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REPORT ON  
ARCHAEOLOGICAL WORK RELATED TO  
SEVERAL PROJECTS AT SOISSONS LANDING  
ON GOVERNORS ISLAND  
NEW YORK, NEW YORK  
Soissons Combined Project  
Demolition of Building #s 146, 147 and 148  
and  
Soissons Dock and Utilities Work



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Cannon manhole exposed above ground surface, facing north (February 8, 2012).

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September 26, 2012

1502

## EXECUTIVE SUMMARY

This is a report on archaeological work conducted at Soissons Landing on Governors Island, New York City. The location of this work was within the Governors Island National Historic Landmark District and the New York City Landmark District. This report is being prepared to comply with environmental review regulations and meets the standards of both the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC). The work was conducted for D'Onofrio General Contractors Corp by Linda Stone, RPA.

Soissons Landing is the area where the ferry from Manhattan docks. Several small projects were completed simultaneously at Soissons Landing and the results have been combined into this one report. The projects are 1) Governors Island Storm Water Management Plan (Phase 2A) Soissons Combined Project; 2) Demolition of Building #s 146, 147 and 148; and 3) Soissons Dock and Utilities Work.

Documentary research indicated these projects had the potential to impact archaeological resources including the remains of a number of historic map documented structures and/or original shoreline evidence. The structures include two privies, a pump and part of a storehouse depicted on the 1867 Barnard map and three unlabelled buildings depicted on the 1879 Army Engineers map.

Archaeological work consisted of construction monitoring. One archaeological resource was identified, a 5-foot long brick wall. However, it was concluded this was a defunct utility encasement and not a significant resource. No other potentially significant archaeological resources were identified. No further archaeological work was recommended for these projects. However, additional work is planned for the area as part of the Governors Island Park and Public Space Project: Phase 1 and that work will fall under its own archaeological work plan.

## SHPO MANAGEMENT SUMMARY FORM

SHPO Project Review Number (if available):

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): Trust for Governors Island

Phase of Survey: 1B

### Location Information

Location: Governors Island, New York City – Soissons Landing

Minor Civil Division: n/a

County: New York

### Survey Area (Metric & English) - Monitoring

Length: approximately 425 feet (130 m) total

Width: approximately 8 feet (244 cm)

Depth: (when appropriate): approximately 3.5 - 12 feet (107 - 366 cm)

Number of Acres Surveyed: n/a

Number of Square Meters & Feet Excavated (Phase II, Phase III only): n/a

Percentage of the Site Excavated (Phase II, Phase III only): n/a

USGS 7.5 Minute Quadrangle Map: Jersey City, NJ - NY

### Archaeological Survey Overview

Number & Interval of Shovel Tests: n/a

Number & Size of Units: n/a

Width of Plowed Strips: n/a

Surface Survey Transect Interval: n/a

### Results of Archaeological Survey

Number & name of prehistoric sites identified: 0

Number & name of historic sites identified: 0

Number & name of sites recommended for Phase II/Avoidance: 0

### Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: n/a

Number of buildings/structures/cemeteries adjacent to project area: n/a

Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: n/a

Number of identified eligible buildings/structures/cemeteries/districts: n/a

Report Author(s): Linda Stone, RPA

Date of Report: September 26, 2012

## TABLE OF CONTENTS

Executive Summary	
SHPO Management Summary Form	
List of Figures and Photographs .....	ii
INTRODUCTION .....	1
SITE HISTORY AND ARCHAEOLOGICAL POTENTIAL .....	1
Pre-Contact Period .....	1
Historic Period .....	1
METHODOLOGY AND RESULTS .....	2
Utility Monitoring .....	2
CB 1.04 to CB 1.05 .....	2
MH 1.09 to CB 1.04 .....	3
MH 1.09 to CB 1.12 .....	3
MH 1.10 to MH 1.11 .....	4
CB 1.06 to MH 1.09 .....	4
CB 1.02 to CB 1.03 .....	6
Demolition .....	7
Rotunda .....	7
Building #148 .....	7
CONCLUSIONS AND RECOMMENDATIONS .....	8
FIGURES AND PHOTOGRAPHS .....	after 8
BIBLIOGRAPHY .....	9

### APPENDICES

- Appendix A – Archaeological Work Plans
- Appendix B – Artifact Inventory

## LIST OF FIGURES

- Figure 1 The location of the work at Soissons Landing in the Governors Island Historic District.
- Figure 2 The Soissons Combined Stormwater Management Plan Storm Drainage Plan also showing the location of the demolished buildings (shaded and in upper left).
- Figure 3 North profile of trench connecting CB 1.04 to CB 1.05.
- Figure 4 East profile of trench connecting CB 1.04 to MH 1.09.
- Figure 5 North profile of a section of the trench connecting MH 1.10 to MH 1.09.
- Figure 6 As-built location of catch basin CB 1.03 and the archaeological brick wall shown on part of the Soissons Dock Storm Drainage Plan.
- Figure 7 North and east profiles of the cut for CB 1.03.
- Figure 8 West profile of the trench between MH 1.09 and CB 1.03.

## LIST OF PHOTOGRAPHS

- Cover Cannon manhole exposed above ground surface, facing north (February 8, 2012).
- Photo 1 Trench from CB 1.04 to MH 1.14 showing coal ash deposit around defunct pipe, facing northeast (February 17, 2012).
- Photo 2 Part of the brick and mortar feature found in the trench between MH 1.10 to MH 1.11, facing north (May 18, 2012).
- Photo 3 CB 1.06 to CB 1.03 in progress showing the red silty clay deposit at the base of excavation, facing east (March 20, 2012).
- Photo 4 CB 1.03 excavation pit showing the 5-foot long brick wall, facing north (April 30, 2012).
- Photo 5 The brick feature first identified in CB 1.03 shown here as a utility encasement in the trench between CB 1.03 and MH 1.09, facing southwest (August 17, 2012).
- Photo 6 Concrete slab foundation of Building #148 after the superstructure was demolished, facing northeast (May 10, 2012).
- Photo 7 Former location of Building #148 after demolition, facing northeast (May 16, 2012).

## INTRODUCTION

The Trust for Governors Island (TGI) is in the process of upgrading Soissons Landing. The work involves demolition of old non-significant structures, replacement and repair of utilities and dock work. Soissons Landing is located within the Governors Island National Historic Landmark District and the New York City Landmark District (see Figure 1). Archaeological monitoring was recommended for much of this work to identify the presence or absence of the remains of map documented structures and/or the original shoreline. The work was originally proposed as three separate projects, each with their own archaeological work plan (see Appendix A).

The monitored work included excavation for four new manholes, five new catch basins and new storm drainage lines connecting them. Monitoring of the demolition of the foundation footings of Building #148 was also in the plan, but once the superstructure was removed, no footings were present. Figure 2 is a section of the storm drainage plan showing the work locations.

This report presents the findings of archaeological work conducted for the Soissons Landing projects. The work has been conducted in accordance with the guidelines of both the New York State Office of Parks Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC). This report was prepared by Linda Stone, RPA for D'Onofrio General Contractors Corp. The archaeological fieldwork described in this report was conducted by Ms. Stone from February 8 through August 17, 2012. The author would like to acknowledge the assistance and support of Keith Neuscheler of D'Onofrio, Kenneth Suarez of Turner Construction Corporation and Claire Kelly of TGI for facilitating the archaeological work.

## SITE HISTORY AND ARCHAEOLOGICAL POTENTIAL

### Pre-Contact Period

The Phase 1A Archaeological Assessment of Governors Island does not include Soissons Landing in the areas mapped as sensitive for the preservation of Native American resources (PAL, Inc. 1996: Figure 4). However, previous archaeological work in the vicinity indicates a buried original land surface may be present (Stone 2011: 4). If present, it is possible Native American features and/or sites could be identified.

### Historic Period

Historic period archaeological potential is related to both historic map-documented structures depicted on the 1867 Barnard Map and the 1879 Army Engineers Map (reproduced as part of the Archaeological Work Plans in Appendix A). These structures include two privies, a pump and part of a storehouse depicted on the 1867 Barnard map and three unlabelled buildings depicted on the 1879 Army Engineers map.

## METHODOLOGY AND RESULTS

The scope of work for archaeological monitoring is provided in Appendix A. In summary, the monitoring protocol included the ability for the archaeologist to temporarily stop excavations to examine any potentially significant resources that may have been present. Soil screening for artifact recovery was conducted in three locations; the area of a brick feature, that of a suspected location of a historic map documented structure and a deposit that contained a concentration of brick fragments (discussed below).

Excavations were conducted using a machine with either a 3-foot (91 cm) or 4-foot (122 cm) wide bucket. Utility trenches were generally up to 8-feet (244 cm) wide and manhole and catch basin pits were up to 15 feet (457 cm) square. Trench boxes used for shoring were 5 feet (152 cm) wide. Work locations were described and recorded by their position relative to new catch basins and manholes depicted on Figure 2 (eg. CB 1.03 to MH 1.09). Elevations were recorded as depth below ground surface (bgs) and they varied depending on the drainage plans; however, excavations for catch basins and manholes was always several feet deeper than that for the pipe trenches. Stratigraphy was recorded using comparison to the Munsell Soil Color Charts. Photo documentation was done as appropriate.

The original site plans called for excavation for a number of different types of utility lines (see Appendix A: Figure 2 in the two utility work plans). However, certain utility work was either eliminated or otherwise removed from this project. What remained was the storm drainage installations, rotunda removal and building demolition work. The changes to the project can be seen in the differences between Figure 2 and Appendix A: Figure 2 (n=3).

All recovered artifacts were assigned a context number based on provenience that was unique for its location. A descriptive key is included in the artifact inventory (Appendix B). The artifacts were washed and rinsed in tap water and left to air dry before labeling and rebagging in clean 4-mil perforated zip-lock bags. Ceramic and glass artifacts were individually labeled with the site abbreviation "GI" (Governors Island) and project identifier "SC" (Soissons Combined) and the context number. All zip bags were labeled with the same information along with the excavation date. All ceramic and glass artifacts in the inventory are sherds, unless otherwise noted. Governors Island is the current repository for all artifacts recovered during the conduct of work described in this report. Artifacts will be transferred there from the archaeological consultant upon acceptance of this report by the review agencies.

### Utility Monitoring

Excavations were conducted from lower to higher elevations in segments. Manholes and/or catch basins were installed at each end of a segment and then trench excavations were completed to connect those features. Shoring was added when excavations were 5 feet (152 cm) or deeper. The following describes the work and findings by segment.

#### ***CB 1.04 to CB 1.05***

The run between CB 1.04 to CB 1.05 was located along Andes Road headed eastward. This run also included MH 1.14, located approximately 25 feet (762 cm) east of CB 1.04 (see Figure 2). This trench was excavated to approximately 5.5 feet (168 cm) below ground surface and the manhole and catch basins up to 10 feet (305 cm) deep. No historic map documented structures were located in this area and no potentially significant archaeological resources were identified in this trench segment.

The most distinctive aspect of this excavation area was the presence of a coal ash deposit buried under the paving and extending up to 3 feet (91 cm) below ground surface, located at and around CB 1.04 (see Figure 3 and Photo 1). This deposit was likely related to a nearby existing manhole and to a defunct catch basin that was then removed to install CB 1.04<sup>1</sup>. The coal ash could have been used as fill during the original installation of the previously existing manhole and catch basin. Once the defunct catch basin

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<sup>1</sup> The excavation for CB 1.04 took place partially in the sidewalk, and therefore on National Park Service (NPS) property.

was removed, the base of the retaining wall surrounding Fort Jay was exposed there. A few displaced pieces of granite were observed approximately 4 feet (244 cm) below ground surface and just below the retaining wall. They measured up to 5 inches (13 cm) long and 2 inches (5 cm) thick. These could have been part of earlier paving that was removed prior to installation of the original catch basin and then included as backfill.

Several existing pipes crossed this trench and there was also an existing pipe in the base of the trench excavation, as seen spray painted in the lower right corner of Photo 1. The stratigraphy within the CB 1.04 to CB 1.05 trench was mainly comprised of fill, particularly toward the eastern end of the trench when the existing pipe in the base of excavation was almost at the center of the trench. The fill was underlain by reddish brown sandy silt and sand.

The excavation for CB 1.05 revealed a buried earlier road surface approximately 2.5 - 3 feet (76 - 91 m) below the existing surface. That surface was underlain with dark yellowish brown silty sand, indicative of subsoil documented elsewhere on Governors Island. The presence of that soil buried directly beneath an early road surface is an indication that the original ground surface had been cut to build that section of Andes Road. A similar conclusion was reached during a previous project further east on Andes Road (Stone 2006: 10).

Three artifacts were recovered from this segment (Context #s 1 - 3). They all relate to the coal ash deposit. A piece of refined earthenware with a wide possible manufacture date range extending from the late-18th century through present and a glass flask that could have been manufactured between the late 1880s and the early 1920s were recovered from the CB 1.04 excavation. The flask was found in the deposit beneath the coal ash. Part of a clear glass bottle neck and finish was found in the excavation for MH 1.14. It could have been manufactured any time from the late-18th century onward.

#### ***MH 1.09 to CB 1.04***

The coal ash deposit found near CB 1.04 continued approximately 10 feet (305 cm) into the trench between it and MH 1.09, up Ferry Line Road. This trench was excavated up to nine feet (274 cm) below ground surface. Excavation took place in two stages and a soil profile was drawn after the first lift was removed, at approximately 4 feet (122 cm) below ground surface (see Figure 4), before shoring was added. No historic map documented structures were located in this trench segment and no potentially significant archaeological resources were identified.

In general, the soil exposed in this trench was comprised of yellowish red soil underlain with reddish brown soil in the lower levels, as seen in the previous trench segment. The reddish brown soil often had a clay component. This stratum is beneath the deposits depicted on Figure 4. Numerous utility lines crossed the trench, including a 2.5 inch (6 cm) gas pipe shown at 35 feet on Figure 4. The interesting thing about this pipe is that no pipe trench was present. This was the first instance of evidence that pneumatically driven lines were laterally installed on Governors Island. The implication of this type of pipe installation is that archaeological resources could be preserved at levels above gas lines.

No artifacts were recovered from this segment.

#### ***MH 1.09 to CB 1.12***

This trench was located partially the roadway (approximately 30 feet/914 cm) and partially in the grass (close to 50 feet/1,524 cm) east of Building #110, an area with a significant slope. The ground slopes up from an elevation of approximately 15 feet (457 cm) above sea level on Ferry Line Road to approximately 20 feet (610 cm) above sea level near CB 1.12. The trench was excavated to a depth of up to 9 feet (274 cm) below ground surface at its western end. One historic map documented structure was located in this trench segment, possibly at the sidewalk, but remains of it were not present.



A partial/representative soil profile was drawn of the segment in the roadway (see Figure 5). The soil in the grassy area was very unstable, partially due to water saturation in the base of excavation from a broken pipe<sup>2</sup>. The trench was not safe for entry without shoring or benching back, therefore measurements and observations were done from above. Yellowish brown fine silty sand was documented at approximately 4 feet (122 cm) below ground surface. Reddish brown silty sand was encountered at 7 feet (213 cm) below ground surface and continued to the base of excavation.

The most notable part of this trench excavation was a deposit of dark brown silty loam containing a concentration of displaced bricks and brick fragments, located approximately 2.5 to 4.5 feet (76 to 137 cm) below ground surface and 5 to 15 feet (152 to 457 cm) east of MH 1.10. A sample of the deposit was screened for artifact recovery. In addition to brick fragments, it contained a sherd of pearlware, curved glass and a copper nail head (all retained as Context #6), along with much coal and mortar and four corroded nails (not retained). As excavation monitoring continued, an electrical line was exposed and the brick concentration appeared to be part of the pipe trench fill.

No potentially significant archaeological resources were identified in this trench segment.

#### ***MH 1.10 to MH 1.11***

The excavation of this segment was to depths between 5 and 15 feet (152 and 457 cm) below ground surface, with the deepest excavation at MH 1.11. MH 1.11 was a replacement in kind. The trench was to follow the path of an existing pipe, however it was not known at the time whether the excavations would extend beyond the original pipe trench fill. No historic map documented structures were located in this trench segment and no potentially significant archaeological resources were identified.

A somewhat large brick and mortar possible feature was identified in the trench excavation, buried approximately 2.5 feet (76 cm) below ground surface. It measured approximately 6 feet (183 cm) long and 1.9 feet (59 cm) wide and was curved about midway on one side (see Photo 2). It appeared to be part of either a drainage pipe or an architectural element. Four soil samples were taken from what would be the interior fill of the feature and screened for artifact recovery. They contained no cultural material, other than mortar which was probably from the feature itself. The feature was exposed by hand, rather than machine. Once exposed, a void measuring approximately 1.5 feet (46 cm) wide, was noted underneath the northeast side of the feature, indicating the feature was likely part of the fill for the pipe which was being replaced. Other sections of mortared brick, although much smaller, containing only a few bricks each, were also unearthed as excavation continued. Part of a butchered cow bone was also present in the fill (Context #10). Ultimately, the pipe to be replaced was exposed thus confirming the brick feature was indeed part of the pipe trench fill.

#### ***CB 1.06 to MH 1.09***

The trench between CB 1.06 and MH 1.09 contains two segments separated by CB 1.03 (see Figure 2). Excavation depths were up to 15 feet (457 cm) below ground surface at CB 1.03. No historic map documented structures were located in these trench segments, however two map documented structures overlay very close by (see Appendix A: archeological sensitivity maps). There were two locations which correspond roughly to those of the historic maps where possible structural remains were found, but further investigations proved they were not related and not significant archaeological resources.

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<sup>2</sup> The repair of the broken pipe entailed excavation to the north of and perpendicular to the new storm sewer line to expose the existing broken pipe so it could be repaired. The soil exposed was entirely pipe trench fill from its original installation.

A possible concentration of red stone was identified during monitoring of the trench segment between CB 1.03 to CB 1.06 buried 3 feet (91 cm) below ground surface. A sample of the deposit was screened for artifact recovery, but it contained no cultural material. The red stone appeared to be natural and not cut stone building material. The soil matrix was yellowish red wet fine silt with some clay. Upon continued excavation a utility pipe was found buried within this deposit and the soil became clayier with depth (see Photo 3). The material had obviously be redeposited after installation of the existing utility line there.

In the excavation for CB 1.03, a 5-foot (152 cm) long brick wall was identified in the northern edge of the excavation pit, buried approximately 3.5 feet (107cm) below ground surface (see Photo 4). The wall section represents the exterior of the southern side of a small structure, measuring 5-feet wide (both east and west sides were visible) and approximately 3-feet high, although it had obviously been truncated. The bricks used to build the structure are not uniform in size, perhaps indicating they were scavenged and the wall was not part of an important structure or that was not meant to last. The location is near where an unlabeled structure is mapped on the 1879 Army Engineers Map. However, the wall could also have been part of another feature, such as a defunct manhole.

Figure 6 is a blow up of part of Figure 2 showing the location of the brick wall relative to the planned utility work. Figure 7 is two of the profiles of catch basin excavation. Once the excavation area was open, the contractor placed CB-1.03 as far to the southeast of the planned location as possible (as seen on Figure 6) with the hope destruction of the wall could be avoided once excavation for the storm drainage line connecting CB-1.03 to CB-1.02 to the north was conducted. However, it was not known at the time if avoidance was possible because CB-1.02 was not yet installed. If not avoidable, methods for archaeological evaluation were developed. The discussion of excavations for the trench connecting CB 1.03 and CB 1.02 and the wall evaluation is presented below, in the following section.

Prior to the identification of the brick wall, a concentration of brick, mortar and concrete debris was observed buried about 5 feet (152 cm) below ground surface directly to the south of the where the wall was later found. This would have been a possible builder's trench. A sample of the deposit was screened for artifact recovery. Three ceramic sherds were recovered (Context #4), but the deposit also contained pieces of coal and slag, along with brick fragments, concrete and mortar. The possible manufacture date range is so large as to preclude making any inferences regarding the construction date of the feature.

Elsewhere in the CB 1.03 excavation pit, the south profile contained vertical wooden sheeting that was placed when an earlier pipe was installed. Shoring was added to the excavation pit when it was 5 feet (152 cm) deep. As excavation continued the soil became redder and clayier and contained some rock at approximately 6.5 feet (198 cm) below ground surface, below the depth depicted on Figure 7.

The west profile of the trench connecting CB 1.03 to MH 1.09 depicts the location of the wooden sheeting documented in the CB 1.03 excavation pit relative to the rest of the trench (see Figure 8). One artifact was recovered from the backdirt of this trench segment; a Sheffield Farms milk bottle (Context #8). "Sheffield Farms was a major distributor of dairy products in New York City at the turn of the 19th century. By 1930 Sheffield Farms was one of three of the largest milk companies in New York City." The company was in business from c. 1866 to c. 1969 (Perkins Geddes Eastman 1991: 15-19; Wikipedia 2012). However, the bottle likely dates from between c. 1900 when glass milk bottles were common to 1930 when Sheffield Farms began packaging milk in "Sealcone" containers (Lockhart 2011: 1, 22).

The trench connecting CB1.03 to CB 1.06 measured approximately 36 feet (11 m) and contained six existing utility lines and a defunct catch basin. This trench segment was almost thoroughly disturbed at levels above the reddish clay containing soil. No potentially significant archaeological resources were identified

in these trench segments and no artifacts recovered.

### ***CB 1.02 to CB 1.03***

The run between CB 1.02 and CB 1.03 was close to 90 feet (27 m). As much as 37 feet (11 m) of the northern end of the run, including CB 1.02 itself, was outside of the original Governors Island landform and therefore not of archaeological concern (see Appendix A). The excavated deposits south of that point were likely comprised of landfill to a large degree. Additionally, an unmapped clay utility pipe was discovered during excavation at places along the trench west profile, running parallel to at least part of the southern portion of the run. Both of these conditions resulted in extremely unstable material in the trench profiles and it was not possible to enter this trench to take direct measurements for the most part.

The excavation depth of the run varied from approximately 4 feet (122 cm) in the northern end to 10 feet (305 cm) near CB 1.03. Large cobbles and boulders were found in places beginning at 6 feet (183 cm) below ground surface and at the point where the original Island shoreline would have been located. Soil beneath that level was red clayey silt seen elsewhere within the project excavations as a culturally sterile subsoil.

The most anticipated part of this trench excavation was the section near CB 1.03 where a small brick wall had been identified during its installation. As excavations approached this area from the north, the unstable trench profiles were frequently collapsing. One such collapse, located approximately 10 - 15 feet (305 - 457 cm) north of the suspected brick feature, exposed a section of previously unknown clay pipe in the western profile running parallel to the trench just outside of the pavement saw cut. Once excavation reached closer to 5 feet (152 cm) north of where the brick feature would be found, the fill was observed to contain a conglomerate of brick and mortar, possibly part of the brick feature before it was truncated, a good indication the measurements were on target.

The top of the northeast corner of the brick feature was exposed and mechanical excavations were stopped by the archaeologist. It was found buried approximately 3 feet (91 cm) below ground surface. Hand excavation to remove the deposit above the top of the wall was completed to expose its extent. This would have been the eastern wall of the brick structure. Like the southern wall, this also measured 5 feet (152 cm) wide. The eastern wall was close to parallel to the sides of the trench and encroached into the trench approximately 1.7 feet (52 cm). The eastern side/exterior of the wall would have been impacted by the installation of the new pipe. Therefore, archaeological excavation to determine its identity and significance was needed. The contractor continued to work north of the brick feature, in the area of the previously discussed exposed clay pipe when he suggested that we may be able to remove enough of the soil from the pipe and western trench profile north of the brick feature to determine if it entered the brick feature, i.e. if the brick features was nothing more than a defunct unmapped manhole. As the pipe was being exposed, the site superintendent observed the clay pipe had so many joints in it that it appeared to have been put together using scavenged materials. That was the same observation the author made regarding the use of bricks of differing sizes to construct the brick feature. Sure enough, the contractor was able to expose the entry of that clay pipe into the northern side of the brick feature. This concluded the need for further archaeological hand excavation. Ultimately, the excavation exposed two other pipes entering the brick box (see Photo 5). The engineer commented that this type of box is called a "utility encasement", which today are made of concrete. Utility encasements are used to support utility lines when the run between manholes and/or catch basins are too long.

Only one artifact was recovered from the area of the brick utility encasement; part of a saucer with a partial maker's mark (Context #12). The mark was that of G. L. Ashworth & Brothers, a Staffordshire pottery firm. The mark indicates the piece was manufactured between c. 1872 and 1889 (BlueAndWhite.com 2012, Paull 2012). This means the utility encasement was constructed sometime after 1872. However, because only

one artifact was recovered this is not a firm date.

No potentially significant archaeological resources were identified in this trench segment.

### **Demolition**

Demolition of the rotunda at the south end of Ferry Line Road at the intersection of Andes Road and part of Building #148 were also included in the archaeological work plan.

#### ***Rotunda***

The rotunda/traffic circle/cannon display at the intersection of Ferry Line and Andes Roads was an above ground feature with below ground footings. It was approximately 20 feet (610 cm) in diameter. The rotunda also covered an existing electrical manhole which became known as the "cannon manhole" for the display that covered it. Although the rotunda was level on top, the above ground portion measured approximately 4 feet (122 cm) on the south side and less than 2 feet (61 cm) on the north side because the road slopes upward significantly there. Removal of the rotunda revealed the cannon manhole was at a higher elevation than previously expected, actually above that of the roadway (see cover photo). Therefore, consideration was given to how to deal with the existing electrical lines and lower the manhole elevation. Ultimately, a portion of the existing electrical line west of the rotunda in Andes Road was re-exposed and a new connection was made to enable lowering of the cannon manhole to grade.

No potentially significant archaeological resources were identified, nor were they expected, in either the excavation for the rotunda removal or in the Andes Road excavation exposing the existing electrical line. However, a ceramic sherd was recovered from the utility trench fill (Context CMH). It bore a floral transfer print motif and could have been manufactured between 1784 and 1864 (Samford 1997: 20). The print itself is misaligned, perhaps indicating the piece was a second.

#### ***Building #148***

As stated in the Introduction, monitoring of the demolition of the foundation footings of Building #148 was also in the plan, but once the superstructure was removed, no footings were present. Photo 6 shows the concrete slab on which Building #148 previously stood. Photo 7 is a view of the area once the slab was removed. No excavation was required in this area and therefore no archaeological work, other than taking these photographs was conducted.

## CONCLUSIONS AND RECOMMENDATIONS

Archaeological monitoring was conducted for utility excavations in the Soissons Landing area of the Governors Island Historic District. The work involved replacement and repair of utilities, dock work and demolition of old non-significant structures. A monitoring plan was implemented to identify the presence or absence archaeological resources, including the remains of map documented structures and/or the original shoreline, as well as previously unknown archaeological resources.

Four areas were examined more intensively, but no significant archaeological features were identified. One of these loci was a brick feature initially identified as the south wall of a brick structure, found during excavation for a new catch basin (CB 1.03). Additional excavations revealed that feature was a defunct utility encasement. Another brick and mortar possible feature was also identified. However, this turned out to be a displaced piece of demolition debris from an unknown source (MH 1.10 - MH 1.11). A location of more intensive examination was an area in the vicinity of a historic map documented structure where red stone was observed in the utility trench. This was revealed to be a natural deposit and not related to the former structure (CB 1.06 - CB 1.03). A coal ash deposit was identified at the southern end of Ferry Line Road (around CB 1.04). Examination of that deposit revealed it was fill related to a defunct catch basin and manhole. Additionally, the presence of buried roadway in the Andes Road portion of the project (near CB 1.05) underlain by a soil type indicative of deeper deposits observed elsewhere in Andes Road could be interpreted as the absence of a buried original ground surface. If so, this would mean that portion of Andes Road was originally cut to construct the roadway.

No other potentially significant archaeological resources were identified. No further archaeological work was recommended for these projects. However, additional work is planned for the area as part of the Governors Island Park and Public Space Project: Phase 1 and that work will fall under its own archaeological work plan.

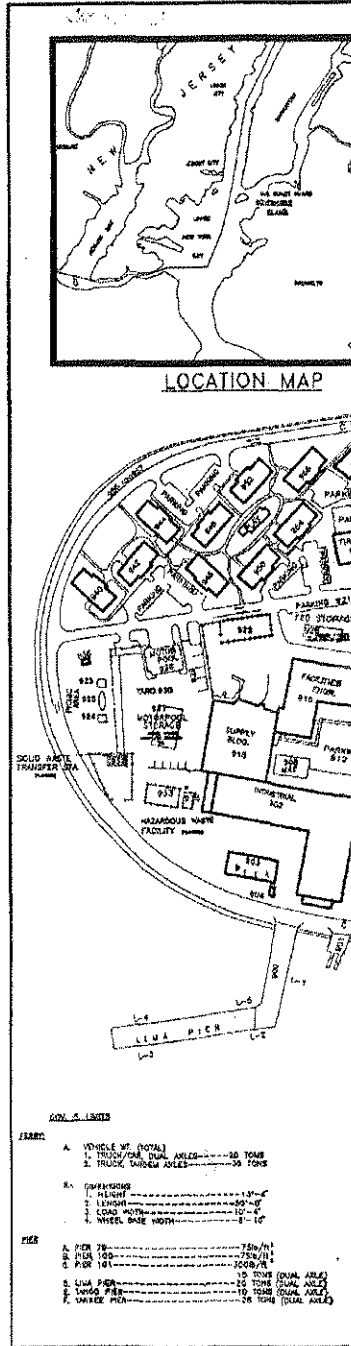


Figure 1

The Trust for Governors Island  
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 10 South Street, 5th Fl  
 New York, NY 10004  
 T 212-460-2215  
 F 212-460-4329

CLIENT

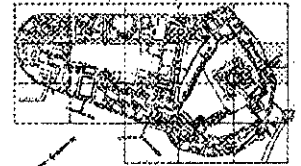
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ENGINEER



Engineers & Consultants  
 110 William Street, New York, NY 10038  
 Phone: (212) 751-8300, Fax: (212) 751-8301

KEY PLAN



NO.	DATE	ISSUE DESCRIPTION
4	3/16/10	ADDENDUM #1
3	12/7/11	ISSUED FOR CONSTRUCTION
2	7/7/11	ISSUED FOR BID
1	5/27/11	ISSUED FOR NYS DEC REVIEW



DEREK M. HILSCHER, PROFESSIONAL ENGINEER  
 NY LICENSE NO. 047593-1

DRAWING TITLE

# STORM DRAINAGE PLAN

SCALE: 1" = 20'

JOB NUMBER: 1110P00111

DATE: MAY 27, 2011

DRAWN BY: JPL

SHEET NUMBER: 3 OF 13

DRAWING NUMBER:

## C-221

### GENERAL NOTES

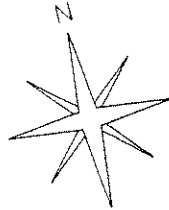
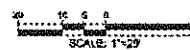
- BASEMAP SURVEY OF EXISTING SITE CONDITIONS, STORM SEWER STRUCTURES, OUTFALLS, AND UTILITIES PREPARED BY MANHATTAN SURVEYING DATED 4/29/2011.
- TOPOGRAPHIC AND ELEVATION DATA REFERENCED FROM THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29). HORIZONTAL CONTROL, REFERENCED FROM THE NORTH AMERICAN DATUM OF 1983 (NAD 83) NY LONG ISLAND PROJECTION.
- NPS PROPERTY IS NOT WITHIN THE PROJECT SCOPE OF WORK.
- NPS PROPERTY LINE REFERENCED FROM BASEMAP PREPARED BY MERCATOR LAND SURVEYING, LLC, OF NEW YORK, NY, DATED 10/16/2003.

### PLAN NOTES

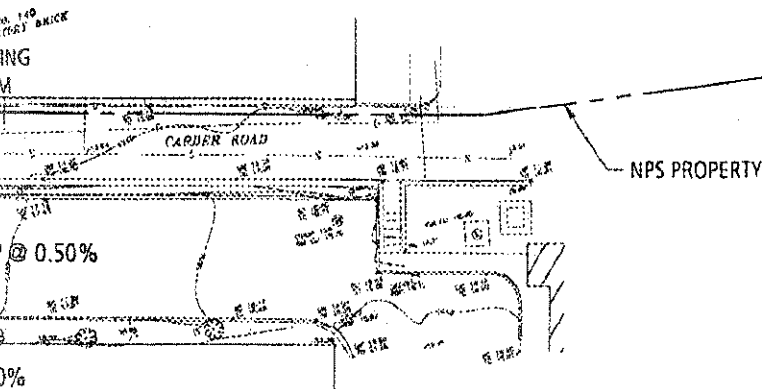
- PLAN ISSUED FOR CONSTRUCTION.
- PLAN DEPICTS SCHEMATIC LAYOUT OF PROPOSED STORM SEWER SYSTEM. CONTRACTOR MAY MAKE FIELD ADJUSTMENTS IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND WITH APPROVAL FROM THE PROJECT ENGINEER.
- DEMOLITION OF BUILDINGS 148, 147, AND 146 ANTICIPATED PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR TO NOTIFY PROJECT MANAGER AND FIELD ENGINEER OF ANY STRUCTURES OR UNDERGROUND UTILITIES ENCOUNTERED WHICH ARE NOT SHOWN ON PLANS.
- CONTRACTOR MUST RECEIVE APPROVAL FROM PROJECT MANAGER AND FIELD ENGINEER PRIOR TO MAKING ANY FIELD ADJUSTMENTS DUE TO UNANTICIPATED CONFLICTS.
- THE CONTRACTOR SHALL COORDINATE WITH UNEMPLOYED ORDINANCE AND ARCHEOLOGY MONITORING PERSONNEL ASSIGNED TO THE PROJECT. SEE CONTRACT DOCUMENTS FOR FURTHER CLARIFICATION.
- MEAN HIGH WATER ELEVATION IS 3.14' (NGVD 1929 DATUM).
- REFER TO PROPOSED GOVERNORS ISLAND FERRY TRANSFER SYSTEM AND SEAWALL REHABILITATION PLANS BY OCEAN COASTAL CONSULTANTS, DATED 9/27/2011 OR MOST CURRENT ISSUED.
- REFER TO SHEETS C-021-C-022 FOR PROPOSED STORM SEWER PROFILES. PIPE INVERT ELEVATIONS AND UTILITY CROSSINGS. PIPE INVERTS ARE REFERENCED FROM CENTER CROWN OF STRUCTURES. PIPE LENGTHS REPRESENT CENTER-TO-CENTER DISTANCES.
- INSTALL TIDEFLEX SERIES 35- FLANGED CHECK VALVE (OR APPROVED EQUIVALENT) AT OUTLET PIPE.
- CUSTOMER INVERT ELEVATIONS TO BE DETERMINED BY CONTRACTOR PRIOR TO START OF WORK. PROVIDE VCP AND NON-PRESSURE TRANSITION COUPLING AS NEEDED TO RECONNECT TO EXISTING PIPE.
- TREE PROTECTION SHALL BE IN ACCORDANCE WITH SPECIFICATION.
- PROVIDE CUSTOM 6" SQUARE MANHOLE WITH 2' X 4" GRATE AND CUSTOM 24" DIAMETER HOOD AND HOOPS.
- RESTORATION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS 21212 IS ASPHALT PAVING AND SPECIFICATION 212300 TURF AND GRASS AND CONSTRUCTION DETAILS.
- INSTALL ACO DRAIN TYPE 820 CATCH BASIN WITH CLASS P GRATE AND TRASH BUCKET, OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

### PLAN LEGEND

SYMBOL	DESCRIPTION
	PROPOSED STORM PIPE
	PROPOSED CURB INLET
	PROPOSED GRATE INLET
	AREA OF DEMOLITION (D.L.C.)
	TREE PROTECTION FENCE
	EXISTING STORM SEWER
	EXISTING SANITATION SEWER
	EXISTING WATER SEWER
	EXISTING ELECTRIC LINE
	EXISTING GAS LINE
	EXISTING CATCH BASIN
	EXISTING STORM MANHOLE
	EXISTING SANITARY MANHOLE
	EXISTING TREE



@ 2.00%



NO. 109  
 NOTES (MINOR  
 ASSUMPT)

CB-1.05  
 GR: 23.94  
 INV. IN: 18.53  
 INV. OUT: 18.53

SEE NOTE 11

NPS PROPERTY

@ 3.00%

35

@ 3.00%

Plan also showing the location of the demolished buildings (shaded and in upper left).

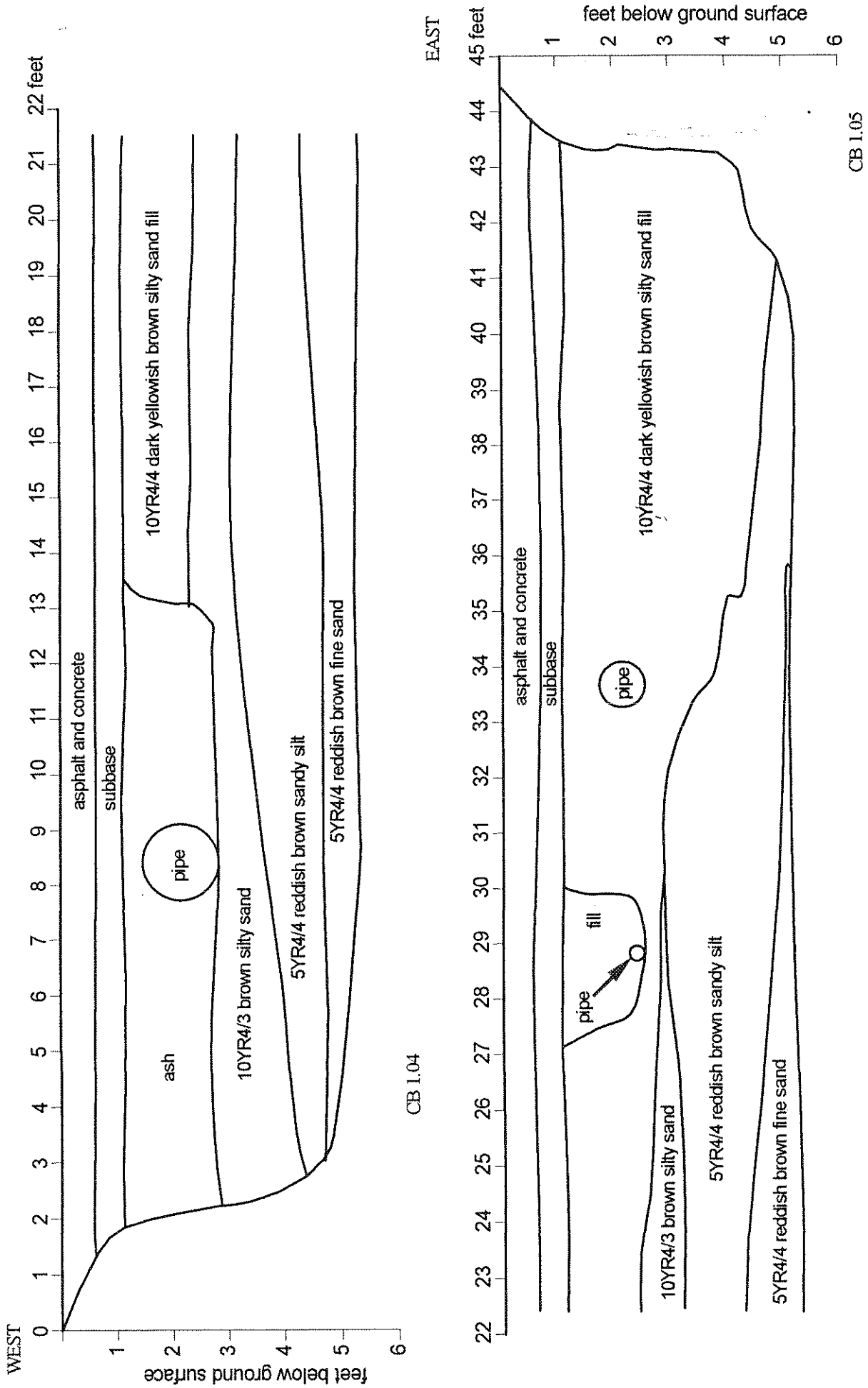


Figure 3 North profile of trench connecting CB 1.04 to CB 1.05.



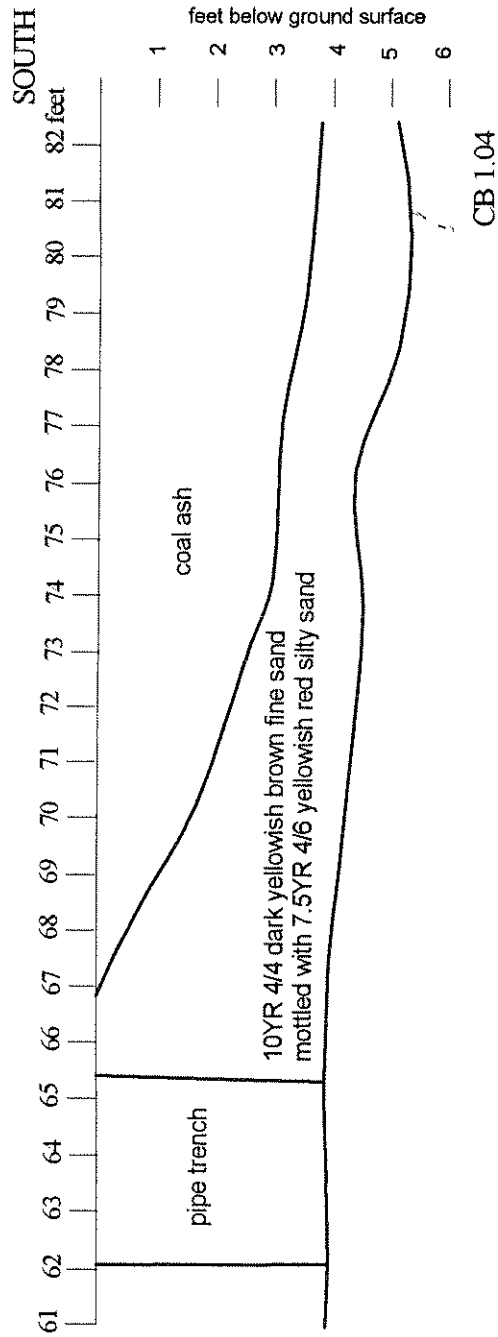
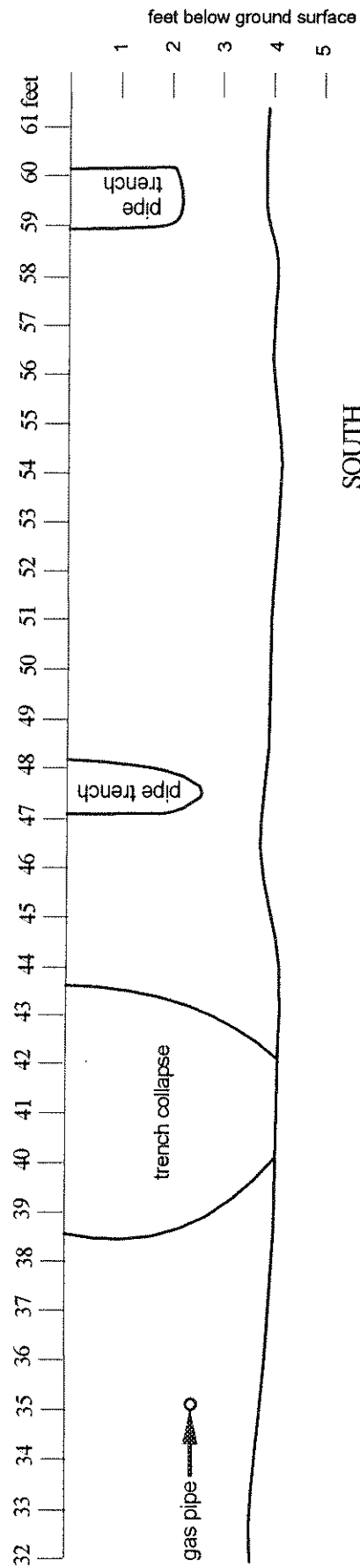
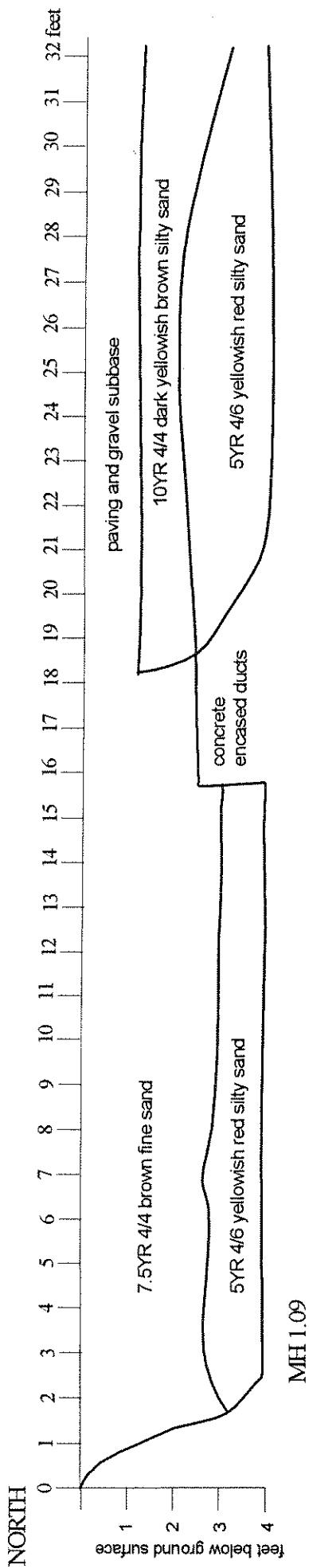


Figure 4 East profile of trench connecting CB 1.04 to MH 1.09.

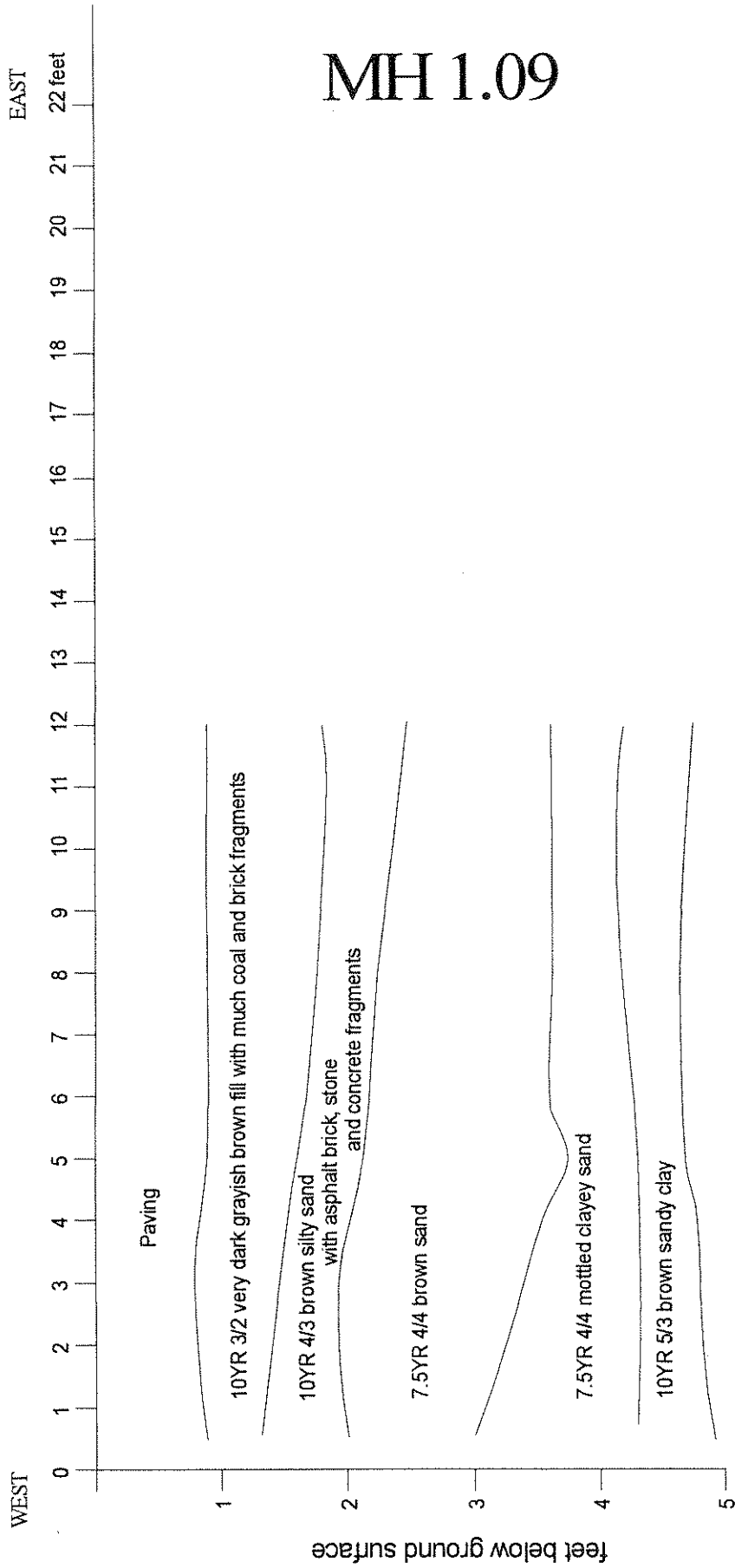


Figure 5 North profile of a section of the trench connecting MH 1.10 to MH 1.09.

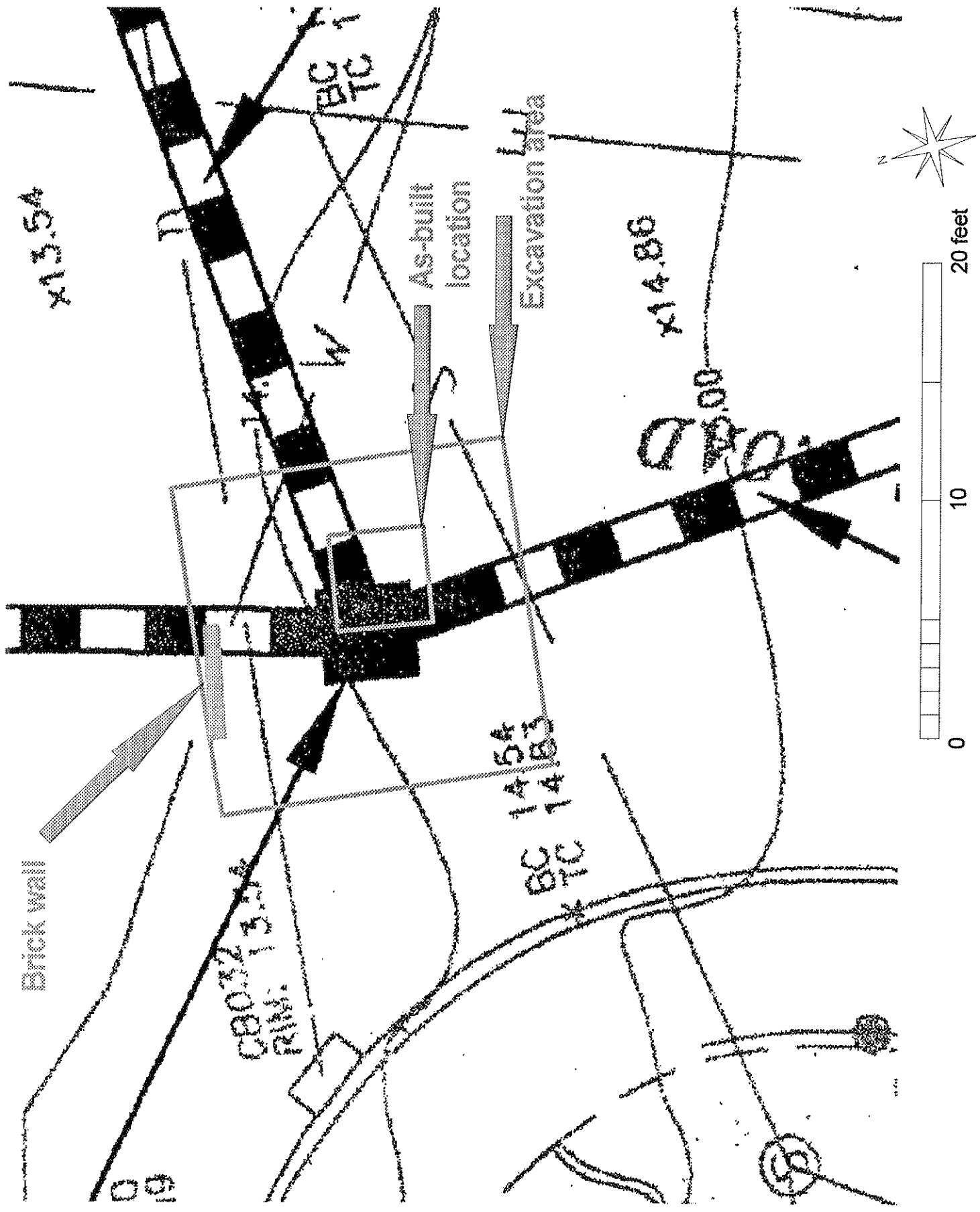


Figure 6 As-built location of catch basin CB-1.03 and the archaeological brick wall shown on part of the Soissons Dock Storm Drainage Plan.

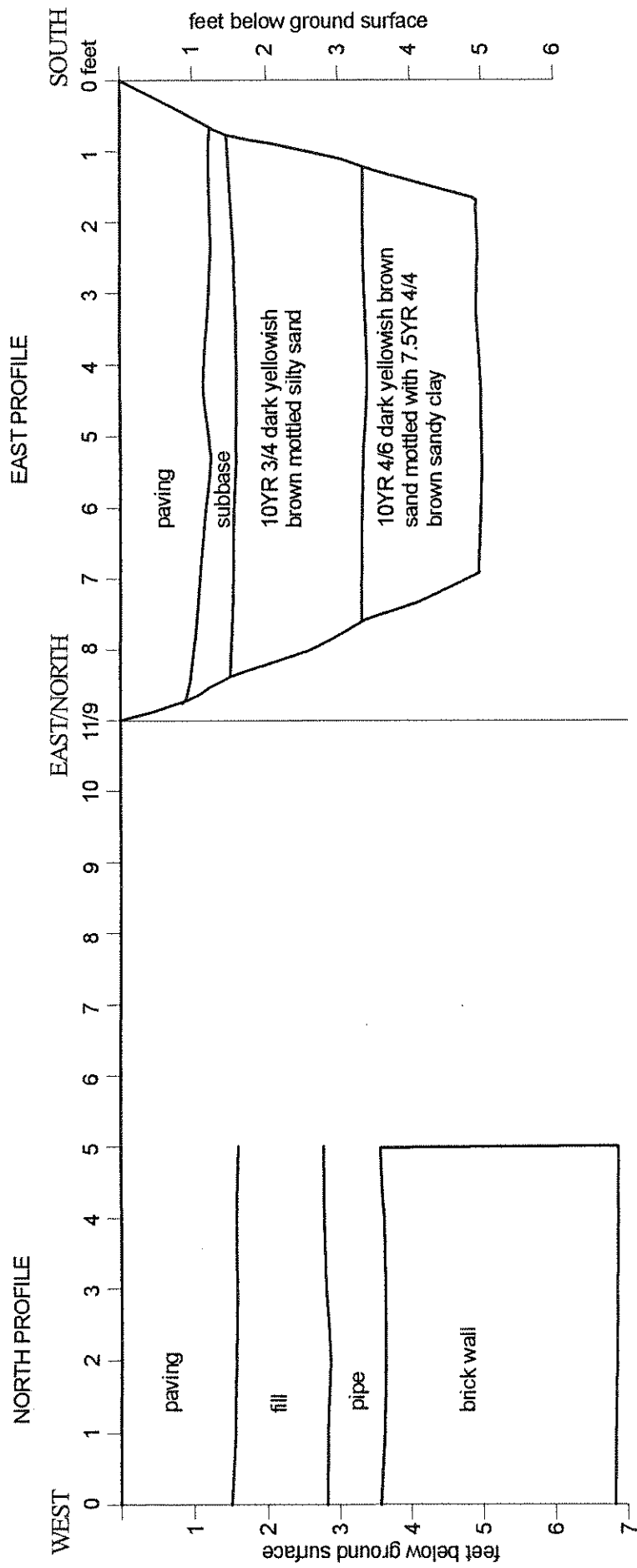


Figure 7 North and east profiles of the cut for CB 1.03.

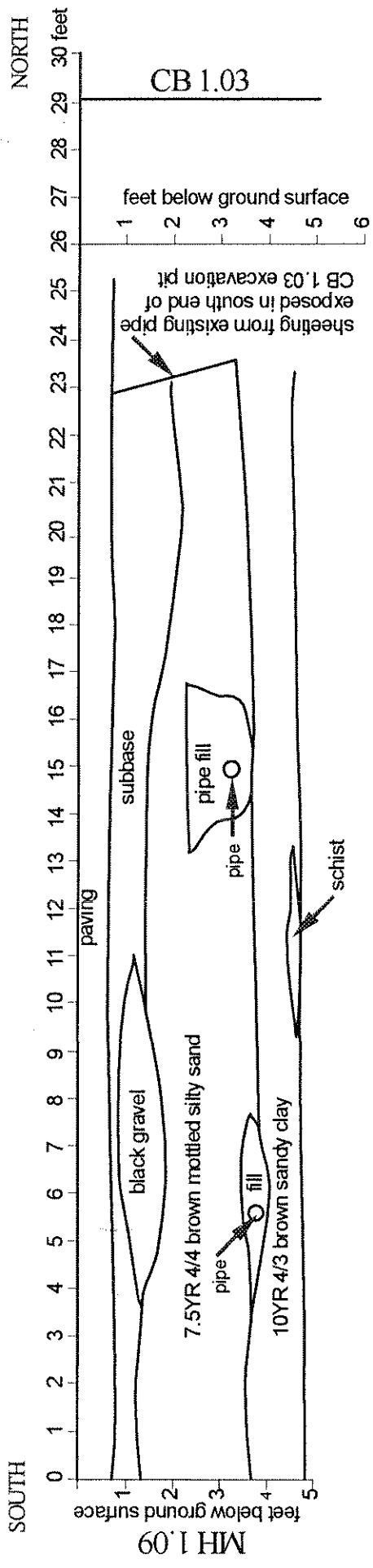


Figure 8 West profile of the trench between MH 1.09 and CB 1.03.



Photo 1 Trench from CB 1.04 to MH 1.14 showing coal ash deposit around defunct pipe, facing northeast (February 17, 2012).

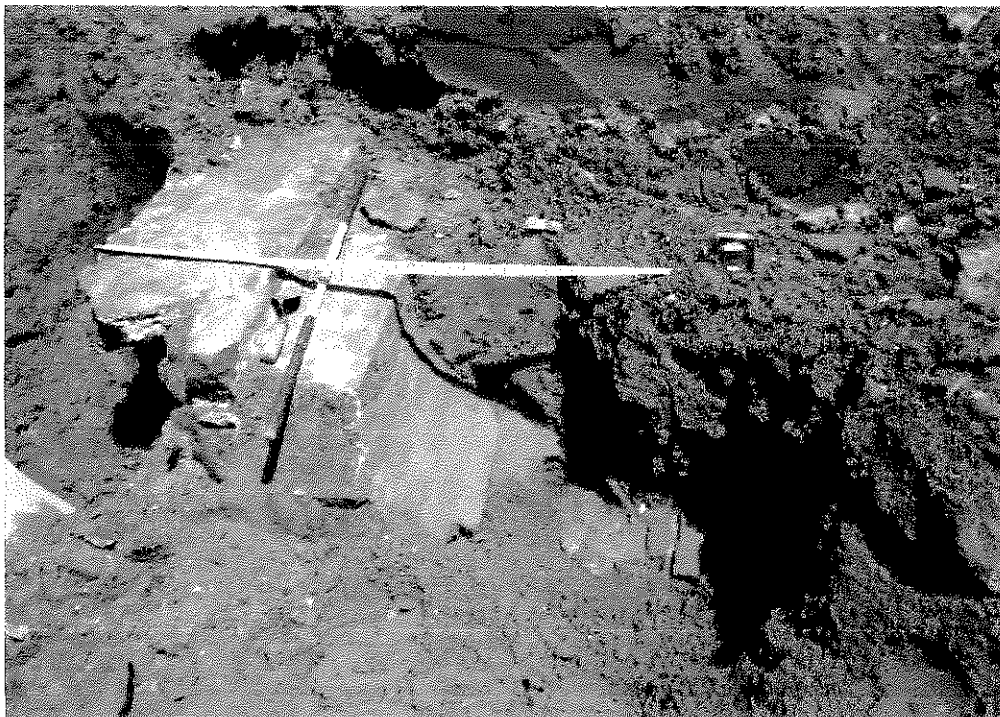


Photo 2 Part of the brick and mortar feature found in the trench between MH 1.10 to MH 1.11, facing north (May 18, 2012).

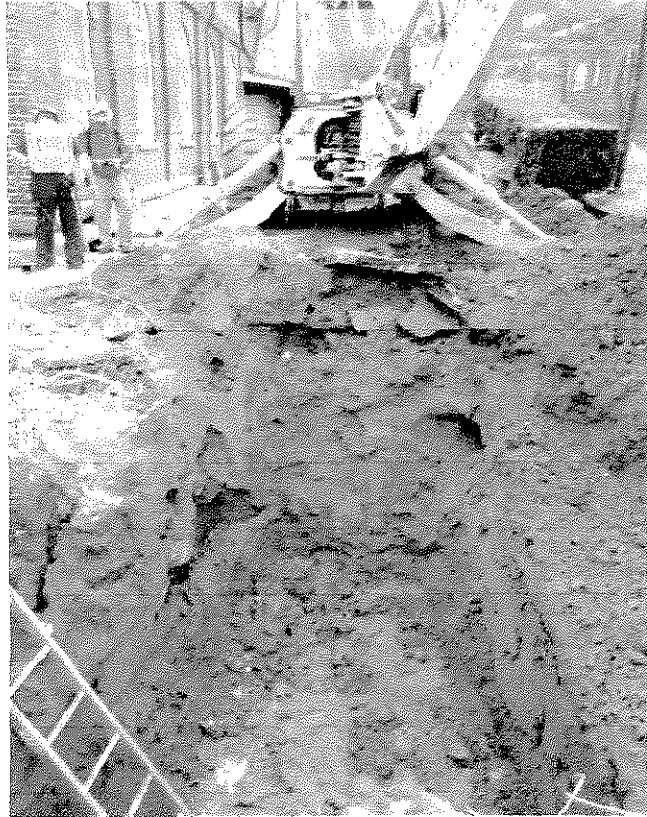


Photo 3 CB 1.06 to CB 1.03 in progress showing the red silty clay deposit at the base of excavation, facing east (March 20, 2012).



Photo 4 CB 1.03 excavation pit showing the 5-foot long brick wall, facing north (April 30, 2012).



Photo 5 The brick feature first identified in CB 1.03 shown here as a utility encasement in the trench between CB 1.03 and MH 1.09, facing southwest (August 17, 2012).



Photo 6 Concrete slab foundation of Building #148 after the superstructure was demolished, facing northeast (May 10, 2012).





Photo 7 Former location of Building #148 after demolition, facing northeast (May 16, 2012).

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Wikipedia

2012 [http://en.wikipedia.org/wiki/Sheffield\\_Farms](http://en.wikipedia.org/wiki/Sheffield_Farms). Accessed 9/5/12.

# APPENDIX A

## ARCHAEOLOGICAL WORK PLANS

Soissons Combined Project

Demolition of Building #s 146, 147 and 148

and

Soissons Dock and Utilities Work

ARCHAEOLOGICAL RESEARCH AND WORK PLAN FOR  
GOVERNORS ISLAND STORMWATER MANAGEMENT PLAN (Phase 2A)  
SOISSONS COMBINED PROJECT  
NEW YORK, NEW YORK

May 27, 2011

The Trust for Governors Island (TGI) is proceeding with their stormwater management plan on Governors Island, New York, New York in the area of Soissons Dock (see Figure 1). This work is located within the Governors Island National Historic District and the New York City Governors Island Landmark district. The archaeological work described here is therefore subject to the regulations of and the review by the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC).

The Soissons Combined project includes excavation for the placement of storm drain pipes and related catch basins and manholes along Ferry Line Road between Andes Road and Soissons Dock (the Manhattan ferry landing) and on Carder Road in front of Building #140. Figure 2 depicts the proposed pipe, catch basin and manhole locations. The placement of the storm drain pipes will require excavation to a depth of between 3.5 - 8.0 feet below ground surface in the locations of the pipes, catch basins and manholes. The depths will vary depending on the location of the pipe and other project considerations not related to archaeology.

The determination of archaeological potential of the Soissons Combined Project involved three elements; a comparison of the location to several historic maps, review of known disturbances and review of past archaeological work completed in the vicinity.

Three historic maps were used for comparative purposes; the 1813 Mangin map, the 1867 Barnard map and the 1879 First Army Engineers Map. Discrepancies between the relationship of the planned storm drainage work to the original shoreline, and other historic features, on the various historic maps is not uncommon. Factors including the natural changes to the then unprotected shoreline and the accuracy of the maps themselves should be considered. However, the use of historic map overlays can be informative and as a group these maps are a powerful tool in determining past use.

The 1813 Mangin map (see Figure 3) depicts a small part of the planned pipe work outside of the original Island footprint. No former structures are shown within the footprint of the Soissons Combined Project in 1813.

By 1867, there was much more activity in the area of the Soissons Combined Project. In addition to depicting the shifting shoreline and creation of a seawall along a portion of it, several buildings are depicted on the 1867 Barnard Map in the vicinity of the planned work (see Figure 4). There are two privies, a pump, a "tool house for the gardener", part of a "shed for shot and shells" and part of the adjacent "store house for shot and shells." Only a small portion of the storehouse actually crosses the path of the planned storm drainage pipe. One of the privies and the pump are quite close to the planned work and could actually be within the footprint depending of the validity of the overlay.

The 1879 First Army Engineers Map (see Figure 5) does not depict any of the same structures shown on the 1867 map within the project impact area. However, it does show four other unlabeled structures in the vicinity, all of which are quite small. It also shows that Building #140, adjacent to and north of the Carder Road segment of the planned pipe, had been built by that time, as had Building #110 to the west of the planned work between Andes and Carder Roads. None of the four structures depicted within the area crosses the path of the planned storm drainage pipe.

The amount of fill added to the area of planned work over time was also evaluated using the historic maps. The 1813 Mangin Map provides spot elevations that have been compared to those on the current survey (see Figures 2 and 3). Three spot elevations are depicted near or along the footprint of the planned storm drainage pipe on the 1813 map. One is between MHs 1.03 and 1.05 (21 feet), another near CB 1.16 (13 feet) and the third near CB 1.10 (0 - 4 feet). The current elevation in these locations are 18 feet, 13 feet and 9 feet, respectively. For practical purposes therefore, very little fill, just a few feet, has been added in the southern portion of the Soissons Combined Project Limit of Work. The northern portion, however, is entirely fill, partially placed during the expansion of the shoreline in that area.

Disturbances over time within the Soissons Combined project area have been minimal and primarily due to excavations for utility lines, as well as the expected demolition of Building #148. Figure 6 depicts the locations of these disturbances showing only the portions of the utility lines that cross the path of the planned storm drainage pipe or run closely parallel, for simplicity. The majority of the utility disturbances are located in the southwestern part of the project, from MH 1.03 southward, and in the eastern part of the project area in Carder Road, south of Building #140 from CB 1.15 eastward. Here the new pipes will be within virtually in the same trenches as the old, although the depths of these are unknown.

Previous archaeological reports have also been consulted to determine what archaeological resources have been identified in proximity to the Soissons Combined Project and what types of deposits may be expected. Three archaeological projects have been conducted within the vicinity of the planned storm drain project; monitoring of a utility trench (LBA 1995), testing for electrical poles for the New York City Waterfalls project (Stone 2007) and examination of soil characterization borings (Stone 2011). Although archaeological resources were documented, no archaeological features were identified during these projects within the Limit of Work.

Louis Berger and Associates conducted testing for part of the high voltage feeder in Andes Road from the traffic circle at Ferry Line Road westward. LBA was called in on an emergency basis when human remains were identified during trenching near Castle Williams, well outside of the Soissons Combined Project. In addition to the emergency data recovery, LBA monitored excavation for the remainder of the utility trench without identifying any potentially significant archaeological resources. Unfortunately, the trench length depicted on the report figure is nearly double the 226 feet length described in the report text, making interpretation of the location of soil profiles confusing. In any case, the monitored trench was 3.5 to 3.9 feet deep. Representative trench profiles show four strata were generally present. The upper stratum was paving related and extended to a depth of 0.9 feet. Stratum 2 was "brown to dark yellowish brown silty sand to sandy loam." It was found up to 2.1 feet below ground surface. Stratum 3 was found up to 3.2 feet below ground surface. It was "strong brown to yellowish brown sandy loam to medium sand with gravels and cobbles occasionally mottled with dark yellow brown coarse sand." The basal stratum was "strong brown to dark yellowish brown silty sand

to medium-fine sand." All the artifacts recovered from the trench monitoring came from the "construction fill deposit" (Stratum 2) (LBA 1995: 61-63).

Archaeological shovel tests were placed within the Limit of Work in advance of installation of two temporary electrical poles. One was at the northeast corner of Building #148 and the other north of the western end of Building #140. The shovel tests were dug to 3 feet below ground surface then a post hole digger was used to 6 feet deep. Both locations were ultimately excavated to 10 feet using a hand augur for the Building #148 hole and a geoprobe for the Building #140 hole. Various levels of fill were documented. A possible buried surface was identified in the test near Building #148 at approximately 8.5 feet below ground surface. A large late-nineteenth century deposit was identified in the test north of Building #140, buried 1.3 - 6 feet below ground surface. A possible buried surface was identified here at 8 feet below ground surface (Stone 2007: 4-5).

Archaeological inspection was conducted for a soil characterization geoprobe boring south of Carder Road, in the parking area north of Building #109. The boring was excavated to 15 feet below ground surface. Fill was documented to a depth of 5 feet below ground surface. No archaeological features were encountered (Stone 2011: 3).

Based on the combination of historic map overlays, topographic analysis, past disturbances and previous archaeological studies, the Soissons Combined Project has been divided into areas of moderate, low or no archaeological potential for the preservation of archaeological resources (see Figure 7). Areas with no archaeological potential include parts of the planned work that were historically below the high water line and/or within the footprint of Building #148 that is soon to be demolished. No archaeological work is recommended for these areas. Areas of low to moderate archaeological potential include the remainder of the Soissons Combined Project. Although parts of the below ground work will certainly encounter a substantial amount of prior utility disturbance, past experience with mapped utilities on Governors Island indicates the depths of utility disturbance is not always what may be expected. Therefore, while it is possible the excavation for the Soissons Combined Project will unearth many previously excavated utility trenches, until they are located in the field, it is not prudent to dismiss certain locations from archaeological consideration out of hand based on records of utility disturbance alone.

Potential archaeological resources located along the path of the planned storm drainage pipe, or close to it, include remains of a privy, a pump and part of a storehouse for shot and shells, all depicted on the 1867 Barnard Map (see Figure 4). However, since there has been a fair amount of disturbance, the potential for preservation is rated low to moderate for these structures. Monitoring is recommended for the excavation of areas marked on Figure 7 as having low or moderate potential for preservation of archaeological resources. During field monitoring, should the utility maps prove accurate in the areas marked with low archaeological potential on Figure 7, having extensive utility disturbance that would have obliterated any potentially significant archaeological deposits all the way to the base of excavation required for the planned storm drainage pipe, field monitoring may be terminated in those areas only after documenting the disturbance. Monitoring will continue in the areas of moderate archaeological potential.

Monitoring will include observing the excavations and inspecting them and the backdirt. This may also involve the archaeologists entering the trench, if it is safe to do so, so that deposits or features can be directly assessed. Should any potentially significant archaeological resources be identified, the

contractor will be instructed to stop excavation until the resources can be evaluated and the archaeologist hand excavates, measures and/or otherwise records the find(s). The amount of time necessary for this will be relative to the extent of the find(s) and the weather conditions. Should this initial inspection determine the resources are potentially significant, the TGI and Turner Construction Company would be immediately contacted. In such a case, the TGI, SHPO and LPC will have to be consulted and either a plan to recover archaeological data will have to be produced or other mitigation measures developed. While those consultations are taking place, the work may have to be temporarily stopped in that location while the decision on how to proceed is made. If no archaeological features are encountered, the archaeologist will document the soils and fill deposits. This will include taking photographs and measurements for drawings. Stratigraphy will be recorded using Munsell Soil Color Charts descriptions.

Artifacts may be collected opportunistically during monitoring from the trench or backdirt to inform the nature and deposition date of the deposits. Should any artifacts be recovered during this work, standard methods of artifact processing, labelling, identification, evaluation and documentation will be done on the recovered materials. It is expected items such as coal, cinder, brick fragments and modern garbage will be recorded but not retained. Upon completion of the excavations, documentation, artifact processing and analysis a report will be prepared detailing the monitoring and any findings that may be present.

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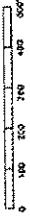
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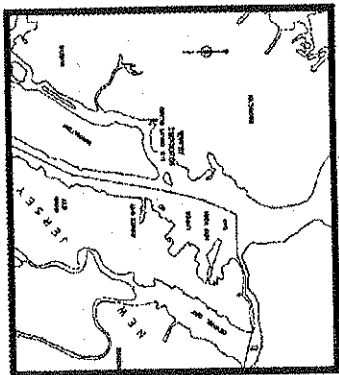
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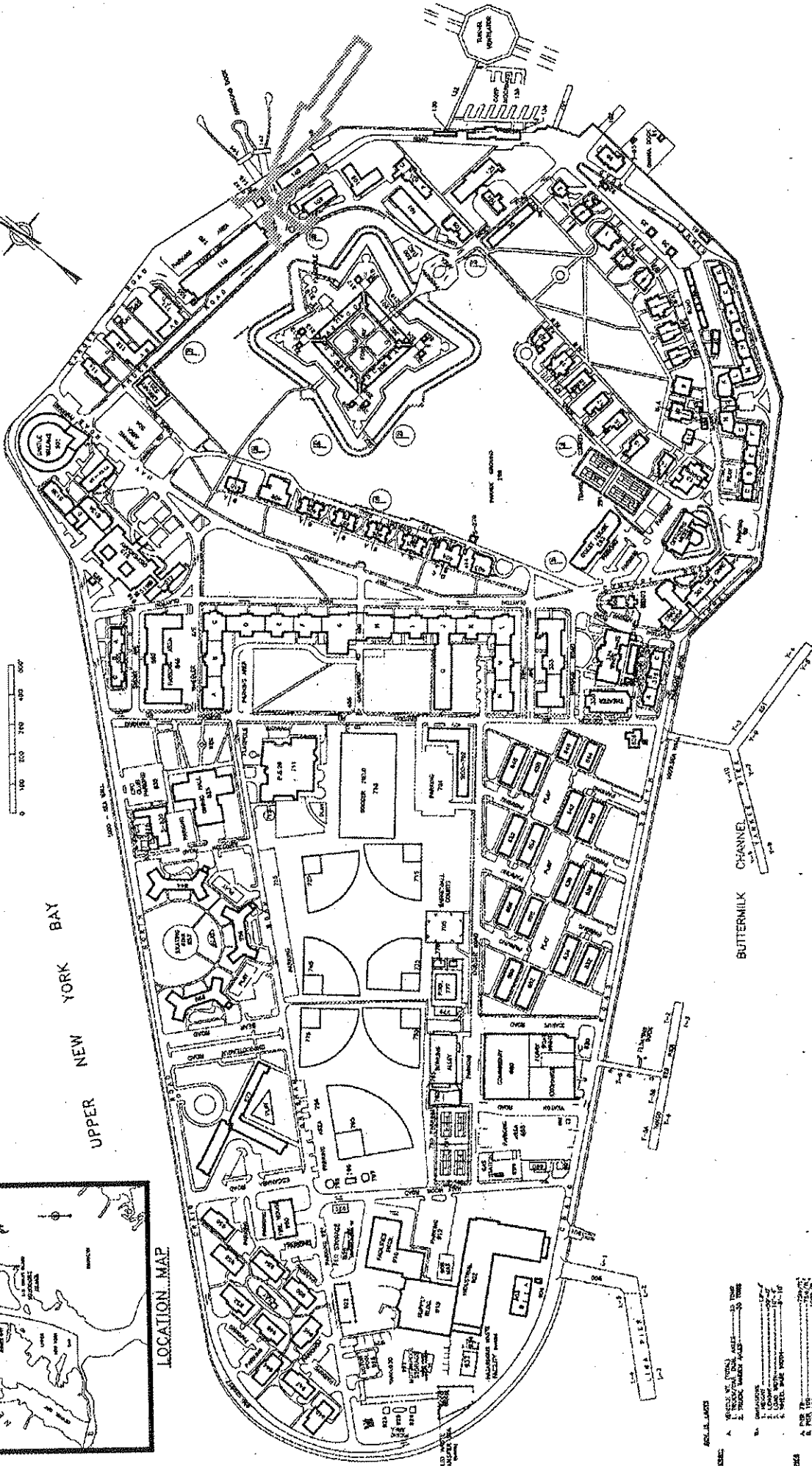
SITE PLAN  
 U.S. COAST GUARD  
 GARDIAN CENTER NEW YORK  
 GOVERNORS ISLAND, NEW YORK  
 JAN 1982



UPPER NEW YORK BAY



LOCATION MAP



- LEGEND
- A. VERTICAL SIGNAGE
  - B. SIGNAGE
  - C. SIGNAGE
  - D. SIGNAGE
  - E. SIGNAGE
  - F. SIGNAGE
  - G. SIGNAGE
  - H. SIGNAGE
  - I. SIGNAGE
  - J. SIGNAGE
  - K. SIGNAGE
  - L. SIGNAGE
  - M. SIGNAGE
  - N. SIGNAGE
  - O. SIGNAGE
  - P. SIGNAGE
  - Q. SIGNAGE
  - R. SIGNAGE
  - S. SIGNAGE
  - T. SIGNAGE
  - U. SIGNAGE
  - V. SIGNAGE
  - W. SIGNAGE
  - X. SIGNAGE
  - Y. SIGNAGE
  - Z. SIGNAGE

Location of the Governors Island Stormwater Management Plan Phase 2 A (Soissons Combined Project) on Governors Island.

Figure 1

**GOVERNORS ISLAND**  
 STORMWATER MANAGEMENT  
 PHASE 2A  
 (SOISSONS COMBINED PROJECT)

PROJECT NO.: 017138  
 DATE: 08/13/2024  
 DRAWN BY: A.S.  
 CHECKED BY: A.S.  
 APPROVED BY: A.S.  
 PROJECT LOCATION: 750205101

**CLIENT**  
 Turner Construction Company  
 100 Water Street  
 Boston, MA 02109  
 TEL: 617.552.2400  
 FAX: 617.552.2400

**DESIGNER**  
**WB**  
 WATERBURY CONSULTANTS  
 100 WATER STREET, SUITE 200  
 BOSTON, MA 02109  
 TEL: 617.552.2400  
 FAX: 617.552.2400

**PROPERTY**  
 PROJECT NO.: 017138  
 SHEET NO.: 3A  
 PROJECT NAME: STORM DRAINAGE PLAN  
 DRAWN BY: A.S.  
 CHECKED BY: A.S.  
 APPROVED BY: A.S.  
 DATE: 08/13/2024  
 PROJECT LOCATION: 750205101

**PROGRESS PRINT**  
 SHEET NO. 3A OF 3A  
 PROJECT NAME: STORM DRAINAGE PLAN  
 DRAWN BY: A.S.  
 CHECKED BY: A.S.  
 APPROVED BY: A.S.  
 DATE: 08/13/2024  
 PROJECT LOCATION: 750205101



- GENERAL NOTES**
1. ALL STORM DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE 2024 MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MHD) DESIGN MANUAL.
  2. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR FLOOD PROTECTION.
  3. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR WIND PROTECTION.
  4. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR HURRICANE FORCE WIND PROTECTION.
  5. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR TYPICAL FLOOD PROTECTION.

- PLAN NOTES**
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  4. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR HURRICANE FORCE WIND PROTECTION.
  5. ALL STRUCTURES SHALL BE CONSTRUCTED TO BEAT 100-YEAR TYPICAL FLOOD PROTECTION.

**PLAN LEGEND**

-----	12" U.P.
-----	18" U.P.
-----	24" U.P.
-----	36" U.P.
-----	48" U.P.
-----	60" U.P.
-----	72" U.P.
-----	84" U.P.
-----	96" U.P.
-----	108" U.P.
-----	120" U.P.
-----	132" U.P.
-----	144" U.P.
-----	156" U.P.
-----	168" U.P.
-----	180" U.P.
-----	192" U.P.
-----	204" U.P.
-----	216" U.P.
-----	228" U.P.
-----	240" U.P.
-----	252" U.P.
-----	264" U.P.
-----	276" U.P.
-----	288" U.P.
-----	300" U.P.
-----	312" U.P.
-----	324" U.P.
-----	336" U.P.
-----	348" U.P.
-----	360" U.P.
-----	372" U.P.
-----	384" U.P.
-----	396" U.P.
-----	408" U.P.
-----	420" U.P.
-----	432" U.P.
-----	444" U.P.
-----	456" U.P.
-----	468" U.P.
-----	480" U.P.
-----	492" U.P.
-----	504" U.P.
-----	516" U.P.
-----	528" U.P.
-----	540" U.P.
-----	552" U.P.
-----	564" U.P.
-----	576" U.P.
-----	588" U.P.
-----	600" U.P.
-----	612" U.P.
-----	624" U.P.
-----	636" U.P.
-----	648" U.P.
-----	660" U.P.
-----	672" U.P.
-----	684" U.P.
-----	696" U.P.
-----	708" U.P.
-----	720" U.P.
-----	732" U.P.
-----	744" U.P.
-----	756" U.P.
-----	768" U.P.
-----	780" U.P.
-----	792" U.P.
-----	804" U.P.
-----	816" U.P.
-----	828" U.P.
-----	840" U.P.
-----	852" U.P.
-----	864" U.P.
-----	876" U.P.
-----	888" U.P.
-----	900" U.P.
-----	912" U.P.
-----	924" U.P.
-----	936" U.P.
-----	948" U.P.
-----	960" U.P.
-----	972" U.P.
-----	984" U.P.
-----	996" U.P.
-----	1008" U.P.

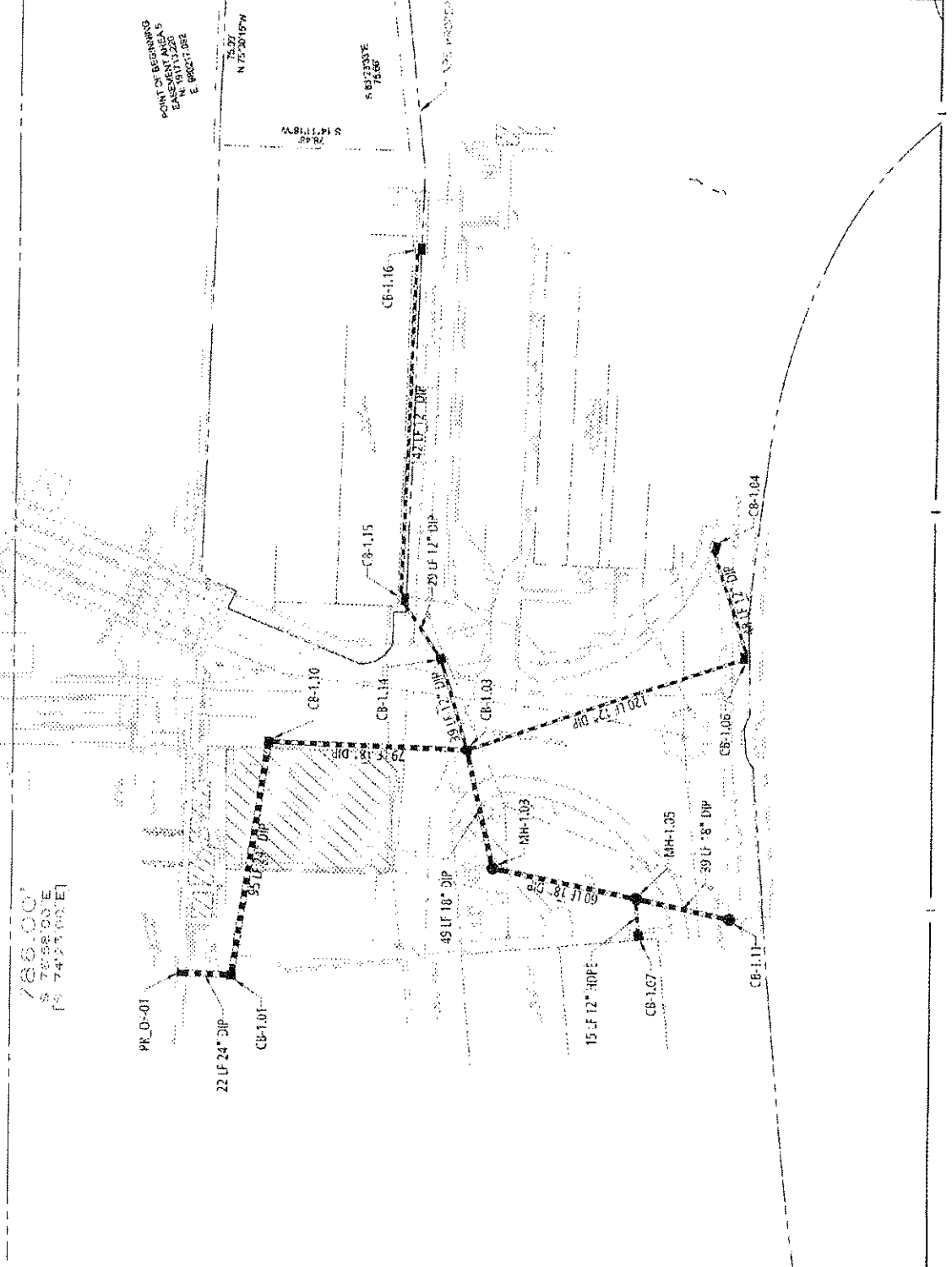


Figure 2 Governors Island Stormwater Management Plan Phase 2A (Soissons Combined Project).

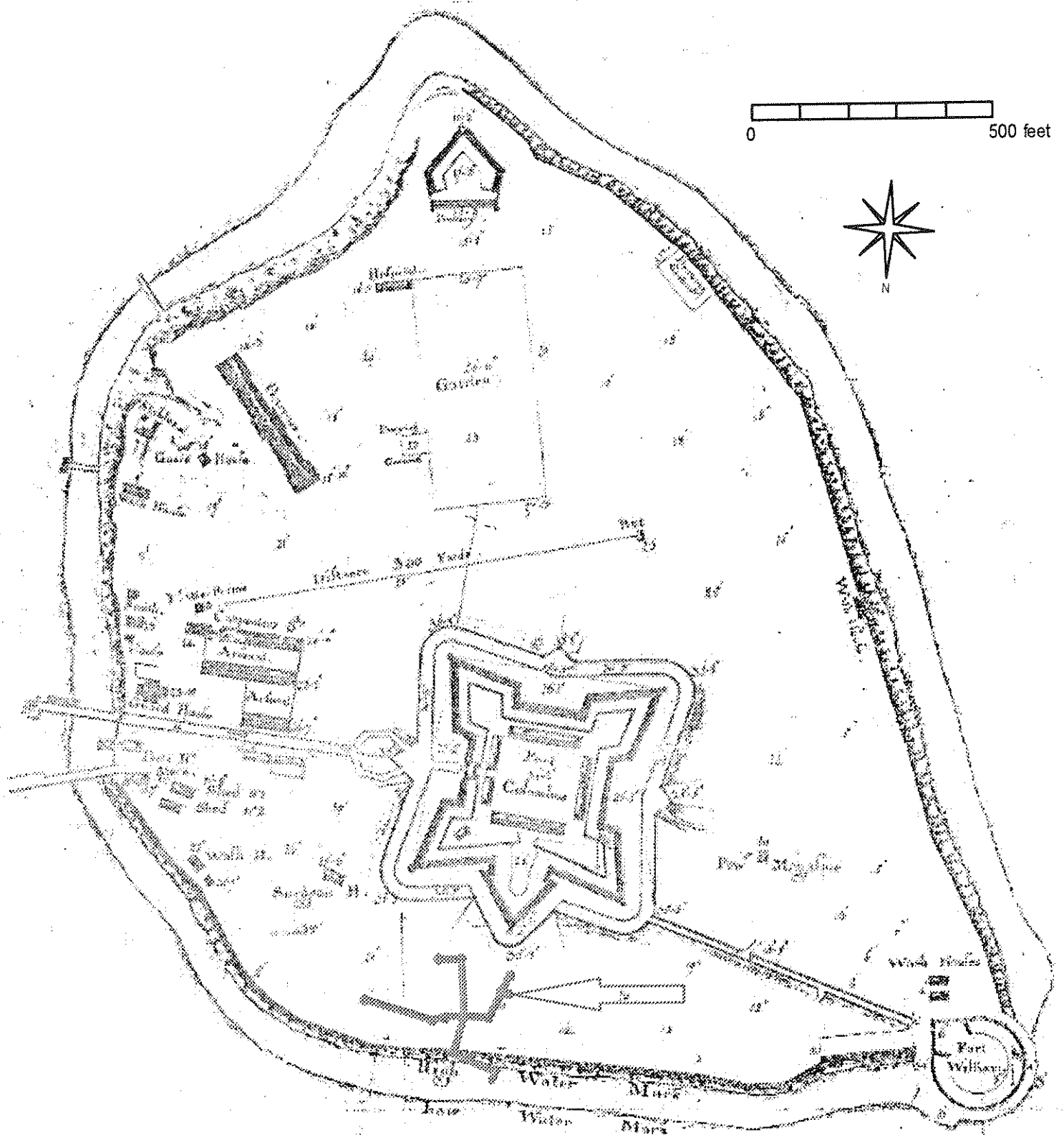


Figure 3

1813 Mangin Map of Governors Island with an overlay of the Soissons Dock area storm drainage project.

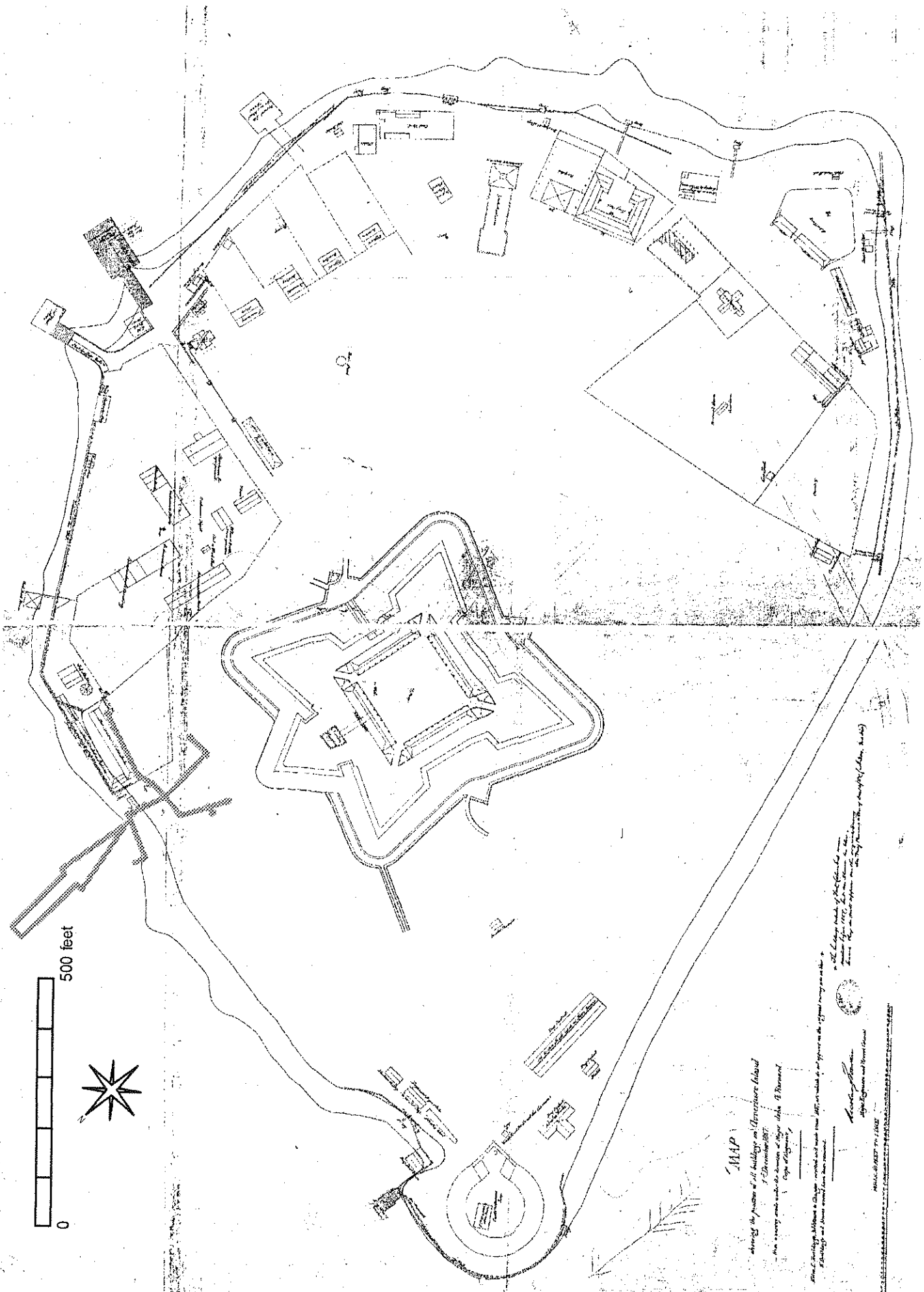


Figure 4 1867 Barnard Map of Governors Island with an overlay of the Soissons Dock area storm drainage project.

**LEGEND**

- 1 COMMANDING GENERAL'S QUARTERS
- 2-12 OFFICERS' QUARTERS
- 13 HEAD QUARTERS, DIV. OF THE ATLANTIC AND DEPT. OF THE EAST
- 14 PRINTING OFFICE
- 15 SCHOOL HOUSE
- 16 BLACKSMITH & TUNESHOP
- 17 CARPENTER & PAINTSHOP
- 18 QUARTERMASTER'S STOREHOUSE
- 19 STABLE
- 20 COAL SHED
- 21 BOAT HOUSE
- 22-23 POST TRADER'S STORE HOUSE
- 24 OFFICES OF POST QUARTERMASTER & A.C.S.
- 25 OFFICES
- 26 OFFICES, POST COMMANDER & CO.
- 27 OFFICERS' QUARTERS, N. I. ARSENAL
- 28-29 ORDNANCE STORE HOUSES
- 30-34 STORE HOUSE
- 35 MUSEUM & OFFICE
- 36 QUARTERS
- 37 WORK SHOP
- 38 FIRE ENGINE HOUSE
- 39 BOAT HOUSE
- 40 STABLE
- 41 ENGINEER BUILDINGS
- 42-49 POWDER MAGAZINE
- 50 OFFICERS' QUARTERS
- 51-52 BARRACKS
- 53 MAGAZINE
- 54 POST HOSPITAL
- 55 N.C.B. & GENERAL-SERVICE CLERKS' QUARTERS
- 56 CHAPEL
- 57 QUARTERS
- 58 BAND BARRACKS
- 59 HOSPITAL STEWARD'S QUARTERS
- 60 BATH HOUSE



**FIRST U S ARMY ENGINEERS  
MAP OF  
GOVERNORS ISLAND - 1879**

FROM A SURVEY BY 1ST LT. E. GRIFFIN, CE  
& MR. F. N. OWEN, ASST. ENGR.

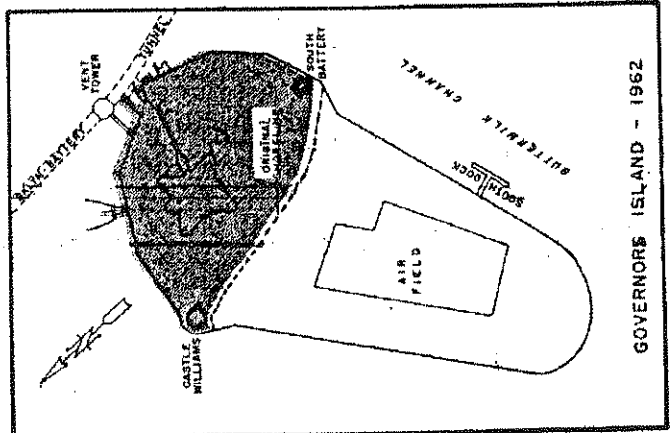
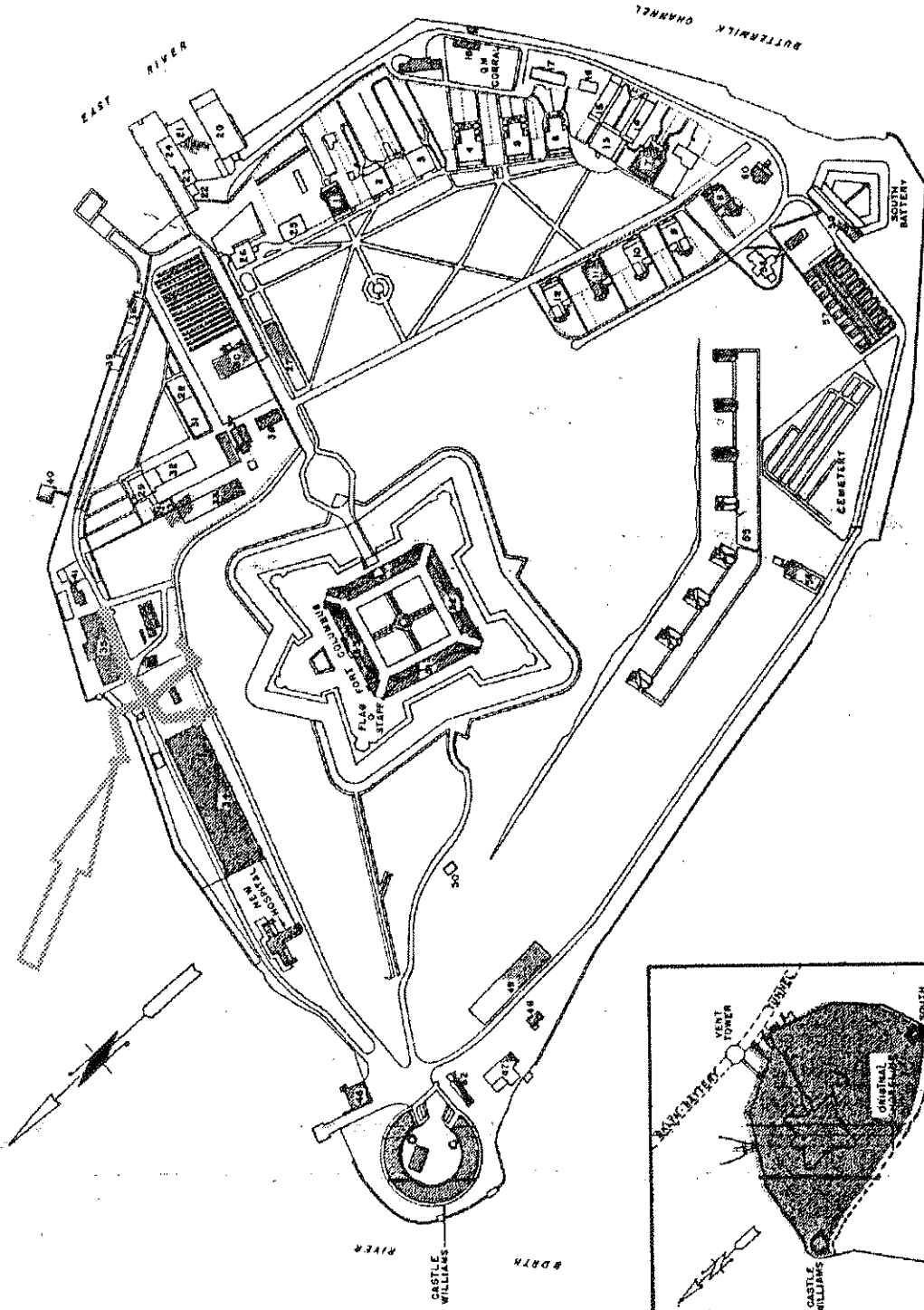


Figure 5 1879 First U.S. Army Engineers Map of Governors Island with an overlay of the Soissons Dock area storm drainage project.

PREPARED JAN. 1962 UNDER DIRECTION OF S. H. KREITZER, CE, INTCL. BR.

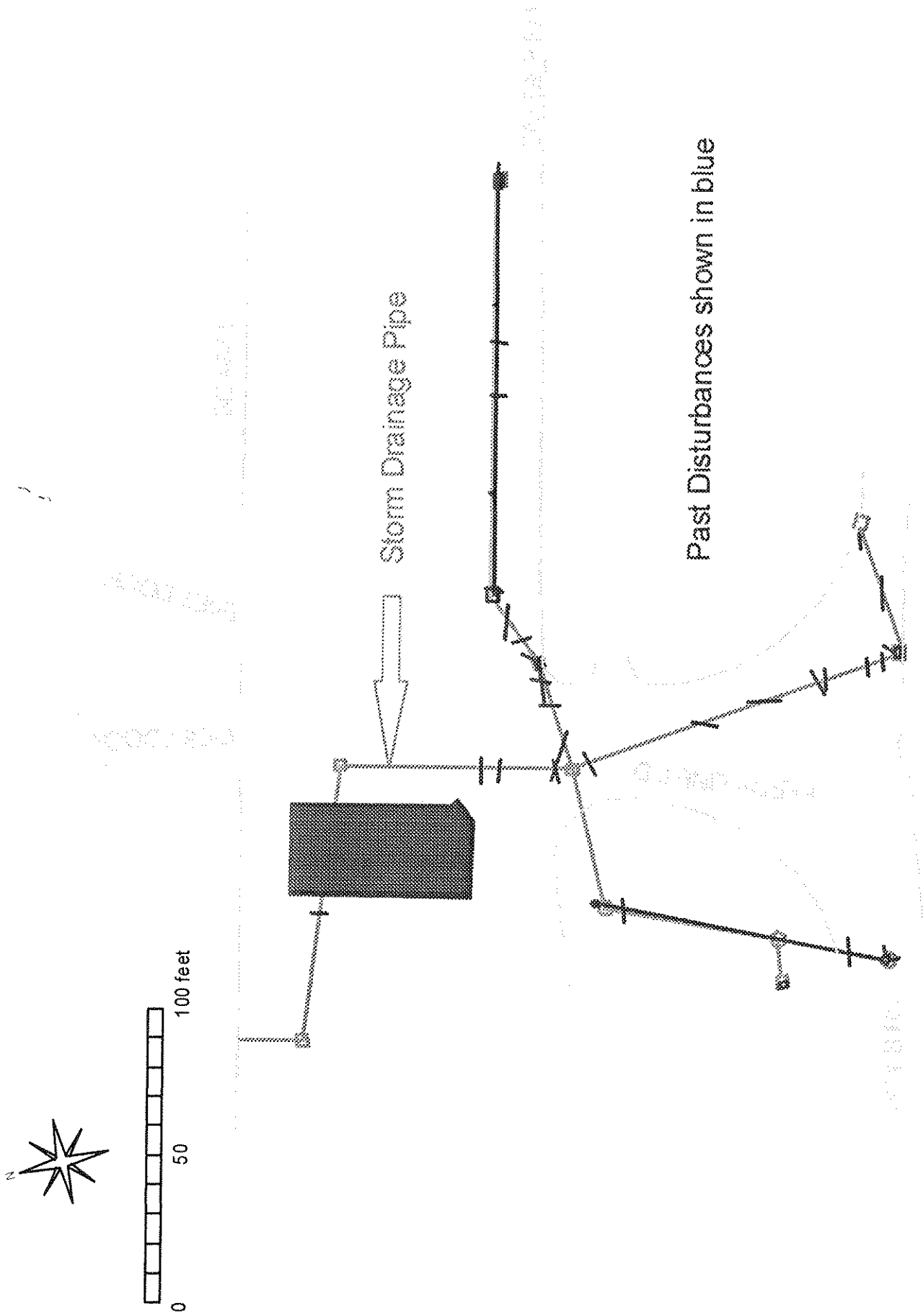


Figure 6 Areas of past disturbance within the Governors Island Stormwater Management Plan Phase 2A (Soissons Combined Project).

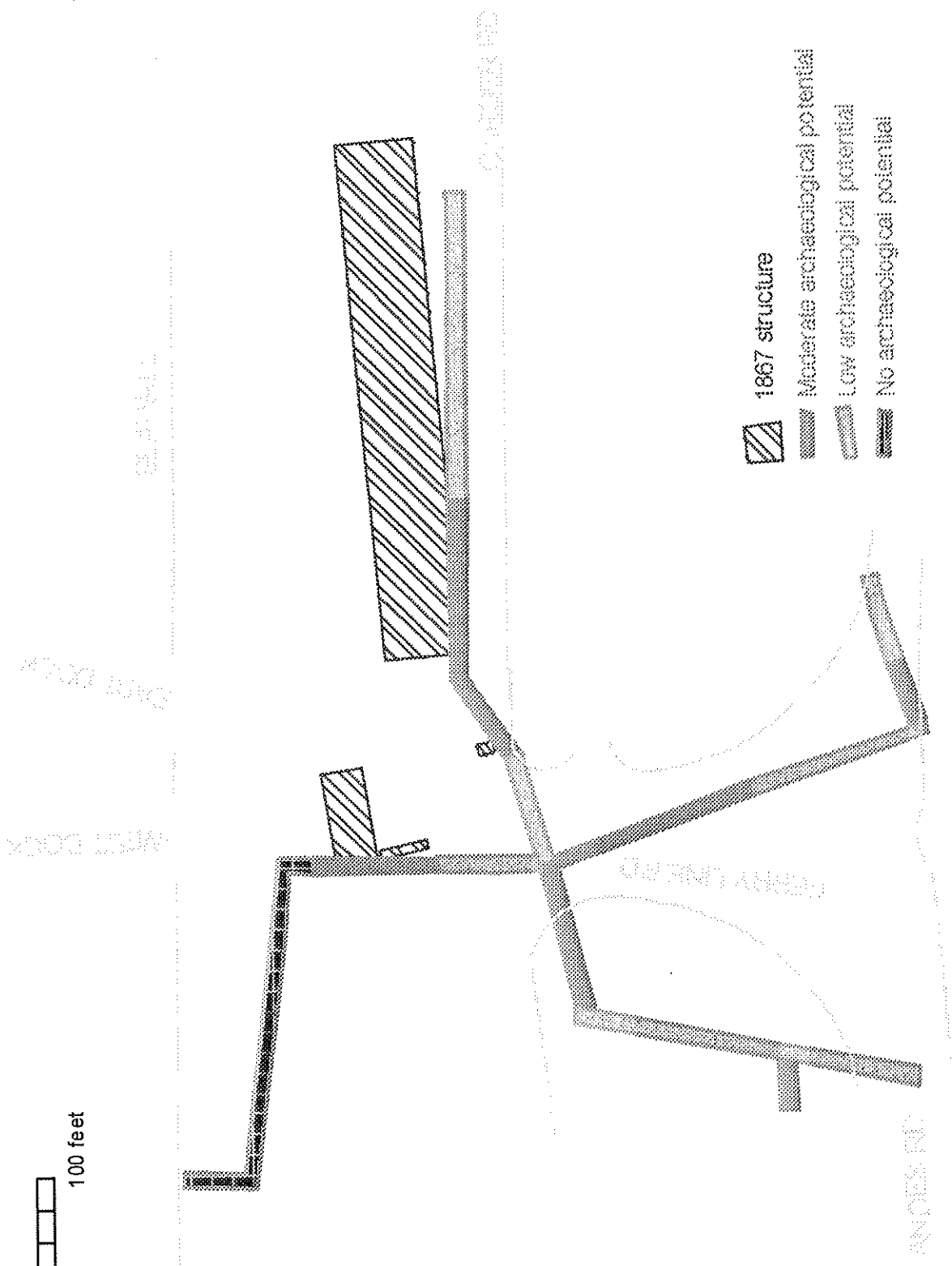


Figure 7 Areas of archaeological sensitivity within the Governors Island Stormwater Management Plan Phase 2A (Soissons Combined Project).

ARCHAEOLOGICAL RESEARCH AND WORK PLAN FOR  
DEMOLITION OF BUILDING #S 146, 147 AND 148  
IN THE GOVERNORS ISLAND HISTORIC DISTRICT  
NEW YORK, NEW YORK

November 30, 2011

The Trust for Governors Island (TGI) plans to demolish three small buildings on Governors Island, New York, New York within the Governors Island National Historic District and the New York City Governors Island Landmark district (see Figure 1). The archaeological work described here is subject to the regulations of and the review by the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC).

The buildings, each one story, are located near Soissons Dock, the ferry landing from Manhattan (see Figure 2). The combined footprint of the buildings is approximately 2500 square feet. The work includes removing the three buildings and their footings, if present, as well as the diesel storage tank and pad to the west of Building #147, and all the concrete sidewalk, curbs and steps in that area. Catch basins and manholes in the footprint of the demolition work will not be affected. Building #147 and the storage tank are on concrete pads without footings. Removals there will not involve any excavation beyond that needed to cap the utilities, estimated to be localized and up to 5 feet below ground surface. Building #148 has footings expected to be up to 6 feet below ground surface. It is not known if Building #146 has footings, but if it does they are expected to be no deeper than those for Building #148.

The determination of archaeological potential of this demolition project has involved three elements; a comparison of the location to several historic maps, a review of past archaeological work completed in the vicinity and a review of known disturbances.

Three historic maps were used for comparative purposes to determine past use within the project's limit of disturbance; the 1813 Mangin map, the 1867 Barnard map, and the 1879 First Army Engineers Map. The 1813 Mangin map (see Figure 3) depicts close to half of the demolition project beneath the high water mark and no former structures are shown within the project footprint in 1813. The 1867 Barnard map (see Figure 4) also depicts close to half of the project footprint beneath the high water mark. However, a privy is depicted in 1867 in the eastern edge of the planned demolition. Like the two earlier maps, the 1879 Army Engineers map also depicts about half of the demolition project beneath the high water line (see Figure 5). By 1879 there is a small unidentified building depicted in the southeastern corner of the planned demolition footprint.

Previous archaeological reports have also been consulted to determine if the potential exists for the preservation of archaeological remains in the location of the planned demolition. Three borings and a ten-foot deep post hole in close proximity to the planned demolition footprint were archaeologically examined. The post hole was located in the sidewalk between Building #s 146 and 148 and the borings were located one on each fork in Ferry Line Road and the other in Carder Road to the south of Building #148.

The boring in Carder Road unearthed deposits with cultural material through 4 feet below ground surface. A possible early ground surface was found in the 8 - 10 foot deep sample, evidenced by water-worn stones in a clayey silt matrix (Stone 2010). Fill-containing deposits were found at deeper levels in the two borings in Ferry Line Road; in one through the 12 foot sample and the other through the 10 foot sample, underlain by natural sediment (Stone 2011). The post hole excavated between Building #s 146 and 148 was recorded in ten strata. Modern cultural material



was found through Stratum 3, 1.8 feet below ground surface. Earlier material was found in Stratum 6, 6 feet below ground surface. It was thought the basal stratum represented a possible buried surface, beginning at 7.4 feet below ground surface (Stone 2007). These results mirror the contour of the shoreline, with the slope down northward toward the water/ferry landing.

Previous disturbances in the vicinity of the planned demolition footprint are mainly from the construction of the buildings themselves and from the utilities that serve them (see Figure 6). In general, utility disturbances depicted<sup>1</sup> are confined to the areas to both the north and south of Building #148. Of those to the north of Building #148, some are overhead utilities (see Photo 1). Footings are expected along the perimeter of Building #148 and the disturbance created by their construction varies with the topography. Construction of the Building #148 footings would have involved excavation of trenches along the edges of the building footprint, and possibly the entire building footprint. For those buildings constructed on a concrete slab, the disturbance from their construction would have been minimal to none.

The research shows that at least half of the area of the planned demolition work is beneath the historic high water line and therefore of no concern regarding archaeological resources. However, approximately half of Building #148 is within the original Governors Island footprint. Modern fill may be expected to at least a depth of 3 feet below ground surface in the southern part of Building #148, based on the information from the prior archaeological work in the vicinity. However, preservation of archaeological resources could be expected at deeper levels.

Archaeological monitoring is recommended for part of the excavations associated with the demolition project to identify possible remains of a privy shown on the 1867 map and/or an unknown building depicted on the 1879 map. Monitoring is recommended for the removal of the footings at the southern side, the southern two-thirds of the eastern side and the southern half of the western side of Building #148. If excavation is needed in interior areas of that building, then archaeological monitoring is also recommended for those areas, as well as for the excavations to cap the utility lines feeding those portions of Building #148 or any of the other removals that will involve excavation deeper than 3 feet in that area.

Monitoring will include observing the excavations and inspecting them and the backdirt. This may also involve the archaeologist entering the excavation, if it is safe to do so, so that deposits or features can be directly assessed. Should any potentially significant archaeological resources be identified, the contractor will be instructed to stop excavation until the resources can be evaluated and the archaeologist hand excavates, measures and/or otherwise records the find(s). The amount of time necessary for this will be relative to the extent of the find(s) and the weather conditions. Should this initial inspection determine the resources are potentially significant, TGI and Turner Construction Company would be immediately contacted. In such a case, TGI, SHPO and LPC will have to be consulted and either a plan to recover archaeological data will have to be produced or other mitigation measures developed. While those consultations are taking place, the work may have to be temporarily stopped in that location while the decision on how to proceed is made. If no archaeological features are encountered, the archaeologist will document the soils and fill deposits. This will include taking photographs and measurements for drawings. Stratigraphy will be recorded using Munsell Soil Color Charts descriptions.

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<sup>1</sup> This is a relatively new survey and the accuracy of the mapped utilities has not been assessed via excavation. Earlier surveys have been notoriously incomplete and other drawings depict utilities also exiting the western side of Building #148.

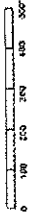
Artifacts may be collected opportunistically during monitoring from the excavations or backdirt to inform the nature and deposition date of the material. Should any artifacts be recovered during this work, standard methods of artifact processing, labelling, identification, evaluation and documentation will be done on the recovered materials. It is expected items such as coal, cinder, brick fragments and modern garbage will be recorded but not retained. Upon completion of the excavations, documentation, artifact processing and analysis, a report will be prepared detailing the monitoring and any findings that may be present

## BIBLIOGRAPHY

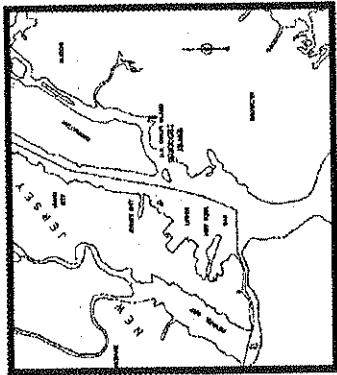
Stone, Linda

- 2007 Report on Archaeological Testing and Monitoring of Seven Locations of Planned Electrical Poles for a Waterfall Art Installation on Governors Island, New York, New York. Prepared for NYC Waterfalls, LLC. July 3, 2007.
- 2010 Letter Report to David G. Winter, Hart Crowser, Inc. Re: Archaeological Inspection of Borings in the Governors Island Historic District. November 10, 2010.
- 2011 Report on Archaeological Monitoring of Four Borings in the Governors Island Historic District New York, New York. Prepared for Warren George, Inc. June 20, 2011.

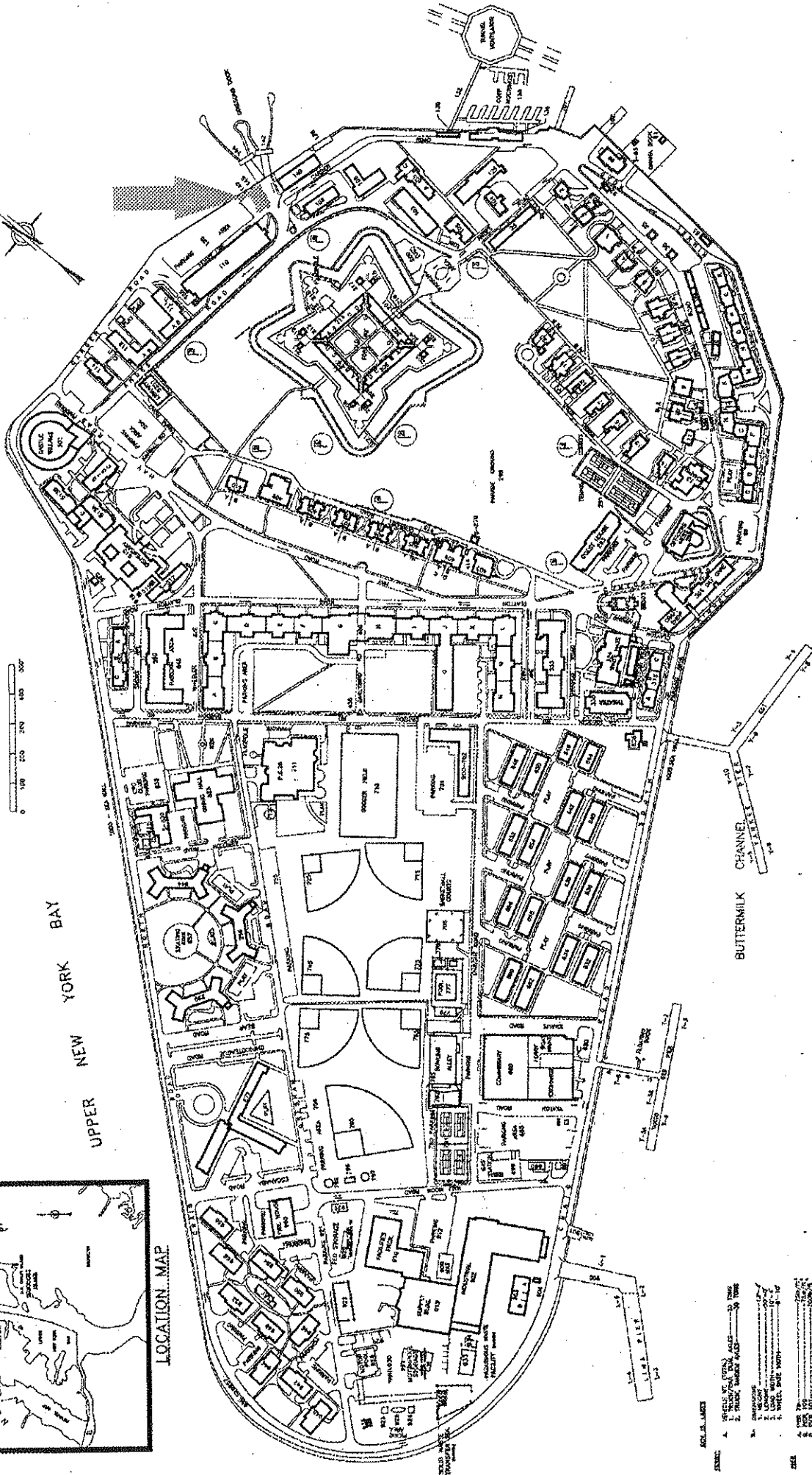
SITE PLAN  
 U.S. COAST GUARD  
 SUPPORT CENTER NEW YORK  
 GOVERNORS ISLAND, NEW YORK  
 JAN 1992



UPPER NEW YORK BAY



LOCATION MAP



- SCALE: AS SHOWN
- DATE: 1. 1992 (REVISED) 2. 1993 (REVISED) 3. 1994 (REVISED) 4. 1995 (REVISED) 5. 1996 (REVISED) 6. 1997 (REVISED) 7. 1998 (REVISED) 8. 1999 (REVISED) 9. 2000 (REVISED) 10. 2001 (REVISED) 11. 2002 (REVISED) 12. 2003 (REVISED) 13. 2004 (REVISED) 14. 2005 (REVISED) 15. 2006 (REVISED) 16. 2007 (REVISED) 17. 2008 (REVISED) 18. 2009 (REVISED) 19. 2010 (REVISED) 20. 2011 (REVISED) 21. 2012 (REVISED) 22. 2013 (REVISED) 23. 2014 (REVISED) 24. 2015 (REVISED) 25. 2016 (REVISED) 26. 2017 (REVISED) 27. 2018 (REVISED) 28. 2019 (REVISED) 29. 2020 (REVISED) 30. 2021 (REVISED) 31. 2022 (REVISED) 32. 2023 (REVISED) 33. 2024 (REVISED) 34. 2025 (REVISED) 35. 2026 (REVISED) 36. 2027 (REVISED) 37. 2028 (REVISED) 38. 2029 (REVISED) 39. 2030 (REVISED) 40. 2031 (REVISED) 41. 2032 (REVISED) 42. 2033 (REVISED) 43. 2034 (REVISED) 44. 2035 (REVISED) 45. 2036 (REVISED) 46. 2037 (REVISED) 47. 2038 (REVISED) 48. 2039 (REVISED) 49. 2040 (REVISED) 50. 2041 (REVISED) 51. 2042 (REVISED) 52. 2043 (REVISED) 53. 2044 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Figure 1 The location of planned demolition in the Governors Island Historic District.

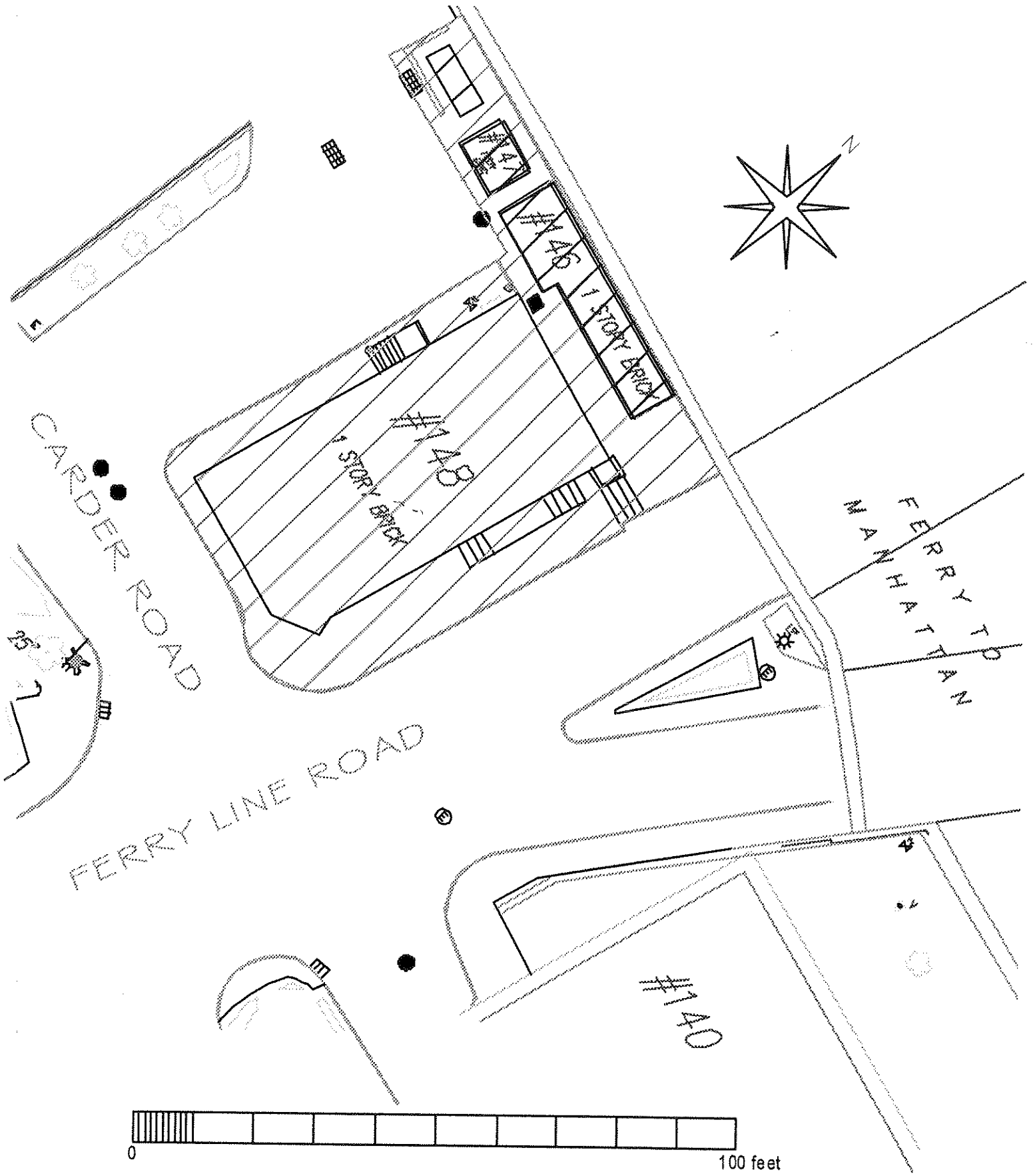


Figure 2 Part of the 2006 Mercator survey of Governors Island showing the vicinity of Soissons Dock with the area scheduled for demolition hatched.

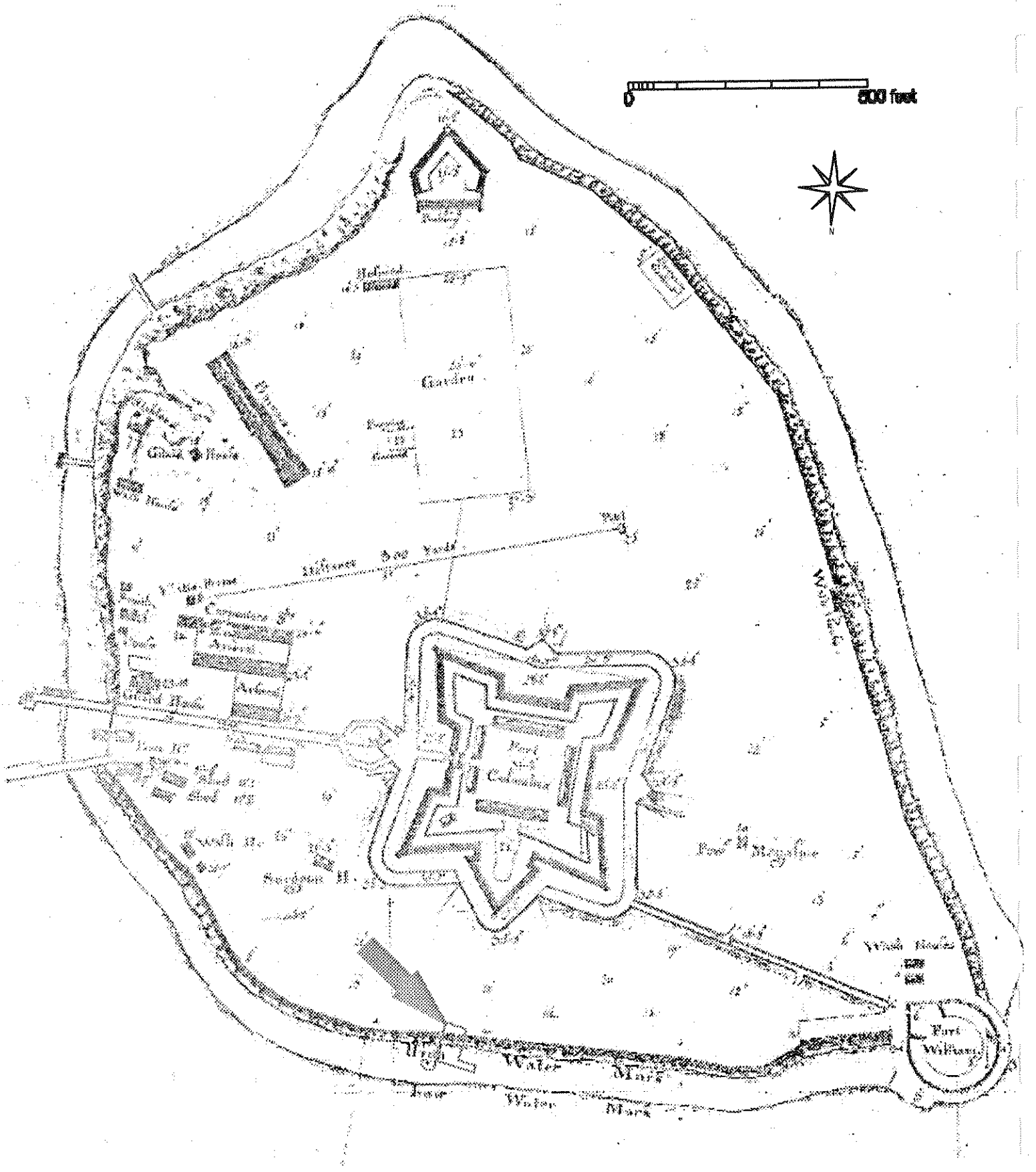


Figure 3

The 1813 Mangin Map of Governors Island showing the area scheduled for demolition.

0 500 feet



MAP

Showing the location of buildings on Governors Island  
with the exception of the buildings in the  
center of the island which are to be  
demolished.

Wm. H. Rouse, Architect  
New York

1867

Figure 4 The 1867 Barnard Map of Governors Island showing the area scheduled for demolition.

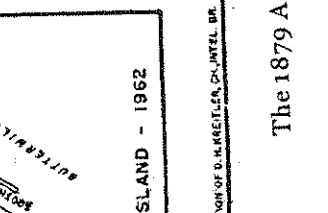
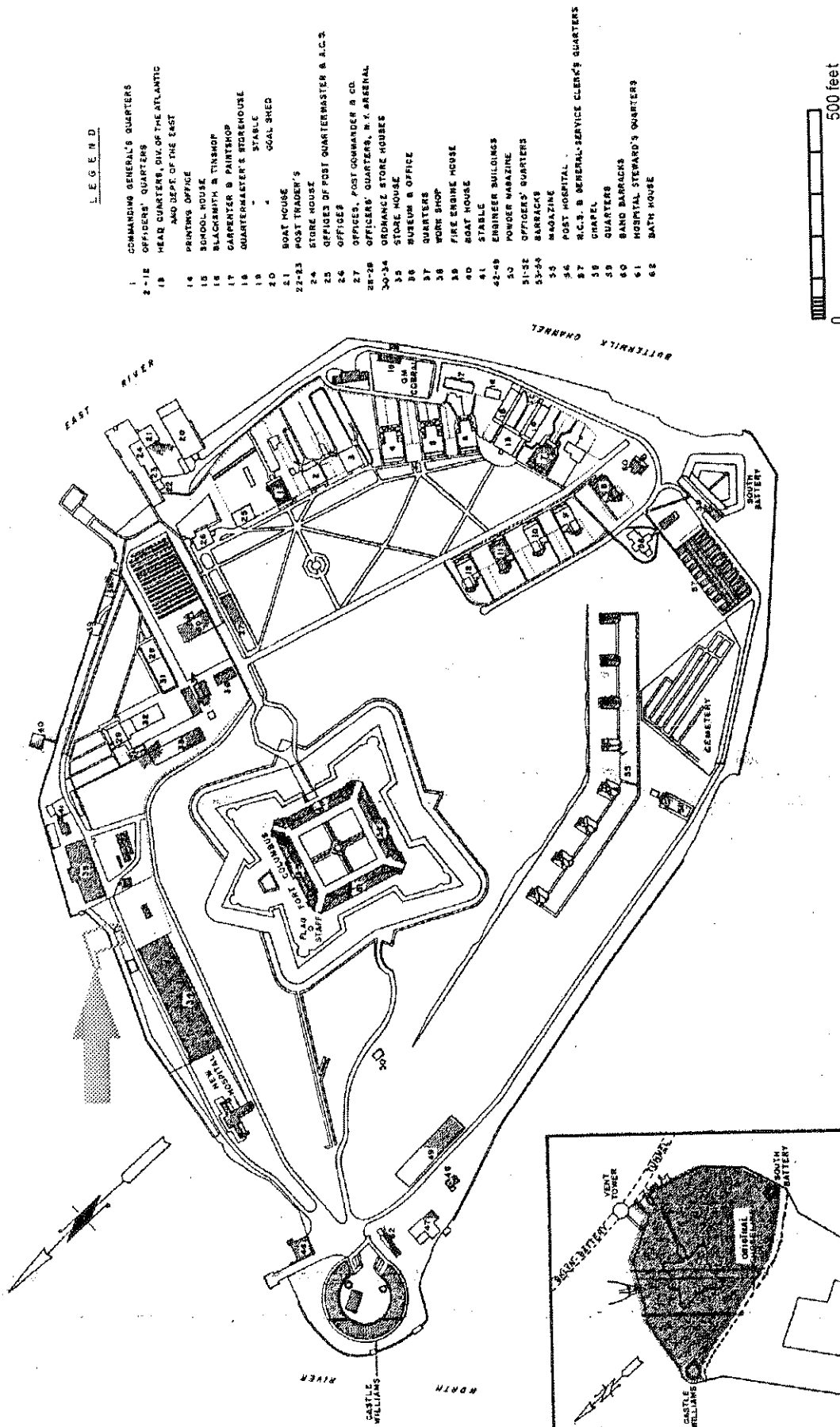


Figure 5 The 1879 Army Engineers Map of Governors Island showing the area scheduled for demolition.

PREPARED JAN 1942 UNDER SUPERVISION OF D. H. KRUEGER, CHIEF, INTTEL BR.

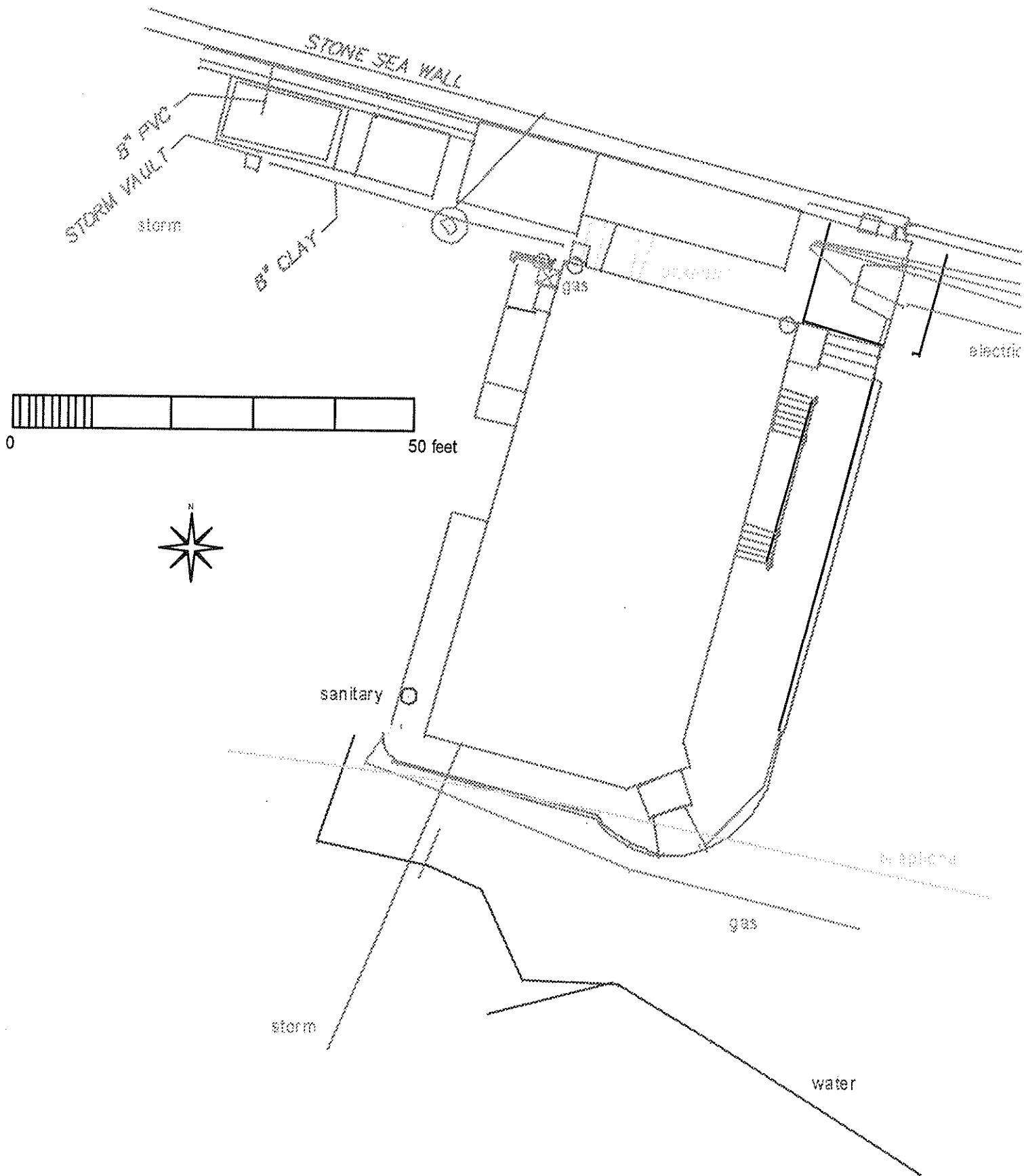


Figure 6 Part of the 2011 Langan survey of Governors Island showing the utilities in the vicinity of the area scheduled for demolition.





Photo 1 Space between Building #s 146 (left) and 148 (right) showing overhead utility lines, facing northeast (November 22, 2011).

ARCHAEOLOGICAL RESEARCH AND WORK PLAN FOR  
SOISSONS DOCK AND UTILITIES WORK  
IN THE GOVERNORS ISLAND HISTORIC DISTRICT  
NEW YORK, NEW YORK

January 11, 2012

The Trust for Governors Island (TGI) is planning below ground utility work related to the reconstruction of the Soissons Dock area on Governors Island, New York, New York. The project is within the Governors Island National Historic District and the New York City Governors Island Landmark district (see Figure 1). The archaeological work described here is subject to the regulations of and the review by the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC).

The below ground impacts from the project include reconstruction of the Dock, replacement of storm drainage pipes and some new storm pipes, a new electrical duct bank, and new gas and electric service. Existing gas will also be removed, as will the rotunda display area (the traffic circle). The excavations for the new storm pipes will be from 7 to 15 feet deep. The electrical work will require excavation to approximately 4.3 feet and the gas with electric to 5 feet deep. The existing gas line removal will require excavation to about 3.5 feet and the removal of the rotunda to 4 feet (see Figure 2). Depths necessary for storm drainage pipe removals are not known, therefore excavation depths could vary from the installation plans if existing lines are more deeply buried. All utility trenches will be approximately 4 feet wide, except the gas with electric that will be 9 feet wide. The seawall reconstruction excavations will be as much as 8 feet wide and possibly up to 10 feet wide on the eastern slip near Building #140.

Two of the storm drainage lines included in this project were part of an earlier project whose archaeological work plan was previously approved (Stone 2011b). It rated the locations with either low or moderate archaeological potential and recommended monitoring. The areas of low potential would be monitored unless or until prior utility disturbance could be proved. Monitoring would continue in areas rated with moderate archaeological potential<sup>1</sup>.

The determination of archaeological potential of the Soissons dock and utility work project has involved three key elements; a comparison of the location to several historic maps, a review of past archaeological work completed in the vicinity and a review of known disturbances.

Three historic maps were used for comparative purposes to determine past use within the project's limit of disturbance; the 1813 Mangin map, the 1867 Barnard map, and the 1879 First Army Engineers Map. The 1813 Mangin map (see Figure 3) depicts some of the project area outside the high water mark and no former structures are shown within the project footprint in 1813.

By 1867, a seawall had been constructed in part of the vicinity of the Soissons Dock reconstruction and utility project; however, the 1867 map also depicts a good part of the project still outside of the high water line (see Figure 4). Furthermore, the project impacts cross over the locations of two privies, a pump and part of the Store House for Shot & Shells.

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<sup>1</sup> This information is repeated later with regard to the archaeological approaches for the remainder of Soissons utility project.

Like the two earlier maps, the 1879 Army Engineers map also depicts part of the project area beneath the high water line (see Figure 5). Building #s 110 and 140 had been constructed as store houses by then<sup>2</sup>. The project area also overlays three unlabeled structures on the 1879 map; one each near Building #s 110 and 140 and the other between the two.

The amount of fill added to the area of planned work over time was also evaluated using the historic maps. The 1813 Mangin Map provides spot elevations that have been compared to those on the current survey. Four spot elevations are depicted near or along the footprint of the Soissons utility project on the 1813 map and are listed in Table 1. The spots closest to the shoreline show an expected increase in elevation due to the addition of fill when the seawall was constructed. The two inland elevation points do not show much change, if any. However, it there is no way to know if the same datum was used.

Table 1 Comparison of 1813 and 2011 elevations

1813 elevation	2011 elevation
2	9
2	11
13	13
21	19

Previous archaeological reports have also been consulted to determine if the potential exists for the preservation of archaeological remains in the locations of the planned below ground project impacts. Five borings, seven post holes or shovel tests, and four monitored contractor excavations have been previously conducted in the vicinity of the Soissons project.

Three borings have been monitored close to the seawall in the vicinity of the Soissons project. The two of those closest to the dock revealed possible original ground surface buried between 9 and 10 feet below ground surface (Stone 2011c: 4). The boring to the west, near Castle Williams encountered possible rip-rap buried only 4 feet (Stone 2011a: 3). The two other borings were in or near Carder Road. The western of those unearthened deposits with cultural material through 4 feet below ground surface. A possible early ground surface was found in the 8 - 10 foot deep sample, evidenced by water-worn stones in a clayey silt matrix (Stone 2010b). The eastern boring contained cultural material through 5 feet (Stone 2011a:3).

From west to east, the shovel tests or post holes in the vicinity of the Soissons project represent a variety of fill and/or redeposit material. However, the westernmost hole was augur excavated and did not contain any cultural material, although the deposits were described as indicative

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<sup>2</sup> Building #110 was built between 1870 and 1879. However it is not clear from the Building Summary Sheet when Building #140 was constructed, either at the same time as Building #110 or between 1857 and 1867. If the latter, it would indicate that Building #140 is the structure depicted in that location on the 1867 map, however the orientation of that building on the overlay in Figure 4 is not aligned with the extant building, perhaps suggesting that Building #140 was built after 1867 (JCA 2003: 66, 82).

of others on Governors Island where the cultural bearing strata are generally found in the upper 2 - 3 feet (Stone 2008b: 5). The next five shovel test pits were part of the same project. The westernmost was excavated to only 1.1 feet below ground surface and was entirely fill (Stone 2008a: 1). The adjacent hole was excavated to 6 feet deep and also was entirely fill. The next two tests were 10 feet deep, excavated with the assistance of a post hole digger. The westernmost of those contained fill through 7.4 feet. The eastern of those two was also within fill to approximately 8 feet, however that fill was more consistent with modifications related to Building # 140. That deposit had a late-nineteenth century *tpq* (Stone 2007a: 5). The easternmost test near the seawall was excavated to 6 feet and also provided a late-nineteenth century *tpq*. Here the deposit extended to the base of excavation (Stone 2007a: 4-5). Finally, one shovel test pit was excavated along a transect representing a utility line within proximity to the Soissons project, located southeast of Building #140 on an embankment. There the excavated deposits were interpreted as landscaping fill (LBA 1987: 12).

The four monitoring projects in the vicinity of the Soissons utility project include a sinkhole repair on the seawall, a utility line, a fire hydrant and adjacent water valve. The sink hole contained entirely junky fill, similar to the shovel tests/post holes to the west in the same parking lot (Stone 2007c: 4). The remainder of the high voltage line was monitored when an emergency data recovery of burials near Castle Williams was conducted there in 1995. The part of that high voltage line which passes directly to the south of Building #110, near the Soissons project, was monitored to 3.5 feet below ground surface. "Generally, the first soil stratum encountered below the asphalt or rubble layers was composed of construction fill. Deeper deposit were generally composed of natural soils, except in areas disturbed by the installation of existing utility lines" (LBA 1995: 61). The fire hydrant and valve monitoring was conducted to ensure the work did not exceed the previous disturbances from when those features were installed, but if they did, to determine the presence or absence of archaeological finds and document the deposits. The excavations did not stray from the original disturbances (Stone 2007b: 3; 2010a: 1).

Disturbances over time within the Soissons utility project area are primarily due to excavations for other utility lines and, for locations near buildings, disturbances from the original building construction may also be present. Further, it is not known if an earlier structure was built in the location of Building #140. However, it cannot be discounted with the current information<sup>2</sup>. Figure 7 shows the existing utilities as they criss-cross the Soissons utility project impacts. However, the depths of these are unknown. In addition to the in kind replacements, that clearly stand out on Figure 7, it is quite clear that the new electric/gas line is flanked by other utility lines parallel to its path. The excavation trenches for those other utilities may overlap with at least part of the current work.

The above documentation shows that most of the project impacts will be either to areas already disturbed from previous utility work or to areas that were formerly beneath the high water line of 1813. Based on the combination of historic map overlays, historic topography, previous archaeological studies, and past disturbances, the Soissons utility project has been divided into areas of moderate, low or no archaeological potential for the preservation of archaeological resources (see Figure 8). Areas with no archaeological potential include those that were historically beneath the high water line. Unfortunately, because the depth of most existing utilities scheduled for in kind replacements is unknown, those locations cannot be dismissed out of hand, but are rated with low archaeological potential. Low archaeological potential is also assigned to areas where there has been minimal past disturbance and original ground surfaces may still be present below ground, but no known archaeological resources have yet been identified. Moderate archaeological potential is assigned to locations of historic map

documented structures, regardless of utility or other disturbances since the depths of those disturbances is unknown. Potential archaeological resources within the footprint of the Soissons utility project include two privies, a pump and part of a storehouse mapped in 1867, and three structures not labeled on the 1879 map.

Based on the previous archaeological studies and historic topography, it is possible the excavations north of Carder Road (i.e. those closest to the seawall) will be entirely within fill added during or after the creation of that seawall to depths of close to 10 feet below ground surface. The amount of fill drops off dramatically headed inland and there is an indication that original ground surfaces may have been cut during the creation of Andes Road. In addition to identifying possible foundation remains of map documented structures, the archaeological work recommended for the Soissons utility project will also assist in identifying the extent of filling and therefore aid in the evaluation of the historic data.

For areas where there is no potential for the identification of archaeological resources, no further work is recommended. Monitoring is recommended for the excavation of areas marked on Figure 8 as having low or moderate potential for the preservation of archaeological resources. For areas with low archaeological potential, many will likely have prior utility disturbances present throughout the depth of the excavation. Should this prove to be the case, indicating the utility survey is accurate and potential archaeological deposits thus obliterated, then monitoring will discontinue in those locations and the fill deposits documented. However, in other areas of low or moderate potential, archaeological monitoring of contractor excavations will continue to the base of excavation or until culturally sterile deposits have been reached to identify either remains of map documented structures or previously unknown archaeological resources.

A monitoring plan has been developed and is attached here. Monitoring will include observing the excavations and inspecting them and the backdirt. This may also involve the archaeologist entering the excavation, if it is safe to do so, so that deposits or features can be directly assessed. Should any potentially significant archaeological resources be identified, the contractor will be instructed to stop excavation until the resources can be evaluated and the archaeologist hand excavates, measures and/or otherwise records the find(s). The amount of time necessary for this will be relative to the extent of the find(s) and the weather conditions. Should this initial inspection determine the resources are potentially significant, TGI and Turner Construction Company would be immediately contacted. In such a case, TGI, SHPO and LPC will have to be consulted and either a plan to recover archaeological data will have to be produced or other mitigation measures developed. While those consultations are taking place, the work may have to be temporarily stopped in that location while the decision on how to proceed is made. If no archaeological features are encountered, the archaeologist will document the soils and fill deposits. This will include taking photographs and measurements for drawings. Stratigraphy will be recorded using Munsell Soil Color Charts descriptions.

Artifacts may be collected opportunistically during monitoring from the excavations or backdirt to inform the nature and deposition date of the material. Should any artifacts be recovered during this work, standard methods of artifact processing, labeling, identification, evaluation and documentation will be done on the recovered materials. It is expected items such as coal, cinder, brick fragments and modern garbage will be recorded but not retained. Upon completion of the excavations, documentation, artifact processing and analysis, a report will be prepared detailing the monitoring and any findings that may be present

MONITORING PLAN FOR  
SOISSONS DOCK AND UTILITY WORK ON  
GOVERNORS ISLAND, NEW YORK, NEW YORK

- The archaeologist has the authority to halt contractor excavations to document any archaeological resources, should they be encountered.
- The archaeologist will communicate directly with the machine operator should excavations need to temporarily stop for archaeological purposes.
- Should any potentially significant archaeological resources be identified, the contractor will be instructed to stop excavation until the resources can be evaluated and the archaeologist hand excavates, measures and/or otherwise records the find(s).
- The amount of time necessary for this will be relative to the extent of the find(s) and the weather conditions, but a minimum of one half hour should be expected for any given location. More time may be necessary if the find is extensive, or if it is rainy, snowy or below freezing.
- The objective of investigations will be to identify any potentially significant archaeological resources (either as detailed in the Archaeological Research and Work Plan or previously unknown resources). If identified, these resources will be documented in a number of ways, depending on and appropriate to the resource. Archaeological field techniques may include hand excavation to expose the resource, screening of soil for artifact recovery, taking measurements, producing field drawings, and /or photographing the resource(s).
- It is possible the archaeologist will require assistance from the excavation contractor, such as erecting protection for potentially significant archaeological resources, moving backdirt or providing shelters to work under winter conditions if data recovery excavations are needed.
- Should the initial inspection determine the resources are potentially significant, the TGI and Turner Construction Company would be immediately contacted. In such a case, the TGI, SHPO and LPC will have to be consulted and either a plan to recover archaeological data will have to be produced or other mitigation measures developed, including possible project redesign. Should additional archaeological excavations be determined necessary, then the consultations will also include a discussion of time frames for conducting and completing that work.
- If a data recovery or mitigation plan is needed, there are two potential time lines. The time line chosen will depend on what point in the project the find occurs, its potential significance and/or the weather conditions. One alternative is to protect the archaeological resource until all monitoring is completed and the other alternative is to work on the one location until it is fully addressed prior to continuing with the remaining monitoring in that area.
- If the potentially significant archaeological resource requires immediate action, the archaeologist will have up to one week from the time the verbal agreement is reached between TGI, SHPO and LPC to prepare a written plan for their review. The agencies will have up to one week from verification of receipt to review the plan. Their concurrence in writing will be needed prior to field work.

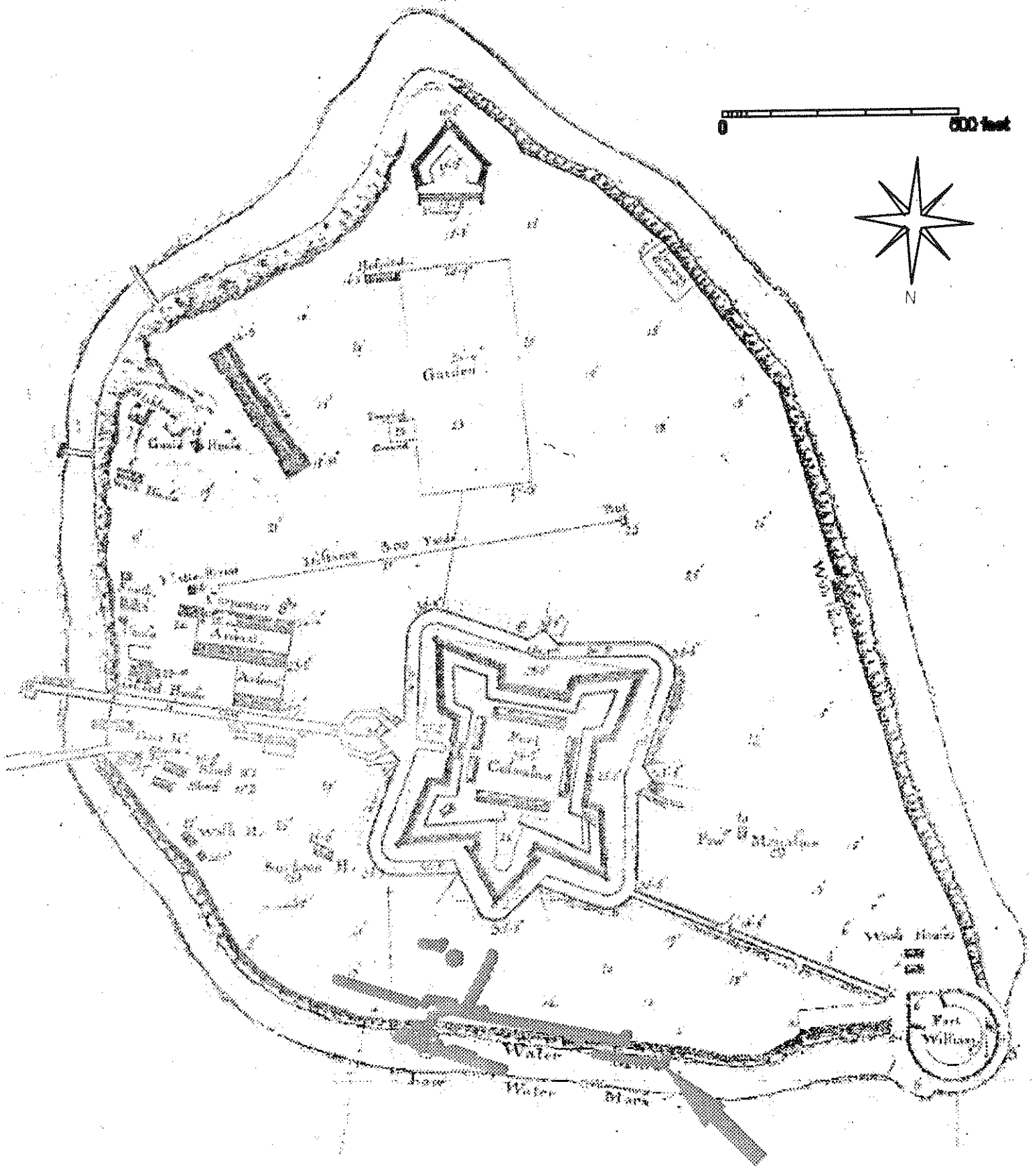


Figure 3 The 1813 Mangin Map of Governors Island showing the Soissons area utility work.

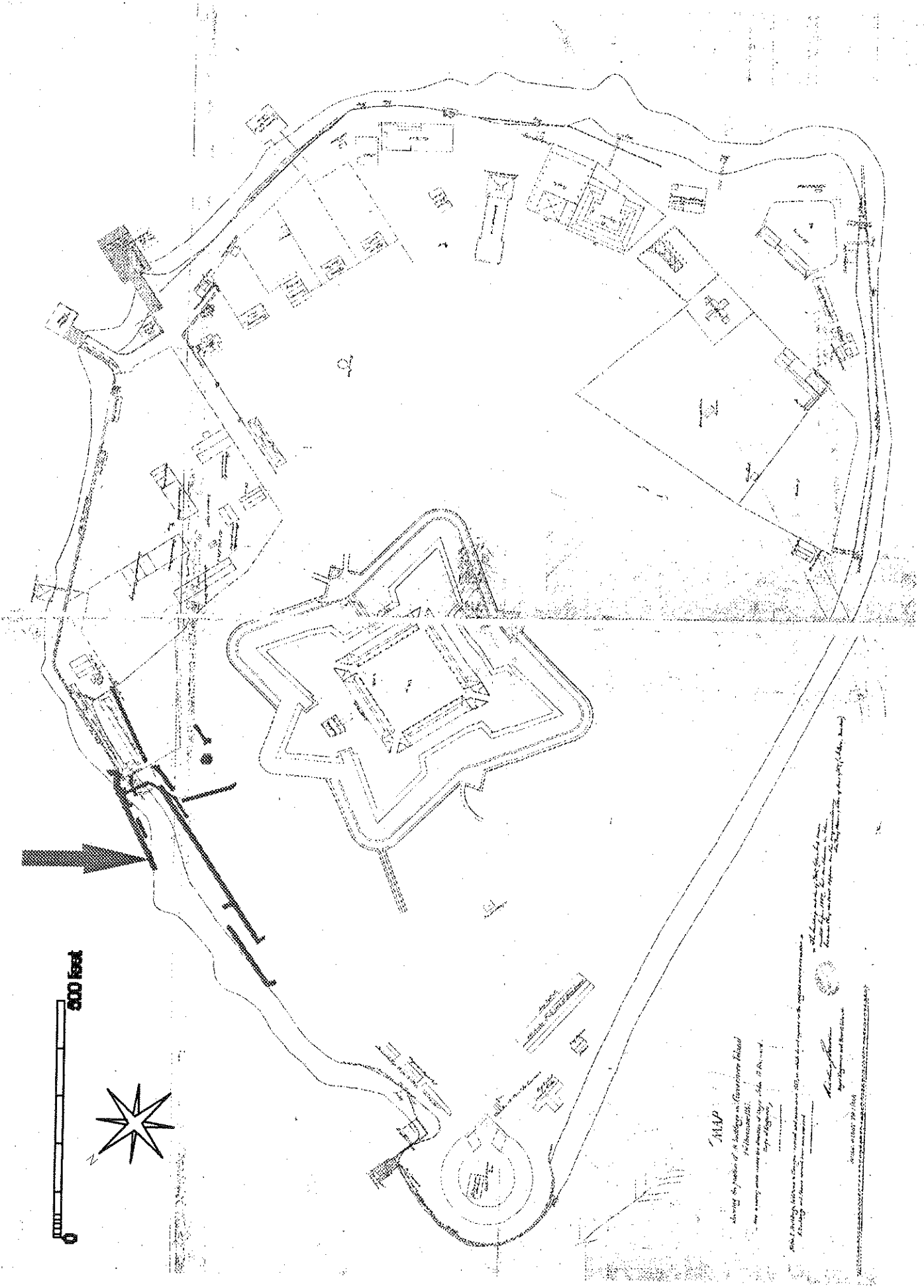
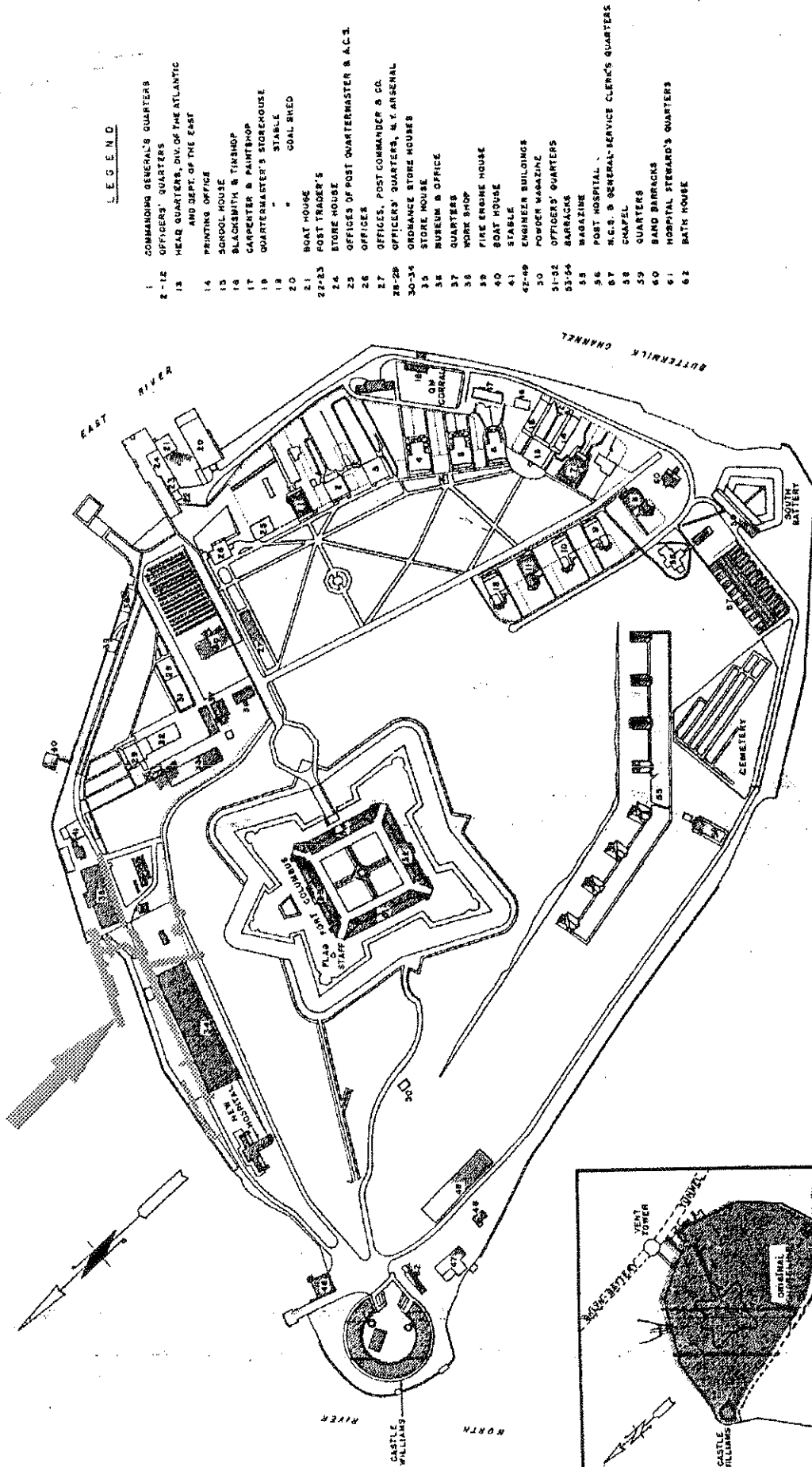


Figure 4 The 1867 Barnard Map of Governors Island showing the Soissons area utility work.





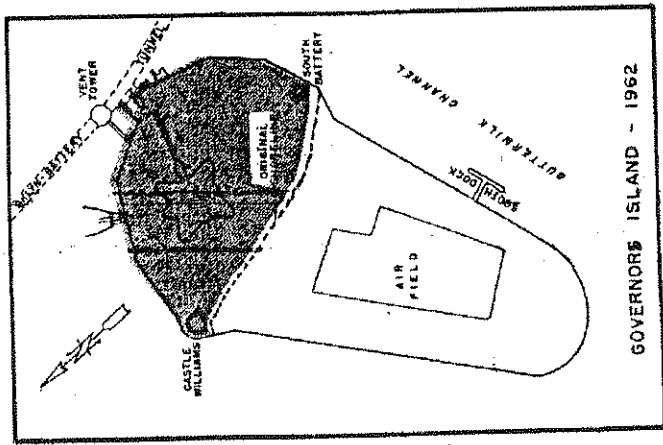
**LEGEND**

- 1 COMMANDING GENERAL'S QUARTERS
- 2-12 OFFICERS' QUARTERS, DIV. OF THE ATLANTIC AND DEPT. OF THE EAST
- 14 PRINTING OFFICE
- 15 SCHOOL HOUSE
- 16 BLACKSMITH & TINSHOP
- 17 CARPENTER & PAINTSHOP
- 18 QUARTERMASTER'S STOREHOUSE
- 19 STABLE
- 20 COAL SHED
- 21 ROAT HOUSE
- 22-23 POST TRADER'S STORE HOUSE
- 24 OFFICES OF POST QUARTERMASTER & A.C.S.
- 25 OFFICES
- 26 OFFICES, POST COMMANDER & CO.
- 27 OFFICERS' QUARTERS, N.Y. ARSENAL
- 28-29 ORDNANCE STORE HOUSES
- 30-34 STORE HOUSE
- 35 MUSEUM & OFFICE
- 36 QUARTERS
- 37 WORK SHOP
- 38 FIRE ENGINE HOUSE
- 39 ROAT HOUSE
- 40 STABLE
- 41 ENGINEER BUILDINGS
- 42-49 POWDER WAREHOUSE
- 50 OFFICERS' QUARTERS
- 51-54 BARRACKS
- 55 MAGAZINE
- 56 POST HOSPITAL
- 57 U.S. & GENERAL-SERVICE CLERK'S QUARTERS
- 58 CHAPEL
- 59 BAND BARRACKS
- 60 HOSPITAL STEWARD'S QUARTERS
- 61 BATH HOUSE
- 62



FIRST U S ARMY ENGINEERS  
 MAP OF  
**GOVERNORS ISLAND - 1879**

FROM A SURVEY BY 1ST LT. E. GRIFFIN, CE  
 & MR. F. N. OWEN, ASST. ENGR.



**GOVERNORS ISLAND - 1962**

PREPARED JAN. 1962 UNDER DIRECTION OF D. H. KREITLER, CH. INT. ENGR.

Figure 5 The 1879 Army Engineers Map of Governors Island showing the Soissons area utility work.

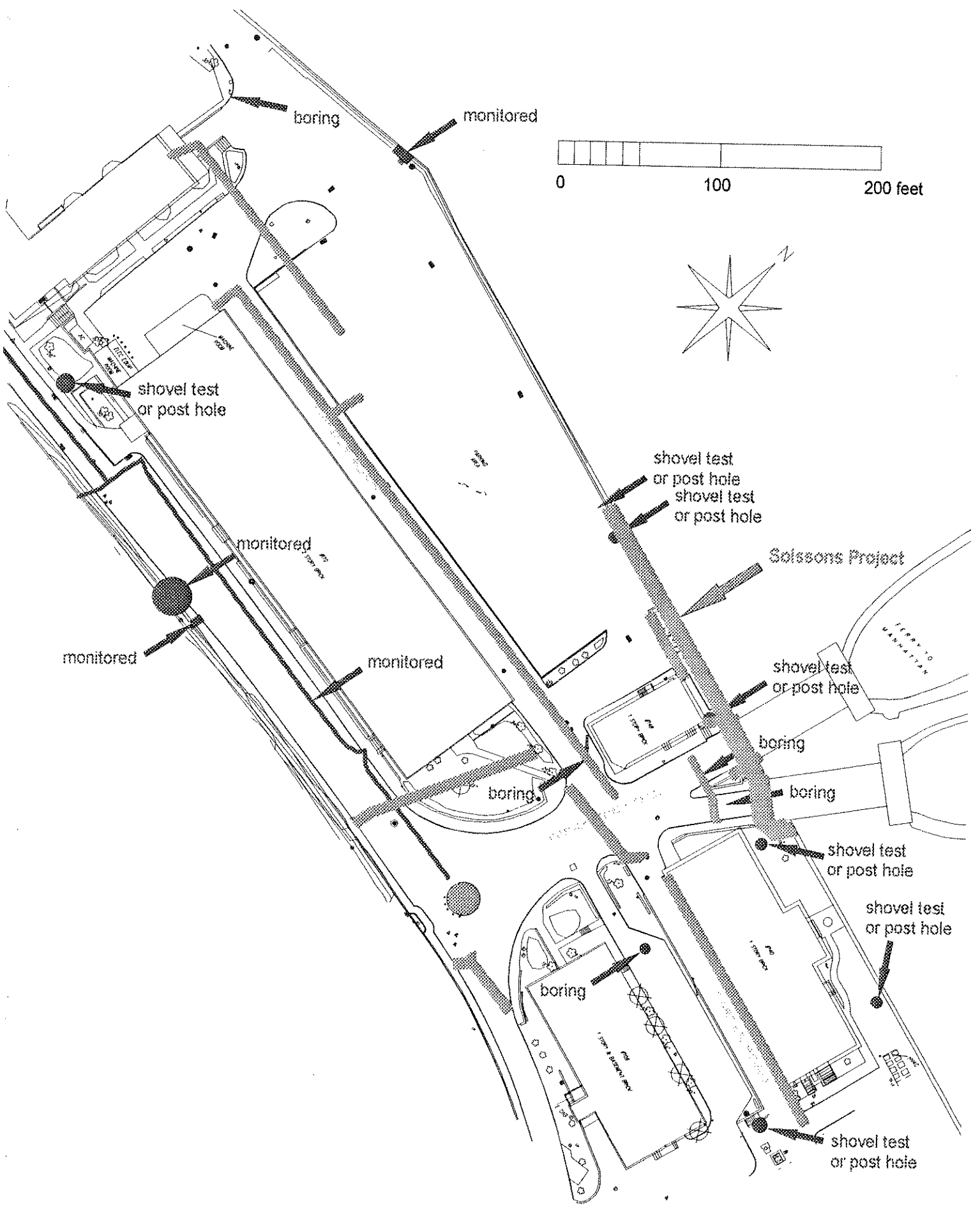


Figure 6 Previous archaeological work completed in the vicinity of the Soissons Dock and Utility project.

Utility line color key

- electric
- gas
- sanitary
- storm
- telecommunications
- water

Soissons Utility Project

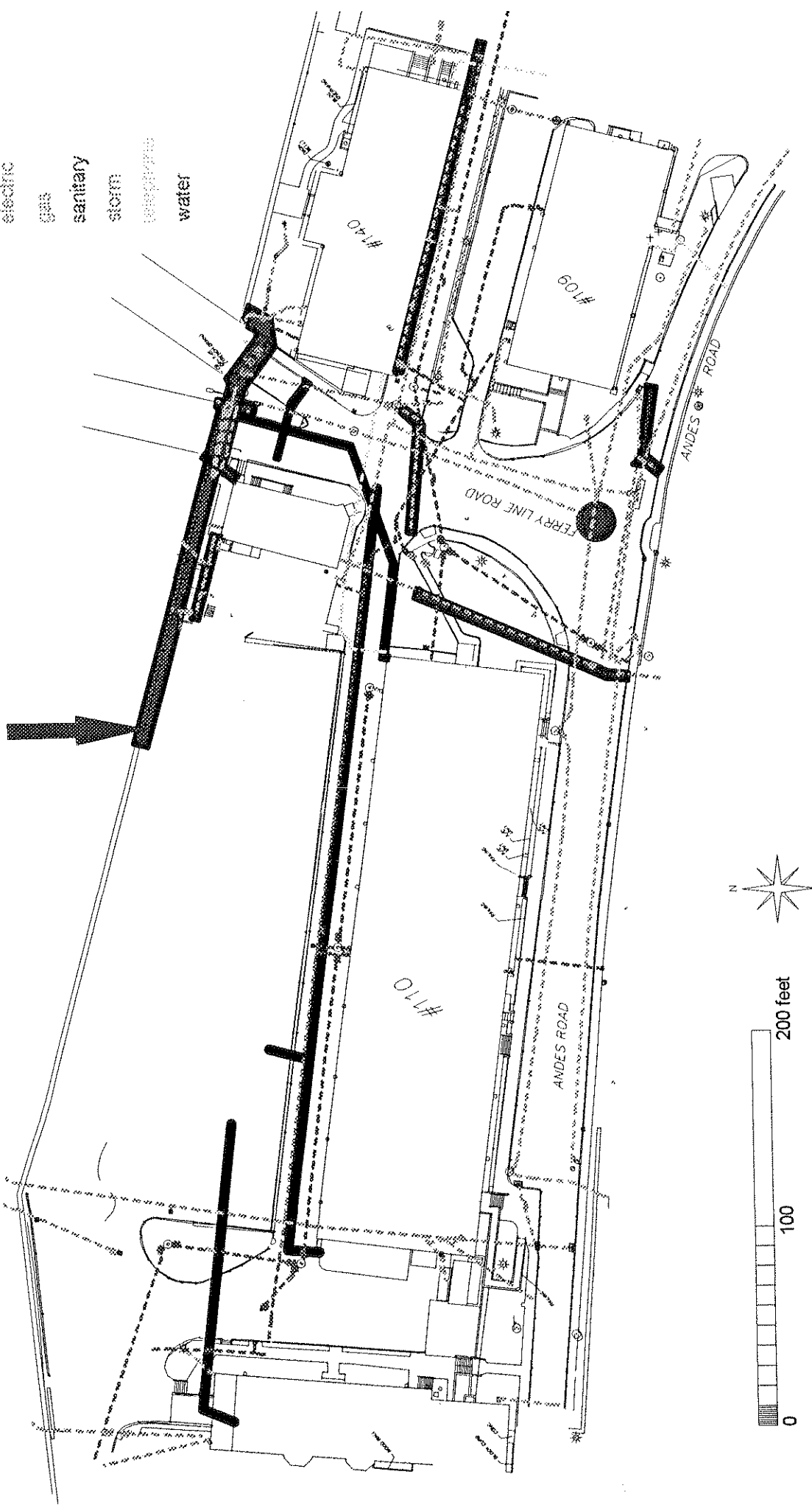


Figure 7 Part of the 2011 Langan survey of Governors Island showing the existing utilities in the vicinity of the Soissons utility project.

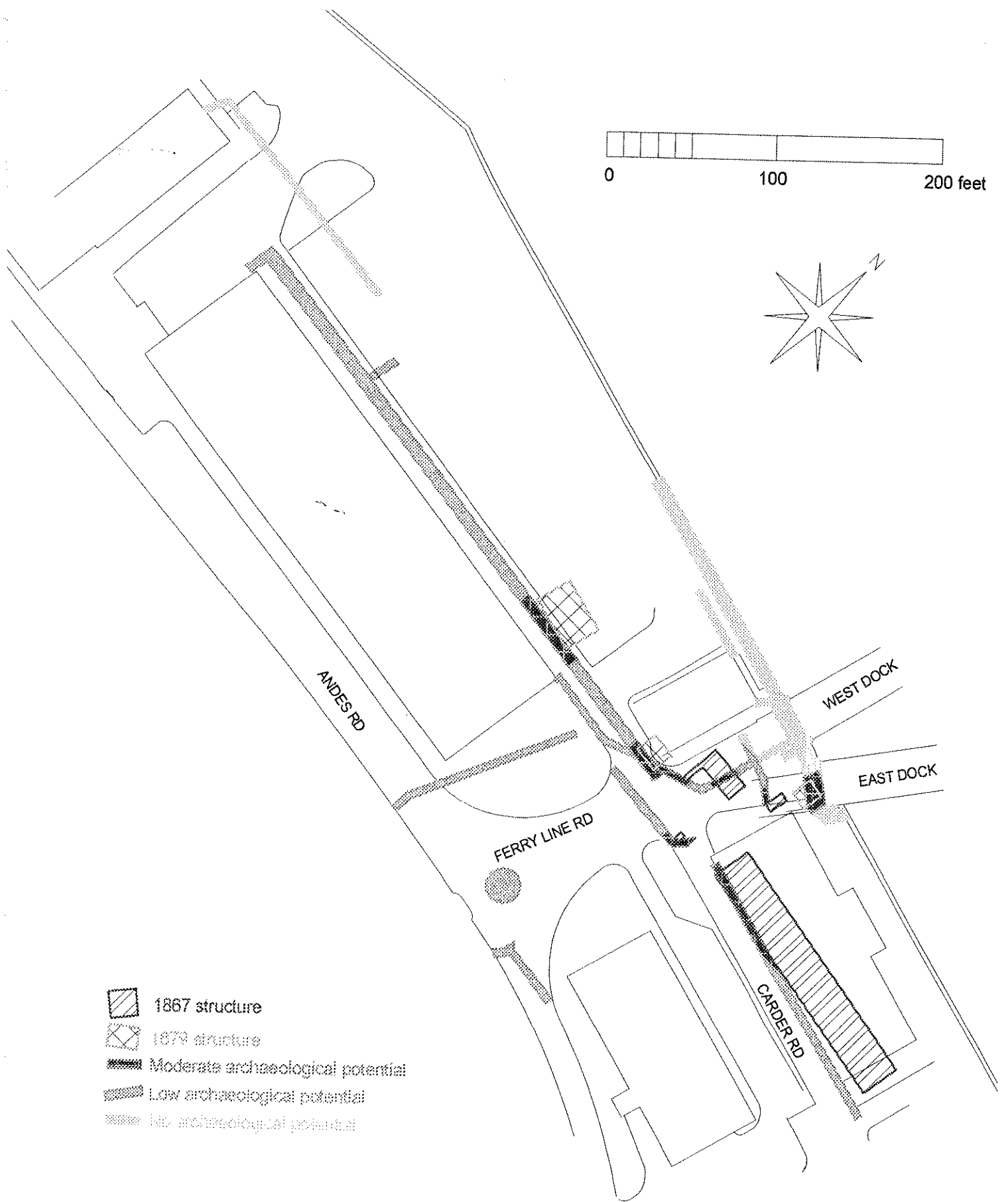


Figure 8 Areas of archaeological sensitivity in the Soissons utility project.

APPENDIX B  
ARTIFACT INVENTORY

# GOVERNORS ISLAND - SOISSONS COMBINED ARTIFACT INVENTORY

Context #	Material Identity	Form	Color	Count	Description	Date Range
1	Ceramic	refined earthenware rim	white	1	blue underglaze decoration; impressed radial lines	late 1880s -
2	Glass	flask	clear	1	embossed on base "400"; 4 5/8" high; missing part of one side	early 1920s
3	Glass	bottle neck & finish	clear	1	1 5/8" diameter; mold seams on 2 sides to lip	late 19th C. - present
4	Ceramic	porcelain	white	1		
4	Ceramic	porcelain	white	1	water worn	
4	Ceramic	refined earthenware	white	1	water worn	
5	Ceramic	stoneware	buff	1	3" diameter	
6	Ceramic	pearlware	white	1		1779 - 1820+
6	Glass	curved	light green	1		
6	Metal	copper alloy		1		
7	Glass	bottle base	dark green	1	devitrified; push-up; 2 3/4" diameter; mameelon; unusual impression along base edge of bottom	
7	Metal	iron		1	very corroded	
8	Glass	milk bottle	clear	1	whole; 4" diameter; 9" high; embossed on two sides; "4/SHEFFIELD FARM CO/SHEFFIELD/REG.-U.S.-PAT.-OFF/NEW YORK" "4/SHEFFIELD/REG.-U.S.-PAT.-OFF/1 QT"	c. 1900 - 1930
9	Glass	bottle	light green	1	whole; octagonal; 2 3/4" high; 5" high; corroded metal stopping late 19th C. - bottle (possible lid); embossed mark on base mostly illegible "...7902"	
10	Bone	faunal		1	cut marks	
11	Ceramic	ironstone	white	1		early 19th C. - present
12	Ceramic	ironstone	white	3	mends; saucer; partial mark impressed "ASHW..."; orange pattern mark "B/3595/B"; Chineseoirie pattern; black	c. 1872 - 1880
CMH	Ceramic	refined earthenware rim	white	1	possible makers mark illegible; transfer print pink roses with green leaves	1784 - 1864

Total artifacts recovered = 20

Context #	Key	Exc. Date	Location
1		03/01/12	From coal ash deposit appx. 3' bgs near CB 1.04
2		03/26/12	From CB 1.04 excavation, appx 4.5' bgs
3		04/18/12	From MH 1.14 excavation coal ash deposit, appx 2.5' bgs
4		04/30/12	Screened 2 buckets from south of brick wall feature near CB 1.03
5		05/07/12	From backdirt in Ferry Line Rd
6		05/08/12	Screened 2 buckets from trench between MH1.09 and MH 1.10 above brick lens, appx 2.2' bgs
7		05/11/12	From backdirt near CB 1.06
8		05/16/12	From backdirt near CB 1.03 and MH 1.09
9		05/16/12	From backdirt near the former cannon manhole
10		05/18/12	From fill in east side of trench excavation near MH 1.11
11		08/17/12	70' south of CB 1.02 at 4.5' bgs
12		08/17/12	From SE corner of brick feature at CB 1.03 at 5' bgs
CMH		04/25/12	Northwest corner of trench at cannon manhole, appx 3' bgs

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