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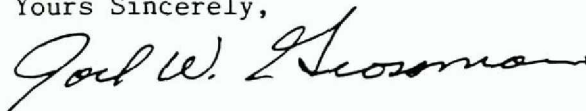
Mr. Christie Nobriga
Resident Engineer
Mason and Hanger
437 Madison Avenue
New York, N.Y. 10022

Dear Mr. Nobriga;

With this letter we are formally presenting our Phase 1B Testing and Documentation study of the Red Hook Water Pollution Control Project, Contract 1B-1. We have made every effort to address the details and mandates of the N.Y.S.D.E.C. scope of work in order to guarantee the expeditious review of our results. The report includes a general introductory summary of the results, a detailed description of each test trench, as well as the stratigraphy and the artifacts recovered. Also included is the photo documentary evidence for establishing the dates of the artifacts and hence the deposits.

We would like to express our appreciation for your assistance both during the development phase and actual field work. We look forward to the opportunity to work with you again in the future.

Yours Sincerely,



Joel W. Grossman, Ph.D.
Chief Archaeologist
GREENHOUSE CONSULTANTS INCORPORATED

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STAGE 1B-1 DEEP TESTING CULTURAL RESOURCE REPORT
RED HOOK WATER POLLUTION CONTROL PROJECT
(CONTRACT 1B-1)

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October 1984

TABLE OF CONTENTS

INTRODUCTION.....1
LOCATION OF TEST TRENCHES.....2
EXCAVATION METHODOLOGY.....2
DESCRIPTION OF CONTEXTS.....3
HARRIS MATRICES.....3
COMPONENT SUMMARIES.....4
RESULTS.....6
 The Building Remains.....6
 The Landfill.....6
 Patchen's Dock.....8
CONCLUSIONS AND RECOMMENDATIONS.....8
LIST OF PARTICIPANTS.....9
APPENDIX I: ARTIFACT INVENTORY.....10
BIBLIOGRAPHY.....15

LIST OF FIGURES

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Test Trench I: Context Chart
- Figure 4: Test Trench II: Context Chart
- Figure 5: Test Trench III: Context Chart
- Figure 6: Test Trench I: Harris Matrix
- Figure 7: Test Trench II: Harris Matrix
- Figure 8: Test Trench III: Harris Matrix
- Figure 9: Test Trench I: Section Drawing
- Figure 10: Test Trench II: Section Drawing
- Figure 11: Test Trench III: Section Drawing
- Figure 12: Artifact Percentage Graphs, Components 2 and 3
- Figure 13: Artifact Percentage Graphs, Components 5 and 7
- Figure 14: Coding Chart (N.P.S. M.C.D.B.)
- Figure 15: Coding Examples (N.P.S. M.C.D.B.)
- Figure 16: Codes for Ambiguous Items

LIST OF PLATES

Plate I:	Beginning Excavation of Test Trench II
Plate II:	Section Drawing in Progress, Test Trench II
Plate III:	East Section, Test Trench I
Plate IV:	Detail of Concrete Floor, Test Trench II
Plate V:	West Section, Test Trench III
Plate VI:	Cx. 104-Whitewares
Plate VII:	Cx. 104-Whitewares
Plate VIII:	Cx. 104-Whitewares
Plate IX:	Cx. 104-Whitewares
Plate X:	Cx. 104-Fluted pipe bowl
Plate XI:	Cx. 104-Glass off-cut
Plate XII:	Cx. 105-Whiteware
Plate XIII:	Cx. 107-Annular whiteware
Plate XIV:	Cx. 110-Whiteware
Plate XV:	Cx. 110-Whiteware
Plate XVI:	Cx. 111-Whiteware
Plate XVII:	Cx. 205-Toilet Bowl fragment
Plate XVIII:	Cx. 207-Whiteware
Plate XIX:	Cx. 304-Glass bottle base
Plate XX:	Cx. 305-Glass bottle
Plate XXI:	Unstratified-Pipe bowl
Plate XXII:	Unstratified-pipe bowl

RED HOOK CONTRACT 1B-1

INTRODUCTION

In accordance with the dictates of the New York State Department of Environmental Conservation we are submitting the following final report for Phase 1B Deep Testing for Contract 1B-1 of the Red Hook Sewer Project. This final report includes a detailed discussion of the internal stratigraphy and cultural contents of three 5'x12' test trenches which ranged from 6.25' to 11.0' in depth, a quantified inventory of all recovered materials, the identification of the range of variation and time periods of the artifacts encountered within the identified natural stratigraphic fill deposits, and finally, a discussion of the depositional history encountered together with a computerized tabulation and photographic documentation of the dateable and diagnostic artifacts recovered. This documentation has been analyzed by the project field supervisor, Mr. William I. Roberts IV, in order to address relevant research issues pertaining to the contents and processes reflected by the fill, as well as a comparison of the archaeological insights to the previously available documentary indications concerning the time frame and nature of 19th century shoreline fill development in this section of Brooklyn.

In summary, the test trench field work of Contract 1B-1 was undertaken over a four day period between September 12 and 17, 1984. Out of a maximum of five possible test cuts, the testing was limited to three large cuts based on the goal of establishing range of variation of deposits throughout the designated impact area and the definition of both undisturbed and accessible study areas. These three test cuts designated Test Trenches I, II and III, were removed as a series of 35 natural stratigraphic fill deposits which were designated in the field by discreet "context" numbers, reflecting differences in color, composition, and contents. Recovered materials were screened through 1/4" mesh yielding a total of 575 artifacts as well as 870 grams of brick and shell. The relative stratigraphic provenience and relationships of each of these context/deposits have been reconstructed as a Harris Matrix for each test trench.

Subsequent to the field work, all recovered cultural materials were washed, marked, stabilized and cataloged according to a National Park Service taxonomy for historic artifacts. All diagnostic materials consisting of glass, ceramics and pipe fragments, were dated based on stylistic and technical criteria according to their TPQ (the beginning date for manufacture of each artifact type identified). This TPQ date provided a time frame for the earliest possible date of each deposit establishing the initial date after which the fill had to be laid down. All artifacts were then computer inventoried on the in-house microcomputer data base system, which provided sorted catalogues with totals and dates for each excavated group of artifacts by natural units of stratigraphic association. Based on the artifact dates of the various context deposits, these were then grouped into larger "components" reflecting units

of contemporaneity and episodes of deposition within the fill.

Finally, in accordance with the guidelines specified in the scope of work, these Phase 1B Testing/data Recovery results were evaluated in terms of several research issues addressing processes of site formation and archaeological patterns relative to documentary indications about the history of fill west of Columbia Street. Graphically rendered quantitative comparisons between each of the major components are discussed in terms of possible sources of fill encountered and time ranges indicated. Based on these results, it is pertinent to point out that the deep test trench cuts provided additional information on the nature of the fill history which went beyond that derived from the previous borings alone. While the test cuts confirmed the depth of fill indicated by the borings, the deep tests provided a clear basis for defining the nature and composition of the multiple fill deposits encountered, as well as adequate information to date the deposits which was not possible with the borings alone.

LOCATION OF TEST TRENCHES

Three test trenches with dimensions of approximately 5 ft. x 12 ft. were located within the Contract 1B-1 impact corridor in accordance with our testing proposal. Test trench I was located adjacent to the south side of Warren Street, centered on the impact corridor centerline. This location was chosen because it was between Boring hole #12, where hard mortar or concrete was hit at 5.3 ft to 5.5 ft. below the surface, and Boring hole #13, where soft mortar was encountered at 7.8 to 8.0 ft. below the surface. Test Trench II was located between Congress and Amity Streets, centered on the impact corridor centerline, a position between the location of Boring hole #16 and that of Regulator 12. Test Trench III was located as close to Regulator 12 as possible. This location at the foot of Amity Street was chosen because it was seen as a possible location of the 18th century Patchen's Dock. The initial location selected for Test Trench III was immediately adjacent to the Port Authority high pressure water main which runs alongside Regulator 12. At this location it was deemed too dangerous to excavate below the level of the main (later seen to be above the depth of the concrete floor), so Test Trench III was relocated slightly south and west of the its original location, but still immediately adjacent to the projected position of the south side of Amity Street. No other locations were selected for additional test trenches due to the presence of extensive surface obstructions, such as backdirt piles and stockpiles of steel sheeting, active driveways and streets, and known locations of subsurface utilities.

EXCAVATION METHODOLOGY

The test trenches were positioned using a transit and fiberglass surveying tapes. Fluorescent spray paint was then used to mark their edges on the paved surface of the Port Authority property. A backhoe was used to break through the pavement(s) and to

excavated the trenches. Backhoe buckets of material removed from individual contexts were dumped on previously cleaned areas of pavement adjacent to the trenches where they could be screened and/or visually examined for the recovery of artifacts in them. Shovels, trowels and small brushes were used to clean the exposed soil profiles prior to their being drawn and photographed. Soil samples were collected from each context wherever possible.

DESCRIPTION OF CONTEXTS

For each test trench a chart has been assembled listing all contexts encountered, descriptions of their soil matrices and inclusions, a Munsell reading of the soil matrix color, and the component to which it has been assigned. Also included is a column for Terminus Post Quem, which is the beginning manufacture date for the latest artifact found in that context. The following abbreviations are used: Context - Cx; Component - CMP; and Terminus Post Quem - TPQ. The three charts are included here as Figures 3, 4 and 5.

HARRIS MATRICES

Following the context description charts are Harris Matrices for each of the test trenches. These are schematic representations detailing all the interrelationships of the contexts from a given test trench. Each context is represented by its context number within a rectangular box. The lines between the boxes indicate interfaces between those contexts. The three matrices are included here as Figures 6, 7 and 8.

ARCHAEOLOGICAL TESTING
REDHOOK WATER POLLUTION CONTROL PROJECT
CONTRACT 1B-1

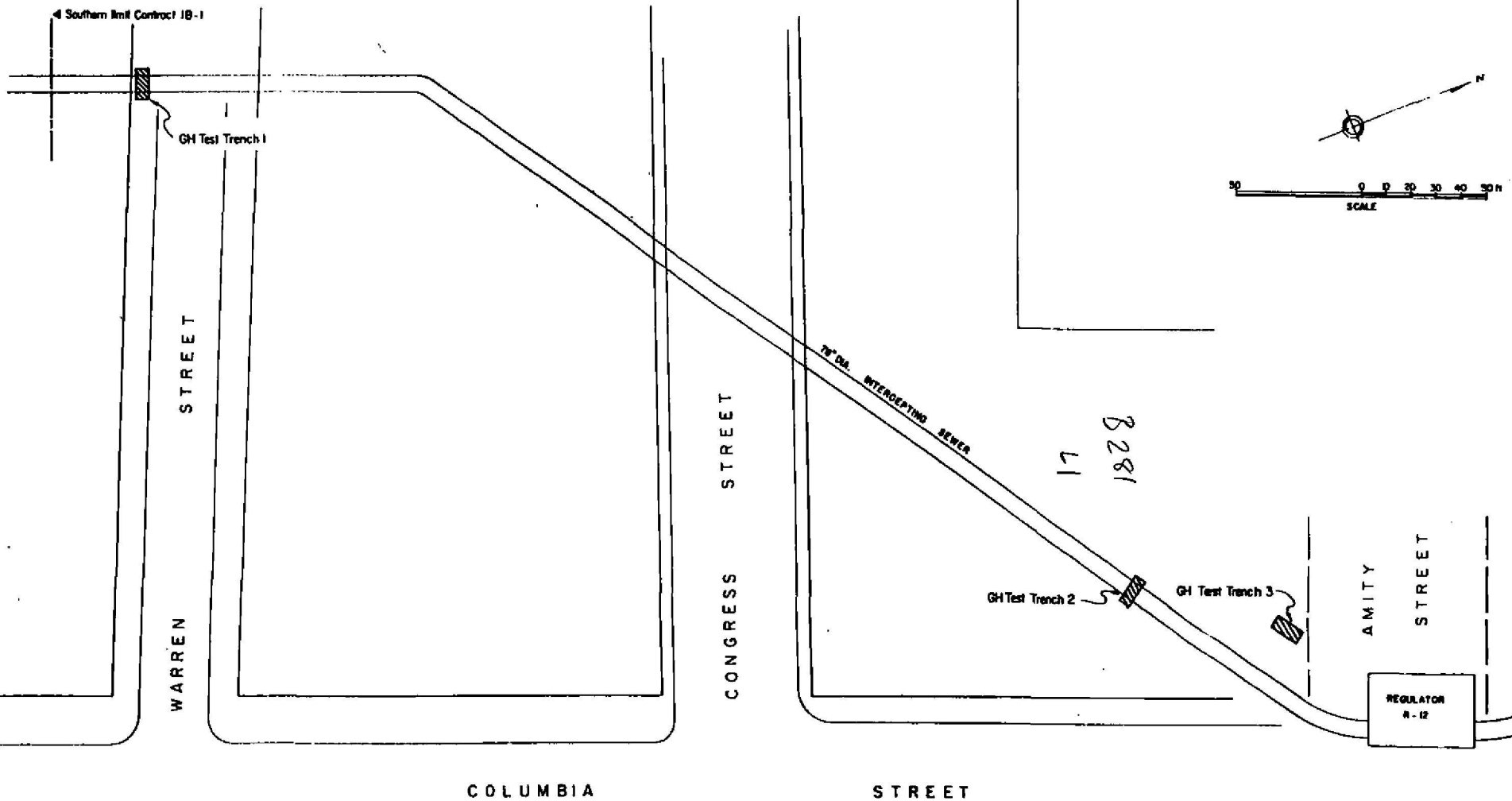


Figure 2: SITE PLAN

RED HOOK: CONTRACT 1B-1

TEST TRENCH I CONTEXT CHART

CONTEXT	DESCRIPTION	MUNSELL	TPQ	CMP
101	Asphalt			1
102	Concrete			1
103	Dark yellow/brown sandy silt w/ few inclusion	10 YR 4/4		2
104	Dark grey/brown slightly sandy silt w/ gravel, cobbles, cinders, etc.	10 YR 4/2	1860	2
105	Dark brown silty sand w/ occasional small pebbles	7.5 YR 4/4	1830	3
106	Brown silty sand w/ some gravel & cobble	10 YR 4/3		3
107	Dark yellow/brown sandy silt	10 YR 4/4	1830	3
108	Very dark grey brown silt w/ profuse ash, cinders, coal & tar.	10 YR 3/2		3
109	Dark grey/brown silty sand w/ some gravel and red brick	10 YR 4/2		3
110	Very dark grey/brown slightly sandy silt w/ gravel & red brick	10 YR 3/2	1830	3
111	Brown sand w/ some wood & soft mortar	7.5 YR 4/2	1830	3
112	Granite blocks			1
113	Black slightly silty sand w/ profuse cinders	10 YR 2/0		1
114	Concrete			1
115	Dark grey sand w/ profuse cinders	10 YR 4/1		1
116	Brown fine sand w/ few inclusions	7.5 YR 5/4		3

Figure 3

RED HOOK: CONTRACT 1B-1
 TEST TRENCH II CONTEXT CHART

CONTEXT	DESCRIPTION	MUNSELL	TPQ	CMP
201	Asphalt			4
202	Grey very coarse gravel			4
203	Light brown/grey medium to fine gravel in a little silt	10 YR 6/2		4
204	Very dark brown sandy silt w/ profuse gravel, cobble & red brick	10 YR 2/2		5
205	Brown silty sand w/ profuse red brick, tile, concrete, elec. cables, etc.	7.5 YR 4/4		5
206	Reinforced concrete slab		1855	6
207	Strong brown silty sand w/ some cobble, red brick and wood	7.5 YR 4/6	1830	7
208	Brown sand w/ red brick and wood frags			7

Figure 4

RED HOOK: CONTRACT 1B-1
TEST TRENCH III CONTEXT CHART

CONTEXT	DESCRIPTION	MUNSELL	TPQ	CMP
301	Asphalt			4
302	Grey very coarse gravel			4
303	Very dark grey Med. to fine gravel in some silt	10 YR 3/1		4
304	Very dark brown slightly sandy silt w/ red brick, cobble & gravel	10 YR 2/2	1904	5
305	Brown silty sand w/ gravel, cobbles and red brick	7.5 YR 4/2	1915	5
306	Concrete slab			6
307	Stones set in very light brown/grey hard mortar	10 YR 6/2		6
308	Hard mortar w/ red brick frags			6
309	Dark yellow/brown slightly sandy silt w/ some fine gravel	10 YR 3/4		7
310	Very dark grey/brown silty sand w/ some fine waterworn gravel	10 YR 3/2		7
311	Mottled black/brown sandy silt impregnated w/ oil	10 YR 2/1 10 YR 4/3		7

Figure 5

RED HOOK · CONTRACT 18-1
TEST TRENCH I · HARRIS MATRIX

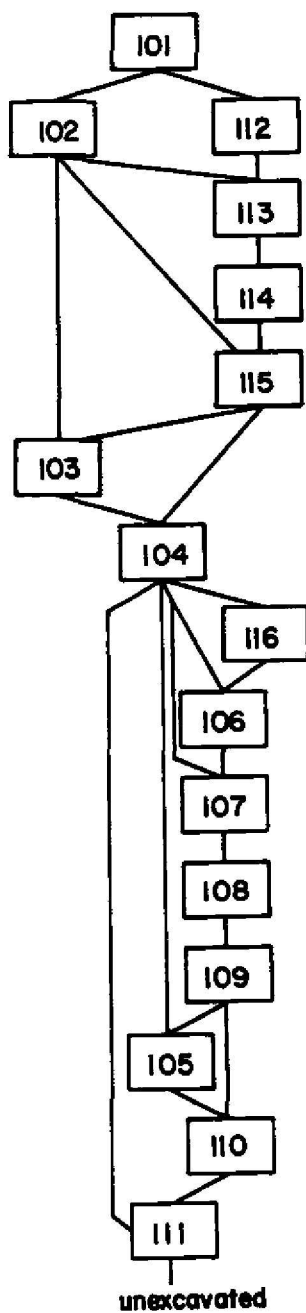


Figure 6

RED HOOK · CONTRACT IB-1
TEST TRENCH II · HARRIS MATRIX

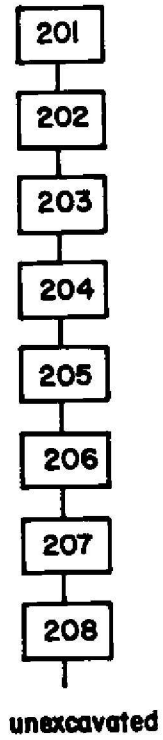


Figure 7

RED HOOK · CONTRACT IB-1
TEST TRENCH III · HARRIS MATRIX

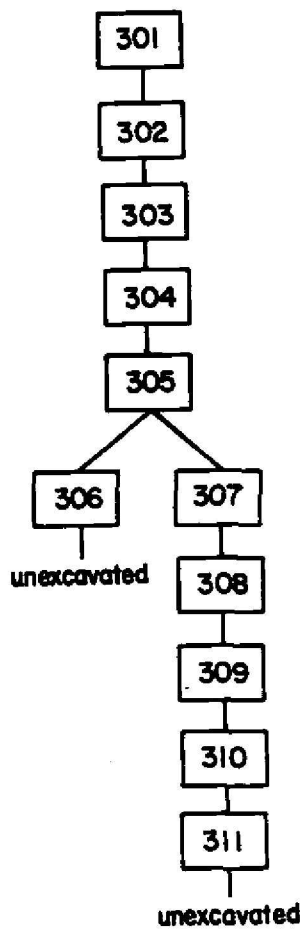


Figure 8

RED HOOK

TEST TRENCH I
NORTH & EAST
Drawn: W.R., B.B.

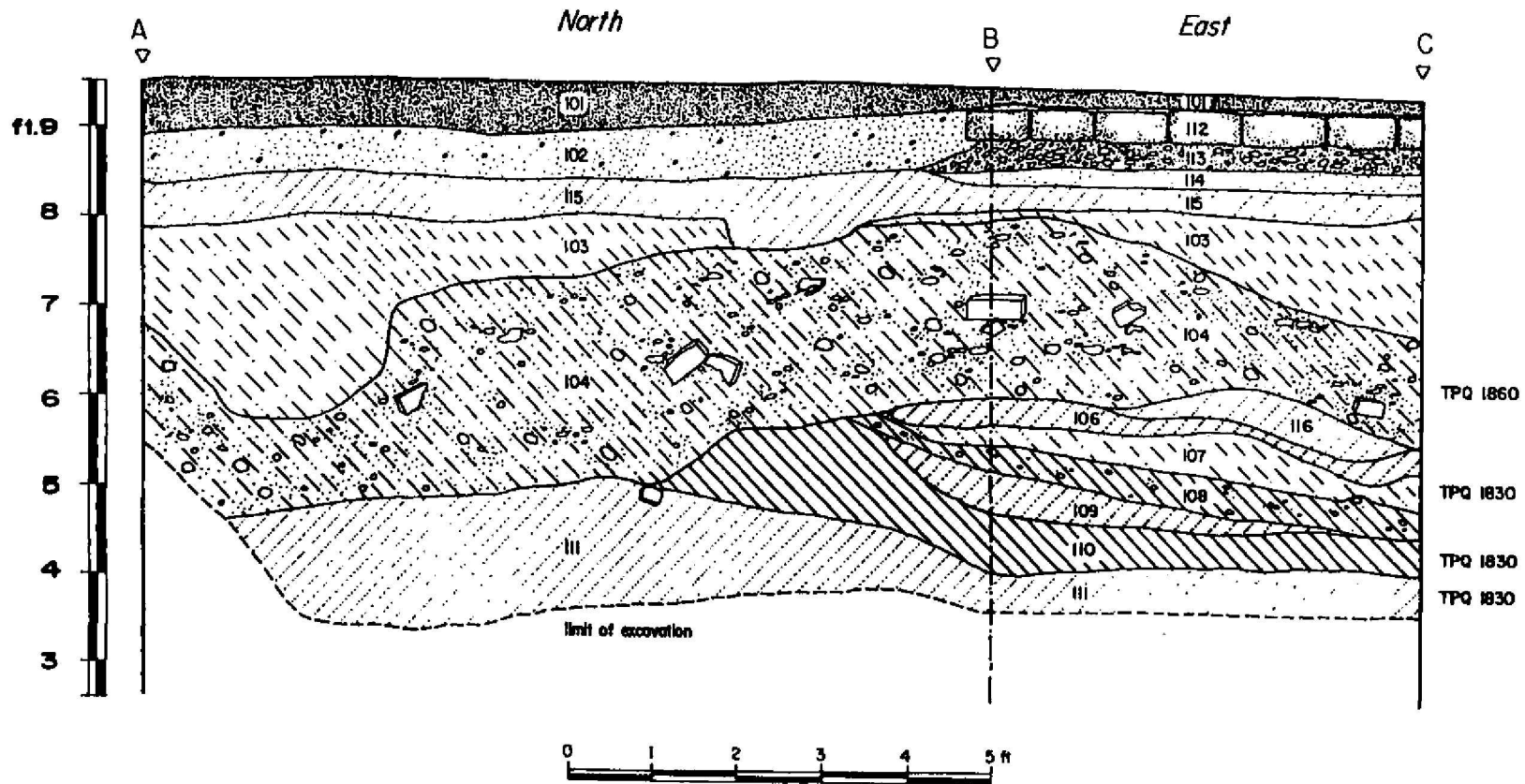


Figure 9: SECTION DRAWING

RED HOOK
TEST TRENCH 2
SOUTH
Drawn: J.B., B.B.

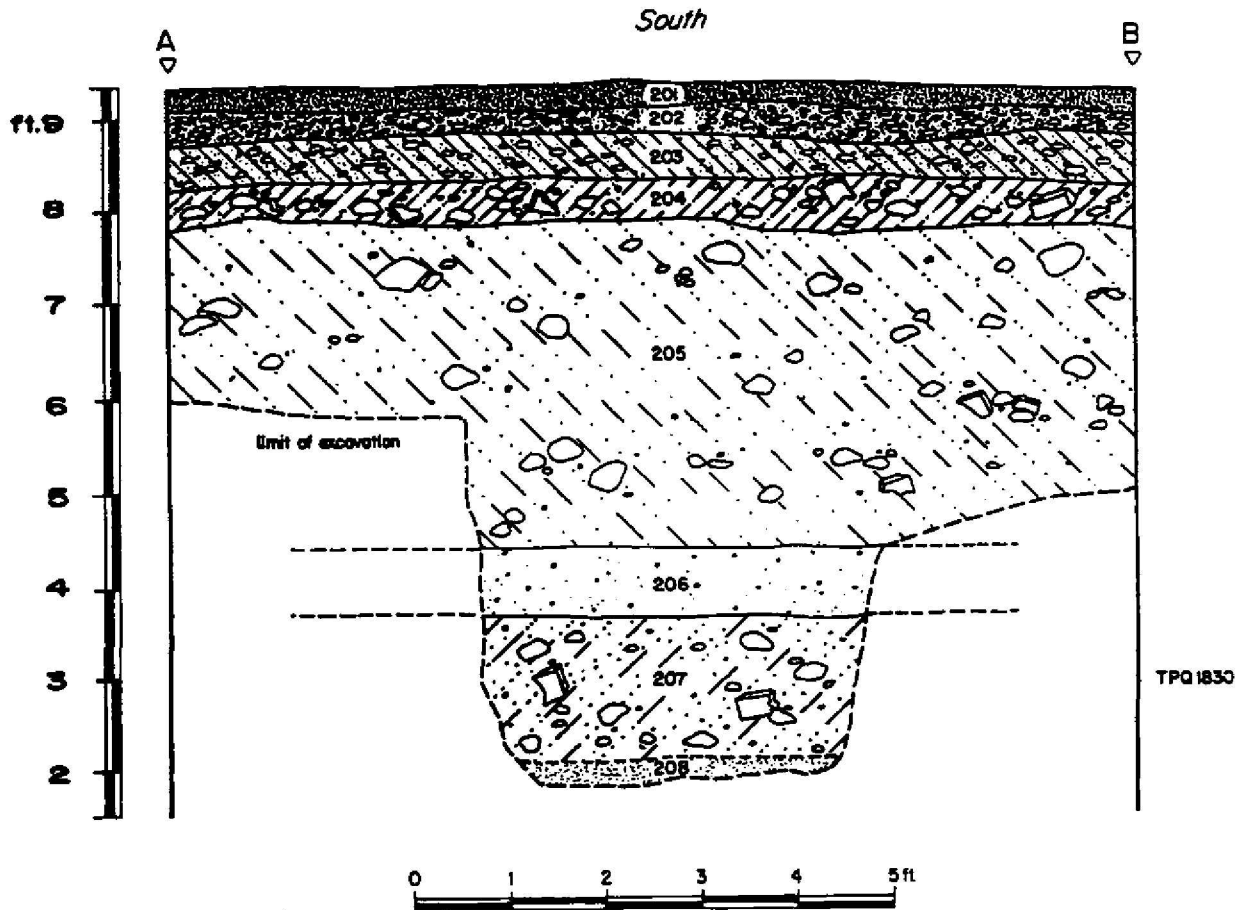


Figure 10: SECTION DRAWING

RED HOOK
TEST TRENCH 3
WEST
Drawn: J.B., B.B.

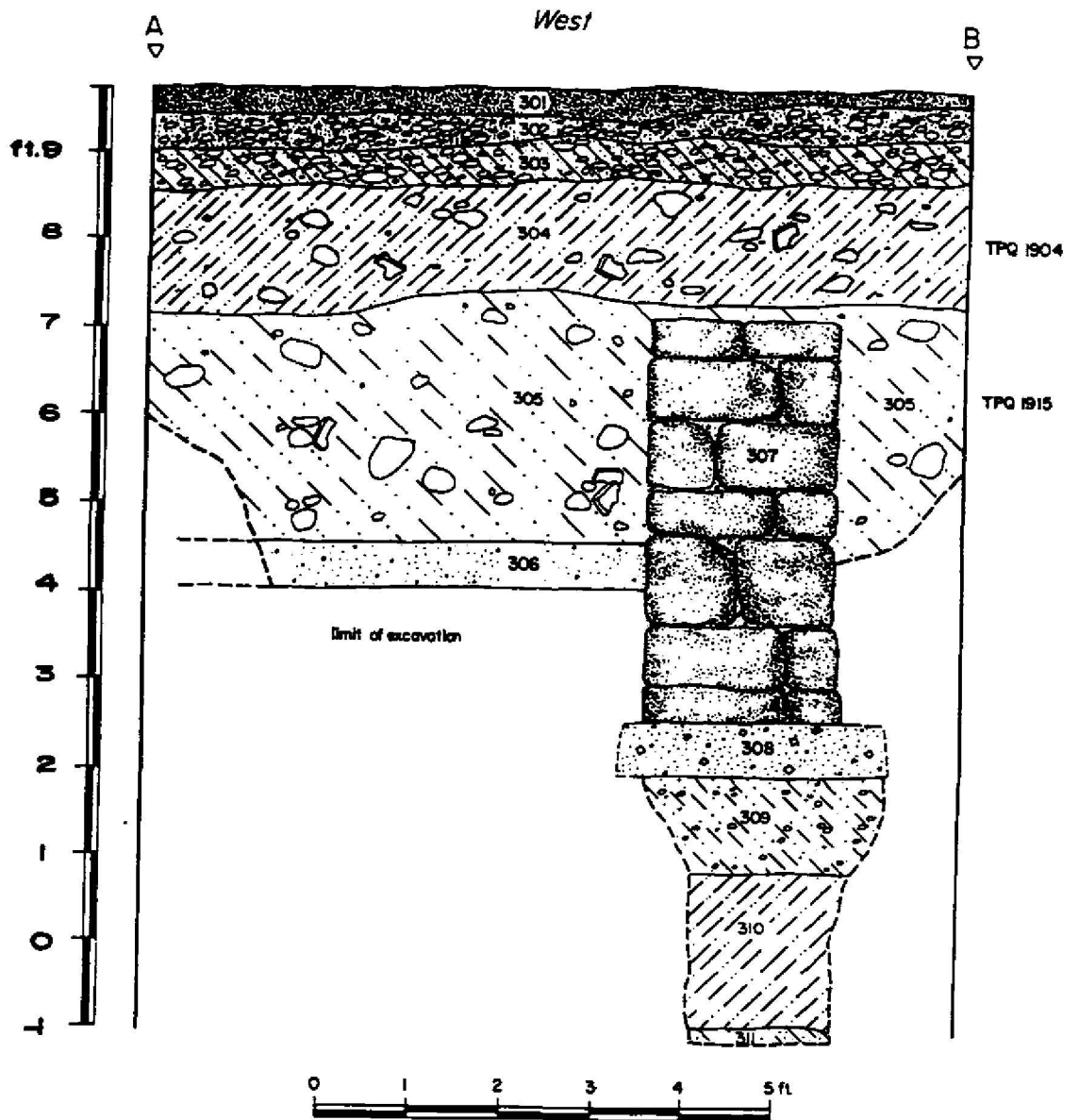


Figure 11: SECTION DRAWING

COMPONENT SUMMARIES:

The term component has been used here as the next higher order of stratigraphic analysis above the context, which is the minimal unit of stratigraphic recording. All contexts of similar nature have been grouped together as a component, which therefore represents a unit of relative contemporaneity. Test Trenches II and III were analyzed using components that include contexts from both trenches because they were located in close proximity. Test Trench I was considerably farther away, so the contexts excavated there were analyzed in components specific to Test Trench I. Below are individual summaries for the seven components. These list the test trench(es), the contexts included, an interpretation of the deposits, a generalized soil description, information about the sampling procedure and the dating evidence (if any was found). The term diagnostic is used to denote only those artifacts which could be assigned a specific beginning manufacture date.

Component 1: (Test Trench I): 6 contexts (Cx. 101, 102, 112, 113, 114 and 115); Modern Pavements and Bedding for pavements. No TPQ information, but the contexts are all obviously from the later 19th or 20th centuries, judging by their appearance during excavation and the date of the paving of Warren Street, 1852 (Solecki 1984:29). Because these contexts were all modern surfacings and make-up, no finds were collected.

Component 2: (Test Trench I): 2 contexts (Cx. 103 and 104); Upper portion of landfill - lenses of sandy silt with varying amounts of inclusions such as gravel, cobbles and cinders. Color ranges from dark yellow-brown to dark grey-brown. TPQ is 1860 (from Cx. 104). Samples of both contexts were screened through 1/4" mesh and a total of 341 artifacts were recovered. See Figure 12 for a bar graph of the relative percentages of ceramics, glass, pipes and bones. Component 2 yielded a total of 89 fragments of ceramics of which 84, or 94% were diagnostic. Component 2 also yielded 83 fragments of glass of which none were diagnostic.

Component 3: (Test Trench I): 8 contexts (Cx. 105, 106, 107, 108, 109, 110, 111, 116); Lower portion of landfill - lenses of sands and silts with varying amounts of inclusions such as gravel, cobbles, ash, cinders, coal, red brick, wood and mortar. Color ranges from very dark yellow-brown to brown and dark brown to very dark grey-brown. TPQ is 1830 (from Cx. 105, 107, 110, 111). Samples of these contexts were screened through 1/4" mesh and a total of 42 artifacts were recovered. See Figure 12 for a bar graph of the relative percentages of ceramics, glass, pipes and bones. Component 3 yielded a total of 18 fragments of ceramics of which 14, or 78% were diagnostic. Component 3 also yielded 1 fragment of glass which was not diagnostic.

Component 4: (Test Trenches II and III): 6 contexts (Cx. 201,

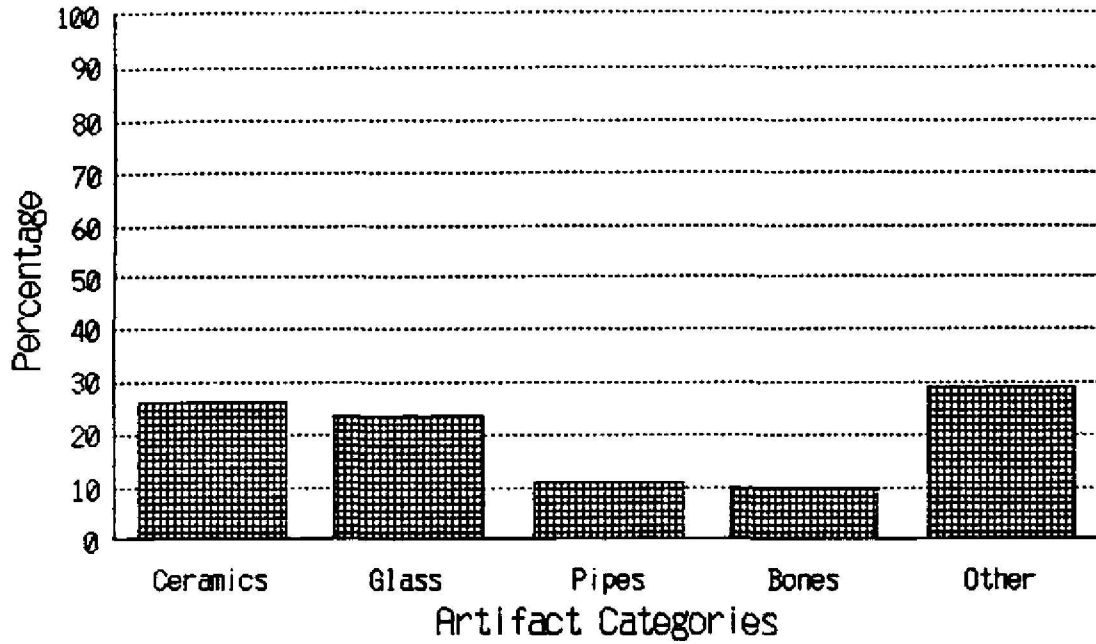
202, 203, 301, 302, 303); Modern parking lot pavement and beddings for same. No TPQ information but these contexts are all obviously related to the present Port Authority parking lot surface. Due to their recent date, no finds were collected from these contexts.

Component 5: (Test Trenches II and III): 4 contexts (Cx. 204, 205, 304, 305); Basement fill - lenses of sand and silt with inclusions such as gravel, cobbles and red brick fragments, tile fragments, concrete slab fragments and modern BX type electrical cables. TPQ is 1915 (Cx. 305), possibly later depending on the BX cable date. Samples from Contexts 205, 304, and 305 were screened through 1/4" mesh and a total of 154 artifacts were recovered. See Figure 13 for a bar graph of the relative percentages of ceramics, glass, pipes and bones. Component 5 yielded a total of 21 fragments of ceramics, of which 12, or 57% were diagnostic. Component 5 also yielded 69 fragments of glass, of which 3 or 4% were diagnostic.

Component 6: (Test Trenches II and III): 4 contexts (Cx. 206, 306, 307, 308); Building remains; concrete slab floors (Cx. 206 and 306). Stone and mortar wall (Cx. 307). Hard mortar and brick rubble, foundation slab (Cx. 308). TPQ information: The building in Test Trench III must be later than the introduction of hydraulic cement, (ca. 1815), and the building in Test Trench II must postdate the introduction of reinforced concrete (ca. 1855). Since all contexts were composed of concrete, stone and mortar, no screening was attempted and no artifacts were recovered other than a mortar sample.

Component 7: (Test Trenches II and III): 5 contexts (Cx. 207, 208, 309, 310, 311). Landfill - lenses of sands and silts with inclusions such as gravel, wood fragments, and red brick fragments. TPQ is 1830 (Cx. 207). Samples of these contexts were screened through a 1/4" mesh and a total of 35 artifacts were recovered. See Figure 13 for a bar graph of the relative percentages of ceramics, glass, pipes and bones. Component 7 yielded only 1 ceramic, but this fragment was diagnostic. Component 7 also yielded 4 fragments of glass of which none were diagnostic.

REDHOOK: Test Trench I CMP 2



REDHOOK: Test Trench I CMP 3

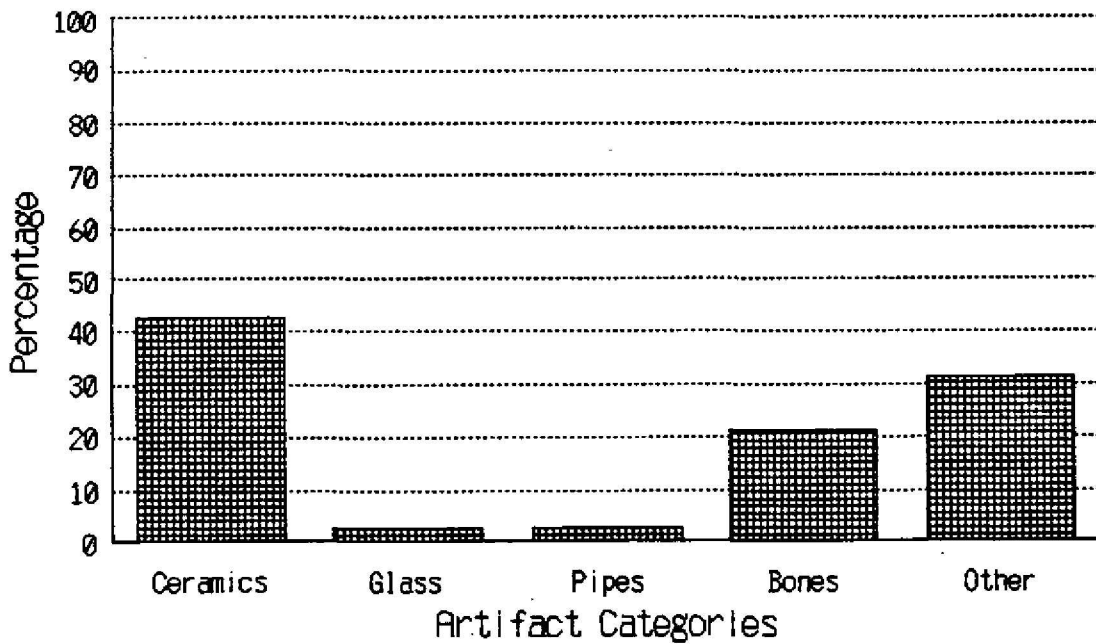
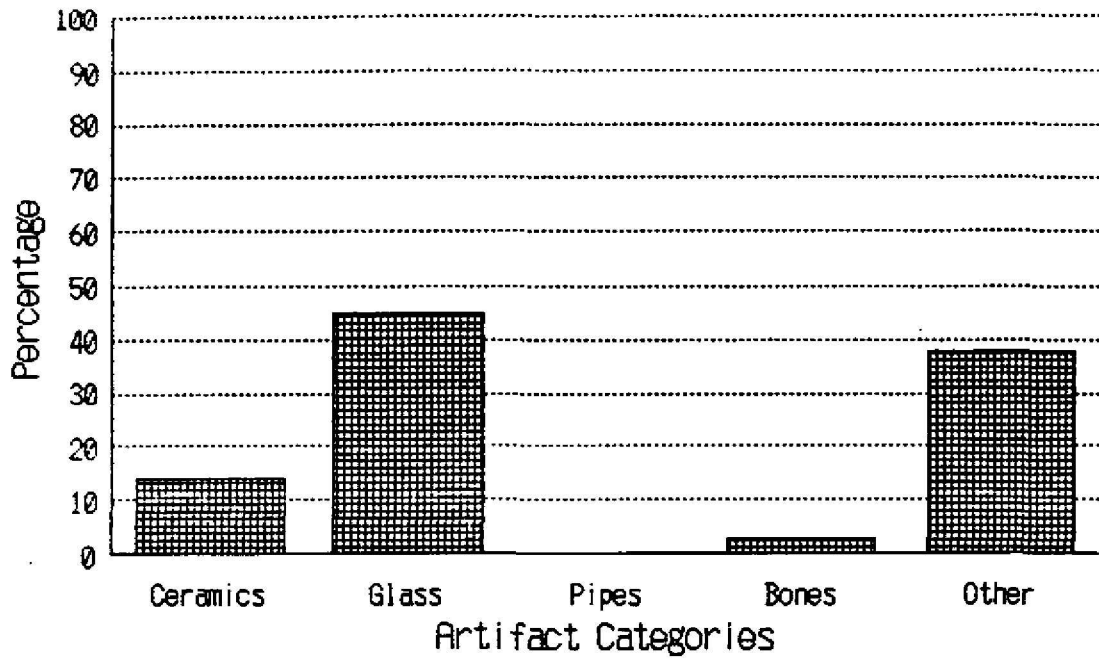


Figure 12: ARTIFACT PERCENTAGE GRAPHS

REDHOOK: Test Trench II and III CMP 5



REDHOOK: Test Trench II and III CMP 7

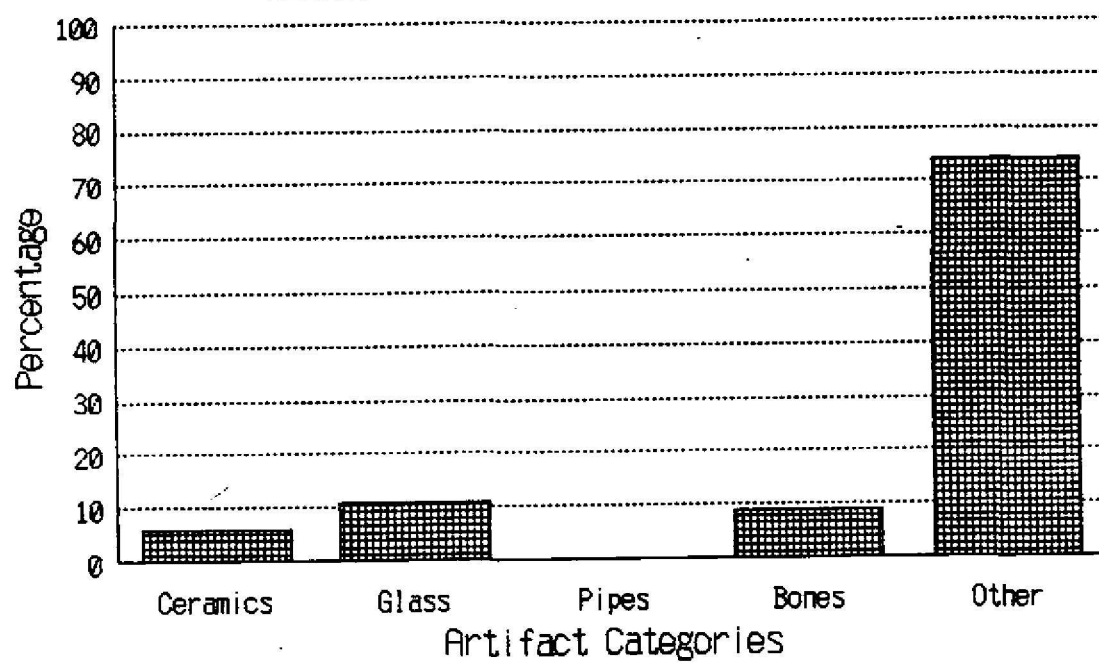


Figure 13: ARTIFACT PERCENTAGE GRAPHS

RESULTS

The Building Remains

Remains of two buildings were encountered during the excavation of the three test trenches. They were assigned to Component 6. A basement floor was uncovered in Test Trench II (Cx. 206). Since this floor was constructed of concrete reinforced with iron or steel rods, it must post-date the introduction of this building technique in North America. The first use of reinforced concrete was an experiment carried out by Sir Marc Isambard Brunel in 1832 for an arch to be used as part of a tunnel under the Thames. This experiment appears to have been an isolated incident and did not introduce any widespread appearance of the technique. A much more reasonable Terminus Post Quem is the year that François Coignet obtained a French patent for the process (Encyclopedia Britannica 1973:Vol. 6:263-5). Therefore, the building found during the excavation of Test Trench II was constructed sometime after 1855. The fill of its basement was deposited sometime in the 20th century, judging by the presence of BX type electrical cables in the fill. More extensive remains of a second building were found in Test Trench III, including a stone and hard mortar wall (Cx. 307), the foundation slab it rested on (Cx. 308) and the concrete basement floor (Cx. 306). The only dating evidence for this building is the use of non-reinforced concrete in the floor and foundation which requires a hydraulic cement. Cements of this type were being produced in the U.S.A. during the 1820's (Encyclopedia Britannica Vol 5:153-4). Their earliest use in this country would appear to be construction of the Erie Canal circa 1815 (Roberts pers. comm. 1984). Even if one accepts the later date of 1820 as a TPQ for this building, it is still earlier than the 1830 TPQ of the landfill (see below) on which it was constructed. This second building also went out of use in the 20th century as evidenced by the TPQ of 1915 taken from a glass bottle in the basement fill (Cx. 305).

The Landfill

Samples of the landfill were excavated in all three test trenches. They were assigned to Components 2,3 and 7. Components 2 and 3 were only in Test Trench I, while Component 7 was in both Test Trench II and III. Component 2 (Cx. 103 and 104) was distinguished from Component 3 below on the basis of the date ranges of artifacts found in them. The results of artifact analysis yielded a consistent TPQ of 1830 for both Components 3 and 7. This was based on 10 sherds of ceramics recovered from contexts 105, 107, 110, 111 and 207. This date is consistent with the documentary evidence on street openings. Warren Street was laid down in 1845 (Solecki 1984:18), and Columbia Street had to exist by 1843, for in that year the bulkhead line was established as 596 feet from Columbia Street (Ibid). The screening of the sample from Component 2 yielded a TPQ of 1860.

This was based on 24 sherds of ceramics recovered from context 104. This difference in the date of the artifacts from Component 2 compared with those of the rest of the landfill could be due to several factors. One possibility is that the primary landfill took place in two episodes, one during the 1830's and/or 1840's, and a second during the 1860's. This would appear to be an unlikely explanation for several reasons. Documents indicate that Warren Street was paved by 1852 (Solecki 1984:20) and all contexts associated with any pavements were at least 2.5 feet above the component 2/3 interface. If there had been 2 episodes of primary landfill, then this interface should have been an exposed surface for 20 to 30 years during the middle of the nineteenth century. No evidence of any such surface was seen during the excavation of Test Trench I or in the exposed sections after excavation. The second possible explanation is that the primary landfill (Component 3) subsided producing a low spot which required secondary filling to bring it up to the level of the remainder of the surrounding landfill. This explanation also appears unlikely, as Component 2 is in places, over 3 feet thick, which would be an extremely large drop for land subsidence. The third possible explanation for the differing dates from Component 2 and 3 is that Component 2 represents primary landfill that was disturbed in some manner by later construction or paving activity. This explanation would appear to be more likely than the other two because both contexts in Component 2 (Cx. 103 and 104) have interfaces with contexts in Component 1 (Cx. 102 and 115). Refer to the Harris Matrix for Test Trench I, Fig. 6, for a schematic representation of these interfaces. The interface with Cx. 115 was particularly apparent and is illustrated in the north section of Test Trench I. The disturbance could have been from paving operations on Warren Street, or the Port Authority parking lot, or construction activity associated with a building alongside Warren Street. East River landfill has been excavated on the Manhattan side, where the primary fill was characterized as having been devised from trash and harbour-related deposits. The former category of fill is characterized by inclusions typical of household rubbish and/or commercial wastes in a usually organic matrix. The harbour-related deposits consist of ships' ballast and river/harbour dredgings and are typified by shell, wood chips and leather inclusions. One or both of these categories of landfill have been excavated at the 175 Water Street site, the Telco site, Old Slip and Schermerhorn Row in Manhattan (Geismar 1983:679-706). Both of these general categories appear to be represented in the landfill on the Brooklyn side as well. Domestic rubbish is represented by ceramic sherds (in contexts 104, 105, 107, 110, 111 and 207), container glass fragments (in Cx. 104), clay pipe fragments (in Cx. 104 and 111) and bones (in Cx. 104, 107, 110 and 207). Commercial wastes are represented by slag (in Cx. 103, 104 and 207), and glass waste (in Cx. 104 and 110). Harbour-related deposits are represented by shells (Cx. 104), wood fragments (in Cx. 103, 104, 105 and 207) and leather (in Cx. 104). The relatively clean sands and silts in Cx. 309, 310 and 311 may have been derived from river dredging activities. One other source for fill material seems apparent from the Red Hook evidence, that

of rubble from demolished buildings. Brick fragments (in Cx. 103 and 207), mortar and plaster (in Cx. 103, 104 and 207), window glass (in Cx. 103 and 207) and nails or spikes (in Cx. 104, 105 and 207) are all suggestive of building rubble having been a constituent of the landfill here. A section of two planks, each about 0.5 feet by 3.5 feet and held together by iron spikes or bolts, found in Cx. 105 was also probably derived from a demolished building.

Patchen's Dock

Test Trench III was positioned as close to the foot of Amity Street as possible to search for any surviving remains of the 18th century Patchen's Dock. At least two possible locations for this structure have been suggested: at the foot of Amity Street, and at the foot of Atlantic Ave. (Solecki 1983:15). No remains that could be associated with Patchen's Dock were found in Test Trench III, so it would seem that a location closer to Atlantic Ave. would be more likely.

CONCLUSIONS AND RECOMMENDATIONS

This final report documents the procedures and results of the Phase 1B deep testing within Contract 1B-1 of the Red Hook Sewer Project. Based on this objective ground truth testing, and in accordance with the dictates of the scope of work, it is now possible to make concrete recommendations that:

- 1) no potentially significant archaeological or historical resources are present within the Contract 1B-1 impact corridor; and
- 2) additional testing is not necessary and no Phase II/III work is recommended.

List of Participants

Dr. Joel W. Grossman	- Principal Investigator/Co-Author
William I. Roberts IV	- Field Supervisor/Co-Author
Michael Davenport	- Cartographer
Melba J. Myers	- Conservator/Ceramic Analyst/Lab Director
George Myers, Jr.	- Field Technician
John Blitz	- Field Technician/Lab Assistant
Gregor Szurnicki	- Field Technician
Diane Dallal	- Pipe Analyst
Joseph Diamond	- Glass Analyst
Bonnie Bogumil	- Draftsperson
Helen Stoltzfus	- Lab Assistant
Andrew Neuhart	- Artifact Photographer
Mindy Washington	- Word Processor

APPENDIX I: ARTIFACT INVENTORY

The National Park Service Material Culture Data Base was used in an abbreviated form to prepare a computer inventory for the finds from the Red Hook project. Only the first two categories of function descriptions and the material descriptor were used to draw up coding charts for this purpose. The coding charts were made by listing all the NPS Material Culture Data Base taxonomy numerical descriptions for the categories of Group and Class, and by selecting those material descriptions that could be distinguished by visual examination. The coding chart and a table of examples follow, figure 14 and 15 . Following these is a table of codes used to describe artifacts which were in some way hard to place in taxonomic categories, figure 16 . After this is the entire inventory of artifacts recovered during the Red Hook Contract 1B-1 archaeological testing program, listed in context number order.

GROUPS AND CLASSES

- 01 KITCHEN GROUP
 - 01 Dishes
 - 02 Containers
 - 03 Tableware
 - 04 Kitchenware
- 02 BONE GROUP
 - 01 Mammalia
 - 02 Aves
 - 03 Reptilia
 - 04 Amphibia
 - 05 Pisces
- 03 ARCHITECTURAL GROUP
 - 01 Window Glass
 - 02 Nails
 - 03 Spikes
 - 04 Door & Window Hardware
 - 05 Other Structural Hardware
 - 06 Construction Materials
- 04 FURNITURE GROUP
 - 01 Hardware
 - 02 Materials
 - 03 Lighting Device
 - 04 Decorative Furnishings
- 05 ARMS GROUP
 - 01 Projectiles
 - 02 Cartridge Case
 - 03 Arms Accessories
 - 04 Gun Parts
- 06 CLOTHING GROUP
 - 01 Apparel
 - 02 Ornamentation
 - 03 Making and Repair
 - 04 Fasteners
- 07 PERSONAL GROUP
 - 01 Coins
 - 02 Keys
 - 03 Writing Paraphernalia
 - 04 Grooming and Hygiene
 - 05 Personal Ornamentation
 - 06 Other Personal Items
- 08 KAOLIN TOBACCO PIPE GROUP
 - 01 Kaolin Pipe Class
- 09 ACTIVITIES GROUP
 - 01 Construction Tools
 - 02 Farm Tools
 - 03 Leisure Activities
 - 04 Fishing Gear
 - 05 Nonkaolin Pipe
 - 06 Smoking Accessories
 - 07 Pottery Class
 - 08 Storage Items
 - 09 Ethnofaunal Zoological
 - 10 Stable and Barn
 - 11 Miscellaneous Hardware
 - 12 Specialized Activities
 - 13 Military Objects
 - 14 Housekeeping
 - 15 Public Services
 - 16 Ethnobotanical
- 10 PREHISTORIC GROUP
 - 01 Weapons
 - 02 Domestic
 - 03 Stone Working
 - 04 Wood Working
 - 05 Digging Tools
 - 06 Other Fabricating or Processing Tools
 - 07 Other General Utility Tools
 - 08 Ceremonial & Ornamental
 - 09 Miscellaneous Artifacts
- 98 UNSPECIFIED GROUP

MATERIALS - COMMON LIST (classified)

- INORGANIC MATERIALS
 - CERAMIC
 - 003 earthenware
 - 004 ironstone/granite/whiteware
 - 001 porcelain
 - 002 stoneware
 - 134 undifferentiated ceramic
 - CLAY
 - 047 clay
 - 062 kaolin
 - 079 red clay
 - CONSTRUCTION
 - 069 brick
 - 071 cement
 - 070 mortar
 - 072 plaster
 - GLASS
 - 078 glass
 - 013 glass, milk
 - 112 slag and clinker
 - METALS
 - 029 aluminum
 - 035 chrome
 - 026 cuprous metal
 - 028 ferrous alloy
 - 021 gold
 - 034 lead
 - 096 mercury
 - 019 silver
 - 032 steel
 - 005 tin
 - 136 undifferentiated metal
 - STONE
 - 129 agate
 - 075 asbestos
 - 133 chalk
 - 052 chert
 - 046 gravel
 - 109 jet
 - 038 limestone
 - 041 marble
 - 049 mica
 - 058 obsidian
 - 057 ochre
 - 068 precious stone
 - 053 quartz
 - 054 quartzite
 - 039 sandstone
 - 044 shale
 - 040 slate
 - 060 steatite
 - 043 schist
 - 126 undifferentiated stone
 - 042 granite
- ORGANIC MATERIALS
 - CELLULOSIC
 - 115 bark
 - 108 burlap
 - 128 charcoal
 - 092 cork
 - 087 cotton
 - 131 fiberboard/masonite
 - 085 hemp
 - 011 paper
 - 006 wood
 - 121 cellulose seeds/seed covering
 - CONSTRUCTION
 - 093 asphalt
 - 125 formica
 - 101 linoleum
 - 102 tar paper
 - WAX
 - 076 wax
 - GUM/RESIN
 - 010 rubber, elastic
 - 009 rubber, hard
 - PETROCHEMICALS
 - 073 carbon
 - 095 coal
 - 048 graphite
 - 116 tar
 - PROTEIN
 - 118 chitin (arthropod, exoskeleton)
 - 106 felt
 - 122 flesh
 - 016 hair
 - 117 keratin (horns/fingernail/claws)
 - 015 leather
 - 107 silk
 - 090 sponge, natural
 - 105 wool
 - COMBINATION MATERIALS
 - 017 bone
 - 132 ivory
 - 067 pearl
 - 089 shell
 - SYNTHETIC MATERIALS
 - 103 celluloid
 - 088 nylon
 - 008 plastic
 - 077 soap
 - 091 sponge, synthetic
 - 104 synthetic
 - TEXTILE
 - 151 undifferentiated textile

Figure 14: Coding Chart with Group, Class and Material Common List (National Park Service Material Culture Data Base).

GROUPS AND CLASSES

01	KITCHEN	SAMPLE ARTIFACTS
01	Dishes	Historic fragments, plate, cup, salt cellar
02	Containers	Bottle glass fragments
03	Tableware	Eating Utensils
04	Kitchenware	Cooking Utensils, pot, kettle
02	BONE GROUP	
01	Mammalia	Mammal Bones
02	Aves	Bird Bones
03	Reptilia	Reptile Bones
04	Amphibia	Amphibian Bones
05	Pisces	Fish Bones
03	ARCHITECTURAL GROUP	
01	Window Glass	Window pane glass
02	Nails	Copper nails, iron nails
03	Spikes	Railroad spikes
04	Door & Window Hardware	Doorknob, door hinge
05	Other Structural Hardware	Pipe, fireplace tiles
06	Construction Materials	Brick, mortar, metal roofing
04	FURNITURE GROUP	
01	Hardware	Handle, drawer pull, latch
02	Materials	Stove parts, chair part, bed frame
03	Lighting device	Candlestick, lamp base
04	Decorative Furnishings	Flower pot, clock parts, vase
05	ARMS GROUP	
01	Projectiles	Shot, bullets
02	Cartridge Case	Cartridge
03	Arm Accessories	Gun flints, bullet molds, powder horn
04	Gun Parts	Pistol barrel, flint lock assembly
06	CLOTHING GROUP	
01	Apparel	Hat, coat, scarves, glove, shoe
02	Ornamentation	Beads, sequin, hatpin, feather
03	Making & Repair	Thimble, straight pin, straight scissors
04	Fasteners	Buttons, snaps, buckles, cuff links
07	PERSONAL GROUP	
01	Coins	Silver coins, copper coins
02	Keys	Door lock keys, padlock keys
03	Writing Paraphernalia	Quill, fountain pen nib, graphite pencil
04	Grooming & Hygiene	Hair brush, razor, mirror, tweezers
05	Personal Ornamentation	Jewelry, ribbon, ornamental comb
06	Other Personal Items	Pocket watch, key chain, pocket knife
08	KAOLIN PIPE GROUP	
01	Kaolin Pipe Class	Kaolin pipe fragments

GROUPS AND CLASSES (cont'd)

09	ACTIVITIES GROUP	
01	Construction Tools	Axe head, drill bit, saw, paint brush
02	Farm Tools	Hoe, rake, plow blade
03	Leisure Activities	Marbles, jew's harp, doll parts
04	Fishing Gear	Fish hooks, sinkers, crab trap
05	Nonkaolin Pipe	Corncob pipe
06	Smoking Accessories	Snuff tin, tobacco tin, pipe cleaner
07	Pottery Class	(Indian) water jar, effigy pot
08	Storage Item	Crock, barrel staves, sacks
09	Ethnafaunal Zoological	Oyster shells, crab shells
10	Stable and Barn	Stirrup, horse shoe, rein, harness belt
11	Miscellaneous Hardware	Rope, bolts, nuts, washers, chain
12	Specialized Activities	Button blanks, metallurgic debris, saggars
13	Military Objects	Insignia, bayonets
14	Housekeeping	Broom, coat hanger, washboard
15	Public Services	Sewer pipe, water pipe
16	Ethnobotanical	
10	PREHISTORIC GROUP	
01	Weapons	Projectile point, atlatl hook
02	Domestic	Vessel, mortar, pestle
03	Stone Working	Hammerstone, baton, flake, core
04	Wood Working	Celt, grooved axe
05	Digging Tools	Hoe
06	Other Fabricating or Processing Tools	Drill, chisel, needle
07	Other General Utility Tools	Knife, prismatic blade, chopper
08	Ceremonial and Ornamental	Sheet, gorget, bead
09	Miscellaneous Artifacts	Function unknown

Figure 15: Coded Examples (National Park Service Material Culture Data Base).

THE ITEMS LISTED BELOW MAY BE AMBIGUOUS OR HARD TO PLACE IN A TAXONOMIC CATEGORY, BUT AS A CONVENTION, FOR INVENTORY PURPOSES, WILL BE CODED AS FOLLOWS:

Unident Wood Frags	98 00 006
Construction Wood, Wooden Pegs, Wood Planks	03 06 006
Twigs, Branches	09 16 006
Burned Wood (Partial)	Code as wood (above) and put "burnt wood" in the comments section.
Charcoal & all small frags of completely burnt wood	Code as charcoal
Coal	98 00 095
Slag, burned coal, vitrified metalworking or manufacturing by-products	98 00 112
Pantiles	03 06 003
Delft fireplace tiles, wall skirting, etc.	04 04 003
Porcelain bathroom tiles, other bathroom furniture (tub, toilet, etc)	03 05 001
Chamber Pot	04 02 ()
Flower Pot	04 04 003
Teeth	02 () 132
Fish scales	09 09 118
Coral	98 00 119
Eggshell	09 09 119
Seeds, Seed Covering	09 16 121
Schist (construction)	03 06 043
Schist (unident)	98 00 043
Red Brick	03 06 169
Yellow Brick	03 06 155
Linoleum	03 06 101
Metal Hardware	03 06 ()
(probably construction)	
Furniture Hardware	04 01 ()
Misc. hardware (other and unident), screws, car parts	09 11 ()
Leather Shoe Parts	06 01 015
Unident Leather scraps	98 00 015
Leather Personal Items	07 () 015

Figure 16

TTR	CXND	GR	CL	MAT	COMMENTS	TPQ	WEIGHT	COUNT
I	.	01	01	004	ANNULAR WHITEWARE	1830	0.0	1
I	.	01	01	004	BLU TRNSFR-P WHITEWARE	1830	0.0	1
	.	01	01	062	PIPE WITH DECOR.	0	0.0	1
I	103.	03	01	078	WINDOW PANE GLASS	0	0.0	6
I	103.	03	06	069	RED BRICK	0	440.3	0
I	103.	03	06	070	MORTAR	0	0.0	3
I	103.	03	06	071	CONCRETE	0	0.0	1
I	103.	98	00	006	WOOD FRAG	0	0.0	1
I	103.	98	00	054	QUARTZITE	0	0.0	1
I	103.	98	00	095	COAL	0	0.0	1
I	103.	98	00	112	SLAG	0	0.0	10
I	103.	98	00	126	BURNED STONE	0	0.0	4
I	104.	01	01	001	PORCELAIN SOFT PASTE	1734	0.0	8
I	104.	01	01	002	GRAY SLTGLZ STNWA	0	0.0	1
I	104.	01	01	003	CREAMWARE BODY SHERDS	1762	0.0	5
I	104.	01	01	003	MOTTLED LEAD GLZ EARTHWA	0	0.0	2
I	104.	01	01	004	ANNULAR WHITEWARE	1830	0.0	7
I	104.	01	01	004	BLU SHELL EDGED RIM	1820	0.0	1
I	104.	01	01	004	BLU TRNSFR PTD BASE	1830	0.0	1
I	104.	01	01	004	BLU TRNSFR-PTD WHTWA/THK	1855	0.0	2
I	104.	01	01	004	BRTGRN TRNSFR-P/THICK	1855	0.0	3
I	104.	01	01	004	GRN GLZ WHTWA INKPOT	0	0.0	1
I	104.	01	01	004	IRONSTONE BASE IV MARK	1813	0.0	2
I	104.	01	01	004	LT TRNSFR PNT/THICK WHTWA	1855	0.0	9
I	104.	01	01	004	PLAIN WHTWA BASE	1820	0.0	1
I	104.	01	01	004	RED TRNSFR-P WHITEWARE	1830	0.0	3
I	104.	01	01	004	RED TRNSFR-P WHITEWARE	1830	0.0	3
I	104.	01	01	004	SHELL EDG WHTWA/NO COLOR	1830	0.0	1
I	104.	01	01	004	SPONGE DEC WHITEWARE	1835	0.0	1
I	104.	01	01	004	STAMP DEC WHITEWARE	1850	0.0	7
I	104.	01	01	004	UNDEC MOLDED WHTWA/THICK	1850	0.0	5
I	104.	01	01	004	UNDEC WHITEWARE/THICK	1860	0.0	24
I	104.	01	01	004	UNDEC WHTWA/HEXAGONAL LID	1820	0.0	1
I	104.	01	01	004	UNDENT WHITEWARE	0	0.0	1
I	104.	01	02	078	BLUE MILK GLASS	0	0.0	3
I	104.	01	03	006	WOODEN CUTLERY HANDLE	0	0.0	1
I	104.	02	01	017	MAMMAL BONES	0	0.0	24
I	104.	02	02	017	BIRD BONES	0	0.0	6
I	104.	02	05	017	FISH BONE	0	0.0	3
I	104.	03	01	078	WINDOW PANE GLASS	0	0.0	56
I	104.	03	02	028	SQUARE NAILS	0	0.0	20
I	104.	03	03	028	SPIKES	0	0.0	2
I	104.	03	06	006	PLASTER COVERED WOOD	0	0.0	1
I	104.	03	06	069	RED BRICK	0	240.0	0
I	104.	03	06	072	PLASTER	0	0.0	5
I	104.	04	04	003	FLOWER POT RIM	0	0.0	1
I	104.	04	04	026	SMALL HANDLE FOR DRAWER	0	0.0	1
I	104.	06	01	015	SHOE LEATHER FRAGS	0	0.0	5
I	104.	06	04	001	BUTTONS	0	0.0	2
I	104.	07	03	040	SLATE PENCIL	0	0.0	1
I	104.	08	01	062	PIPE BOWL FRAGS	0	0.0	7
I	104.	08	01	062	PIPE STEMS	0	0.0	29
I	104.	09	08	078	BOTTLE LIP FRAGS CLR/ERN	0	0.0	2
I	104.	09	08	078	GLASS BOTTLE BASE FRAG	0	0.0	1
I	104.	09	08	078	GLASS BOTTLE FRAGS	0	0.0	6

TTR	CXND	GR	CL	MAT	COMMENTS	TPQ	WEIGHT	COUNT
I	104.	09	09	089	CLAM SHELL	0	15.6	0
I	104.	09	09	089	OYSTER SHELL	0	20.0	0
I	104.	09	09	089	UNIDENT. SHELL	0	0.6	0
I	104.	09	11	028	IRON CONCRETIONS	0	0.0	2
I	104.	09	11	136	SMALL TOOLED METAL OBJECT	0	0.0	1
I	104.	09	11	136	THIN METAL CLIP FRAG.	0	0.0	1
I	104.	98	00	006	UNIDENT. WOOD FRAGS	0	0.0	18
I	104.	98	00	040	SLATE	0	0.0	2
I	104.	98	00	078	BLUE GLASS CHUNKS	0	0.0	7
I	104.	98	00	078	GLASS MFR SCRAP?	0	0.0	1
I	104.	98	00	078	GREEN CHUNK OF GLASS	0	0.0	1
I	104.	98	00	095	COAL	0	0.0	11
I	104.	98	00	095	DEHYDRATED COAL	0	8.5	0
I	104.	98	00	112	SLAG AND CLINKER	0	0.0	4
I	104.	98	00	126	BURNED STONE	0	6.1	0
I	104.	98	00	126	SMALL UNMODIFIED STONES	0	13.9	0
I	104.	98	00	126	UNIDENT. STONE	0	0.0	1
I	105.	01	01	004	DECORATED WHITEWARE BASE	1830	0.0	1
I	105.	01	01	004	LIGHT BLU TRNSFR-P	0	0.0	1
I	105.	01	01	004	PLAIN WHITEWARE	1820	0.0	1
I	105.	03	05	028	LRGE STEEL BAND W/ SPIKES	0	0.0	1
I	105.	03	05	028	STEEL RODS	0	0.0	3
I	105.	03	06	006	LARGE PIECE OF WOOD	0	0.0	1
I	105.	98	00	006	UNIDENT. WOOD FRAGS	0	0.0	3
I	105.	98	00	093	ASPHALT CHUNK	0	0.0	1
I	105.	98	00	093	ASPHALT WITH WOOD	0	0.0	1
I	107.	01	01	004	ANNULAR WHITEWARE	1830	0.0	1
I	107.	01	01	004	BLCK ON BUFF TRNSFR-P CUP	0	0.0	2
I	107.	01	01	004	PLAIN WHITEWARE	1830	0.0	2
I	107.	02	01	017	MODIFIED BONE	0	0.0	8
I	110.	01	01	004	ANNULAR PRINTED WHITEWARE	1830	0.0	1
I	110.	01	01	004	LT. BLU TRANS-P	1830	0.0	2
I	110.	01	01	004	PLAIN WHITEWARE	1830	0.0	1
I	110.	02	01	017	MAMMAL BONE	0	0.0	1
I	110.	09	15	093	ASPHALT W/CONCRETIONS	0	0.0	3
I	110.	98	00	078	YELLOW CHUNK GLASS	0	0.0	1
I	111.	01	01	001	GLZ HANDPAINT. SOFT PASTE	1734	0.0	2
I	111.	01	01	003	RED EARTHENWARE FRAG	0	0.0	1
I	111.	01	01	004	ANNULAR WHITEWARE	1830	0.0	1
I	111.	01	01	004	LIGHT BLU TRNSFR-P	1830	0.0	1
I	111.	01	01	004	PLAIN WHITEWARE	1820	0.0	1
I	111.	08	01	062	PIPE STEM	0	0.0	1
II	205.	01	02	078	DRK. GREEN BOTTLE FRAGS	0	0.0	4
II	205.	03	01	078	WINDOW GLASS W/ WIRE	0	0.0	2
II	205.	03	05	134	TOILET BOWL FRAG	0	0.0	1
II	205.	03	06	069	GLZ BRICK W/ MORTAR	0	0.0	1
II	205.	03	06	069	RED BRICK FRAGS	0	1.0	6
II	205.	03	06	134	B/W FLOOR TILE W/ CEMENT	0	0.0	1
II	205.	03	06	134	WHITE INTERIOR TILE	0	0.0	1
II	207.	01	01	004	PLAIN WHITEWARE	1830	0.0	1
II	207.	02	00	017	BONE FRAG	0	0.0	1
II	207.	02	01	017	MAMMAL TOOTH	0	0.0	1
II	207.	02	05	017	FISH BONE	0	0.0	1
II	207.	03	01	078	WINDOW GLASS	0	0.0	2
II	207.	03	02	028	NAIL	0	0.0	1
II	207.	03	03	028	SPIKE	0	0.0	1

ARTIFACT INVENTORY

TTR	CXND	GR	CL	MAT	COMMENTS	TPQ	WEIGHT	COUNT
II	207.	03	06	069	RED BRICK	0	100.0	0
II	207.	03	06	071	FRAG OF CEMENT	0	0.0	1
II	207.	09	07	003	FLOWER POT FRAG	0	0.0	1
II	207.	09	08	078	GREEN GLASS FRAGS	0	0.0	2
II	207.	98	00	001	FRAGS OF WOOD	0	0.0	12
II	207.	98	00	028	FRAGS OF IRON	0	0.0	2
II	207.	98	00	049	MICA FRAGS	0	0.0	3
II	207.	98	00	112	SLAG	0	0.0	2
II	207.	98	00	126	BURNED STONE	0	0.0	3
II	207.	98	00	126	MODIFIED STEATITE	0	0.0	1
III	304.	01	01	004	BLACK ON WHITE TRANS-P	1825	0.0	1
III	304.	01	01	004	BLU TRANS-P	1830	0.0	1
III	304.	01	01	004	HOTEL WARE	1860	0.0	1
III	304.	01	01	004	PLAIN WHITEWARE	1820	0.0	2
III	304.	01	02	078	BLU BOTTLE FRAG	0	0.0	1
III	304.	01	02	078	DRK GREEN BOTTLE FRAGS	0	0.0	2
III	304.	01	02	078	GREEN BOTTLE BASE FRAGS	0	0.0	3
III	304.	01	02	078	LT. GREEN BOTTLE FRAG	1904	0.0	1
III	304.	01	02	078	MOD BEER BTL (INTRUSIVE)	0	0.0	1
III	304.	01	01	003	GLZ RED EARTHENWARE	0	0.0	1
III	304.	01	01	003	L-GLZ BUFF/BLACK	0	0.0	1
III	304.	02	01	017	CARNIVORE TOOTH	0	0.0	1
III	304.	02	02	017	BIRD BONE	0	0.0	1
III	304.	03	01	078	WINDOW GLASS FRAGS	0	0.0	35
III	304.	03	02	028	NAILS	0	0.0	6
III	304.	03	03	028	SPIKE	0	0.0	1
III	304.	03	06	003	CONSTRUCTION TILE	0	0.0	1
III	304.	03	06	006	WOOD FRAGS	0	0.0	6
III	304.	03	06	041	MARBLE FRAGS	0	0.0	4
III	304.	03	06	069	RED BRICK (MOLDED)	0	22.3	0
III	304.	03	06	070	MORTAR	0	0.0	3
III	304.	03	06	071	MOLDED CEMENT	1815	0.0	1
III	304.	04	03	136	ELEC WRE COVD W/ RUBBER	0	0.0	1
III	304.	09	03	078	MARBLE- WHITE AND YELLOW	0	0.0	1
III	304.	09	09	089	SHELL	0	2.0	0
III	304.	09	11	009	*HEAVY DUTY* SHEET RUBBER	0	0.0	1
III	304.	09	11	028	SMALL METAL CHAIN	0	0.0	1
III	304.	98	00	028	METAL FRAG	0	0.0	1
III	304.	98	00	038	LIMESTONE LUMP	0	0.0	1
III	304.	98	00	095	COAL	0	0.0	1
III	305.	01	01	001	PORCELAIN	0	0.0	1
III	305.	01	01	002	SLIPPED GRAY STONWARE	0	0.0	3
III	305.	01	01	003	BLK LEAD-GLZ EARTHENWARE	0	0.0	1
III	305.	01	01	003	CREAMWARE BASE	1762	0.0	1
III	305.	01	01	003	RED BASE, BLK GLZ	0	0.0	1
III	305.	01	01	003	RED BASE, BLK LEAD GLZ EXT	0	0.0	1
III	305.	01	01	004	ANNULAR WHITEWARE	1830	0.0	1
III	305.	01	01	004	FLOW BLUE WHITEWARE	1844	0.0	1
III	305.	01	01	004	GRN, OTHER-MOLDED EDGWARE	1830	0.0	1
III	305.	01	01	004	HOTELWARE, FINGER BOWL	1860	0.0	1
III	305.	01	02	004	PLAIN WHITEWARE	1820	0.0	2
III	305.	01	02	076	AMBER PHARMA. BOTTLE	1915	0.0	1
III	305.	01	02	078	BEER BOTTLE FRAGS	0	0.0	2
III	305.	01	02	076	CLEAR BOTTLE GLASS	0	0.0	5
III	305.	01	02	078	CLEAR GALLON GLASS JUG	0	0.0	4
III	305.	01	02	078	DECORATED BOTTLE GLASS	0	0.0	1

TTR	CXND	GR	CL	MAT	COMMENTS	TPB	WEIGHT	COUNT
III	305.	01	02	07B	GREEN BOTTLE GLASS FRAG	0	0.0	1
III	305.	01	02	07B	MILK GLASS	0	0.0	2
III	305.	02	01	017	MAMMAL BONES	0	0.0	3
III	305.	03	01	07B	REFRIDGE. PLATE GLASS	0	0.0	1
III	305.	03	01	07B	WINDOW GLASS	0	0.0	3
III	305.	03	02	02B	IRON NAIL	0	0.0	1
III	305.	03	06	072	PLASTER ON MORTAR	0	0.0	1
III	305.	04	03	001	PORCELAIN ELEC. FIXTURE	0	0.0	1
III	305.	09	11	001	PORCELAIN, INSULATOR?	0	0.0	1
III	305.	09	11	026	COPPER HARDWARE	0	0.0	1
III	305.	09	11	149	MISC. HARDWARE, ELEC.	0	0.0	13
III	305.	98	00	006	UNIDENT. WOOD FRAGS	0	0.0	6
III	305.	98	00	034	UNIDENT. LEAD	0	0.0	1
III	305.	98	00	121	BURNED ORGANIC MATERIAL	0	0.0	1
						****	870.3	575 Sum

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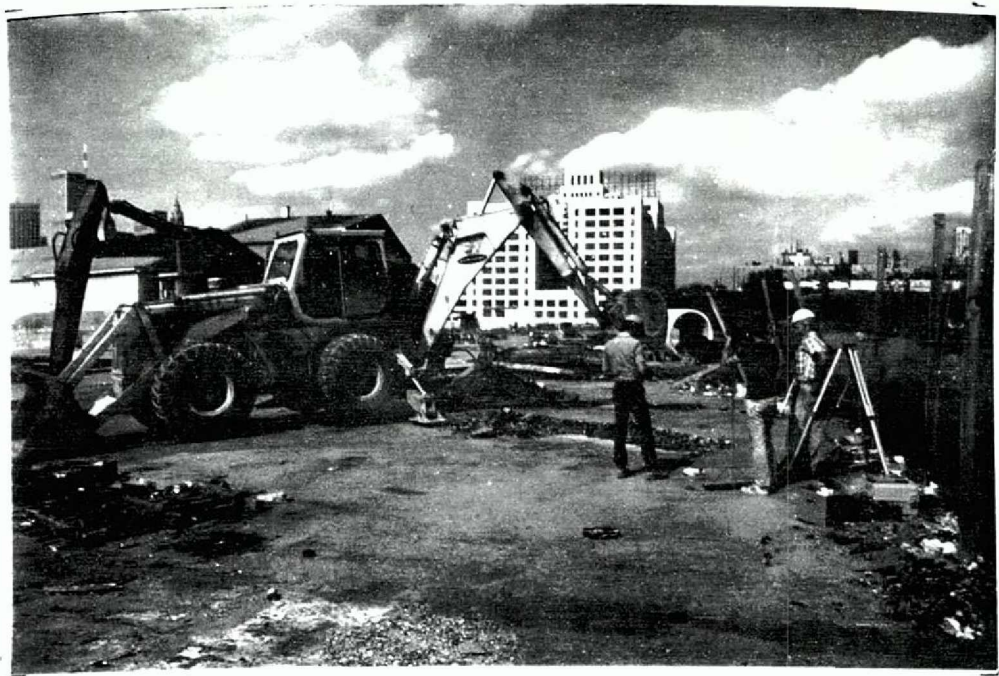


Plate I: Beginning Excavation of Test Trench II

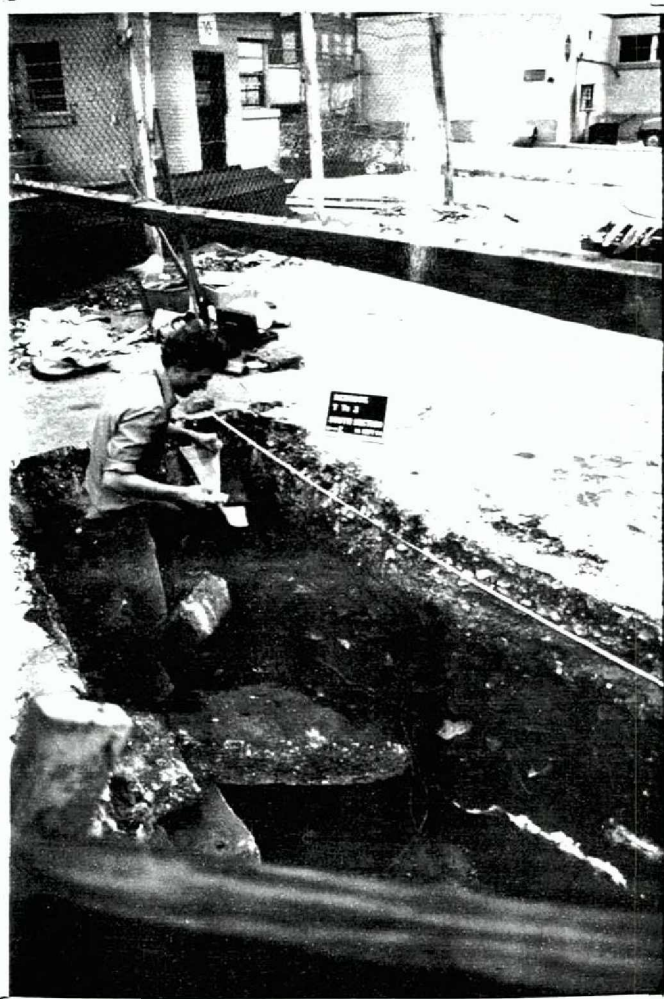


Plate II: Section Drawing in progress, Test Trench II

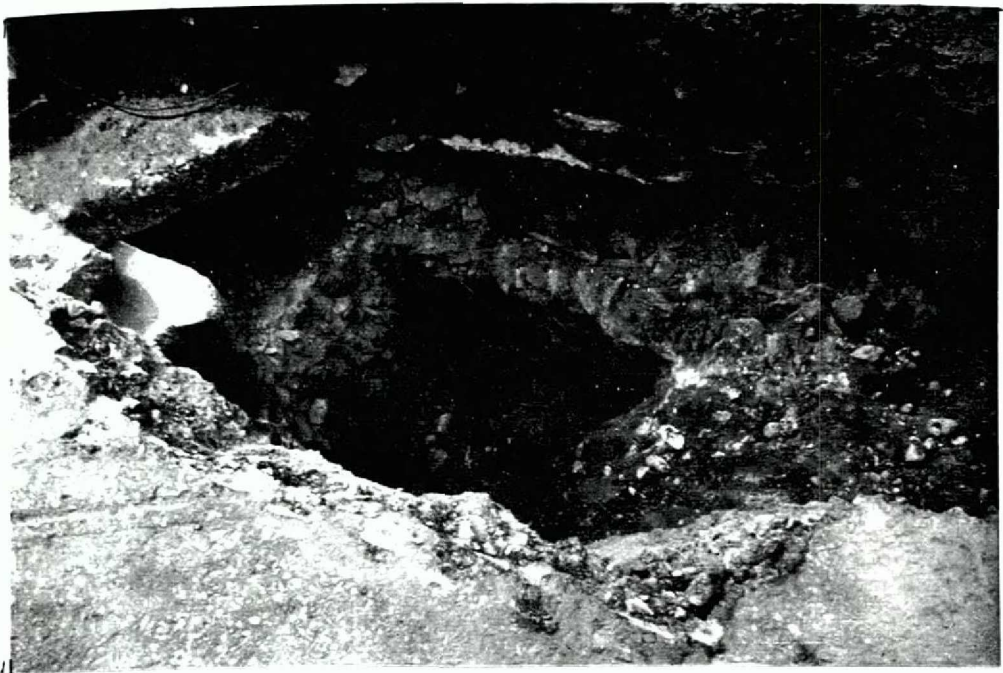


Plate IV: Detail of concrete floor, Cx. 206, & landfill below, Test Trench II.

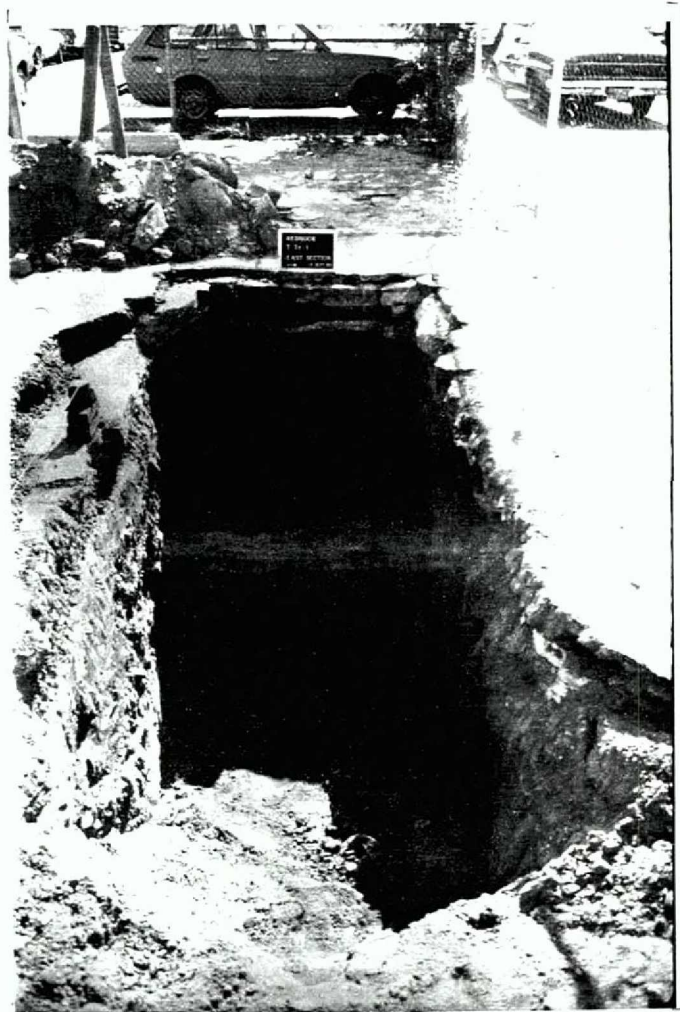


Plate III: East Section, Test Trench I.



Plate V: West Section, Test Trench III. Scale = 1 ft.

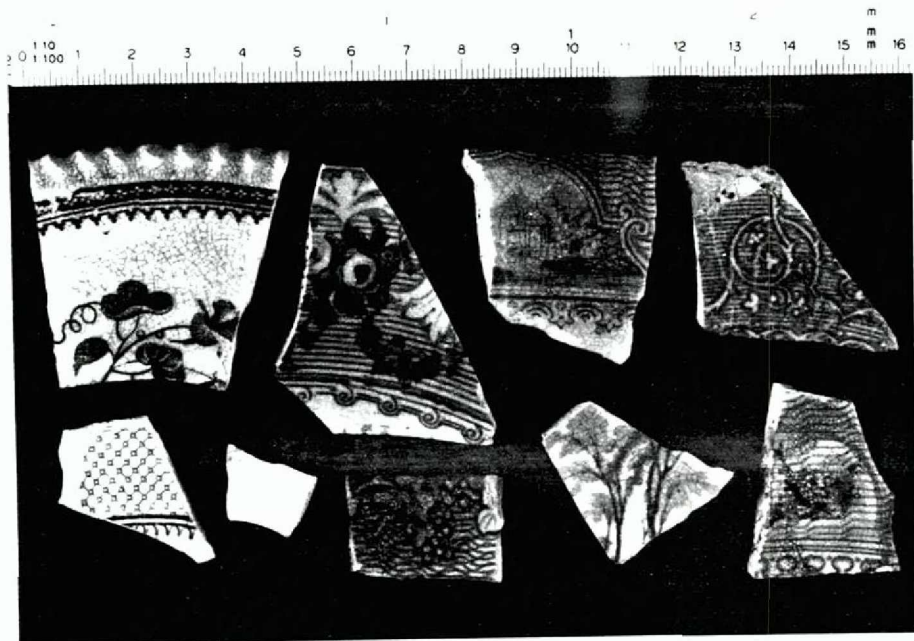


Plate VI: Cx. 104: Transfer printed thick whitewares with washed out colors. Post 1855 (Price 1979:31). Scale in cm.



Plate VII: Cx. 104: Bright green transfer printed thick whiteware. 1855-1900 (Price 1979:31). Scale in cm.

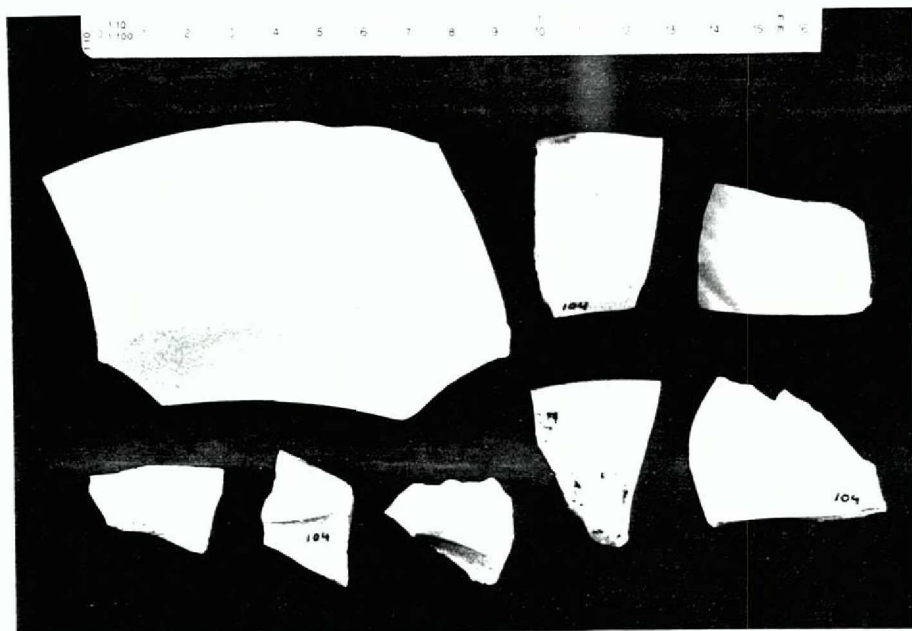


Plate VIII: Cx. 104: Plain thick whitewares with blue-grey cast. Post 1860 (contemporary with hotelware)(Price 1979:31). Scale in cm.

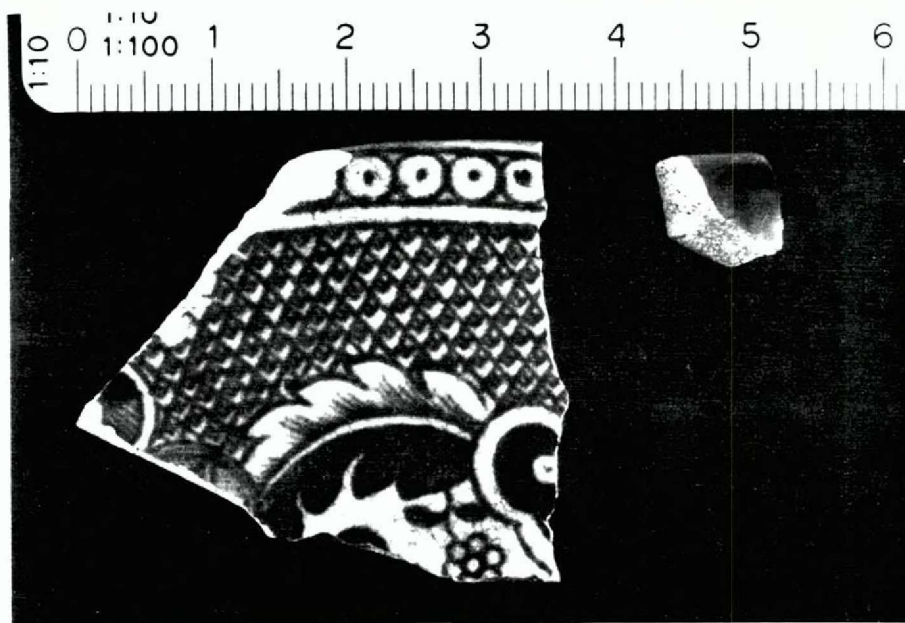


Plate IX: Cx. 104: Blue transfer printed thick whiteware.
1855-1900(Price 1979:31). Scale in cm.

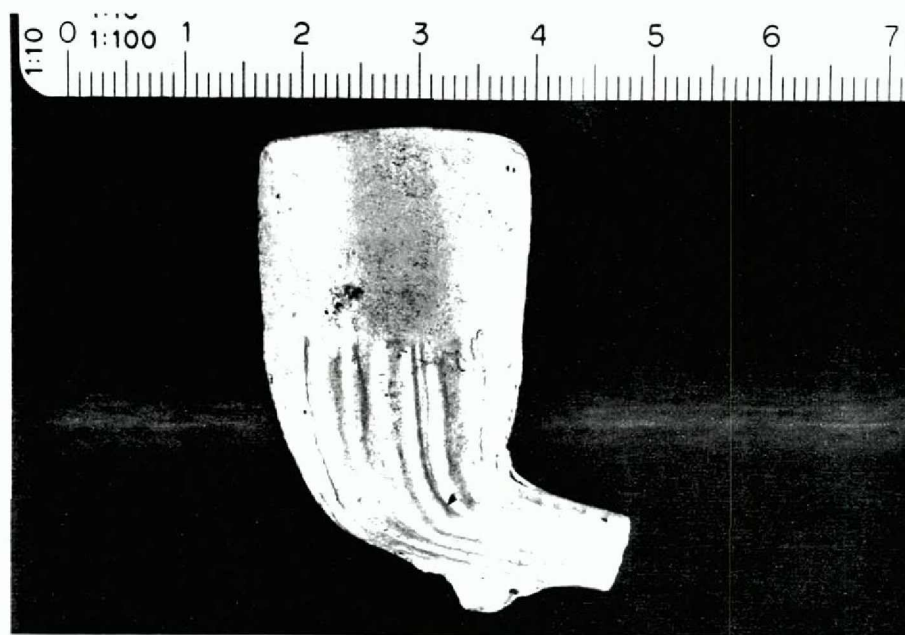


Plate X: Cx. 104: Fluted pipe bowl, type 1. 1825-1875.
(Alexander 1983:214, fig. 5). Scale in cm.



Plate XI: Cx. 104: Glass off-cut, industrial waste. Scale in cm.

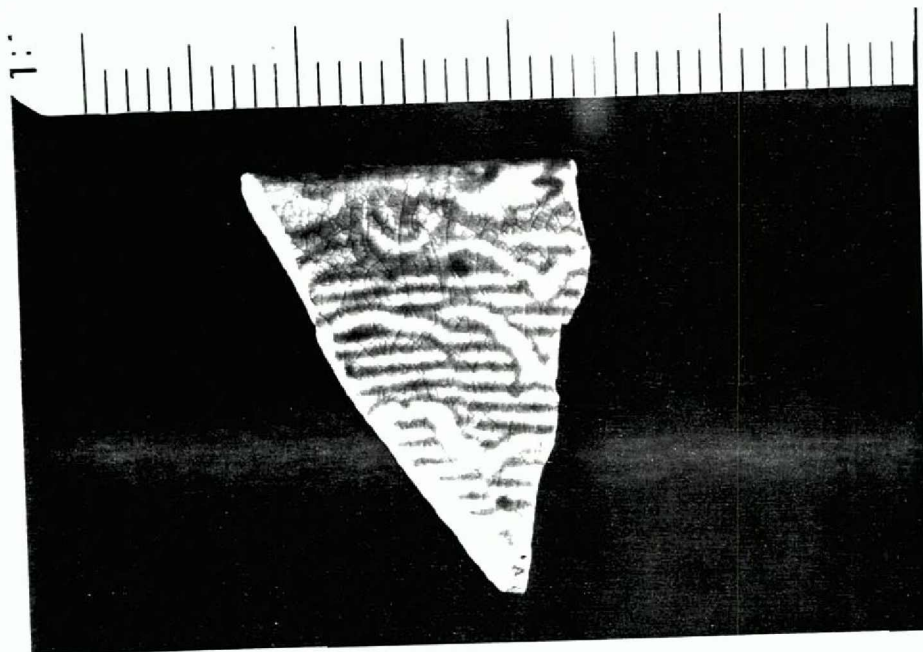


Plate XII: Cx. 105: Light blue transfer printed whiteware rim. 1830-1860 (Price 1979:31). Scale in cm.

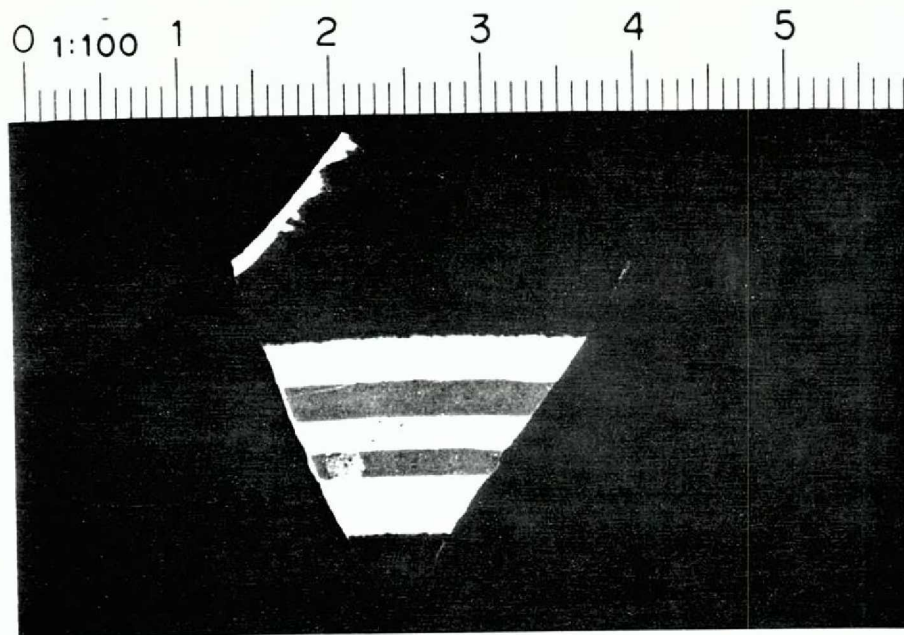


Plate XIII: Cx. 107: Annular whiteware with earthen band. Post 1830 (Price 1979:31). Scale in cm.

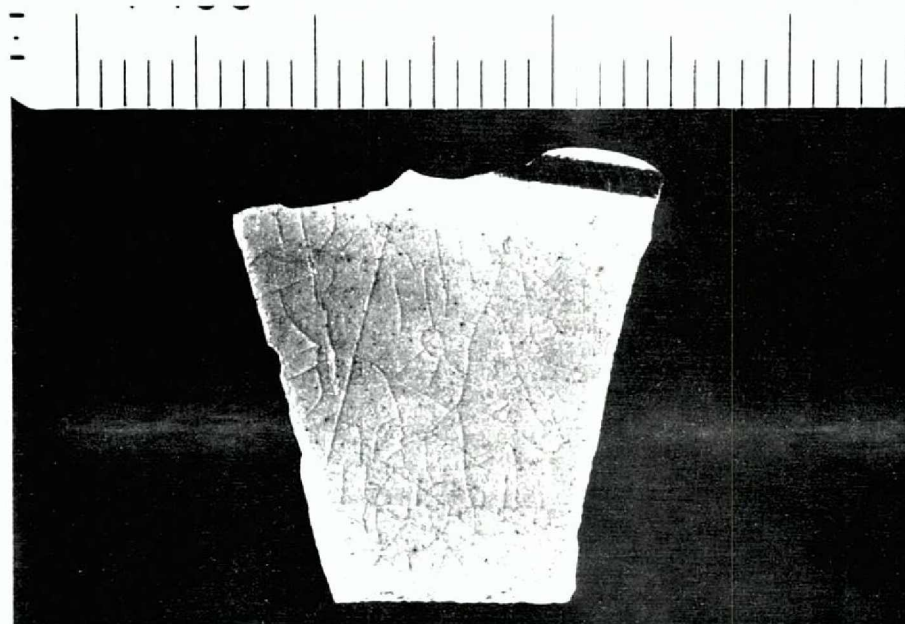


Plate XIV: Cx. 110: Annular whiteware 1830-1855 (Price 1979:31). Scale in cm.

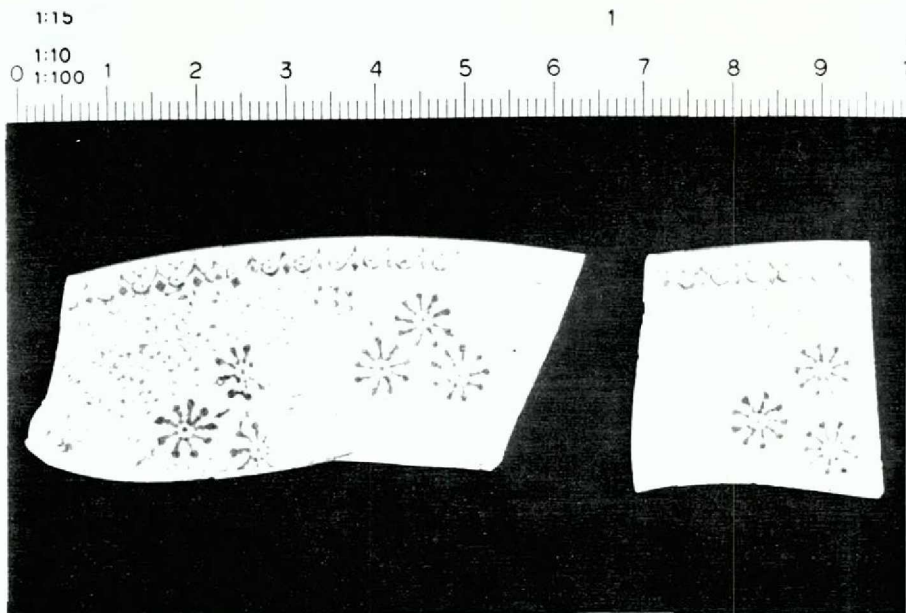


Plate XV: Cx. 110: Light blue transfer printed whiteware rim.
1830-1860 (Price 1979:31). Scale in cm.

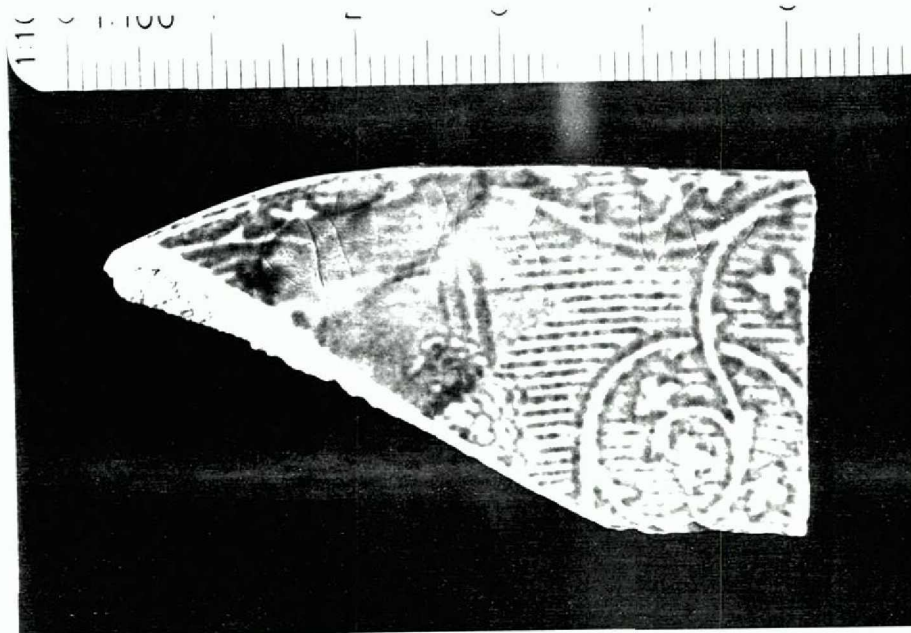


Plate XVI: Cx. 111: Light blue transfer printed whiteware rim.
1830-1860 (Price 1979:31). Scale in cm.

1.10
1.100 1 2 3 4 5 6 7 8 9 10 11

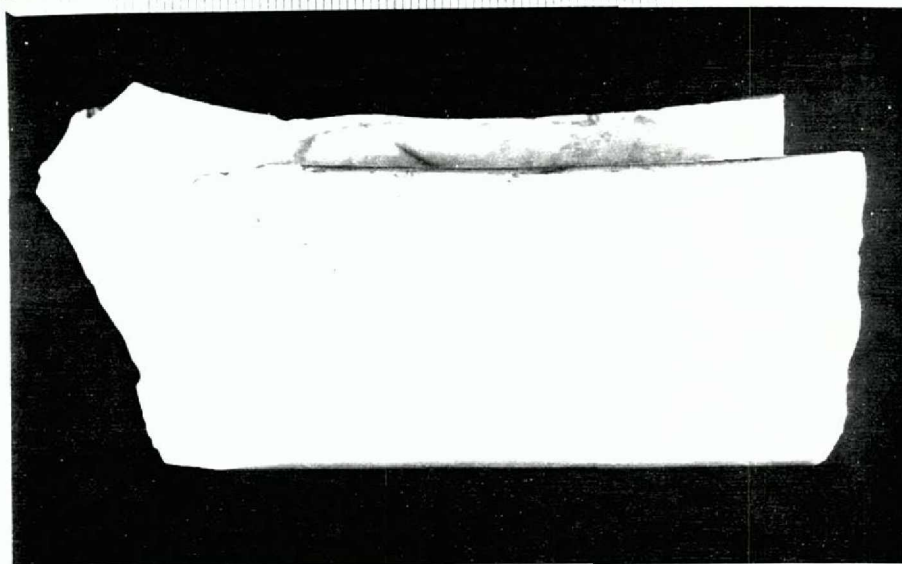


Plate XVII: Cx. 205: Porcelain toilet bowl fragment.
Scale in cm.



Plate XVIII: Cx. 207: Plain whiteware fragment. Scale in cm.



Plate XIX: Cx. 304: Light blue glass bottle base fragment with machine cut-off scar. Post 1904 (Miller & Sullivan 1981:15-16). Scale in cm.

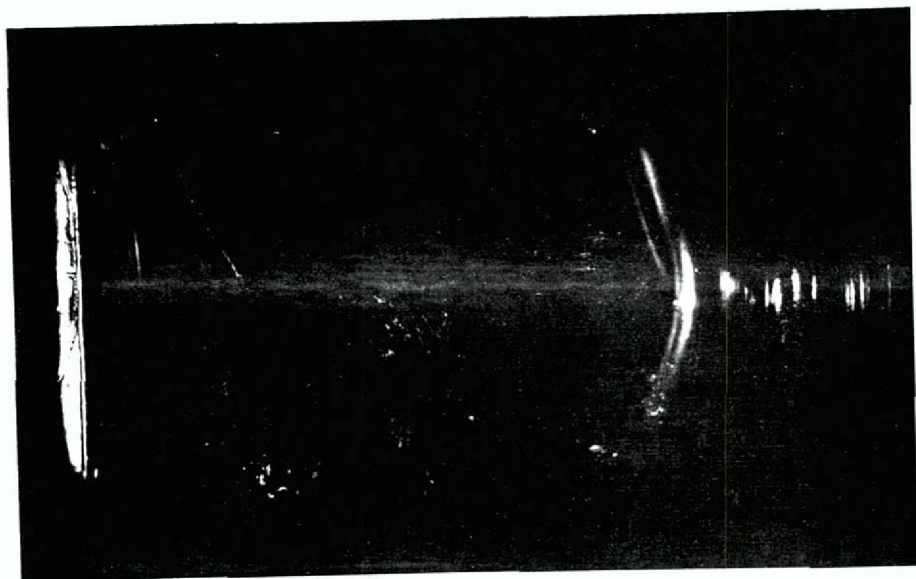


Plate XX: Cx. 305: Amber machine-made pharmaceutical bottle. Post 1915 (Toulouse 1972:373-75). Scale in cm.

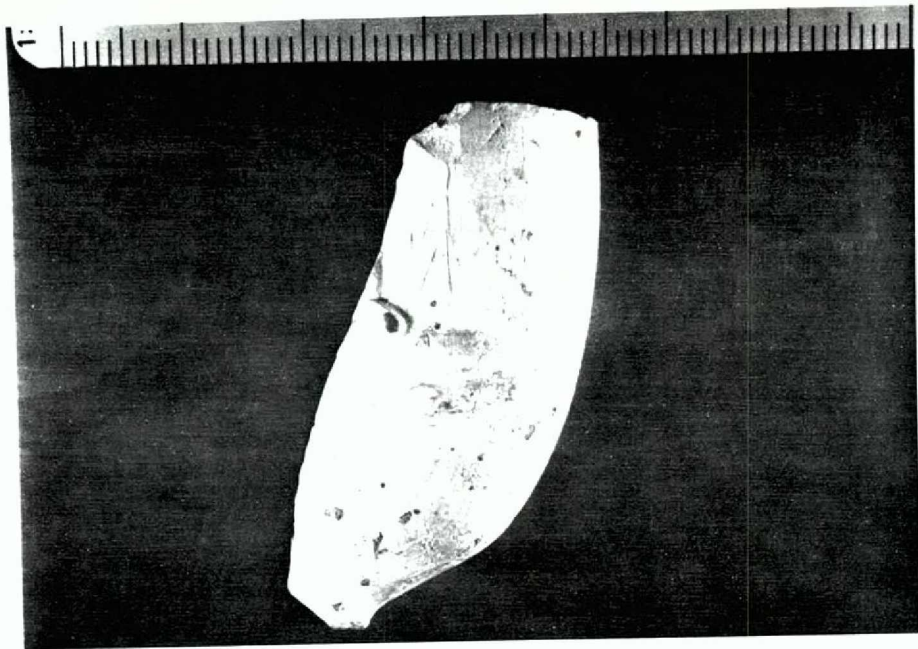


Plate XXI: Unstratified. Right side of pipe bowl decorated with a side wheel steamship. 19th century. Scale in cm.

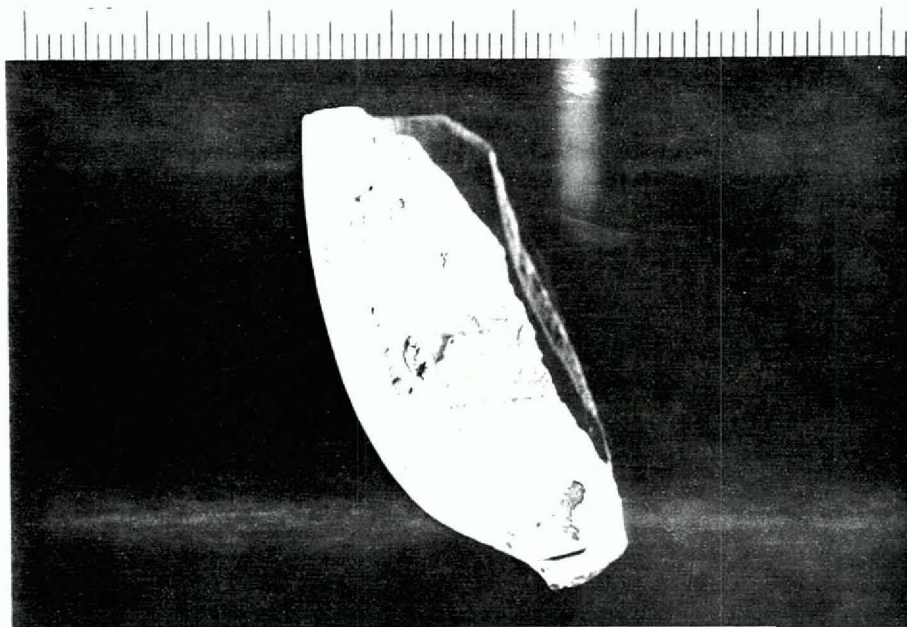


Plate XXII: Unstratified. Left side of pipe bowl with an early steam locomotive. 19th century. Scale in cm.