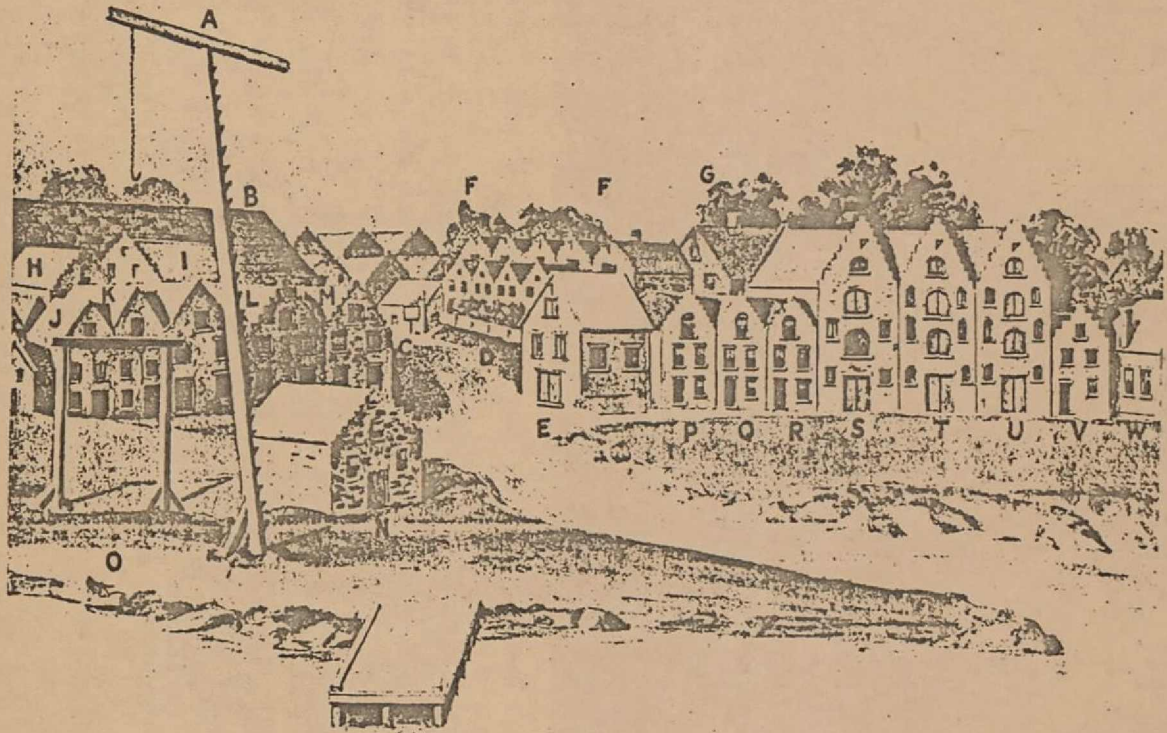


USF
24M
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Phase I Report & Mitigation

G

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Broad Street Plaza Site

205 Brandon Place
Atlanta, Georgia 30328
404 394-2969

December 12, 1983

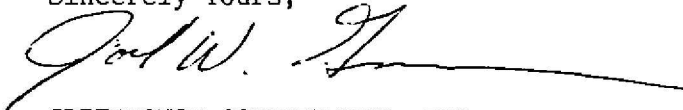
Dear Dr. ^aBougher;

As per our agreement, we are submitting this joint Phase I Report and Mitigation Proposal covering Lots 12-14. Within the week we will have a comparable report and data recovery recommendation ready for submission to your office for Area II of the Broad Street site covering the Eastern Lots 8 and 10.

We hope that this meets your needs and those of the Commission as a basis for expeditious review, and are prepared to meet at your convenience to discuss any issues or points of our proposal which may need to be addressed.

Please find enclosed, under separate cover, a breakdown of our task and labor projections based on current estimates.

Sincerely Yours,



GREENHOUSE CONSULTANTS, INC.
Joel W. Grossman, Ph.D.
Principal Investigator

PHASE I REPORT AND MITIGATION REPORT
FOR
THE BROAD STREET PLAZA SITE, N.Y., N.Y.
AREA I, LOTS 12-14

October 12, 1983

GREENHOUSE CONSULTANTS INCORPORATED
Proposal No. 32-83-0005

Prepared For:
Fox and Sowle Architects, P.C.

F

PLATE II

Aerial view, looking west, of the Block 10 site from the Fifth floor of the Bridge Pub Restaurant, showing the three areas of definition of the site.

Area I - Lots 12-14

Area II - Lots 8 and 10

Area III - All other as yet unexposed segments.

PLATE III

October 31, 1983 subsurface electromagnetic survey of Lot 10 with the EM-32 Flux Meter , with resolution of circa 30 feet below surface operated by Bruce Bevan of Geosite, Inc.

PLATE IV

View looking south of partially cleared Lot 14 showing 10' x 10' exposure for second test area which contained the 17th/18th century well/cistern. Note the four course basement floor construction and presence of continuous coal bins under the sidewalk of Whitehall Street.

PLATE V

Close-up of view of Test Area II through the basement floor looking East, showing 17th century well/cistern being recorded and depth of basement floors relative to former parking lot surface.

PLATE VI

Formal shot of Southern profile of first test unit in Lot 13, showing 6" thick deposit of historic refuse over sterile sand substrate and groundwater level at bottom of unit.

PLATE VII

Close-up view of partially excavated well/cistern within the intersection of the second subbasement test area in Lot 14.

PLATE VIII

CX:102.01 Lot 14

Description: Clay tobacco pipe bowl. 19th century Dutch.
Stroke burnished. Long narrow heel, rouletting
around bowl rim. Tobacco remains in bowl.
Possibly manufactured in Gouda.
Stem bore 6/64".

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill in top of brick
lined cistern/well.

Condition: Insoluble salts on surface.

PLATE IX

CX: 102.01 Lot 14

Description: Pipe bowl fragment, with goblet mark inside
a cartouche with radiating lines on base.
1667-1693 Gouda.
7/64 stem bore.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill in top of brick
lined cistern/well.

Condition: Excellent

PLATE X

CX: 102.01 Lot 14

Description: English brown salt-glazed stoneware tankard
rim of the "Fulham" type. Post-1690 on
American sites (Noël-Hume 1976: 112-114).

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot: 14
Unit N72 E43
Cx Secondary fill in top of brick
lined cistern/well

Condition: Excellent

PLATE XI

CX: 102.01 Lot 14

Description: Copper alloy hilt from a "small sword".
Shape parallels early 17th century hilt
recovered from Jamestown (Peterson 1956:
77). Also 18th century parallel shapes
in silver.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill deposit in top
of brick lined cistern/well

Condition: Encrustation of expanded copper corrosion
products. Solid metal core present. Micro-
scopic examination indicates that mechanical
removal of part of the carbonate encrustation
would reveal a dense cuprite layer at the
surface.

Treatment: Awaiting treatment with Benzotriazole
inhibitor after mechanical cleaning under
stereoscopic zoom microscope.

PLATE XII

CX: 102.01 Lot 14

Description: Octagonal wooden cutlery handle. Probably 18th century. Pointed tang shaft reaches near the butt end but does not break through.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill deposit in top of brick lined cistern/well.

Condition: Waterlogged

Treatment: Air drying was not attempted. Object has been kept saturated with water and thymol (fungicide) until water replacement treatment can be performed.

PLATE XIII

CX: 102.03 Lot 14

Description: Belly bowl with heel and partially rouletted rim, 5/64" bore diameter. Cartouche in raised circle on right side of bowl reads:
"I^TENK"
ND James Jenkins. Bristol. 1707-1739

Provenience:

| | |
|---------|----------------------|
| Block | 10, 100 Broad Street |
| NY Site | AO 61-01-1282 |
| Lot | 14 |
| Unit | N72 E43 |
| Cx | 102.03 |

Condition: Insoluble salts on surface

** See detail: close-up of Mark on next page.

PLATE XIV

CX: 102.03 Lot 14

Description: Buff bodied tin-glazed earthenware plate rim. Blue on light blue. Panelling on chinoiserie decoration suggests late 17th or early 18th century date. 4.7 cm x 4.6

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.03
Primary residue deposit inside
brick lined cistern.

Condition: Tin glaze chipped on rear of rim. Insoluble salts deposit on surface.

PLATE XV

CX: 102.03 Lot 14

Description: Wine bottle. Dark olive green, sand pontil, squat, probably English. Circa 1685-1715.. (Noel-Hume 1961:103).

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N73 E42
Cx 102.03
 Primary refuse deposit inside
 brick lined cistern/well.

Condition: Waterlogged when recovered. Devitrification layer present and extremely fragile.

Treatment: Removal from its microenvironment with minimum physical handling; cleaned with running water only, no tools; allowed to air dry slowly in an unheated environment; after one week of air drying, four applications of Acryloid B-72 in ethanol to consolidate the devitrification layer.

PLATE XVI

CX: 102.03 Lot 14

Description: "Silesian stem" wine glass, molded four sides, tear, lead glass. Circa 1705-1720, (Hughes 1956:73) or 1715 (Daris 1964:25).

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N73 E42
Cx 102.03
Primary refuse deposit inside cistern/well.

Condition: Stable. Some very fine pitting on the surface.

PLATE XVII

CX: 102.03 Lot 14

Description: Double tooth ivory comb. Common in the 17th and 18th centuries. Vertical pattern clearly visible in the photograph, were used to identify the material as elephant ivory.

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N72 E43
Cx 102.03
Primary refuse deposit inside
brick lined cistern/well.

Condition: Stable. Broken into 2 fragments which mend. Ivory stained dark brown. Waterlogged when recovered.

Treatment: Slow air drying has resulted in no measurable shrinkage and no checking. Deformation of one small tooth existed when the object was wet.

PLATE XVIII

CX: 102.03 Lot 14

Description: Pipeclay wig curler. Distinctive 18th century artifact type. Used at home as well as in the barber's and wigmaker's shops.

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N72 E43
Cx 102.03
Primary refuse deposit inside
brick lined cistern/well.

Condition: Stable. Insoluble salts on surface.

PLATE XIX

CX: 102.04 Lot 14

Description: Inverted baluster stem wine glass, with tear
lead glass, Circa 1690-1710, (Noël-Hume
1976:190-191).

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N63 E42
Cx 102.04

Interface between primary refuse
deposit and clay liner inside
brick lined cistern/well.

Condition: Stable. Some surface abrasion. Pitting
at the lower waist of the stem.

PLATE XX

CX: 102.04 Lot 14

Description: Tin-glazed fireplace/wall skirting tile with central figure in manganese decoration. Probably Dutch. Size of figure and proportion of undecorated area suggests late 17th century date.

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N72 E43
Cx 102.04
Interface between primary and refuse deposit and clay liner at bottom of brick lined cistern/well.

Condition: Excellent. Mortar present on top edge. Cleaned with ORVUS in tap water plus final water baths to remove detergent residues.

PLATE XXI

CX: 102.04 Lot 14

Description: Pewter tankard with banded repousse designs. 17th Century. Ceramic drinking vessels were often patterned after existing metal vessel types. This is a rare example of the metal prototype.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.04
Interface with primary refuse deposit and clay liner inside brick lined cistern/well.

Condition: Fragile. Completely mineralized.

Treatment: Expanded lead carbonates were removed while the object was wet. Some encrustation remains, and will have to be removed mechanically before stabilization by wax impregnation.

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and Relative Data Potential of Site3

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APPENDICES

- I. Lot and Unit Artifact Summaries
Lots 12-14
- II. PLATES

INTRODUCTION

The purpose of this preliminary evaluation report and mitigation proposal is to assess the relative integrity, historical sensitivity and data potential of the Block 10 test areas evaluated as of the first week of December, 1983. As will be detailed below, archeological testing phase has clearly documented the survival of 17th century occupation surfaces and destruction debris below the recent 19th century basement floors. The testing phase has permitted the definition of three areas within the six lot sites, the three western lots next to Whitehall Street, (Lots 12, 13 and 14) where the 19th century basements were relatively deep leaving only truncated features and architectural elements intact. The two eastern lots, (8 and 10) designated as Area II, next to the Clearing House, had higher basements which left the early 17th century Dutch remains undisturbed. And, finally, all as yet uncleaned areas, (Lot 11, the trailer area and the equipment ramp) ~~which~~ remain undefined as to their historic and archeological sensitivity. This first report and mitigation proposal focuses only on the results and recommendations for Area I.

Based on the insights provided by the one month testing proposal, several recommendations are herein proposed to permit the documentation and rescue data recovery of the identified historic remains for Area I (Lots 12-14), within a restricted time frame of no more than two weeks. These recommendations will be designed to allow recovery of the data which will effectively encompass the chronological and spatial diversity of the identified and projected buried historic remains. This approach will identify the historic use of space, structural dimensions and alignments, architectural details and techniques and in general what can be subsumed under the category of culturally relevant historic uses and perceptions of space as manifested in the physical remains and their distribution across surfaces of this original shoreline block of 17th century New York.

*These time
figures are
contradicted
on p. 16*

This preliminary report includes four primary sections. The first segment of the report will briefly recap the progress and initial insights of the four week testing program for the six lot site as a whole. The second section will only focus on the work and results of the three western lots (Area I, Lots 12-14), adjacent to Whitehall Street.

The purpose of this section is to describe the range of variation of the architectural and activity related features within each lot, the location and rationale for the placement of each five by five or five by ten foot controlled test unit or units within each lot tested, and where available data permits, the general material and chronological diversity of the historic materials recovered with an emphasis on the T.P.Q., (Terminus Post Quem, or latest documented date of manufacture) for each diagnostic artifact category from each stratum, including ceramics, glass and dateable pipe bowl and stem elements.

The third segment of this proposal will recap the preservation status of the waterlogged artifacts encountered to date as a basis for projecting the future stabilization needs of the artifacts recovered during mitigation.

Finally, the fourth segment of this report and proposal will detail the projected data recovery recommendations, strategy, area coverage, labor needs and finally, based on the quantified artifact yields to date, an indication of the number and storage requirements of the projection for the Area I mitigation phase.

The four week testing program which ended on December 7, 1983 provides a controlled basis for characterizing different lot areas of the surviving historic waterfront block at three different levels, each reflecting stratigraphic integrity and information potential as well as accessibility during the testing phase. At the same time, the differences in past impacts and differential levels of information potential within each of these site areas will, to a large extent, also determine the timing and data recovery strategy being proposed.

The results to date contrast sharply with the expected depths of 19th century and twentieth century basements suggested by the available but fragmentary documentary record. While preliminary documentary work indicated considerable variation in the 19th and 20th century basement depths, the exposed remains reflected a radically different situation. Instead, sometime in this period five of the six basements were cleared (excluding the uncleared Lot 11) were cleared throughout most of their lengths, (in studied areas), to uniform depths of between 6 and 9 feet below the sloping modern grade of the former parking lot. Although generally deeper and more uniform in depth than indicated by the documents, this difference of up to 2 feet appears to have determined the relative survival and integrity of many of the earlier remains throughout the site.

This consistent difference in basement depths between the eastern and western ends of the site provides a basis for dividing the proposed mitigation plan into three phases and, at the same time, three levels of intensity based on the information available to date. As indicated on the schematic site plan, (Fig.), Area I consists of the three lots adjacent to Whitehall Street, (lots 14, 13 and 12) of uniformly deep 19th century basement depths. Area II, made up of lots with 8' basements, defines the well preserved early historic remains defined in lots 8 and 10 next to the Clearing House. Area III incorporates all of the as yet unexposed portions of the site, including Lot 11 between Areas I and II, the trailer area along Bridge Street, and the unexposed ca. 15 ft. wide heavy equipment access ramp running along Pearl Street.

Area I: 4200 sq. ft. - 27% of Total Area.

The three historic lots adjacent to Whitehall Street, (lots 14, 13 and 12) were consistently 0.9 feet deeper than the basement floors exposed at the opposite end of the site in lots 8 and 10, upper surface, (lot 14 was at 1.08 above Manhattan datum. Lot 8 at 1.96 above Manhattan datum). This contrast was enhanced by consistent differences in the thickness of the floors themselves. In lots 12-14, the test cuts consistently revealed a ca. 1 foot thick 4 course series of brick and cement floor deposits. However, the higher basement floors in Lots 8 and 10 were, in contrast, composed of only one to two courses of brick, topped by a layer of blacktop in Lot 8. Taken together, these two patterns at either end of the project site mean that the western basement floors intruded into the earlier deposits nearly 1.8 feet deeper than was the case at the opposite, Clearing House end of the block. These different patterns of basement depth determined the relative survival of the earlier remains identified throughout the site...

As the summary of the results detailed above, Area I, (Lots 12, 13 and 14) suffered greater levels of disturbance from subsequent 19th century intrusions into the 17th and 18th century remains. The six controlled and deep tests within these three lots, however, have consistently documented the survival of architectural elements, truncated pits, and cisterns and/or wells below the thick brick, and cement basement floors. Wall alignments are still identifiable, large stone slabs, possibly relating to earlier building elements remain in place, and the one truncated well, (and/or cistern) identified in the limited area tested contained 3314 late 17th and early 18th century artifacts and organic remains. Thus, although partially disturbed, the surviving remains warrant expanded area exposure to identify overall patterns and interrelationships of the architectural remains and truncated features.

Area II: (2700 sq. ft.) 22% of Total Area

The second area within the six lots of Block 10 consists of the identified remains under the higher and shallower basement floors of lots 8 and 10. Immediately under the brick floors in both lots, the four 5x10 foot test units revealed a dense mass of heavy stone destruction debris.

As the overhead photographs document, not only does this upper destruction zone contain diagnostic artifacts, and information on construction materials and technology, but structural details, building outlines and spacial patterns which are clearly and accurately discernable from above, but not often recognizable on the ground.

In each of the test units investigated, once this rubble and destruction stratum was removed, the field crews came down on what appear to be undisturbed surfaces and features dating to the 17th and 18th centuries. In both lots these surfaces varied between cobble and plaster floors and surfaces, of undefined function (given the limited area exposure, it is not now possible to identify interior versus exterior surfaces). Within lot 10 the first test unit revealed a brick lined drain running under the walls between the two lots, bounded on south (Pearl Street) side by cobbles and by a plaster floor on a surface of stone slabs on the opposite, Bridge Street, side. On this surface in Lot 10 was a 17th century pipe stem, (1630-1700), and a late 17th to early 18th century yellow slip decorated "combware".

In the adjacent 5x10 foot unit in lot 8, (Fig. 1), the test cut revealed a similar pattern of heavy stone destruction debris, and beneath this a fragmentary cobble surface overlying a thick oil impregnated lower stratum containing a variety of diagnostic 17th and 18th century artifacts. In addition to an early ca. 1640 Dutch pipe bowl, this lower building deposit contained a well preserved thimble and Dutch copper coin with the date of 1590 clearly visible. Also recovered was an early press molded "raspberry prunt" diagnostic of 17th century table glass.

were there
any 19th c.
materials
here?

In the northern end of lot 8, next to both Bridge Street and the Clearing House, a 5x10 foot test unit revealed the same upper stratum of stone rubble with three stone alignments visible in the overhead photographs.

Beneath this upper deposit, two deeper exposures under the rubble revealed a thin deposit of refuse overlying an off-white silt stratum on the south side of one wall. A three foot deep cut indicated that the substrate was sterile below. On the opposite side of this "wall" the stratigraphic situation was different. Here, beneath a ca. 5 inch layer of historic refuse, the field crew exposed and defined the bottom of a plaster cistern within a thin arc of brick which ran under the stone "wall" alignments of the rubble. On the top of this plaster base of the cistern, the crew recovered a multicolored "Venetian" glass bead similar to 17th century examples recovered from a contact period burial site in Rhode Island.

Based on these insights, it is apparent that the exposed areas of lots 8 and 10 contain at least two distinct strata, one dating to and reflecting the 17th century occupation surfaces of the original Dutch settlement in Block 10, and above this a distinctive later historic stratum of apparently 18th century destruction and architectural remains. The tests to date further indicate that in addition to being characterized by a demonstrably high degree of stratigraphic integrity with vertical and horizontal patterning of temporal and spacial significance, these historic deposits are vertically confined to a ca. 2 foot thick zone of study in lots 8 and 10. Once opened, of course, intrusive pit may extend into substrate below.

Area III: (6100 sq. ft.) 50% of Total Area

Given its position between the two areas, the uncleared area of Lot 11 remains undefined in terms of the depths of recent basement intrusions. Until determined, its information potential and the relative stratigraphic integrity of any materials which may be present, remains undefined. However, given the uniform depths of basement floors and the high degree of integrity encountered in the buried historic strata in the central portions of lots 8 and 10, it is reasonable to project that the front and rear sectors of these lots under the dirt ramps along Pearl and under the trailer areas contain similar in situ buried 17th and 18th century historic deposits.

LOT SUMMARIES: TEST PROCEDURES & RESULTS

This section covers only what has been designated as Area 1 which includes Lots 14, 13, and 12. For each, this brief descriptive section will summarize the number of units excavated in the testing phase, the location and orientation of each 5x5 or 5x10 test unit, the reasons for its placement, the number of natural deposits or "contexts" excavated as natural stratigraphic units within each grid unit, a brief and preliminary description of the deposits encountered, and finally mention of any key diagnostic artifacts recovered.

Throughout this and all forthcoming reports, the primary stratigraphic unit will be referred to as the "Context". Taken from British stratigraphic terminology, the "context" reflects the primary unit of natural stratigraphy, a temporal and chronological unit of contemporaneity, as well as the physical clustering of cultural materials and artifacts. Each context can reflect either a culturally defined irregular feature, such as a pit, posthole, or section of a builder's trench reflecting one activity, or a single unit of deposition within or protruding into a particular stratum or surface area. Or, as a minimal unit of spatial control, the maximal arbitrary area of a single grid unit within the vertical confines of a single stratum or deposit. Individual artifacts may be pinpointed with the precise X, Y, Z coordinates by means of electronic transit within a particular context, but as an element itself, the artifact would not constitute or be assigned a distinct context number.

Unless otherwise stipulated, each unit described will refer to the basic grid unit measuring 5 feet by 5 feet. In actual practice, each sector of each lot was testing with a combined rectangular test unit measuring generally 5 by 10 feet, consisting of two adjacent grid units. Because of time constraints, as was the case towards the end of the testing program in lots 13 and 12, these long rectangular excavation units were slimmed down to 2 by 10 foot dimensions. All density and artifact yield projections are based on calculations of artifact density per 5x5 foot unit.

LOT 14

Coverage for Lot 14 consisted of two controlled hand excavated grid units taken down to sterile, the total excavation of a late 17th -early 18th well or cistern, a deep backhoe cut perpendicular to Whitehall Street, several limited area exposures to define the spacial characteristics of encountered features, and finally a partial cross section profile, cut across what appears to be a refuse filled and artifact rich 19th century builders or robbers trench, also roughly parallel to Whitehall Street.

Lot 14, Unit 1 (N35-40, E40)

This two square, rectangular test unit was oriented on the north-south axis of the grid, and was positioned to cross the approximate location of the rear wall area of the 17th century structure indicated on this lot in contemporary map records.

The purpose of this approach was to attempt to first identify any ⁷ structural elements present, and if possible, provide a basis for characterizing the interior versus the exterior surfaces which may have survived in association with any building remains.

In both 5 by 5 foot units, three vertically superimposed contexts or natural stratigraphic units could be defined. The historic deposit identified immediately below the lowest course of the 19th century basement rubble scatter appears to have been associated with the construction of the late 19th century basements. During the shovel clearing process, two diagnostic artifacts were recovered which help to date the deposition of this 19th century deposit. One consisted of a bottle base fragment dateable to post-1857, based on the use of "snap case" versus pontil rod in production. The second was a post-1832 Dutch pipe bowl (not illustrated). The two contexts from the adjacent grid units contained 144 artifacts. These included a post-1650 pipe stem, a post-1820 sherd of white earthenware, and a sherd fragment of Mottled buffware dating to a post-1695 and four early 17th century yellow bricks. The latest materials clearly indicate that this mixed deposit was formed as a unit in the 19th century with earlier materials mixed in.

The second deposit consisted of a thin layer of off white to green silty sediment that contained no artifacts (Context 111). Below this thin deposit was a robber trench intruding into the sterile sandy sediment below. This feature contained mostly construction related materials, but also a fragment of rooftile, and also a post-1820 white earthenware sherd. Finally, below this was the sandy reddish brown substrate which, except for a small number of artifacts pushed into it from above, contained no in situ cultural materials. Flooding and emergency measures with the heavy machinery prevented the completion of this unit with deeper testing and the integrity of this test was lost before work began again. Aside from the evidence of the 19th century robbers trench, no concrete evidence for either architectural remains or old occupation surfaces could be defined. As in other sections of this western end of the site known as Area 1, this test suggested that the depth of the basements (Upper Surface, 1.08 ft.) had truncated both the surfaces and upper elements of any features formerly present.

Unit 2 - N72, E43 *costo*

This single 5 by 5 foot unit was positioned in order to permit the characterization of the rear and possibly "backyard" area of Lot 14. The uppermost context (100) contained a mixture of 19th and 20th century rubble containing asphalt, nails and construction debris. Of the 98 artifacts identified, in addition to the modern debris, a post-1680 pipe stem was recovered from this obviously disturbed context. Immediately below this was a thin lens designated Context 101 with nothing in it.

*So why
test
here in
mitigation?*

However, below these modern deposits the field crew encountered a curved line of brick, immediately identified as an arc segment of a truncated well or cistern measuring 2.5 feet in diameter. This feature contained four distinguishable internal and natural stratigraphic breaks and strata designated 102.01-.04. Uppermost of these was 102.01, a secondary fill deposit containing a mixture of 17th through 19th century items, including: a post-1671 British brown salt-glazed tankard rim fragment; and a post-1660 Tippet I pipe bowl. Despite the early T.P.Q. dates of the majority of the artifacts, from one 19th century Dutch pipe bowl (Plate 102.01 recorded from this upper level of the well. The mixture of construction related materials suggests that this assemblage was deposited in the well at a different time and later than the early materials encountered below. In contrast, to the earlier and deeper deposits below, this upper fill deposit contained nearly twice the density of construction related materials, 279 versus 137, of the next most numerous deposit. And, in terms of relative number of organic food remains, the deeper deposits contained over twice the number of ethnobotanical and ethnozoological specimens. This shift was accompanied with a parallel shift in the number of pipe fragments, 139 in the lower deposit (102.03) versus only 51 fragments in this uppermost context. Clearly, there was a sharp difference between the upper and lower deposits within the well, probably chronological in nature, but clearly indicated by differences in composition of the different fill levels.

Below this fill was a non-physical interface of mixed materials from both upper and lower contexts (102.02) and below this the primary refuse deposit of the well. This context (102.03) contained 1510 artifacts, including 112 diagnostic pipe bowls and stems; 22 sherds including the elements of one near complete, finely made lead glazed green slipped earthenware plate (reconstructed); and 17 wine glass and bottle fragments..

Dateable artifacts included pipes clustering between 1675 and 1717. The ceramics recovered consisted predominantly of tin-glazed earthenware, both English and Dutch delft, dating to the late 17th and early 18th centuries. The deposit included a whole British wine bottle dating between 1685 and 1715; and two wine glasses between 1700-1740, (see photographic captions of diagnostic artifacts for references). Finally, this well contained a double tooth ivory comb, 2 whole copper alloy 17th century spoons, a pewter tankard with banded repousse designs; a copper alloy sword hilt dating to the 17th century which is a close parallel to similar examples from Jamestown, and a wooded cutlery handle, and two pipe clay wig curlers.

As an isolated unit of stratigraphic association and relative continuity, the contents of this well clearly document the survival in this end of the site of truncated natural and sterile strata below.

Other Features in Lot 14:

*Have LDC
person locate
artifacts*

In the northern end of Lot 14, surface stripping partially exposed a rectangular red brick square platform of as yet ill-defined dimensions and function. However, this feature was found associated with a metal pipe which suggested relatively modern construction and possible use as an elevator shaft base or other element of modern row houses.

In the center of Lot 14, next to Whitehall Street, two tests, one a surface clearing and the other a deep backhoe cut both crosscut what appears to be an artifact-rich, filled robbers or foundation trench. The deep cut went to a depth of five feet below the subbasement surface. This cut hit ground water at three feet and revealed that beneath a thin 3-6 inch lense of greenish off-white silt, was a homogeneous deposit of culturally sterile reddish-brown sandy sediment. The intrusive feature cut into this with a sloping wall on its eastern side, and a near vertical cut on the western, Whitehall ST. side, of the trench. This trench contained large numbers of as yet unwashed, well-preserved food remains, ceramics, bricks, stone slabs, and related construction materials. One diagnostic "Indian Head" two element clay glazed pipe, dating to the 1830's, made to be used with a reed stem, was recovered and processed. The termination of the 20 day testing phase prevented the further examination, of this historic feature, However, several points are clear.

*Is this
a
surprise?*

Both in this lot and others examined, when architectural elements of clear pre-19th century date have been identified, all are at a slightly different orientation than documented 19th and 20th century modern lot and wall alignments. This shift in the orientation is consistently 5-10 degrees off angle from the most recent alignments, and appears to correspond with the original 17th street and lot orientations which seem to have shifted through time, especially after the 18th century. This pattern of distinct alignments is evident with the early stone slabs identified in lots 12 and 13, as well as with the rectangular building outline identified in lot 10, the former property of the British Customs House, and before that the location of the warehouse of the Dutch West India Company.

Finally, three deep test cuts served to 1) characterize the nature of the vertical stratigraphy and 2) to identify the presence or absence of either contact period or prehistoric cultural remains below the 17th century historic strata.

No prehistoric materials were found within any of the deep sand or clay deposits underlying the 17th century historic strata.

Three rectangular ten foot long controlled test units were excavated together with several shovel exposure areas to identify the vertical stratigraphy and subsurface architectural elements.

The first unit was a 5x10 foot rectangular unit positioned parallel to the first test unit in Lot 14, but five feet further north, at N40-45, E55. This 50 square foot unit contained a total of 236 historic artifacts, in five vertically superimposed contexts. Of these the last two, extending down to groundwater at five feet below the subsurface basement, were culturally sterile and devoid of either prehistoric or historic artifacts. The historic deposits (160-163) were confined to the upper foot of the unit. The uppermost deposit (160) consisted of a thin lense 2-3 in. of mixed modern and 19th century construction derived materials. Excavated after several floods and heavy equipment operations in the area, this deposit also contained mixed in pieces of tar paper, leaves and plastic. It was clearly disturbed.

Below a thin non-physical interface (c. 162), was the same off-white to greenish silt identified throughout the western lots. This historic deposit (c.163) contained a high proportion of slate fragments and several dateable and diagnostic artifacts including a fragment of post-1820 white ware. No glass or pipes were recovered. Below this deposit was the three strata or layers of sterile reddish sand extending to groundwater, (Plate VI).

Units 2 and 3, (N70, E50, N65, E60)

Towards the northern "rear" end of lots 12 and 13, two long 10 by 2 foot control units were layed out and partially excavated in an east-west orientation across the thin axis of lots 12 and 13. Although adjacent, and end-to-end, these two units were offset in an elongated checkerboard so as to provide a continuous 20 foot profile section. This pattern both gave area exposure with limited effort and permitted the section to cross the apparently 19th century brick wall alignment which formally divided the two lots prior to the most recent renovations to this area which joined them into one large lot.

Both units contained the same thin deposits as identified in the Pearl Street end of the lot but with significant differences in the contents and density of artifacts recovered. The western end of unit N70E50 contained three white pine planks set into the off-white silt. Associated with these as yet ill-defined but well preserved planks were fragments of white salt-glazed stoneware dating to between 1720-1805, and 2 sherds of creamware dating to between 1762 and 1820.

The second 2x10 east-west unit contained a total of 7 distinct contexts (5 containing diagnostic artifacts) and reflected the complexity of the brick wall construction and associated builders trench. A total of 136 artifacts were recovered, but none were dateable. Most of the material consisted of a mixture of recent intrusive construction related materials (brick, slate, mortar fragment as well as fragments of asphalt and linoleum from context 171, which was a gravel pit cut from above.

So why
test
here?

In addition to the unit related materials discussed above, shovel exposures and backhoe exposures, mandated by the landmarks staff, helped to define the further extent and diversity of the spatially diverse architectural features encountered in lots 12 and 13. Several as yet ill-defined stone slabs were exposed which had a different orientation relative to the more recent lot and street alignments. During this exposure process, a large fragment of fireplace tile with a manganese decorated central figure of a man surrounded by a rondel, (two concentric circles) diagnostic of 18th century fireplace or wall skirting tile, was recovered on the surface of lot 13.

From the testing to date in this sector of the site it is clear that this area contains both a range of in situ architectural elements with lineal alignments and material differences permitting the definition of two groups. The final group of features consisted of brick wall segments suggestive of 19th century lot and block orientations. The second group of architectural features consisted of individual elements, stone elements, and large slabs, which have a different orientation and are suggestive of earlier 17th century construction and architectural elements, both surrounded by a thin matrix of mixed subbasement surface debris. In addition, all three lots demonstrated the survival of truncated subsurface historic features, some dating to the late 17th and early 18th century. Finally, the tabulation and quantification of the relative artifact densities through space within these lots has permitted the demonstration of order of magnitude contrasts in the density and composition of artifact yields between the front and rear portions of the lot areas examined.

How about
someone
from LPC
looking at
these
mystery
stone slabs?

I don't think these funds
suggest a 50% sample.
There should be some
further testing but
I'm not convinced by
this report that extensive
testing is needed.

lot 12+13
only artifacts
from late
1700's
are
assoc.
w/ white planks
of the one fireplace
tile near the stone
slabs.

lot 14
only pre 19th c
fea to the cistern

ARTIFACT PROCESSING

Water table fluctuation throughout the depth levels from which cultural materials were recorded was a major factor in designing the procedures developed for artifact handling. All materials were water degraded to some degree. Metals recovered from Area 1 were covered with heavy encrustations of corrosion products and in some cases were mineralized throughout as a result of exposure to alternating wet/damp conditions. The condition of organic materials was variable and will be discussed in more detail below. The presence of severely water degraded glass necessitated the implementation of specific treatment (consolidation) procedures as part of the routine processing phase. Providing appropriate packaging materials at each stage of the processing was also a major consideration. The handling of artifacts was organized into the following specific tasks: screening; cleaning; drying; cataloging; numbering and entering (into the computer formatted inventory) during excavation and at the field site.

Screening: Dry screening was performed only on those materials recovered from the uppermost levels. Water screening was the primary method of recovering artifact fragments. At the screens, artifacts were separated into 'material' (not taxonomic) categories and placed in polyethylene (open ended poultry bags) to prevent certain chemical reactions that can occur between some materials when in contact in the presence of moisture. Fragile or vulnerable objects encountered by the excavators were brought directly to the Conservator in the site lab trailer; or the Conservator was notified and immediately removed the the object herself using support braces and appropriate chemical pre-treatment prior to removal.

Cleaning: As all artifacts were wet when recovered, water cleaning was considered safe, as long as it was performed before the object was allowed to dry out. ORVUS Liquid (sodium lauryl sulfate, a pure, non-ionic, free-rinsing surface active agent) at very low concentrations was added to the wash water for all inorganic materials, with the exception of those which were held out for possible elemental analysis or other future testing. Mechanical tools such as brushes or probes were used only on the stable, dense materials, such as stoneware and clay pipes. Waterlogged glass and water degraded tin-glazed earthenware both exhibited friable surface layers which could not withstand scrubbing. These and other softer materials, like shell, were cleaned by soaking or removing particles with moving water. Some heavily corroded metal objects exhibited an encrustation layer which can be removed more easily when the object is wet. These were given to the Conservator, who determined the extent of solid metal core (physical examination only) and then removed the outer corrosion layer.

Drying: Three approaches were used for drying: 1) slow air drying on drying screens in an unheated portion of the site lab trailer; 2) slower air drying by placing in an open ended polyethylene bag with a small piece of damp sponge and allowed to remain there for at least one week; and 3) deferring the decision until either freeze drying or water replacement can be performed, and therefore maintaining water saturation, with thymol as a fungicide. The choice of procedure was dependent upon the condition and material class of the object and was determined by the Conservator. Solvent replacement techniques were not

attempted during the test period, but may be considered appropriate during the mitigation.

Cataloging: After one to two days on the drying screens, artifact fragments were classified (as a descriptive procedure) in accordance with the National Park Service Artifact Taxonomy, using only the Group, Class and Material common lists. The fragments were placed in 2 ml polyethylene zip-lock bags. A label printed on TYVIK high density polyethylene coated polyester fibers (a non-paper product) was prepared and placed inside the bag with the artifacts. The label can be read through the bag for future computer entry and, unlike paper, does not give off acids which can attack organic materials and metals. The following information is included on the label: 1) x y z coordinates (entered on only one label for the entire context); 2) context number; 3) number of fragments; 4) find code (from the Taxonomy); and a 'comments' section for an English description of the contents, other measures such as weight, and recording of treatment notes. For immediate use during the test phase the information from these labels was entered on to a computer format inventory page. This step will be eliminated during the mitigation by entering the data directly into the computer.

Numbering: All artifacts, except construction materials and heavily corroded metals were numbered. A thin film of PVA-AYAF (a medium molecular weight polyvinyl acetate thermoplastic resin) was applied with a brush to a small area on the surface of the object. The context number was applied using crow quill pens and India ink, and after drying, the number was covered with an additional film of PVA. The use of solvented PVA protects the number from wear and allows for simple reversibility.

Storage: Processed artifacts were stored in polyethylene bags which were placed, temporarily, in Leahy archive boxes. During the mitigation artifacts will be placed in museum quality storage cabinets which provide security, protection from stacking, and easy accessibility for study.

Treatment: During the processing, certain regular procedures were performed which can be considered stabilization treatment. Whereas organic materials require very slow drying to prevent dimensional change and damage to cellulose fibers, metals need to be relieved of all water as soon as possible in order to stop ongoing corrosion processes. Metal objects which were not in direct association with another material were dewatered by submerging in acetone for at least 30 seconds after cleaning, and then allowed to dry further in the usual way on the screen. Highly devitrified glass was allowed to dry without being touched. When it was completely dry, the friable surface layers were consolidated with from one to five applications of an acrylic thermoplastic resin (Acryloid B-72) in ethanol. It was applied with a brush or flowed on with a pipet and was prepared in very low concentrations (5%) in order to avoid a glossy appearance after treatment. The same consolidation treatment was also used on individual pieces of tin-glazed earthenware which were in danger of losing their glazed layer. The majority of the tin-glazed earthenware recovered from Area 1 was stable and did not require this treatment.

There was no visible evidence of heavy soluble salt concentrations in the ground water, at least not in the form of spalling surfaces of porous materials. During the mitigation, sample fragments of metals and ceramics will be tested for chloride content, and if high chlorides are present, routine soaking, and/or hot bath rinsing

techniques will be instituted.

A majority of the pipe fragments and many of the ceramic fragments did exhibit surface deposits which are the result of mineral salts in the ground water reacting with carbonates in the water and forming insoluble compounds. They are insoluble in water but can often be removed without damage to the artifact with chelating agents or solvents, both applied with a poultice. During the testing phase, this type of procedure was only used on three objects. It is useful when a mark or some diagnostic decoration has been obscured by the deposit. During the mitigation, this kind of procedure, (there are several variations on the procedure itself) will be performed regularly on fragments that are to be reconstructed, and on any individual fragment where it might reveal information.

Completely mineralized objects that require consolidation will be impregnated with microcrystalline wax. Copper alloy and lead alloy objects which have a solid core and do not require impregnation, will be immersed or vacuum impregnated with benzotriazole (a metal complexing agent which forms a moisture barrier on the surface as the result of a chemical reaction with the Copper ions) after which they may be coated with either wax or Inctalac (an acrylic resin with additional benzotriazole included in its formulation), depending on their condition. All of the above metal treatment procedures will be performed after mechanical cleaning of the object under a stereoscopic microscope. Protective corrosion product layers can be retained in this way.

Only one organic object, (a wooden cutlery handle), recovered from Area 1, was considered as a candidate for freeze drying or water replacement with Carbowax. All other organic materials were deemed strong enough to undergo air drying and in no case was there severe checking or splitting during drying. The bone recovered from the well/cistern, (Lot 14, N73, E43), was in excellent condition and did not require special treatment, (other than ensuring that it was washed before it was allowed to dry out). In this particular instance the good bone preservation may be attributed to the oyster and other shell also present in the microenvironment . The shell served to help preserve the bone, but it is these same carbonates (calcium carbonate from shell) that may have created the insoluble salts on the ceramic and pipe fragments.

As of December 7, 1983, 5,408 artifact fragments were recovered, (4,093 from Area 1). All have been washed, stabilized, cataloged, numbered, and the data prepared for computer entry.

PROJECTED ARTIFACT DENSITIES AND STORAGE REQUIREMENTS

The on site processing, stabilization and tabulation of the excavated materials provided a basis for both characterizing the relative densities of artifacts on a lot by lot basis as well as projecting the volume of potential artifact yields during the mitigation phase for various areas of the site. The recorded densities have been rendered into graphic bar chart formats using Epson QX-10 VALDOX software. Figure 2 contrasts the minimum and maximum yields and Figure 3 contrasts the mean or averages against the standard deviation of totals tabulated for each unit within each lot. If the standard deviation is high relative to the lot mean, this ratio indicates a considerable variable in artifact densities between test areas within each lot. Conversely, if the S.D. is low relative to the computed mean, this ratio suggests a relation uniformity of artifact densities within each lot examined to date.

For Lots 13-14 within Area I, the average artifact yield from the controlled excavated units yielded totals ranging between 62-194 artifacts per 25 square foot or 5x5 unit, with a lot total of 384, minus the contents of the cistern/well. The mean was 128 with a relatively low standard deviation of 66.4. These totals suggest a relative uniformity of artifact densities throughout lot 14 and based on the proposed sampling strategy of six 5x10 units, a projected yield of from 1000-2000 artifacts from historic subbasement surface refuse in Lot 14, minus any features, (pits, trenches or cisterns), which may be recovered. As a feature the cistern/well contained 3310 artifacts. Assuming at least 1 additional artifact rich feature, the mitigation of lot 14 should produce on the order of 2000-5000 artifacts requiring laboratory processing.

Lot 13 contrasted with Lot 14 in that considerable variation between the densities between the front (Pearl St.) and rear areas of Lot 13. The artifacts totals for Lot 13 ranged from 29-237/5x5 unit with a mean of 133, plus a high S.D. of 104. Assuming a similar 12 5x10 foot unit, one with 6 5x10 foot units/lot, exposure strategy for Lot 13 (see Fig. 1), this range suggests a total yield of between 1000-6000 artifacts excluding features.

Taken together, the projected 2 week data recovery program for Area I should produce a minimum range of between 5-10,000 artifacts, not counting the contents of any high yield features which may be encountered, in need of laboratory processing, stability and inventory an computer entry. Based on the contents of the cistern/well in Lot 14, each feature could up the projection by at least 30%.

Based on the storage capacity of current museum cabinets, at least 4 units will be required to house the excavated materials from Area I, both from testing and mitigation phase of the project.

DATA RECOVERY RECOMMENDATIONS

Based on the above, we suggest a three phase mitigation approach which would permit rapid mobilization in primary recovery areas of the site (known areas of high sensitivity and significance); a more rapid exposure and sampling for the eastern lots 14, 13 and 12 (Area I) which is characterized by more limited integrity and information potential, and for the uncleared areas (Area III), a rapid and high volume fill removal and area exposure program in two stages (the fill of lot 11 first, followed by the trailer area when access permits.)

AREA I

In general, the field strategy will focus on defining and clearing the western and less complicated lots of Area I first. This first stage of the recovery process will involve two field crews of seven field people for a period of two weeks, assuming uninterrupted access to this sector of the site and limited flooding. By concentrating on this sector first, the western Whitehall Street end of the site would be cleared to provide early and clean work areas for any potential access ramps which may be required to accomplish the subsequent stages of the data recovery program.

The initial testing program has exposed and already defined at least 60% of lot 14, closest to Whitehall Street. Given the nature of the limited surviving subbasement deposits, planned fieldwork will concentrate on lots 12 and 13, and the area of both adjacent to Pearl Street, presently covered by the backhoe ramp. As presently conceived, these two crews will work within a framework of alternating rectangular, 5x10 foot units covering approximately 50% of this study area. These elongated checkerboard units will provide adequate exposure to define wall alignments and any truncated subsurface features which may still be present in the unexposed areas. When encountered, these will be recorded, measured and cleared depending on the integrity and problem solving potential of each feature identified. A combination of both hand trowling and shovel stripping will be used within the control grid system presently in place throughout the site. Where the complexity or clarity of the observed cultural features warrants, contiguous areas between the alternating grid units will be cleared to define or expose significant features. Given the thinness of the documented and surviving remains in this area, the field crews should be able to terminate work within these three lots within a total of ca. 320 person days. As in all areas of this near-water table, wet and clay rich site, this rate will require the continuous use of water screening techniques to maintain a high rate of exposure and artifact processing.

10 days
See Contract on p. 19
doesn't add up

$$14 \text{ people} \times 10 = 140 \text{ person days}$$

$$14 \text{ people} \times 14 \text{ days} = 196 \text{ person days}$$

I think the time/personnel needs to be more clearly defined.

In total, Area I includes 4,200 square feet, of the overall site, composed of Lots 12-14. The basic control grid format would be a 5x5 foot matrix which represents both a convenient work area for 1-2 excavators, and an exposure area commensurate in size with the encountered width and dimensions of such historic lots. However, except where limitations of access or shelter require, and small 5x5 units are the only option, the basic excavation unit would be a 5x10 foot test unit, which would provide a larger exposure area in any one sector, and a long profile in all directions along the length of the excavated grid of the exposure unit.

The goal of the exposure strategy is two-fold, to open adequate areas sufficient to identify spacially defined features and/or site differences without the need for a 100% exposure, and also through the use of the controlled grid system, to provide profile and cross section control at regular intervals in order to characterize the stratigraphy throughout the length and width of each lot. The use 5x5 control units would also provide a basis for defining and graphically characterizing differences in the density of various artifact classes or categories across space.

no one does 100% testing in contract work!

Based on these assumptions, it is proposed that each of the three lot areas in Area I be mitigated with an elongated rectangular grid system of alternating 5x10 excavation units which would require an average of 6 units per lot for a total of 18 throughout Area I. Taken together, these 18 5x10 square foot units for a total area exposure of 900 square feet, amounting to 21.4% of Area I. Alternating 5x10 exposure units along either a north-south or east-west grid line would produce a continuous profile the length of each lot and 10 feet wide cross section profiles every 10 feet for vertical control of the stratigraphy throughout each lot. The timing and placement of each excavation unit will also be determined by the size and/or area coverage of the presently under construction four (12x22, steel-ribbed) deep winter protective shelters, which will be in place no later than December 16, 1983. This alternating grid unit strategy, given the documented depth of three to six inches for the artifacts zone within lots 12-14, would yield an excavated volume of between 200 and 400 cubic feet which would need to be water screened. This partial sample would also provide, in our estimation, an adequate basis for identifying any as of yet unrecognized sub-surface features which may require expansion of the exposure area to adjacent grid units in order to define and excavate their contexts, if required.

*on p. 16
the
total
is
50%*

As presently conceived, and as initially planned, the 6 5x10 units in lot 14 could be oriented north and south, (Figure 1). This linear alignment would provide coverage of the as yet unstudied structure area, indicated by early documents, of Lot 14, as well as the backyard areas closer to Bridge Street.

The proposed strategy in Lots 12 and 13, however, would be slightly different for two reasons. It is proposed that the units in this case be oriented in 5x10 foot blocks east and west. This would accommodate and address two problems, one archeological and the other logistical. Based on the testing exposure to date, the majority of the architectural features and wall alignments have been documented to run in a north-south orientation parallel to the long axis of each lot. Based on the need to cross walls and/or features with a perpendicular profile of adequate length to distinguish feature construction elements such as builders trenches, in contrast to the surrounding site matrix, this east-west orientation would cross-cut these architectural alignments at approximately a 90° angle. At the same time, the current and ongoing presence of heavy machinery ramps precludes the placement of protective structures at the north-south axis until cleared. Based on these considerations, it is proposed that the excavation of Area I, Lots 12-14, be begun in the southwest corner of lot. Structures would be moved 22 and 12 feet north, towards Bridge Street as each successive subarea is cleared.

DATA RECORDING AND DOCUMENTATION PROCEDURES

In general, at least 50% of archeological field activities are taken up by recording procedures. Conversely, this fact implies that the rate of a rescue excavation project depends on the efficiency and precision of the recording techniques utilized. Given the diversity and integrity of documented 17th Century Dutch remains beneath the basement floors, it is reasonable to assume that the overall speed of this data recovery program will depend on two factors: 1) the ability to work continuously with large crews under deep winter conditions with minimal interruptions and 2) the ability to augment the rate and scope of the recording procedures so as to complete this mitigation plan within the allotted time frame. Three immediate solutions are being actualized to meet these goals:

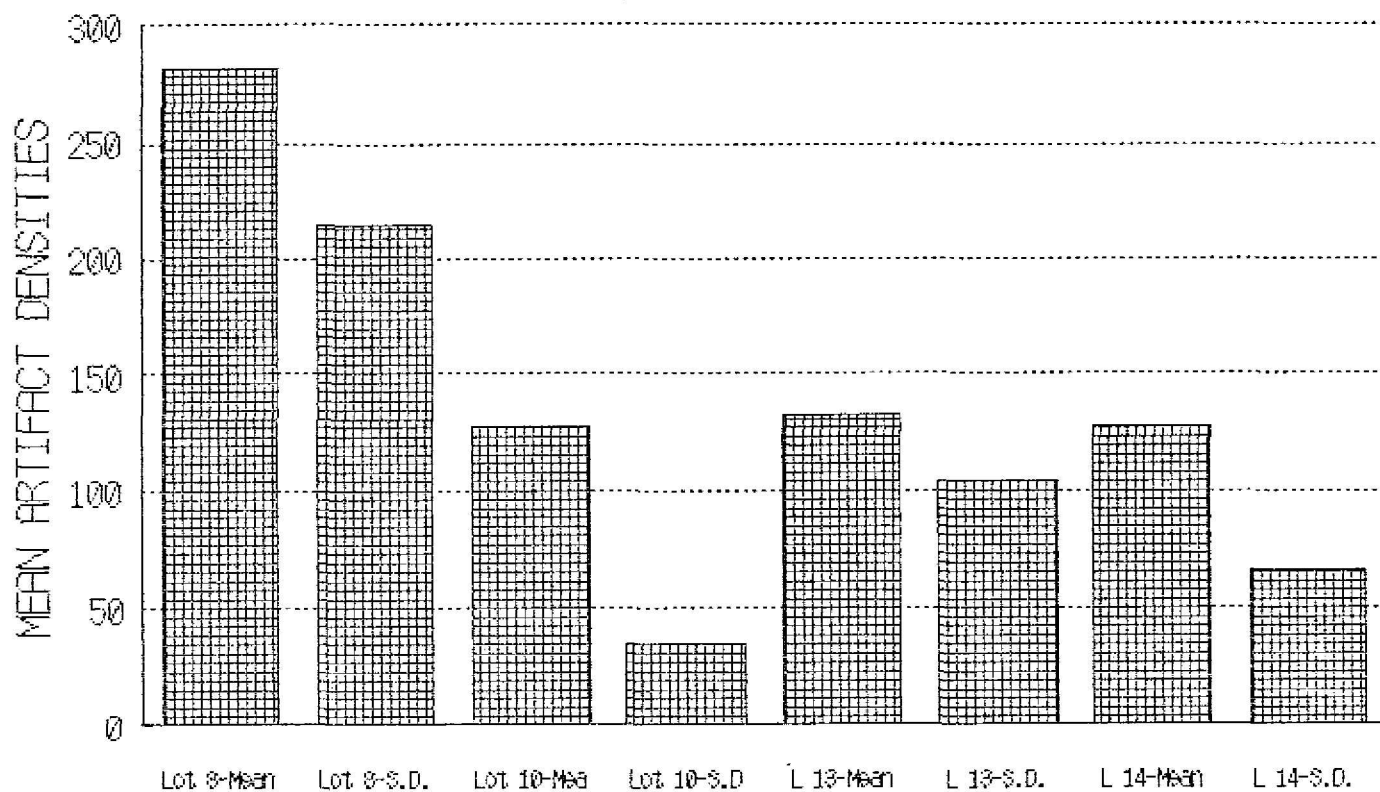
1. Protective Structures: The project staff has designed and is presently constructing two kinds of heated, wind-resistant protective structures. The first will consist of four 12x22 foot, double skinned, plastic covered and steel ribbed modular enclosures. These four units would cover 1056 sq. ft. of Area I for both excavators and screeners, and can be easily moved as the excavation progresses.

The second units would consist of larger 20x20 foot modules which when connected would provide coverage of 20x40 foot areas for a total of 800 sq. ft. and would be used for the intensive exposure of Area II, Lot 8 and 10. At present one is near completion and the elements of the second unit are ready for assembly. Together, these two systems will provide coverage for all areas sufficient to accomodate the projected crew size of 6 teams.

2. High Speed Measurement: In order to circumvent slowness and relatively low speed of precision of optical and manual recording, the project team has applied a recently developed electronic transit, together with an infield data recording and memory unit, capable of recording XYZ provenience points to a hundredth of a foot every two seconds. Recently developed by Zeiss Corporation, this Elta-46R unit consists of an electronic infrared EDM transt connected to a portable HX-20 computer. In order to meet the needs of this project, Zeiss programmers have developed an immediate measurement and conversion package which eliminates the human interface of angle-to-distance conversion. After each 2 second reading, the coded XYZ measurement is recorded in memory and printed out for immediate availability to field crews and stored for subsequent transfer to the onsite computerized data base. This unit is in place and fully operational.

3. Overhead Recording: As an additional time saving device, the project staff has adopted their previously designed overhead bipod system to run without interruption along a two-track overhead unit within each greenhouse to provide continuous stereoscopic, photomosaic, black light, color and infrared coverage of all excavation *surfaces*. This approach will drastically reduce the time frame required to manually draw the location and spacial relationships of features and artifact patterns within the alternating rectangular 5x10 grid units under each greenhouse structure, without the need of repeatedly moving the structures during the excavation.

BLOCK 10: ARTIFACT DENSITIES (Per 5X5)



LOT COMPARISONS: Area I vs. Area II

FIGURE 2

BLOCK 10: ARTIFACT DENSITIES (Per 5X5)

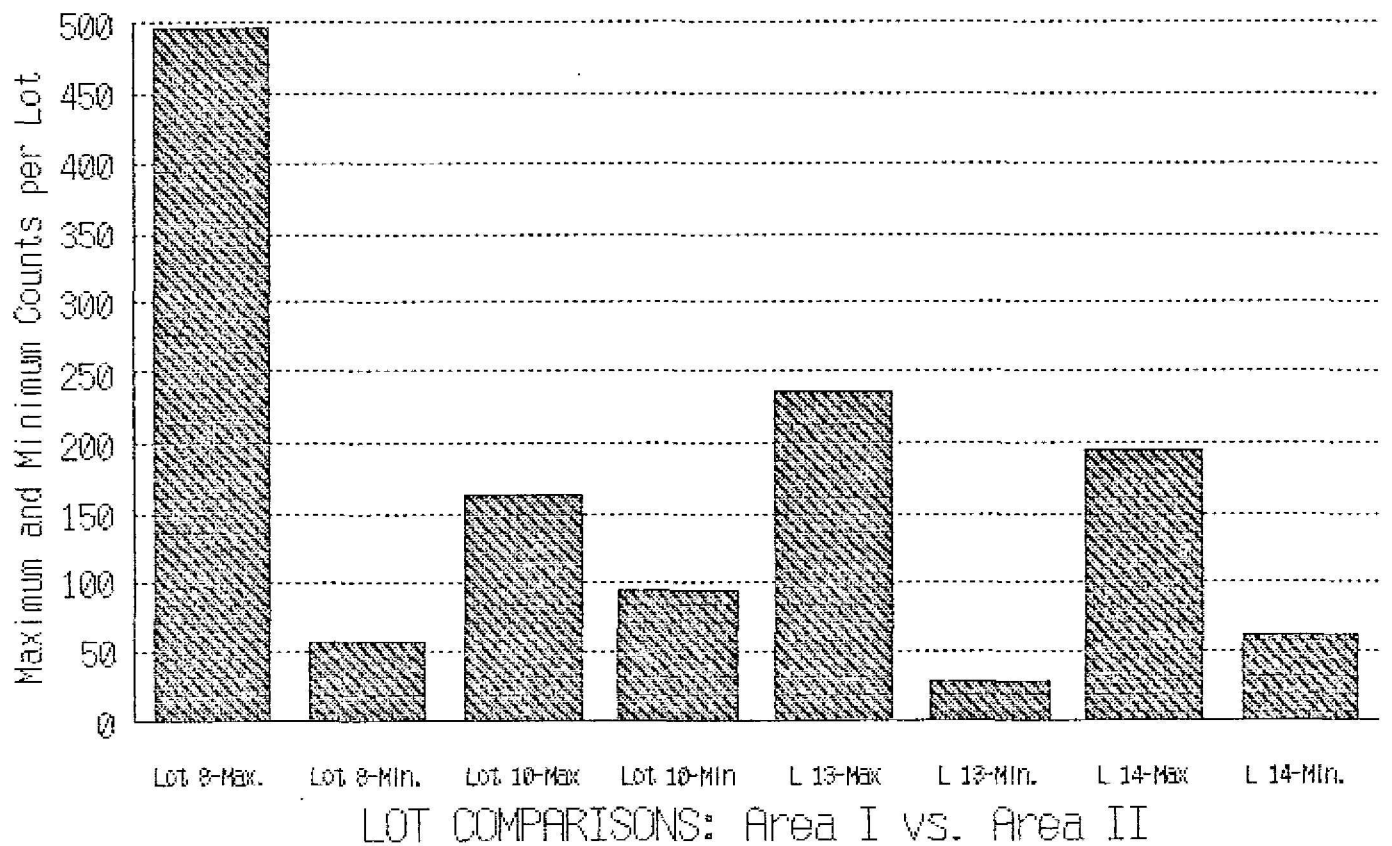


FIGURE 3

ACKNOWLEDGMENTS

We would like to express our appreciation to Lawrence J. Majewski, Chairman, Conservation Center, New York University, for identifying the material of the double tooth ivory comb recovered from the well in LOT 14.

We would also like to express our thanks to Dr. Alan Stahl, Associate Curator of Medieval Coins and Metal, The American Numismatics Society, N.Y., for his positive identification of the 1590 Dutch coin.

Additional thanks goes to Meta Janowitz for advice and identification of 17th Century ceramics. The preparation of this report also benefitted from the insights and comments of Drs. Nan Rothchild and Diana Rockman.

CREDITS

Glass analysis by Joe Diamond.

Clay Pipe analysis by Diane Dallal.

Conservation and ceramic analysis by Melba J. Myers.

Drafting and cartography by Michael Davenport.

Close-up photography by Peter Namuth.

Black-and-White photographic printing by Karen Bluth.

| | |
|---------------------------|-------|
| TOTAL ARTIFACTS LOT 14 | 3,694 |
| LOT 14 without feature | 384 |
| TOTAL ARTIFACTS LOT 13 | 399 |
| TOTAL ARTIFACTS AREA I | 4,093 |
| AREA I without feature | 784 |

LOT 14

| <u>Unit</u> | <u>Cx_No</u> | <u>Itl_Frgs</u> | <u>IPQ/Comments</u> |
|-------------|--------------|-----------------|---|
| N40 E40 | 113 | 92 | 1650+ pipestem 1820+ white earthenware no diagnostic glass |
| | 114 | | no artifacts |
| | 115 | 57 | 1820+ white earthenware construction materials no glass/pipes |
| | 116 | 12 | construction materials (pressed into top of cx) |
| subtotal | | 161 | |

LOT 14

| <u>Unit</u> | <u>Cx_No</u> | <u>Itl_Frgs</u> | <u>IPQ/Comments</u> |
|-------------|--------------|-----------------|---|
| N35 E40 | 110 | 52 | 1680+ two pipestems construction materials no diag ceramics/glass |
| | 111 | | no artifacts |
| | 112 | | no artifacts |
| subtotal | | 52 | |

LOT 14

| <u>Unit</u> | <u>Cx_No</u> | <u>Ttl_Frgs</u> | <u>TPQ/Comments</u> |
|-------------|--------------|-----------------|---|
| N72 E43 | 100 | 98 | 1680+ one pipestem asphalt - 19th cent no diag ceramics/glass |
| | 101 | | no artifacts |
| subtotal | | 98 | |

LOT 14

| <u>Unit</u> | <u>Cx_No</u> | <u>Ttl_Frgs</u> | <u>TPQ/Comments</u> |
|-----------------------------|--------------|-----------------|--|
| Feature cistern/ well | 102.01 | 1,126 | 1830+ Dutch pipebowl with tobacco 1660+ Tippet I pipebowl 1671+ fulham salt-glazed stoneware no dateable glass |
| | 102.02 | 304 | 1675 Thomas Watts pipebowl 17th + early 18th cent tin-glazed earthenware no dateable glass |
| | 102.03 | 1,510 | 1675 Thomas Watts pipebowl 17th + early 18th cent tin-glazed earthenware 1690-1710 wineglass stem 1705-1715 wineglass stem |
| | 102.04 | 370 | 1690+ pipebowl 1690-1710 wineglass stem 17th + early 18th cent earthenwares |
| | 103 | | no artifacts |
| subtotal | | 3,310 | |

LOT 14

| <u>Unit</u> | <u>Cx_No</u> | <u>Ttl_Frgs</u> | <u>IFQ/Comments</u> |
|-------------|--------------|-----------------|--|
| Test 1 | 203 | 70 | 1850+ whiteware 19th + 20th cent bottle glass, linoleum, masonite no pipes |
| Test 2 | 204 | 3 | 1850+ whiteware 19th cent bottle glass no pipes |
| subtotal | | 73 | |

LOT 13

| <u>Unit</u> | <u>Cx_No</u> | <u>Ttl_Frgs</u> | <u>IFQ/Comments</u> |
|-------------|--------------|-----------------|---|
| N40 E55 | 160 | 108 | construction materials, intrusive leaves, tar paper |
| | 162 | 13 | construction materials |
| | 163 | 115 | 1820+ whiteware 90% slate no diag glass/pipes |
| | 164 | | no artifacts |
| | 165 | | no artifacts |
| subtotal | | 236 | |

LOT 13

| <u>Unit</u> | <u>Cx_No</u> | <u>Itl_Frgs</u> | <u>IPQ/Comments</u> |
|-------------|--------------|-----------------|---|
| N70 E50 | 166 | 27 | 1720-1805 white salt-glazed stoneware 1762-1820 creamware |
| | 168 | | no artifacts |
| | 169 | | no artifacts |
| subtotal | | 27 | |

LOT 13

| <u>Unit</u> | <u>Cx_No</u> | <u>Itl_Frgs</u> | <u>IPQ/Comments</u> |
|-------------|--------------|-----------------|--|
| N68 E60 | 167 | 12 | brick/slate/iron only |
| | 170 | 15 | brick/mortar only |
| | 171 | 107 | asphalt - 19th cent other construction materials - green linoleum |
| | 172 | | no artifacts |
| | 173 | 2 | mortar only |
| | 174 | | no artifacts |
| | 175 | | no artifacts |
| subtotal | | 136 | |