 1A Study. In a comment letter dated December 21, 2020,² LPC concurred with the conclusions of the Topic Intensive Study and stipulated that "a Work Plan should be developed to address any remains that may be impacted by the proposed project which

¹https://www1.nyc.gov/assets/lpc/downloads/pdf/2018_Guidelines%20for%20Archaeology_Final_high%20res.pdf

² LPC Project Unique Identification Number (PUID): 35199

includes consultation with a descendant community.” This Work Plan has been prepared to satisfy this request.

IDENTIFICATION OF DESCENDANT COMMUNITY

Pursuant to the 2018 LPC guidelines, for any site with sensitivity for human remains, “a good faith effort” must be made to identify and consult with a descendant community that will represent the interests of the mortuary population (LPC 2018: 15). The community can be represented by an institution (e.g., a successor church); a kinship network with genetic links to the burial population; or individuals with social or community ties to the burial population. An Advisory Group is being assembled to facilitate and coordinate the descendant community consultation. A series of public meetings will be announced that will provide an opportunity for self-identified stakeholders (in the preservation and documentation of the Native American and African descendant histories associated with the site) to connect with researchers and the Advisory Group. These self-identified stakeholders and the Advisory Group will be recognized as Descendant Community members who will participate in the review and final approval of the work plan and receive regular updates during the archaeological investigation.

ARCHAEOLOGICAL TEAM AND PROPOSED SCHEDULE

The Phase 1B Archaeological Investigation of the project site will be supervised by Elizabeth D. Meade, PhD, Registered Professional Archaeologist (RPA) #16353, who will serve as Principal Investigator and Laboratory Director for non-osteological artifacts. 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 Rachel Watkins, PhD, Associate Professor in the Department of Anthropology at American University, will serve as the bioarchaeological consultant and the Oversight Coordinator (OC) for the project. As the OC, Dr. Watkins will be responsible for facilitating all consultation with the descendant community and will provide general oversight over the entire investigation. Dr. Watkins will also be responsible for the bioarchaeological analysis of any human remains or suspected human remains that may be encountered during the Phase 1B effort.

At present, it is not expected that additional subconsultants will be required for the specialized analysis of artifacts or ecofacts as part of the Phase 1B Archaeological Investigation although such consultants would be included in the project team in the event that additional phases of archaeological investigation are necessary. Testing is expected to begin in May 2021, following the review and approval of this work plan by LPC and the descendant community.

2. ENVIRONMENTAL AND HISTORICAL CONTEXT

CURRENT SITE CONDITIONS

The project site is currently developed with two one-story commercial buildings occupied by an auto repair shop and an auto parts store, neither of which were developed with a basement. These buildings line the northern and western sides of the site and until recently, a food truck was permanently parked along the eastern side of the site (see **Figure 1**). The interior of the lot between the buildings is paved and is undeveloped though it has been occupied by unenclosed hydraulic lifts used for auto repairs in the recent past. The auto repair facility along the western side of the project site is situated above

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

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

subsurface infrastructure associated with hydraulic car lifts and buried storage tanks. A retaining wall lines the western side of the garage, separating it from an adjacent public school parking lot to the west. A brick building with a partial basement extending to depths of approximately 4 to 6 feet below grade (12 to 10 feet NAVD88) is situated on the property located to the south of the project. A ground-penetrating radar (GPR) investigation completed as part of a Phase II Environmental Site Investigation by Roux Environmental Engineering and Geology, Inc. in October 2019. The investigation did not identify anomalies suggesting the presence of utilities with the exception of a subsurface electrical line located in the vicinity of the former hydraulic lifts in the parking lot.

ENVIRONMENTAL SETTING

The island of Manhattan is within a geographic bedrock region known as the Manhattan Prong of the New England (Upland) Physiographic Province (Isachsen, et al. 2000). Bedrock in the vicinity of the project site is represented by Inwood Marble (Fisher, et al. 1970). Surficial geology in the immediate vicinity of the project site includes a mix of glacial till and exposed bedrock (Cadwell, et al. 1986). Recent soil borings documented bedrock at depths of 92 to 104 feet, and groundwater was identified at 12 to 14 feet below ground surface (Roux Environmental 2019; MRCE 2020).

THE FORMER CEMETERY ON THE PROJECT SITE

The 2017 Phase 1A Study by Celia Bergoffen, PhD and the 2020 Topic Intensive Study by AKRF documented the history of the project site and its use as a burial ground, which is briefly summarized in this section. The site was historically included within a larger tract of land occupied by the Dyckman and Nagel families and the cemetery that occupied the project site was located near a stone fence that marked the boundary line between the lands of the two families. Both families were enslavers and enslaved persons of African descent lived on and in the vicinity of the Dyckman and Nagel farms before slavery was ended in New York State in 1827. A cemetery that formerly occupied the project site and the surrounding area was first disturbed during a road construction project in 1903. An initial archaeological investigation was completed in 1903 and a second, more intensive investigation occurred in 1904. The cemetery is depicted on a map prepared by R.P. Bolton in 1912, which shows that its boundaries extended to the north, east, and south of modern Lot 25. Between 30 and 50 graves are believed to have been situated within the boundaries of the hillside cemetery. Early archaeologists, including Bolton, identified the individuals buried on the site as enslaved persons of African descent whose stolen labor was likely utilized on the Dyckman and Nagle farms. The fate of the remains following their exhumation at the turn of the century is unknown. The 1904 archaeological investigation also documented a precontact archaeological site that was situated beneath the stratigraphic levels of the cemetery. This archaeological site reportedly included a series of pits filled with shell, animal bone, and dog burials.

The project site was vacant for several decades following the documentation of the burial ground and was developed with a parking lot and small structures in the second half of the 20th century. The existing on-site buildings were constructed on the site in the late 20th century.

DOCUMENTATION OF PREVIOUS SITE DISTURBANCE

In its current state, the project site is generally level with a slight rise to the west and is situated at an elevation of approximately 13.5 to 15.5 feet NAVD88 along Tenth Avenue and 20.2 feet along 212th Street (MRCE 2020). As documented in the 2020 Topic Intensive Study, the project site was historically occupied by a hill that sloped down to the south and east and the former burial place and the precontact archaeological site were located at shallow—possibly as shallow as 3 feet—below what was the ground surface of the hill in the early 20th century (see **Figure 2**). The hill was graded as a result of historical archaeological investigations and subsequent development and redevelopment and the elevation of the

project site appears to have been lowered by as much as 7.7 to 11.7 feet since the late 19th century (AKRF 2020). The 2020 investigation documented four phases of disturbance and possible disturbance across the site:

1. The grading of the hill and subsequent excavation during the construction of Tenth Avenue in 1903 (which resulted in the first archaeological investigation of the burial ground);
2. The completion of additional archaeological excavations in 1904;
3. The conversion of the project site into a parking lot by the 1940s; and
4. The construction of the existing on-site buildings and associated subsurface infrastructure, including utility tanks/connections and hydraulic equipment.

ARCHAEOLOGICAL SENSITIVITY ASSESSMENT

The 2020 Topic Intensive Study concluded that extensive subsurface disturbance associated with previous archaeological excavations and development-related disturbance between the early 1900s and the late 20th century appear to have resulted in the extensive disturbance of the project site and the apparent removal of the hill on which the former cemetery for enslaved persons of African descent was located. It is expected that upper limits of each grave would have been situated at depths ranging from 3 to 6 feet below the original ground surface, and as such, the soil levels potentially containing human remains could have been removed in their entirety. This appears to be confirmed by historical and modern soil borings, which indicate only the presence of what appear to be glacial sands underlying the disturbed fill layer beneath the lot's asphalt pavement. However, given the possibility that disturbed sediments containing human remains could have been redeposited on the project site, the site remains sensitive for disarticulated human remains that may have originated in the cemetery documented on the project site. While the 2017 Phase 1A study identified the project site as sensitive for archaeological resources associated with the area's precontact occupation, the extent to which the site has been disturbed appears to preclude precontact archaeological sensitivity.

3. RESEARCH DESIGN

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). The objectives of the Phase 1B Archaeological Investigation of the project site are therefore to (1) document the subsurface conditions of the project site to determine if soil levels are present that could potentially contain intact archaeological resources from the precontact or historic period occupation of the site or its use as a cemetery; and (2) to confirm the presence or absence of human remains in the form of intact graves or disarticulated/redeposited human skeletal elements. This section defines the possible archaeological resource types that could be present on the project site and outlines the basic research questions that could be used to interpret any recovered resources in order to determine their significance. In the event that human remains are confirmed to be present on the site, a separate plan for their possible analysis would be prepared that would identify all possible area of analysis given the state of the remains' preservation.

POTENTIAL ARCHAEOLOGICAL RESOURCES

PRECONTACT ARCHEOLOGICAL RESOURCES

Although determined unlikely to be present on the project site, if any precontact archaeological resources are identified during the Phase 1B Archaeological Investigation, they would be expected to

be similar to the artifacts and features that were documented on the site in the early 1900s. Those resources included shell midden deposits; filled pits; and dog burials and other animal bone deposits. A number of precontact archaeological sites were identified in the larger Inwood area by Bolton and his associates in the late 19th and early 20th centuries. However, the area has been the subject of few modern archaeological investigations completed pursuant to modern standards and ethical practices.

HISTORIC PERIOD ARCHAEOLOGICAL RESOURCES

Dozens of burials were disinterred from the project site as a result of early-20th century archaeological investigations. Given the lack of documentation of those investigations, the fate of the exhumed remains is unknown, as is the total number of burials that may have taken place on the project site. Despite the extensive disturbance to the project site, the possibility exists that human remains could still be present on the project site in the form of intact graves, secondary burials/reburied remains, or disarticulated skeletal elements in disturbed and redeposited soils. The site could also contain associated funerary artifacts associated with burial (e.g., shroud pins, coffins nails or other hardware, or coffin fragments) or with funerary offerings/grave goods that may have been interred with the deceased.

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. While it is expected that any intact precontact archaeological resources or human remains located on the project site would be expected to be of extremely high research value, the following research questions can be applied to any identified archaeological resources or archaeological sites to confirm their research value and outline the need for further archaeological and/or bioarchaeological analysis. These research topics are specific to the types of potential archaeological resources that could be encountered within the project site as described in the previous section.

RESEARCH QUESTIONS FOR PRECONTACT ARCHAEOLOGICAL RESOURCES

Archaeological resources recovered from the site could produce new data about the Native American occupation of northern Manhattan. The Native American occupation of the site and the larger

Inwood area has been the subject of numerous archaeological (both avocational and professional) investigations between the 19th and mid-20th centuries. In the event that intact precontact archaeological resources remain on the project site, a professional/ethical, modern archaeological investigation could produce valuable new data about the site that could be compared and contrasted with previously collected data as well as information collected at more recently excavated precontact sites in the region. This could provide new insight into the precontact occupation of northern Manhattan and its transition into a colonial settlement in the 17th century.

RESEARCH QUESTIONS ASSOCIATED WITH THE FORMER CEMETERY ON THE PROJECT SITE

As described above, previous archaeological investigations completed between 1903 and 2020 have documented the project site's use as a burial ground. Later, modern archaeological investigations have also indicated that the burial ground had been disturbed at several points in history as a result of the development and redevelopment of the site. This Phase 1B Archaeological Investigation has therefore been designed only to determine the presence or absence of human remains (including both disarticulated human remains and intact burials). No additional research (e.g., disinterment, analysis of mortuary practices, etc.) is proposed at this time. Any human remains or suspected human remains encountered during the Phase 1B testing will be treated in a dignified, respectful manner. If determined to be present, the results of this Phase 1B Archaeological Investigation would then be used to identify

additional archaeological fieldwork that may be necessary to document and protect human remains on the project site in advance of its future redevelopment. All future testing efforts would be developed in consultation with the OC, the descendant community, and LPC and would require careful planning.

Research questions that can be answered through the further archaeological investigation of the project site are expected to be similar to those postulated during the investigation of the New York African Burial Ground in Lower Manhattan, one of the only sources of archaeological information regarding 17th and 18th century populations of African descent in New York City (LaRoche and Blakey 1997). These research questions included “what are the origins of the populations, what was their physical quality of life, and what can the site reveal about the biological and cultural transition from African to African-American identities?” as well as questions regarding modes of resistance (ibid: 86). Additional information regarding the history of the burial ground’s usage, the population interred within its boundaries could reveal new information regarding the practice of slavery in New York City; the cultural between early Dutch and English colonial occupiers and individuals of African descent (including those who were enslaved) during the burial ground’s use could supplement this effort.

Given the disturbance that has been documented on the project site, it is considered likely that any human remains that may be present on the site would be disarticulated skeletal elements potentially associated with disturbed and redeposited soils. In the event that human remains are observed to be fragmentary or poorly preserved, it may be difficult to clearly address these research questions in a comprehensive manner. The fragmentation and redeposition of human remains may significantly limit the ability of the archaeological team to identify burial practices and may limit the archaeologists’ ability to complete analyses of the remains beyond the identification of basic characteristics such as bone dimensions and type and, if identifiable, possibly geographic origin and biological sex. However, if that is the case, it is possible that new research questions can be established through which the archaeologists will be able to interpret the treatment of the burial ground throughout history and the practices and cultural forces that led to its disturbance. Any human remains recovered from the project site could be compared to mortuary populations documented at other contemporary burial sites in New York City, including the African Burial Ground and the Harlem African Burial Ground. Such a comparison could help to better document the ways of life of African and African-American populations living in northern Manhattan as compared with individuals who lived elsewhere on the island or within the African Diaspora.

4. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation is required to determine if resources are actually present on a site. This Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (i.e., a Phase 2 Archaeological Survey/Evaluation) in the event that such a survey becomes necessary. The Phase 1B Archaeological Investigation will be 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 amended in 2014,² and with 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 1994.³

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

² http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf

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

Archaeological excavation within the parking lot on the project site will take place only within the areas as shown on **Figure 1**. This testing strategy has been designed to result in the excavation of between 5 and 10 percent of the project site (e.g., between 500 and 1,000 square feet of the approximately 10,000-square-foot site). The testing is expected to occur while the on-site businesses are in operation and as such, certain areas will not be accessible for archaeological testing, including site access points/driveways and areas immediately adjacent to work areas/buildings to ensure safe egress for the employees and customers of the on-site businesses. The testing is therefore expected to occur entirely within the paved parking lot in the southeastern portion of the project site in areas that are expected to be free of utilities.

NON-INVASIVE GEOPHYSICAL SURVEY

Prior to the completion of the Phase 1B survey, a non-invasive geophysical/GPR survey will be completed to identify utilities within the parking lot where the Phase 1B Archaeological Investigation will take place. In general, GPR can be used to identify the location of undocumented burial places in undisturbed areas. However, given the extent to which the site has been disturbed and the extent of subsurface infrastructure or other sources of interference, it is not expected that the survey will be sufficient for identifying anomalies possibly associated with burials. However, if any anomalies are identified as a result of the survey that cannot be attributed to utility disturbance or subsurface infrastructure associated with the site's current use, attempts will be made to investigate the anomalies as part of the Phase 1B Archaeological Investigation.

SUBSURFACE TESTING

Subsurface testing will primarily consist of mechanically-excavated trenches. Where necessary, hand-excavated shovel test pits (STPs) and/or small excavation units that will be opened to examine resources encountered in the trenches. The testing protocol outlined below documents the planned testing procedures based on expected sensitivity and disturbance as outlined in the Phase 1A Study and summarized in the previous sections of this Work Plan. The exact number and placement of machine-excavated trenches and hand-excavated shovel tests and test units, and the depths to which they will be excavated, will be largely dependent upon the decision of the archaeological team in the field. Therefore, the testing strategy may be altered based on conditions observed in the field, including previously unforeseen obstructions on the surface or beneath the pavement. All mechanical testing will be completed with a backhoe with a bucket fitted with a blade or a straight edge (as opposed to a bucket with teeth).

Up to five backhoe trenches measuring approximately 5 feet in width and 20 to 30 feet in length will be excavated in parking lot on the project site.¹ As the archaeological sensitivity of the site is generally uniform across the site's entire footprint, the trenches will be placed in arbitrary locations where there is adequate room for the trench to be excavated in a safe manner given the on-going operation of the on-site businesses. This will require space for the safe rotation/operation of the machine and to safely stockpile excavated soils. Attempts will be made to stagger the trench locations and to orient some trenches north-south and others east-west to better assess the subsurface conditions across the site. Tentative trench locations are depicted on **Figure 1**, although these locations are subject to changes based on site conditions at the time of the excavation. If surface or subsurface obstructions would

¹ This testing strategy has been designed to attempt to test between 5 and 10 percent of the surface area of the site as requested by LPC. In the event that there are sufficient subsurface obstructions (e.g., utilities) or surface obstructions (e.g. parked/immovable cars) that would result in the testing of less than 5 percent of the site, LPC will be notified.

preclude the excavation of trenches of the size described above, smaller trenches may be opened at irregular intervals to avoid said obstructions. The trenches will be placed to avoid areas of recent disturbance and known utilities and will be placed at a safe distance from adjacent structures, retaining walls, or other obstacles.

The location of each backhoe trench will be cut with a mechanical saw to minimize disturbances to the paved parking lot. The bladed bucket will be used to slowly and gently scrape away the soils within the trench under the direction and observation of the archaeological team. The archaeologists will enter the trench at regular intervals or upon the observation of changes in soil texture or color to skim the surface of the underlying soils with shovels (see **Health and Safety Plan** below). The archaeologists will not enter any unshored trenches deeper than 5 feet pursuant to relevant safety guidance. Selected samples of soils excavated by backhoe will be screened by the archaeological team. The backhoe trenches will be excavated to the depth of sterile subsoil to confirm the presence or absence of archaeological resources.

If historic ground surfaces, soils potentially containing human remains or suspected human remains, or other archaeological features/artifact deposits are observed, additional investigation and examination will be necessary, possibly including the hand-excavation of shovel test pits (STPs) measuring up to 24 inches in diameter and excavation units measuring up to 24 inches square may be excavated by hand in and around the location of observed resources or remains. All hand-excavated soils will be screened as appropriate through quarter-inch mesh and collected artifacts and samples will be placed in labeled zip-top polyethylene archaeological specimen bags.¹

Each testing location will be documented using standard nomenclature and established using measuring tapes and an on-site datum (see **Section 5** for a discussion of standardized datums). Artifacts will be collected as necessary and placed into labeled specimen bags. Modern refuse will not be collected. Each test location will be backfilled at the end of each work day unless otherwise secured. All fieldwork will be documented through notes, photographs, and drawings and all relevant professional standards will be applied. The archaeological team will document the excavation through both photographs and video and all raw footage will be appended to the final report as requested.

HEALTH AND SAFETY PLAN

Excavation completed as part of this Phase 1B Archaeological Investigation is expected to exceed a depth of 4 feet below grade in most locations. All fieldwork will be completed pursuant to the safety measures outlined in the “AKRF Health & Safety Plan” as updated in January 2020 and in compliance with the standards of the United States Department of Labor’s Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices. Archaeologists will not enter unshored trenches that are deeper than 4 feet below the ground surface unless alternate strategies are employed to ensure the health and safety of the archaeologists (e.g., widening trenches, stepping trench sides, etc.).

As the testing is expected to be completed during the COVID-19 pandemic, the testing will also be completed in compliance with AKRF’s “COVID-19 General Procedures for Staff” as issued on April 22, 2020. Pursuant to this plan, the archaeological team will remain socially distant (e.g., a minimum of 6 feet) from each other and from customers and employees of the on-site businesses. All members of the archaeological team and sub-consultants will be required to wear a face covering at all time.

¹ 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.

Commonly used field equipment will be disinfected regularly and all members of the field team will be encouraged to regularly wash or sanitize their hands before and after using shared equipment or facilities.

CONTINGENCY PLAN FOR PHASE 2 SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources or human remains, not to fully expose or document any encountered resources or to disinter human remains. A Phase 2 Survey/Evaluation occurs only if the Phase 1B Archaeological Investigation testing uncovers shaft features that will need to be evaluated according to the National Register criteria for eligibility. A Phase 2 Survey/Evaluation is used “to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility” (NYAC 1994: 4). It can involve detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of excavation units (i.e. including larger excavation units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 work is necessary, it would be undertaken in consultation with LPC. The Phase 2 survey would then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted. In the event that a Phase 2 Survey/Evaluation is required, a separate Work Plan will be prepared at that time for submission to the OC, the descendant community, and LPC.

5. SITE DOCUMENTATION

Professional standards for excavation, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data. Where possible, testing locations will be recorded digitally using GIS software or other accurate digital means. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The excavation will be recorded using digital photography and videography as appropriate throughout the field effort.

6. LABORATORY PROCESSING OF NON-OSTEOLOGICAL ARTIFACTS

Archaeologists will clean, stabilize, and inventory all cultural material removed from the project site. During the course of the investigation, the archaeological consultant (AKRF) will retain custody of all recovered non-osteological artifacts, which will not be stored on-site. Following the completion of the fieldwork, the artifact assemblage will be transported to the AKRF archaeological laboratory for cleaning and processing. No human remains are expected to be removed from the project site as part of this Phase 1B investigation.

All laboratory activity associated with non-osteological artifacts will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (36 CFR 66 and 79). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological

techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zip-top bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with LPC, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service 356 CFR 79.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the project site would be the property of the site owner at the time of the investigation, although it is expected that ownership of any significant archaeological artifact assemblages will be transferred to BRC following the closure of the sale of the site. In the event that significant archaeological resources are encountered within the project site, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with the LPC and a suitable long-term curation plan will be prepared at that time. If the artifact collection is determined to have no research value, it will be returned to the site owner/BRC or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal. It is recommended that the non-significant portion of the assemblage with educational or public interest value—i.e., those ceramic and glass artifacts recovered from disturbed/fill deposits or from soils not determined to be associated with archaeological sites—be donated to an educational non-profit heritage or educational organization (e.g., the Dyckman Farmhouse Museum or PS 98). Any non-significant artifacts that would not be appropriate for such programs (e.g., rusted metal and sharp glass fragments) will be returned to the site owner or discarded.

7. ANALYSIS OF OSTEOLOGICAL REMAINS

In the event that any human remains are encountered during the Phase 1B Archaeological Investigation, any required analysis will be completed by the OC, who is serving as the bioarchaeological consultant for the project. Procedure and the conditions under which analysis will take place are outlined in the Human Remains Discovery Protocol, located in **Section 11** of this document. The OC is responsible for developing a plan in consultation with the Descendant Community for analysis that will be proposed to the BRC and descendant community for approval.

8. REPORTING

Following the completion of field testing and laboratory processing and analysis, a final report will be prepared. In the event that no features are encountered, a final technical report will be completed as described below. The final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data. Maps, plans, drawings,

photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings and additional documentation will be included as an appendix as necessary. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by LPC in 2018.

The final technical report will include the following information:

- Description of the study area;
- Relevant historic documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this testing protocol and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs;
- Documentation of consultation with the descendant community; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to the OC, the descendant community, and LPC for review and concurrence pursuant to CEQR. If necessary, a final version of the report will be prepared to address comments made by any of the involved parties.

9. PROJECT COORDINATION AND MANAGEMENT

The archaeological consultant (AC) will notify LPC when testing is scheduled to begin and, if requested, will assist in arranging an LPC staff site visit during the course of the Phase 1B testing. The OC will facilitate all coordination with the descendant community.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared and submitted to the OC, the descendant community, and LPC as indicated above.

In the event that human remains or suspected human remains are encountered, LPC and the descendant community will be notified immediately pursuant to the terms of the Human Remains Discovery Protocol as outlined in **Section 11** of this Work Plan. Following the implementation of the Human Remains Discovery Protocol, a final report on the field investigation will be submitted by the AC and the OC to LPC and the descendant community for review and comment. The report will document the presence or absence of human remains or archaeological features. In the event that archaeological resources or human remains are confirmed to be present that would require mitigation, any required mitigation for identified archaeological resources will be designed in consultation with the OC, LPC, and the descendant community. It is expected that no information regarding the project will be transmitted from the AC to the public via social media or other means until after the conclusion of the Phase 1B testing or unless such transmission is specifically requested by the descendant community or OC. In the event that archaeological sites are identified and additional rounds of archaeological testing are required, a plan for the dissemination of information about the project will be prepared in consultation with the consulting parties to ensure that the obligations of the archaeological team to the public are met while also protecting any identified archaeological resources.

10. PROJECT TIMELINE/SCHEDULE AND RESOURCE ESTIMATE

Following the approval of this Phase 1B Archaeological Work Plan by LPC and the descendant community, archaeological testing will commence immediately as soon as such work can be scheduled. The work is tentatively scheduled to begin on May 3, 2021. It is expected that the excavation of up to five backhoe trenches will occur over the course of up to five field days (May 3 to May 7, 2021). The fieldwork will be completed by the Principal Investigator with the support of the OC. Any identified features or human remains will either be re-buried or otherwise secured pending a Phase 2 Archaeological Survey/Evaluation (a separate work plan would be prepared at that time). The discovery of any human remains or archaeological features is therefore not expected to interfere with the schedule of the Phase 1B Investigation as trenches will be closed upon the discovery of human remains or archaeological features until they can be further explored via a Phase 2 Archaeological Survey/Evaluation.

Laboratory processing and analysis of collected artifacts will begin immediately after the transportation of the artifacts to the AKRF archaeological laboratory and will be completed under the supervision of the Laboratory Director. It is assumed that up to 50 non-osteological artifacts requiring processing/analysis will be collected as part of the Phase 1B Archaeological Investigation (additional artifacts would be collected in the event that an archaeological site is identified and additional phases of work are required). It is expected that processing and cataloging will take approximately one week and would be expected to be completed by May 14, 2021. The final technical report summarizing the results of the Phase 1B Archaeological Investigation will be completed within four to six weeks of the conclusion of the testing (e.g., between June 4 and June 18, 2021).

11. PLAN FOR THE DISCOVERY OF HUMAN REMAINS

As noted above, given the extent to which the site has been disturbed, the likelihood that intact burials are present is considered to be low. However, in the event that human remains in the form of intact burials or disarticulated remains are encountered, the following protocol will be implemented. This protocol outlines the notification procedures that will be in place to ensure that all involved parties are appropriately notified of the discovery of human remains or suspected human remains. These procedures have been established in accordance with the guidelines of LPC and the wishes of the descendant community and are in compliance with local laws.

HUMAN REMAINS DISCOVERY PROTOCOL

In the event of the discovery of human remains or suspected human remains during the Phase 1B investigation:

1. All work will be immediately stopped to protect the integrity of the find. The location of the find will be flagged or fenced to ensure the safety of the human remains or suspected human remains and to avoid potential damage to the remains.
2. If the Oversight Coordinator (OC), who will be serving as the project's bioarchaeological consultant, is present at the time of the discovery, the OC will complete a preliminary examination of the find to determine if it represents human remains. If the OC is not present on the site at the time of the discovery, the AC will notify the OC immediately. The notification will include photographs and other information in sufficient detail to allow for the OC to make a preliminary determination of whether or not the find represents human remains.
3. If the OC determines that the find is of human origin, the AC and/or the OC will notify BRC.

4. The AC will then notify the Office of the Chief Medical Examiner (OCME) pursuant to New York City law (this notification will occur via email or by calling 911). The AC will cooperate with OCME to notify, as required, any additional law enforcement agencies (e.g., the New York City Police Department [NYPD]) that would need to be alerted, as appropriate.

OCME Contact: Dr. Bradley Adams, Forensic Anthropologist
Telephone: Primary: 212.447.2030; Secondary: 718.804.8050
Address: 520 First Avenue, New York, New York 10016
E-mail: badams@ocme.nyc.gov

5. The AC will immediately notify LPC of the find; the LPC contact is listed below:

LPC Contact: Amanda Sutphin; Director of Archaeology
Telephone: (212) 669-7823
Address: New York City Landmarks Preservation Commission
1 Centre Street, 9th Floor, New York, NY 10007
E-mail: asutphin@lpc.nyc.gov

6. If OCME/NYPD determine that they have no concerns for the remains (e.g., the site is not designated a crime scene), BRC will direct the AC and the OC to begin a more detailed archaeological assessment of the find's significance/physical extent. The OC will notify the descendant community about the status of site at the start of the archaeological assessment.
7. If the human remains are determined to be of Native American origin, all remains and any associated funerary objects will be left in place and protected from further disturbance until consultation with Tribal Nations can be initiated pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) in consultation with LPC (see contact list addendum). Any requests made by the Tribal Nations that represent New York County regarding the treatment of the remains—including reburial or requested offerings—will be honored.
8. If it is determined that intact interments or disarticulated human remains dating to the historic period are present that would be disturbed the construction of the proposed project, remains will be left in place and protected from further disturbance. The OC will initiate discussion with the AC, BRC, the OC, the descendant community, and LPC regarding additional measures to avoid or mitigate further damage. These measures may include:
 - Formal archaeological evaluation of the site;
 - Visits to the site by LPC, the descendant community, and other parties as appropriate;
 - Preparation of a mitigation plan by the AC in coordination with the OC, including procedures for disinterment and reinterment, for approval by LPC, the descendant community, and other parties as appropriate;
 - Implementation of the mitigation plan; and
 - Approval to resume construction following completion of the fieldwork component of the mitigation plan.
9. No human remains are to be disinterred or removed from the site unless such disinterment is directed by the OC and the descendant community following the consultation process completed under Step 8, above.

10. In the event that intact human remains from the historic period are to be disinterred from the site, a funeral director will be retained by the applicants. As required by City Law, the funeral director will apply for a disinterment permit from the New York City Department of Health (NYCDOH) before human remains are removed from the project site.
11. Work will not resume on the project site until authorized by BRC, the OC, and LPC in conjunction with the implementation of a mitigation plan approved by the descendant community.

ADDENDUM: CONTACT INFORMATION FOR STATE AND FEDERALLY-RECOGNIZED NATIVE AMERICAN NATIONS:

DELAWARE NATION

Erin Thompson-Paden
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Phone: (405) 247-2448, ext. 1403
Email: epaden@delawarenation-nsn.gov
Preferred contact method: email

Dana Kelly
HP/106 Asst.
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Phone: (405) 247-2448
Email: dkelly@delawarenation.com
Preferred contact method: email

DELAWARE TRIBE OF INDIANS

Chief Chester “Chet” Brooks
Chief, Delaware Tribe of Indians
Delaware Tribal Headquarters
5100 Tuxedo Blvd
Bartlesville, OK 74006
Phone: 918-337-6527
Fax: 918-3378-6591
Email: cbrooks@delawaretribe.org
Preferred contact method: Print copies via UPS

Susan Bachor
Historic Preservation Representative
Delaware Tribe of Indians
126 University Circle
Stroud Hall Room 437
East Stroudsburg, PA 18301

Phone (m): 610-761-7452
Phone (w): 570-422-2023
Email: temple@delawaretribe.org
Preferred contact method: email

STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICAN INDIANS

Ms. Shannon Holsey
President
Stockbridge-Munsee Community Band of Mohican Indians
N8476 Moh He Con Nuck Road *OR P.O. Box 70*
Bowler, WI 54416
Phone: 715-793-4111
Email: Shannon.Holsey@mohican-nsn.gov
Preferred contact method: Print copies via USPS

Nathan Allison
Tribal Historic Preservation Officer (THPO)
Stockbridge-Munsee Community Band of Mohican Indians
Email: nathan.allison@mohican-nsn.gov
Preferred contact method: email

Bonney Hartley
NAGPRA Coordinator
Stockbridge-Munsee Community Band of Mohican Indians
37 1st Street
Troy, NY 12180
Phone: 518-244-3164
Email: Bonney.hartley@mohican-nsn.gov
Preferred contact method: email

SHINNECOCK NATION

Council of Trustees
PO Box 5006
Southampton, NY 11969
Phone: (631) 283-6143
Email: davidmartine@shinnecock.org; josephinesmith@shinnecock.org
Preferred contact method: email

UNKECHAUG INDIAN NATION (STATE RECGONIZED)

Chief Henry B. Wallace
207 Poospansk Lane
Mastic, NY 11950
Phone: (631) 281-4143, ext 100
Email: hwall@aol.com

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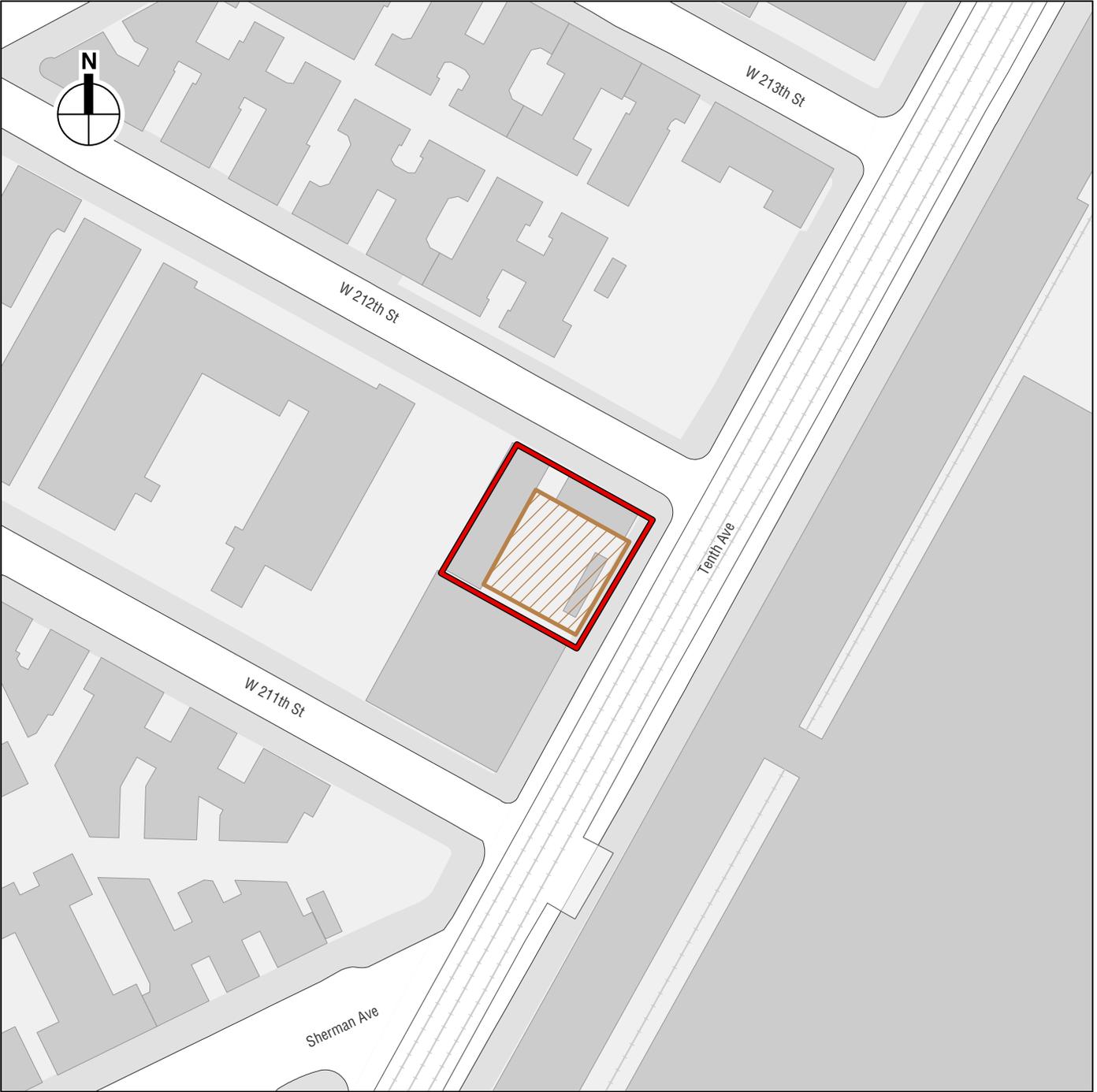
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4.5.21



-  Project Site
-  General Area of Proposed Phase 1B Testing



3966 TENTH AVENUE, NEW YORK, NY

Project Location
Figure 1

Data source: <https://gis.ny.gov/elevation/contours/contours-nyc.html>;
New York City 2-foot contour line features, created using the USGS NYC 2014 LIDAR Collection.



- Project Site
- NYC 2-foot Contour Line*

* Note: Contour elevations shown in Manhattan Datum

1873 Department of Public Parks
Topographical Survey

Appendix B: Descendant Community Consultation Plan



Environmental, Planning, and Engineering Consultants

440 Park Avenue South
7th Floor
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191
www.akrf.com

Memorandum

To: Amanda Sutphin (New York City Landmarks Preservation Commission)

From: Elizabeth D. Meade, PhD, RPA (AKRF) and Rachel Watkins, PhD (American University)

Date: April 27, 2021

Re: Summary of Descendant Community Consultation associated with the Phase 1B Archaeological Investigation of 3966 Tenth Avenue, New York, NY

cc: Nicole Clare, Daughtry Carstarphen, and Dakota An (BRC) and Peggy King Jorde (King Jorde Cultural Projects Consulting)

INTRODUCTION

This memorandum has been prepared to summarize descendant community consultation that has occurred to date with regards to the Phase 1B Archaeological Investigation of the project site located at 3966 Tenth Avenue in the Inwood neighborhood of New York, NY. In compliance with the 2018 LPC Guidelines for Archaeological Work in New York City, efforts have been made to identify and coordinate with individuals with cultural, social, religious, genetic, or other personal connections to the individuals reported to have been interred within the cemetery formerly located on the project site, believed to be enslaved persons of African descent, or with the identified Native American ceremonial site reported to have been located in the stratigraphic deposits beneath the cemetery.

IDENTIFICATION OF ADVISORY GROUP AND DESCENDANT COMMUNITY

The Advisory Group for the Inwood Sacred Sites (AGISS) has been assembled to facilitate and coordinate the descendant community consultation. The AGISS is comprised of self-identified stakeholders interested in the preservation and documentation of the Native American and African descendant histories associated with the site. The AGISS is chaired by staff members from the Dyckman Farmhouse Museum, which has dedicated itself to the documentation and research of the Inwood neighborhood, the Dyckman and Nagel families, and the individuals of African descent whose stolen labor was used to operate the farms and households of the Dyckman and Nagel families. Other members of the AGISS include individuals of African and/or indigenous descent; local historians; local residents; representatives from local institutions, business, and schools; elected officials and/or their representatives; and other self-identified stakeholders as appropriate.

These self-identified stakeholders and the AGISS are for the purposes of this project recognized as Descendant Community members who are participating in the review and final approval of the Work Plan prepared for the Phase 1B Archaeological investigation by AKRF in April 2021. The first meeting of the

AGISS was held on April 16, 2021. The members of the AGISS receive regular updates during the archaeological investigation and will help coordinate the dissemination of information to the broader public.

PUBLIC OUTREACH AND COORDINATION

A series of public meetings have been announced to provide an opportunity for additional self-identified stakeholders and members of the general public to connect with researchers and the AGISS. The first public meeting was held on April 20, 2021 and was led by Rachel Watkins, acting in the role of Oversight Coordinator for the project, and was attended by members of the AGISS as well as staff members from BRC and AKRF. The meeting was intended to discuss the draft Work Plan and to request input from the AGISS and descendant community members.

The following attachments are appended to this memorandum and represent materials prepared for the purposes of informing the AGISS and general public about the site's historic uses and previous archaeological investigation; of defining the goals and methods of the Phase 1B Archaeological Investigation; and to request input from the AGISS and descendant community on both the Work Plan and the comments:

- Archaeological Investigation Fact Sheet dated April 16, 2021;
- Agenda for the first AGISS meeting on April 16, 2021; and
- AGISS calendar used to inform the general public of key meeting dates and project milestones

SUMMARY OF INPUT RECEIVED ON DRAFT WORK PLAN

No revisions to the Work Plan were requested by AGISS or the descendant community. Consultation will continue with the AGISS as documented in the Work Plan throughout the archaeological investigation and in the event that human remains are encountered during the fieldwork.

Advisory Group for the Inwood Sacred Sites
3966 Tenth Avenue, Manhattan, New York City
Tax Block 2229, Lot 25

Archaeological Investigation
Fact Sheet
4/16/2021

Goal

- History of landscape modification
- Changes in elevation
- Contributing to filling out historical gaps
- Assessment of archaeological sensitivity
 - Low: original topography suggests that Native American archaeological sites would not be present (i.e., locations at great distances from fresh and saltwater resources), no evidence of historic activity before the installation of municipal water and sewer networks, evidence of sufficient disturbance/that archaeological resources are not likely to remain intact
 - Moderate: Topography suggests Native American occupation, documented historic period activity, some disturbance, but not enough to eliminate the possibility of archaeological resources
 - High: Topography suggests Native American occupation, documented historic period activity, evidence/record of minimal or no documented disturbance

Process/Method

- Research before on-site testing
 - Previous investigations (esp. 1903 and 1904 investigations by Bolton)
 - Maps – record of historical and contemporary topography, including cemetery and changes in elevation
 - Previous elevation studies – documents and samples of underground rock/soil layers to confirm presence/absence of cemetery layer
 - Newspapers – publicizing/coverage of Bolton’s 1903 investigation, information on disturbance and disposition of human remains, evidence of community knowledge of the cemetery
 - Geophysical testing – using sound and laser technology to identify possible graves/remains without excavation/disturbance - such as ground-penetrating radar (GPR) and light detection and ranging (LiDAR)
- Encompassed in *Topic Intensive Documentary Study* prepared by Elizabeth Meade
- Represents difference between “old” and “new” archaeology

- Archaeological investigation must be carried out by trained professionals
 - As opposed to amateur archaeologists/looters having access to sites
- Minimizing site disturbance
 - Start with testing areas (pits) on the site for evidence of remains and disturbance rather than disturbing entire site
 - Minimize/prevent removing artifacts from the site and taking artifacts for private collections
- Laws and other rules now exist to support or require investigation before construction/development - impacts time and care taken
- Descendant community engagement – Involvement/input from community (including but not limited to possible relatives of people buried in the cemetery) interested in learning about and preserving cemetery about how to go about testing
- Efforts to honor and educate about history of the site/for its historical significance – now a regular part of investigation

What Do We Know About the Cemetery Site?

Precontact history

- Native American occupation – possibly a ceremonial site (found shell pits, animal bones, and pottery)
- Detailed in a Phase 1-A study conducted as part of an Inwood rezoning effort: http://s-media.nyc.gov/agencies/lpc/arch_reports/1781.pdf

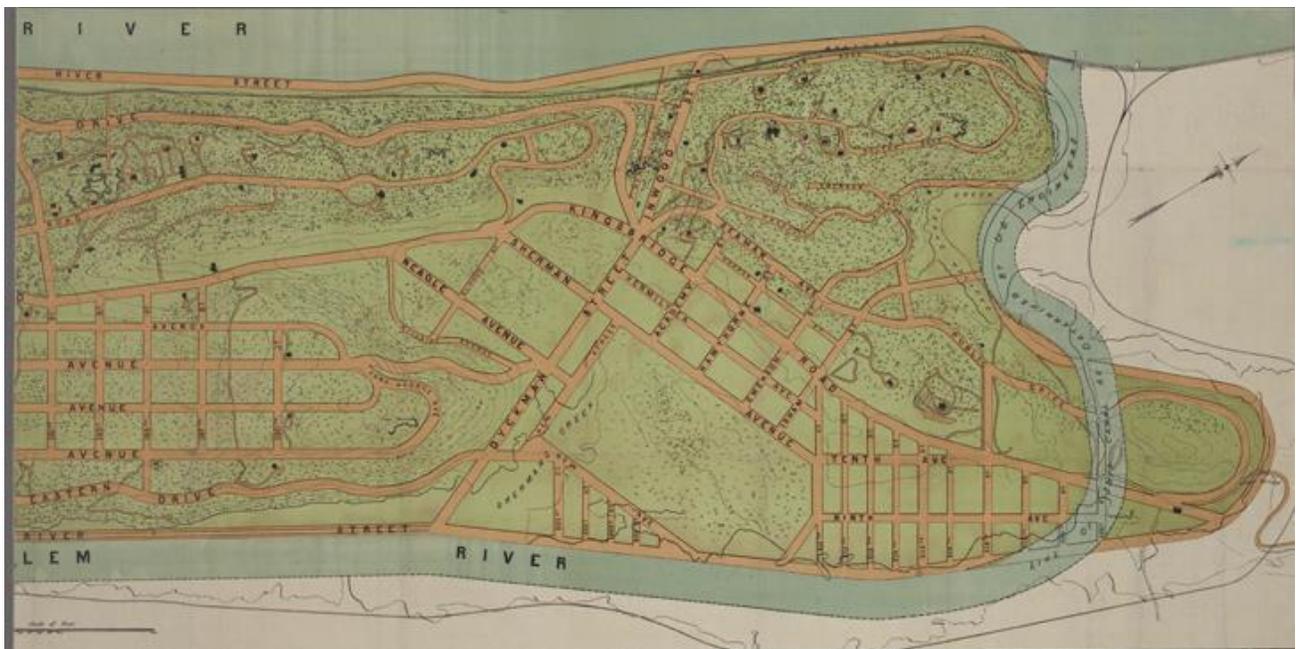
Colonial period

- Area was farmland largely maintained by enslaved Africans
- Maps dating to the early 1700s show the cemetery located near the dividing line between farmland owned by the Dyckman and Nagel families
- Described as a “sandy hillock.”



Edwd. Haganan Hall

AN ANCIENT BOUNDARY. Remains of the boulder fence dividing the Nagel and Dyckman farms. *Page 187.* In the background is the Dyckman apple orchard, in foreground W. L. Calver exploring Indian shell pits.



19th Century

- No evidence of enslaved labor or presence of free Blacks with subsequent owners of land, including cemetery

Early 20th Century

- 1903 – Leveling of hill as part of developing 10th Ave.
- Bolton investigated before leveling
- Newspapers cover investigation
 - General community awareness of cemetery and who is buried there
 - Coverage includes callous handling of remains and unearthing remains during leveling
 - Conflicting information about outcomes of the investigation and who was buried there
- Later reports/coverage confirms people buried at the cemetery were
- The fate of people's remains after leveling is unknown

Later 20th Century

- Site remained vacant for several decades
- Used as parking lot in the 1950s and 1996
- First building on the site built in 2001

Evidence of Leveling

- Original elevation of hill – 25ft
- Depth of burials at time of 1903 excavation – 2-3 feet
- Leveling removed of 7.7-11.7 feet of the hill area

Evidence Suggests

- Likelihood of severe disturbance/eradication of burials
- Not likely to find intact graves
- Possibility of finding a scattering of individual bones

What We Can Learn

- Not the same as what we can learn from intact burials
- Confirmation of previous use as a cemetery
- Evidence of a person's musculature if remains have very defined muscle attachments or evidence of a person's health based on changes to the surface of the bone not caused by long-time underground burial.

What We Can Do

- Support BRC in building community with descendants of enslaved people, Indigenous, marginalized, and interested individuals by working together to achieve a common set of goals and objectives, particularly in research, testing, public education, interpretation, memorialization, preservation, and more.

Other (for public information sheet at the site)

- Provide Spanish translation of info sheet
- Include statement requesting that people not approach testing site
- Glossary of terms, if needed

Prepared by; AKRF/R. Watkins

Advisory Group for the Inwood Sacred Site (AGISS)

Introduction Meeting

April 16, 2021

Agenda

- | | |
|---------------------------|-------------------|
| 1. Welcome | Meredith Horsford |
| 2. Introductions | ALL |
| 3. BRC Presentation | |
| a. Intro | Muzzy Rosenblatt |
| b. Shelter | Nicole Clare |
| c. Site Context | Nicole Clare |
| 4. Advisory Group Role | Peggy King-Jorde |
| a. Archaeological Testing | |
| b. Visioning/Planning | |
| c. Recommendations Report | |
| 5. Questions/Comments | ALL |
| 6. Wrap-Up | Meredith Horsford |

AGISS Recommendations Development Schedule

	Sun	Mon	Tues	Wed	Thur	Friday	Sat	
April						April 16 Orientation	17	
	18	19	20 * AGISS (Public) Archaeology Mtg	21	22	23	24	
May	25	26	27	28	29	30	May 1	
	2 * Site Ceremony	3 Testing Begins	4	5	6	7	8	
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24 *Update Mtg AGISS (Public)	25	26	27	28	29	
June	30	31	June 1	2	3	4	5	
	6	7	8 AGISS Final Rpt. Mtg. Wk.	9	10	11	12	

Appendix C: Non-Invasive Geophysical Survey Report



GEOPHYSICAL INVESTIGATION REPORT

PERFORMED AT:

**3966 Tenth Avenue
New York, NY 10034**

PREPARED FOR:

**Elizabeth Meade
AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016**

PREPARED BY:

**John Wallace
Geophysical Technician
Enviroprobe Service, Inc.
81 Marter Avenue
Mount Laurel, NJ 08054
Phone: (856) 858-8584
Toll Free: (800) 596-7472**

April 28 , 2021

1.0 INTRODUCTION

Enviroprobe Service, Inc. (Enviroprobe) is an environmental investigation services firm which provides monitoring well installation (HSA), Geoprobe (DPT) drilling services and Environmental & Engineering Geophysics (EEG) services to the environmental consulting and engineering community.

Enviroprobe conducted a subsurface geophysical investigation at the subject property within client-specified areas of concern. Due to conditions and objectives, the investigation utilized a GSSI UtilityScan cart-mounted ground penetrating radar (GPR) unit with a 350 MHz antenna, a Fisher TW-6 metallic locator, a Radiodetection multi-frequency transmitter, and a Radiodetection receiver.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 2,000 MHz) to acquire subsurface information. An EM wave is propagated downward into the ground by a transmitting antenna. Where abrupt changes in electrical properties occur in the subsurface, a portion of the energy is reflected back to the surface. This reflected wave is detected by a receiver antenna and transmitted to a control unit for real time processing and display. The penetration depth of the GPR unit varies from several inches to tens of feet according to site-specific conditions. The penetration depth decreases with increased soil conductivity. The penetration depth is the greatest in ice, dry sands, and fine gravels. Clayey, highly saline or saturated soils, areas covered by concrete, foundry slag, or other highly conductive materials greatly reduce GPR penetration. GPR is a method that is commonly used for environmental, engineering, archaeological, and other shallow investigations.

The Fisher TW-6 metallic locator is designed to find pipes, cables and other metallic objects such as underground storage tanks (USTs). The TW-6 transmitter generates an electromagnetic field that induces electrical currents in the subsurface. These currents produce a secondary electromagnetic field that is measured by the TW-6 receiver. One surveyor can carry both the transmitter and receiver together to search for underground metallic objects, although the TW-6 response can also be affected by the electrical properties of non-metallic materials in the subsurface.

The Radiodetection (RD) transmitter and receiver are commonly used for pipe and cable locating. The multi-frequency transmitter can be directly connected, clamped, or used to induce a signal in a target line while the multi-frequency receiver is used to measure the signal from energized lines.

2.0 SCOPE OF WORK

On April 28, 2021, a geophysical technician from Enviroprobe Service Inc. was mobilized to the subject property to perform a geophysical investigation. The purpose of

the investigation was to designate underground conduits/utilities in the client selected exterior portions of the subject property. The ground surface of the survey area consisted of concrete and asphalt.

3.0 SURVEY RESULTS

The utility survey was conducted using a cart-mounted GPR unit and a RD unit. The RD unit was used to trace common utilities from sources in and around the survey area. The RD receiver was also used in the passive mode to search for live underground electrical power cables and other utilities emitting 60Hz electromagnetic signals. When possible, the location of utilities was confirmed with the GPR. The GPR survey was also performed in a grid pattern in at least two orthogonal directions to search for evident and non-evident underground utilities. Linear anomalies consistent with underground utilities were designated on site with spray paint using the following colors: red – electric, blue – water, pink – unknown utility (See Figure Below).

The GPR and TW-6 were used in a grid pattern over all client specified areas of the site. Based on the results of the GPR and TW-6 surveys, no metallic anomalies were detected on site.



4.0 LIMITATIONS

Due to surface conditions and subsurface content, the GPR penetration depth was estimated at about 3 feet in the majority of the survey area.

Due to the dielectric properties of the subsurface, plastic polymer and fiberglass utilities may not have been detected.

The underground utility survey was conducted in compliance with the industry standard of care guidelines found in ASCE 38-02 (Level B).

5.0 WARRANTIES

The field observations and measurements reported herein are considered sufficient in detail and scope for this project. Enviroprobe Service, Inc. warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods. There is a possibility that conditions may exist which could not be identified within the scope of this project and were not apparent during the site activities performed for this project.

Enviroprobe represents that the services were performed in a manner consistent with that level of care and skill ordinarily exercised by environmental consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

Enviroprobe Service, Inc. believes that the information provided in this report is reliable. However, Enviroprobe cannot warrant or guarantee that the information provided by others is complete or accurate. No other warranties or guarantees are implied or expressed.

GPR data is subject to signal anomalies and operator interpretation. The GPR data is intended to provide the locations of areas of concern requiring additional investigation or the approximate location of underground structures and utilities. Great care must be utilized when excavating and/or drilling around underground structures and utilities since GPR data can only be used for estimation purposes and GPR data is subject to misinterpretation. Enviroprobe can not guarantee that utilities, post-tension cables, and/or rebar will not be incurred during drilling, cutting, coring, or excavating activities.

This report was prepared pursuant to the contract Enviroprobe has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Enviroprobe and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between Enviroprobe and its client, reliance or any use of this report by anyone other than the

Client, for whom it was prepared, is prohibited and therefore not foreseeable to Enviroprobe.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to Enviroprobe contract with the Client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

Appendix D: Report from Dr. Rachel Watkins

**Bioanthropological Consultant's Report pertaining to the
Phase 1B Archaeological Investigation of 3966 10th Ave. New York, NY, May 3-4, 2021**

**Submitted by Dr. Rachel Watkins, Oversight Consultant
May 7, 2021**

This document offers a brief report of tasks carried out by Rachel Watkins, Oversight Consultant, according to the scope of work submitted to the Bowery Residents Committee (BRC) for the phase 1B Archaeological investigation of 3966 Tenth Ave. The tasks outlined in the scope include:

- Providing support to Dr. Elizabeth D. Meade, Senior Technical Director and Archaeologist, AKRF, as needed
- Carry out formal identification and photo-documentation of skeletal remains
- Lead the implementation of the human remains discovery protocol if human remains were identified at the site
- Provide information to the public during the investigation in the form of an information sheet
- Communicate findings of the investigation to the Advisory Group for the Inwood Sacred Site (AGISS) after the Senior Technical Director and Archaeologist and Oversight Consultant discuss contents of the report

No Human Remains Found at the Site - The phase 1B archaeological investigation at 3966 10th Avenue, NYC involved excavation of five backhoe trenches to confirm the presence or absence of remains and artifacts as indicated in the 2020 Topic-intensive Documentary Study prepared by AKRF. Details regarding the investigation are forthcoming in the technical report to be submitted by Elizabeth Meade. The focus of this report is to confirm that as expected based on previous studies of the site's current archaeological sensitivity, **no human remains were identified at the site.**

Faunal Remains Identified at the Site – Non-human (faunal) skeletal remains were found in subsurface layers of trenches 1, 3 and 5. All the bones were fragmented and identified as refuse dating to the 20th century. Several fragments presented evidence of butchering and other processing for human consumption.

Identifying Faunal Remains - Significant differences in the shape and size of human and faunal remains prevent misidentification during archaeological investigations of this sort. Other differences include: 1) differences in the type and thickness of limb bones; 2) marked differences in the size and shape of surfaces where bones meet to form joints; and, 3) the location and shape of areas where muscles attach to a bone. **The presentation of findings detailed in the technical report will include information to mitigate any concerns on the part of BRC and the AGISS regarding the identification of skeletal remains at the site.** Photos of the bone found in trench 5 are included here as an example. The remaining photos are included in the "InwoodArchy" folder provided by AKRF and are labeled according to the trench in which they were found.



Fragment of non-human animal bone found in trench 1, with evidence of butchering (Watkins, 5/3/21).



Fragment of non-human animal bone found in trench 5 (Watkins, 5/4/21).



Articulated view, fragment of non-human animal bone found in trench 5 (Watkins, 5/4/21).

Public Information Sheet – Two factors precluded the distribution of information about the site, forthcoming development and memorialization: 1) the length of time required to complete the investigation was shorter than planned; and, 2) the auto mechanic shop on-site continued with normal operations that involved high degrees of traffic and no space for leaving flyers. The draft information sheet will be deposited in the Inwood dropbox for BRC and AGISS review to finalize for use/distribution at the appropriate time.

Appendix E: Unanticipated Human Remains Discovery Plan

Proposed Development at 3966 Tenth Avenue

BLOCK 2229, LOT 25

NEW YORK, NEW YORK

Plan for the Unanticipated Discovery of Human Remains During Construction

LPC PUID: 35199

Prepared for:

Bowery Residents' Committee, Inc. (BRC)
131 West 25th Street, 12th Floor
New York, New York 10001

Prepared by:



AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

MAY 2021

Plan for the Unanticipated Discovery of Human Remains During Construction at 3966 Tenth Avenue, New York, NY

1. PROJECT DESCRIPTION AND BACKGROUND

Bowery Residents' Committee, Inc. (BRC) is contemplating the redevelopment of the property located at 3966 Tenth Avenue in the Inwood neighborhood of Manhattan, New York County, NY. The project site includes Tax Block 2229, Lot 25. The site is currently privately owned and occupied by an active single-story auto repair shop and parking lot. The proposed project is expected to involve the demolition of the existing on-site buildings and the construction of a new building with a homeless shelter and administrative office space on the project site. The project would be developed under existing zoning and would be facilitated with funding from the New York City Department of Homeless Services (DHS). Because of the funding action, the project is subject to New York City Environmental Quality Review (CEQR). DHS is serving as the lead agency for the environmental review. This Phase 1B Archaeological Investigation Work Plan has been prepared pursuant to CEQR and in compliance with the *Guidelines for Archaeological Work in New York City* as issued by the New York City Landmarks Preservation Commission (LPC) in 2018.¹

The project site was historically the site of a cemetery for enslaved persons of African descent. Recent archaeological investigations have concluded that because of landscape modification that occurred in the early 20th century, the soil levels containing the cemetery were stripped away. Archaeological testing did not identify the presence of historical soil deposits suggesting that intact graves are present on the project site and no further archaeological analysis was recommended. However, given the possibility that human remains, including disarticulated skeletal elements, could be present in untested portions of the project site, this Plan for the Unanticipated Discovery of Human Remains was prepared to outline the protocols that are to be implemented and the chain of communication to be followed in the event that human remains or suspected human remains are observed during the construction of the project. This plan must be kept on file during the construction of the project and will be supported by a contractor training program undertaken by BRC.

2. PLAN FOR THE DISCOVERY OF HUMAN REMAINS

In the event that human remains in the form of intact burials or disarticulated remains are encountered, the following protocol will be implemented. This protocol outlines the notification procedures that will be in place to ensure that all involved parties are appropriately notified of the discovery of human remains or suspected human remains. These procedures have been established in accordance with the guidelines of LPC and the wishes of the descendant community and are in compliance with local laws.

¹https://www1.nyc.gov/assets/lpc/downloads/pdf/2018_Guidelines%20for%20Archaeology_Final_high%20res.pdf

HUMAN REMAINS DISCOVERY PROTOCOL

In the event of the discovery of human remains or suspected human remains during the construction of the project:

1. The Contractor¹ will stop work immediately in the area of the find to protect the integrity of the find. The location of the find will be flagged or fenced to ensure the safety of the human remains and to avoid potential damage to the remains. At all times human remains or suspected human remains must be treated with the utmost dignity and respect.
2. The Contractor will immediately notify BRC and BRC will notify the archaeological consultant (AKRF) and the Oversight Coordinator (Rachel Watkins, PhD) of the find. Notification will include: specific location of discovery within the disturbed area of the work site; the nature of the discovery; and photographs of the remains or suspected remains. The Contractor will not restart work in the area of the find until BRC has granted clearance.
3. If the Oversight Coordinator, acting as the project’s bioarchaeological consultant, determines the remains are human or if the find is ambiguous, the Contractor will call 911 as required by New York City law. Local law enforcement will notify the Office of the Chief Medical Examiner (OCME). The archaeological consultant will also contact and cooperate with OCME to notify, as required, any additional law enforcement agencies or parties that would need to be alerted, as appropriate.

OCME Contact: Dr. Bradley Adams, Forensic Anthropologist
Telephone: Primary: 212.447.2030; Secondary: 718.804.8050
Address: 520 First Avenue, New York, New York 10016
E-mail: badams@ocme.nyc.gov

4. BRC and the Oversight Coordinator will notify the Advisory Group for Inwood Sacred Sites (AGISS)/the descendant community as appropriate. The archaeological consultant will immediately notify LPC of the find if LPC has not already been notified; the LPC contact is listed below:

LPC Contact: Amanda Sutphin; Director of Archaeology
Telephone: (212) 669-7823
Address: New York City Landmarks Preservation Commission
1 Centre Street, 9th Floor, New York, NY 10007
E-mail: asutphin@lpc.nyc.gov

5. If OCME/NYPD determine that they have no concerns for the remains (e.g., the site is not designated a crime scene), BRC will direct the Archaeological Consultant and the Oversight Consultant to begin a more detailed archaeological assessment of the find’s significance/physical extent.
6. If the human remains are determined to be of Native American origin, all remains and any associated funerary objects will be left in place and protected from further disturbance until consultation with indigenous Nations can be initiated pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) in consultation with LPC (see contact list addendum) and AGISS. Any requests made by the indigenous Nations that represent New York

¹ As a result of the contractor training process, an appropriate individual (e.g., the site foreperson) will be identified to serve as the role of the Contractor as defined in this protocol.

- County regarding the treatment of the remains—including reburial or requested offerings—will be honored.
7. If it is determined that intact interments or disarticulated human remains dating to the historic period are present that would be disturbed the construction of the proposed project, remains will be left in place and protected from further disturbance. The Oversight Coordinator will initiate discussion with the Archaeological Consultant, BRC, AGISS/the descendant community, and LPC regarding additional measures to avoid or mitigate further damage. These measures may include:
 - Formal archaeological evaluation of the site;
 - Visits to the site by LPC, AGISS/the descendant community, and other parties as appropriate;
 - Preparation of a mitigation plan by the Archaeological Consultant in coordination with the Oversight Coordinator, including procedures for disinterment and reinterment, for approval by LPC, the descendant community, and other parties as appropriate;
 - Implementation of the mitigation plan; and
 - Approval to resume construction following completion of the fieldwork component of the mitigation plan.
 8. No human remains are to be disinterred or removed from the site unless such disinterment is directed by the Oversight Coordinator and AGISS/the descendant community following the consultation process completed under Step 7, above.
 9. In the event that intact human remains from the historic period are to be disinterred from the site, a funeral director will be retained by the applicants. As required by City Law, the funeral director will apply for a disinterment permit from the New York City Department of Health (NYCDOH) before human remains are removed from the project site.
 10. Work will not resume on the project site until authorized by BRC, the Oversight Coordinator, and LPC in conjunction with the implementation of a mitigation plan approved by AGISS/the descendant community.

ADDENDUM: CONTACT INFORMATION FOR STATE AND FEDERALLY-RECOGNIZED NATIVE AMERICAN NATIONS:

DELAWARE NATION

Erin Thompson-Paden
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Phone: (405) 247-2448, ext. 1403
Email: epaden@delawarenation-nsn.gov
Preferred contact method: email

Dana Kelly
HP/106 Asst.
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Phone: (405) 247-2448
Email: dkelly@delawarenation.com
Preferred contact method: email

DELAWARE TRIBE OF INDIANS

Chief Chester “Chet” Brooks
Chief, Delaware Tribe of Indians
Delaware Tribal Headquarters
5100 Tuxedo Blvd
Bartlesville, OK 74006
Phone: 918-337-6527
Fax: 918-3378-6591
Email: cbrooks@delawaretribe.org
Preferred contact method: Print copies via UPS

Susan Bachor
Historic Preservation Representative
Delaware Tribe of Indians
126 University Circle
Stroud Hall Room 437
East Stroudsburg, PA 18301
Phone (m): 610-761-7452
Phone (w): 570-422-2023
Email: temple@delawaretribe.org
Preferred contact method: email

STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICAN INDIANS

Ms. Shannon Holsey
President
Stockbridge-Munsee Community Band of Mohican Indians
N8476 Moh He Con Nuck Road *OR P.O. Box 70*
Bowler, WI 54416
Phone: 715-793-4111
Email: Shannon.Holsey@mohican-nsn.gov
Preferred contact method: Print copies via USPS

Nathan Allison
Tribal Historic Preservation Officer (THPO)
Stockbridge-Munsee Community Band of Mohican Indians
Email: nathan.allison@mohican-nsn.gov
Preferred contact method: email

Bonney Hartley
NAGPRA Coordinator
Stockbridge-Munsee Community Band of Mohican Indians
37 1st Street
Troy, NY 12180
Phone: 518-244-3164
Email: Bonney.hartley@mohican-nsn.gov
Preferred contact method: email

SHINNECOCK NATION

Council of Trustees
PO Box 5006
Southampton, NY 11969
Phone: (631) 283-6143
Email: davidmartine@shinnecock.org; josephinesmith@shinnecock.org
Preferred contact method: email

UNKECHAUG INDIAN NATION (STATE RECGONIZED)

Chief Henry B. Wallace
207 Poospansk Lane
Mastic, NY 11950
Phone: (631) 281-4143, ext 100
Email: hwall@aol.com