# Scope of Work
# Phase IB: Archaeological Monitoring
# Stone Street Historic District

Monitoring has been proposed for all pre-excavation test pits conducted by the excavation crew subcontracted by NYNEX and Con Edison, except for those completely situated above modern grates or vaults (see Map 1). This is equivalent to a Phase IB subsurface testing program employing mechanically and manually-excavated transects (cf. Flannery 1976). The general purposes of the monitoring are: 1) to document the presence or absence of undisturbed archaeological deposits; 2) to ensure that disturbance of intact archaeological deposits is prevented or minimized by limiting the excavations to the existing utility trenches; and 3) to determine the eligibility of potential resources for inclusion on the National Register of Historic Places.

The pre-excavation test pits to be monitored can be considered shorter or longer transects across the area, a sampling universe consisting of the length and width of Stone Street, Mill Lane, Coenties Alley, and half the width of the relevant blocks of Hanover Square, Water Street, Pearl Street, and South William Street (see Map 2 and Table 1). These streets are all part of or immediately adjacent to the Stone Street Historic District, and therefore there is a high probability that the area is potentially "archaeologically sensitive" (CNY 1993:3F-7). These transects may thus expose "sites" or loci of archaeological relevance. The placement of these transects, although designed to efficiently uncover modern utility lines and installations, may be considered random with respect to the premodern streetbed and topography (Plog 1976). The 36 pre-excavation test pits (15 NYNEX, 21 Con Edison, excluding parts of two which are completely situated above modern grates or vaults) present us with a simple random sample of the area (sample fraction of 5.6% of the area [total transect area (1,382 sq. ft) divided by universe (24,452 sq. ft.)], (for literature see: Brown 1987; Fish and Kowalewski 1990; Hodder and Orton 1976; Nance 1983; Shennan 1985; Thomas 1988). **All of these pre-excavation test pits will be monitored** by archaeologists meeting SOPA certification standards. Note that the universe to be sampled allows assessment of disturbance only for current streetbed/sidewalk areas. We cannot say anything about the extent of disturbance under standing structures, beyond the sidewalk line distal to the street, or in the halves of the streets that lie outside the universe.

The monitoring of the transect survey (pre-excavation test pits) will provide positive or negative evidence of undisturbed archaeological deposits within the sample universe. In any pre-excavation test pit or portion thereof, we may find the following: 1) presence of disturbance in the form of modern trenches, utility tunnels, or sidewalk vaults; 2) presence of undisturbed (since 1835) street

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areas; 3) presence of undisturbed (since 1835) off-street areas. Our research design first calls for the preliminary monitoring and test excavations of seven selected pre-excavation test pits, comprising a total of 342 square feet, equivalent to 1.3 percent of the total site area, or 25 percent of the area exposed by the pre-excavation testing. These seven are: NYNEX tests numbers 4, 9, and 14 on Stone Street, and Con Edison numbers 105, 108, 113, 120 on the streets surrounding the Historic District (see Map 1). The NYNEX trenches, each transecting Stone Street from curb to curb, were chosen to give a systematic sample of the sub-surface deposits of this central street of New Amsterdam from east to west. These three trenches comprise 144 square feet, or approximately 25 percent of the area to be exposed on Stone Street. Of the Con Edison test trenches, number 105 (total surface exposure 96 square feet) on the corner of Pearl Street and Coenties Plaza will provide some information about the preservation of archaeological deposits relating to Lot 19, which runs between Pearl and Stone Streets (Map 2). Not only is this lot the closest to the Stadt Huys block, but it is one of the few lots which may contain a complete sequence of possible structural remains documenting continuity and change in land use from the seventeenth through the nineteenth centuries (Rothschild et al 1987). Con Edison test trench number 113 will expose 24 square feet on William Street. It is one of the few trenches on that street which is not located over the subway disturbance, and has the best possibility of uncovering undisturbed off-street deposits. Test trench number 120, comprising 18 square feet in the east side of the block of South William Street also has the highest potential on that street for exposing intact deposits, as well as the highest probability of exposing structural remains. Our selection on Coenties Plaza, trench 108 (60 square feet), is the least likely to have been disturbed, and also may provide some insight into the preservation of deposits relating to Lot 19.

| Street | Surface area | # of pre-exc. Trenches | Pre-exc. trench area | # of trenches sampled | Sample area |
|---|---|---|---|---|---|
| **Stone Street** | 9500 sq. ft. | 17 | 564 sq. ft. | 3 | 144 sq. ft. |
| **Mill Lane** | 1400 sq. ft. | 0 | | | |
| **South William Street** | 6900 sq. ft. | 5 | 108 sq. ft. | 1 | 18 sq. ft. |
| **William Street** | 2300 sq. ft. | 4 | 167 sq. ft. | 1 | 24 sq. ft. |
| **Pearl Street** | 3600 sq. ft. | 6 | 375 sq. ft. | 1 | 96 sq. ft. |
| **Coenties Plaza** | 3150 sq. ft. | 4 | 198 sq. ft. | 1 | 60 sq. ft. |
| **Subtotal** | 26.850 sq. ft. | 36 | 1,412 sq. ft. | 7 | 342 sq. ft. |
| **Less disturbed areas** | | | | | |
| **Pearl Street (grates)** | 1650 sq. ft. | 0 | 30 sq. ft. | | |
| **Stone Street (grates)** | 700 sq. ft. | | | | |
| **Pearl Street (Elevated train supports)** | 48 sq. ft. | | | | |
| **Total** | 24.452 sq. ft. | 36 | 1,382 sq. ft. | 7 | 342 sq. ft. |

**Table 1: Synoptic table of project and sample areas**

These seven pre-excavation test trenches will provide a representative sample of possible results of the exposure of the sub-surface deposits in other trenches. The first 60 cm (24"), comprising the modern street surface and streetbed, will be mechanically removed. Below that, unless the modern utility lines and trenches are immediately apparent, the backhoe operator will be instructed to excavate slowly in thin increments under constant close monitoring by the supervising archaeologist. All operations will be supervised by SOPA-certified archaeologists or those meeting the standards of the Department of the Interior (1983), assisted by staff who have successfully completed at least one field school (4-5 supervisors and 10-12 experienced undergraduate archaeology students). At the discretion of the archaeologists, contractor's excavation will be stopped for further archaeological testing. All intact archaeological deposits uncovered in the course of monitoring these seven trenches will be completely excavated manually by the archaeological staff and crew utilizing hand tools, and the soil passed through 5 mm (¼") screens. Soil samples will be taken from closed contexts. The archaeological test trenches excavating these deposits will be excavated into the surface of the natural subsoil, where this is possible (up to 2 meters [7'] as indicated by the cores (Rothschild et al 1987)). Stratigraphy will be recorded on standardized pre-printed provenience forms. Munsell charts will be used to identify matrix colors, and inclusions and matrix composition will be specified.

Maps of each pre-excavation test trench will be drawn to scale showing the location of modern features and archaeologically intact deposits. Top plans and profiles of all excavated deposits will be drawn.

After the excavation of the first seven pre-excavation test trenches, the remainder of the trenches will be mechanically excavated under close archaeological supervision. If no intact archaeological deposits are encountered, no further action will be recommended. When intact streetbeds/surfaces are encountered, a stratigraphic column comprising a 25% areal sample of the deposit will be randomly selected to be excavated and sifted as above. When intact off-street deposits are encountered, at least a 50% areal sample of the deposit will be excavated as above. This sampling strategy will be further refined based upon the individual resources and the results of the monitoring and testing of the first seven pre-excavation trenches.

## Laboratory treatment

Laboratory treatment will follow established procedures of the Brooklyn College Archaeological Research Center, where the material will be processed, and will be under the direction of the permanent staff of the Archaeological Research Center. Principles of object conservation will be applied both in the field and in the laboratory. These include: recovery in the field using inert waterproof collection materials; emergency removal techniques as required; cleaning/stabilization procedures in the laboratory; catalog/inventory recording and computerized data entry to provide quantified artifact inventories; accessible storage techniques using museum-quality materials.

## Results

The results of this monitoring and testing program will be documented in a report that contains a description of the archaeological work performed and the results of the stratigraphic and artifact analysis. Locations of all excavations, identified features, and recording locations will be depicted on a project map. The report will include descriptions of any modifications or additions to this data recovery plan.

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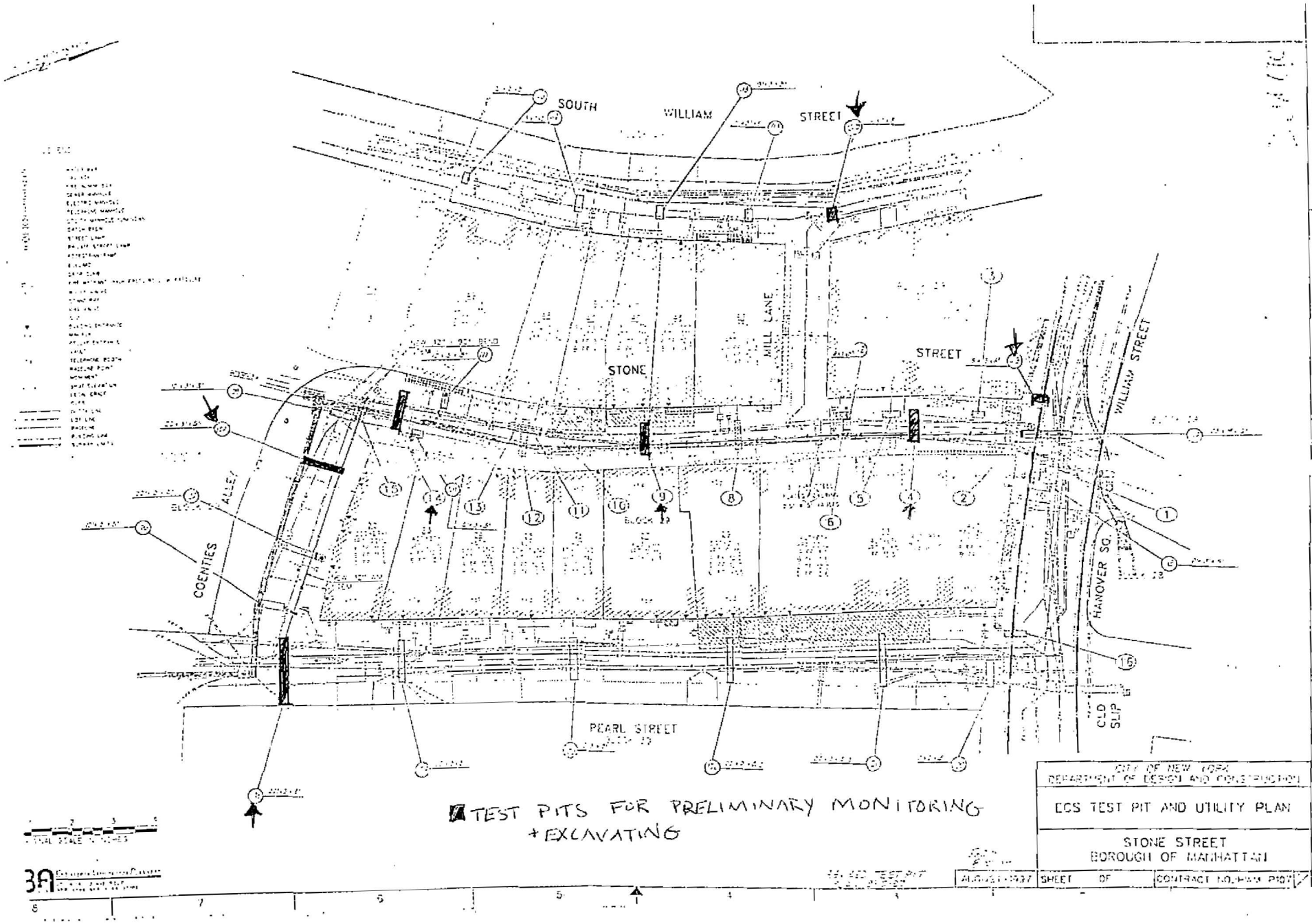
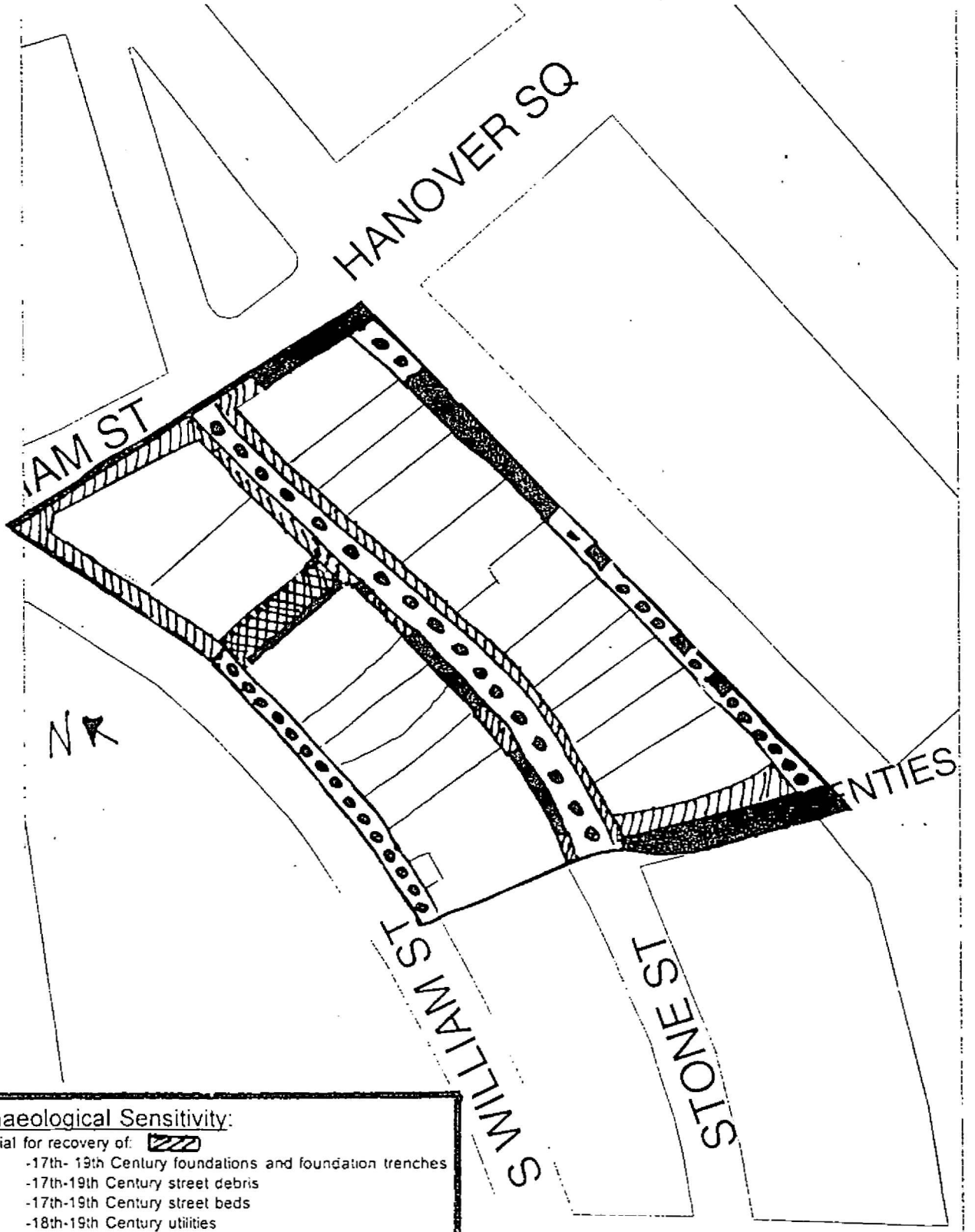
MAP 1


SOUTH
WILLIAM
STREET
STONE
MILL LANE
STREET
WILLIAM STREET
COENTIES
ALLEY
HANOVER SQ.
PEARL STREET
OLD SLIP
TEST PITS FOR PRELIMINARY MONITORING
+EXCAVATING
CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
EOS TEST PIT AND UTILITY PLAN
STONE STREET
BOROUGH OF MANHATTAN
AUGUST 1987
SHEET OF
CONTRACT NO. HWM P107

# ARCHAEOLOGICAL SENSITIVITY MAP - MAP 2




Archaeological Sensitivity:

Potential for recovery of:
- -17th- 19th Century foundations and foundation trenches
- -17th-19th Century street debris
- -17th-19th Century street beds
- -18th-19th Century utilities

Potential for recovery of:
- -17th-19th Century foundations and foundation trenches
- -17th-19th Century street debris
- -17th-19th Century street beds

Potential for recovery of:
- -17th-19th Century street debris
- -17th-19th Century street beds

Disturbed- no further concern