
Fulton Street Transit Center (FSTC)

Archaeological Assessment of Foundation Walls at Maiden Lane and Broadway

Letter Report



Joan H. Geismar, Ph.D.
Archaeologist

40 East 83 Street
New York, NY 10028
212 734-6512 (p)
212 734-6512 (f)
jgeis@aol.com

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Mr. Ajay Singh
Chief Environmental and Sustainability Officer
MTA-New York City Transit
2 Broadway, 8th Floor
New York, NY 10004

Re: FSTC: Archaeological Assessment of Foundation Walls at Maiden Lane and Broadway

Dear Mr. Singh:

On Thursday, May 5, 2005, Ms. Chitra Radin, environmental consultant to New York City Transit (MTA-NYCT) for the Fulton Street Transit Center Project (FSTC), contacted me regarding the discovery of brick and stone foundation walls in a utility trench under excavation on the south side of Maiden Lane east of Broadway (Figure 1). This letter report presents the findings of field observations and research undertaken to determine the significance of this discovery located just east of the study area, or area of potential effects (APE), for the project's original assessment¹ (Figure 2).

On Friday, May 6, 2005, I made a short site visit, followed by more intensive field investigations on Monday, May 9, and Tuesday, May 10, that determined 1) a large segment of what appeared to be an arched brick construction still remained along the upper part of the wall exposed on the north side of the trench, 2) below the brick "arch" was a foundation wall of field stones, 3) a similar, parallel stone wall in line with the curb was noted under fill on the south side of the trench beneath a line of soldier bricks (bricks on end) but with no evidence of a brick arch, and 4) a horizontal stone slab in the south stone wall appeared to structure a former opening that had been sealed off with bricks. While the ultimate depth of the two stone walls was unknown, sometime before 1938, a 16-inch steam pipe had been introduced between them about 5 feet below the current street level.² Although it appeared the exposed walls were remnants of a street vault, a ubiquitous 19th-century urban feature, they were located in the vicinity of the former Oswego Market, a late 18th and early 19th-century structure discussed in the FSTC 1A appendix.¹ This made identification of the find extremely important to ensure that the utility work, then suspended until the significance of the discovery could be determined, would not impact remnants of this historic structure.

At my request, a construction worker hand excavated a pit adjacent to the north wall (see Figure 9c) to determine its depth and, if possible, to examine the nature of the floor at the bottom of the two stone walls. A visit was made to the basement of 170 Broadway, the adjacent building, to explore its relationship to the walls uncovered in the street. The basement proved to be very deep (at least 14 feet below street grade), and an attempt to penetrate its north wall, which paralleled

¹ Arup 2004

² A WPA map of subsurface conditions indicates the 16-inch diameter steam pipe was installed prior to 1938 (WPA 1938/1939)

the trench, was abandoned when five contiguous bricks, laboriously removed, failed to locate the other side (Figure 3).

Research determined that 170 Broadway, an 18-story office building known as the Broadway-Maiden Lane or the Guardian Trust Building, was constructed in 1901-1902.³ Nineteenth-century tax assessments indicate the site originally comprised four lots on Broadway (164, 166, 168, and 170 Broadway before 1830 when they were renumbered 166, 168, 170, and 172) and two lots on Maiden Lane (Nos. 2 and 4)⁴ (e.g., see Figure 4).⁵

From 1772 until 1811, what was called the Broadway or second Oswego Market was located on Maiden Lane along what is now the north side of 170 Broadway and in front of what was then Nos. 2, 4, 6, and part of No. 8 Maiden Lane.⁶ That is, in the vicinity of the trench explored in this report and beyond. While no plans of the market structure have been found, an artist's rendering depicts it in 1811 (Figure 5),⁷ the year the market closed, but the source of information for the rendering is unidentified. The rendering is accompanied by a reconstructed plan that shows the market's location (Figure 6). The 1797 Taylor-Roberts Plan of the City, considered highly accurate, confirms the market's location east of Broadway (Figure 7), and an original but undated survey sketch from the Bancker Collection at the New York Public Library provides its dimensions. According to Bancker's measurements, and those of others,⁸ it was 141 feet long and 20 feet wide with an 18-foot circulation on its south side (Figure 8). Maiden Lane, a street in use since 1653 but not officially opened until 1691,⁹ bordered the market to the north. After the market was demolished in 1811, Maiden Lane was widened,¹⁰ eliminating as much as 30 feet from the front of lots on the south side of the street between the former market site and Liberty Place (AKA Little Green or Walker Street) to the east. Other street alterations have undoubtedly also changed the grade over time.

Excavation of the 5-foot deep pit on the north side of the utility trench reached the bottom of the stone wall at 12 to 13 feet below the current street level (the actual street grade was difficult to determine). Based on previous Lower Manhattan research, as recently as the 1930s, the street could have been as much as 2.5 feet lower than it is today.¹¹ The aforementioned line of "soldier" bricks below the curb in the south wall of the trench, now under 3 feet of fill but possibly closer to the surface originally, tends to support this assumption (see Figures 9g and 14).

At the bottom of the north wall, the "floor" between the two stone walls proved to be dirt with inclusions of scattered cobbles. Figure 9a shows a plan of the trench in relation to Maiden Lane and its north and south sidewalks; Figure 9b offers a schematic profile of the arched brick and stone

³ Dunlap 1999: 30; New Building Application 1901

⁴ Tax Assessment Records 2nd Ward 1809 to 1816; 3rd Ward 1817 to 1896); Perris 1852

⁵ Perris 1852

⁶ e.g., DeVoe 1862:330-340; DeVoe offers a detailed history of the market and its occupants

⁷ Dunshee 1952:95

⁸ Bancker N.D.; Bancker 1789/1794/1804 (not illustrated); Loss 1804 (not illustrated)

⁹ e.g., Street Opening Book N.D.; Street Opening Map, N.D.

¹⁰ e.g., Stokes V 1926:1532; Minutes of the Common Council VI 1917:580; Historical Map 1912-1915 (not illustrated)

¹¹ Geismar 2003

north wall. Photos of the trench and its details are presented in Figures 9c to 9h. Based on available measurements, a relationship between the south side of the market and the north stone wall in the trench could be presumed (see Figure 9a). However, the structural elements of the foundation walls in the trench, the similar stones used in their construction, and their relationship to each other indicate this may be only a coincidence. Moreover, the brick arch of the north wall, which extends away from the market and toward the parallel wall on the south side of the trench, negates a connection to the market house. This is supported by the curb-line situation of the south wall that suggests it structured a vault meant to receive and store coal and other items delivered from the street. Moreover, what appear to be 8- or 9-foot deep foundation walls (under the fill and the arch on the north wall) seem excessive for an 18th-century market structure unless it had a basement, which is unknown. But perhaps most importantly, no evidence of either foundation wall was found in later excavations carried out 50 feet further east but within the 141-foot range of the market (see Figure 9a).

The age and association of the stone walls found on Maiden Lane are somewhat unclear. Noting that post-Civil War structures usually used cast-iron columns rather than stone foundations to support street and sidewalk vaults, it has been suggested the Maiden Lane vault predates the Civil War.¹² Contiguous sidewalk and street vaults exposed and altered in a restaurant on Duane Street, north of Maiden Lane, offer a fine example of Civil War-era vault construction. Built in 1863, and originally structured by cast-iron columns but now supported by steel beams, the Duane Street vaults have been converted into a basement bar (Figures 10 to 12). Research suggests the walls on Maiden Lane were constructed by Eleazar Parmley, a dentist who acquired the corner lot at Maiden Lane and Broadway and the two adjacent Broadway lots in 1830.¹³ Tax assessments indicate Parmley leased the buildings on his lots to residential and commercial tenants for decades.¹⁴ The 1852 Perris insurance map¹⁵ shows the 4-story commercial buildings on Parmley's three lots joined and functioning as a single structure (see Figures 4 and 13). It seems more than likely the street vault on Maiden Lane was associated with this 1852 building configuration.

According to tax assessments, by 1862, that is, during the Civil War, Parmley had acquired another lot on Broadway and either altered the existing buildings, adding two or three more floors, or constructed a new 6 or 7 story commercial structure on his four Broadway lots.¹⁶ In 1901-1902, this building was razed to make way for the Broadway-Maiden Lane Building on an expanded site (Figure 13). It is possible the Maiden Lane street vault is associated with Parmley's later building or alteration, but its stone foundation tends to argue for an earlier construction. It seems that the intrusive brick segment with its stone-slab "lintel" found in the south foundation wall sealed a point of access between Mr. Parmley's building, or buildings, and the vault (Figure 14 offers a schematic profile of the sealed-off section of the south wall). It is reasonable to think this occurred when the Broadway-Maiden Lane building was erected in 1901-1902.

¹² Bogdanow 2005:personal communication

¹³ Liber of Deeds 258:377

¹⁴ Tax Assessment 3rd Ward 1830 to 1896

¹⁵ Perris 1852:Plate 6 (left)

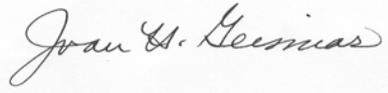
¹⁶ Tax Assessment, 3rd Ward, 1862

In summary, the stone foundation walls and other structural elements exposed in the utility trench, which include the remnant of a thick section of arched brick along the north wall, 1.7-foot square brick piers faced with mortar or concrete at 12-foot intervals possibly intended to support the brick arch, the bricked-in opening in the south wall, and soldier bricks that were perhaps closer to the 19th-century street grade than they are today, are all components of a mid-19th-century street vault and are not related to the historic Oswego Market. This finding is supported by the absence of walls in a non-contiguous section of the trench excavated 85 feet east of Broadway. It seems the walls did not continue beyond Mr. Parmley's 1862 building, which ran 68 feet east from Broadway, and, therefore, did not extend the length of the market, which was 141 feet long.

The vault elements are documented in the above-mentioned photos, plans, and profiles. It was determined that no further work is required, a finding the Landmarks Commission's Director of Archaeology concurred with.¹⁷

Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,

A handwritten signature in cursive script that reads "Joan H. Geismar". The signature is written in dark ink on a light-colored background.

Joan H. Geismar, Ph.D.
Joan H. Geismar, Ph.D., LLC

¹⁷ Sutphin, 2005:personal communication

FIGURES

1. Project Location
2. APE in Arup 2004
3. Construction worker attempting to determine thickness of basement wall, photo
4. Maiden Lane and Broadway 1852 in Relation to Utility Trench
5. Rendering of Oswego Market 1811, photo
6. Plan of Maiden Lane near Broadway, reconstruction, photo
7. Oswego Market (1772-1811) in 1797
8. Bancker's Sketch Survey, Oswego Market
9. Trench Plan (9a), Schematic Profile of North Wall with Brick Arch (9b), Trench Photos (9c - 9h)
10. Brick street vault on Duane Street, photo
11. Underside of sidewalk exposed adjacent to brick street vault on Duane Street, photo
12. Long view of the brick arch of the street vault on Duane Street, photo
13. Block 64 in 1852 with Building History in Northwest Corner Superimposed
14. South Wall Profile (Schematic) in Vicinity of Brick Intrusion

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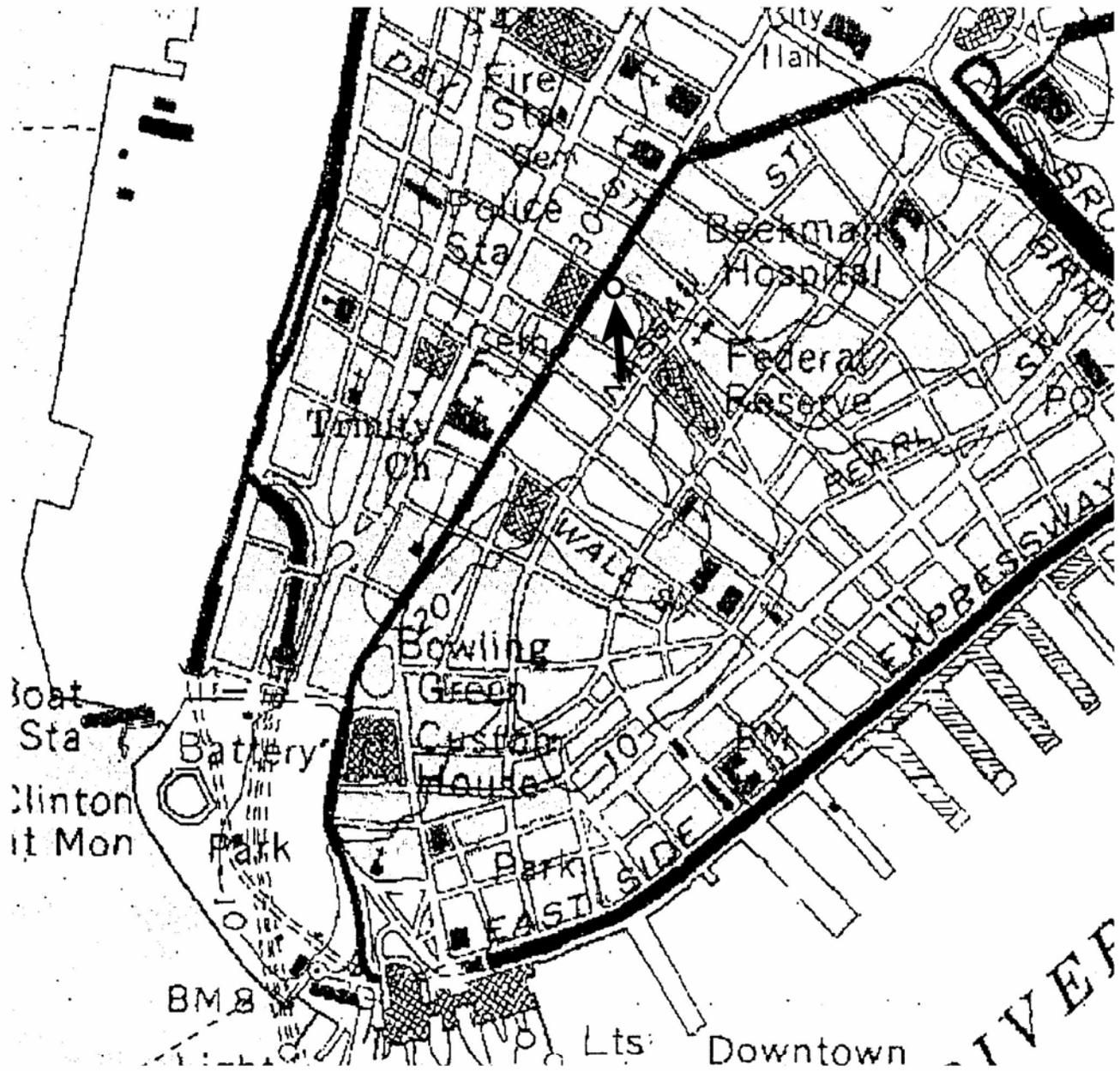
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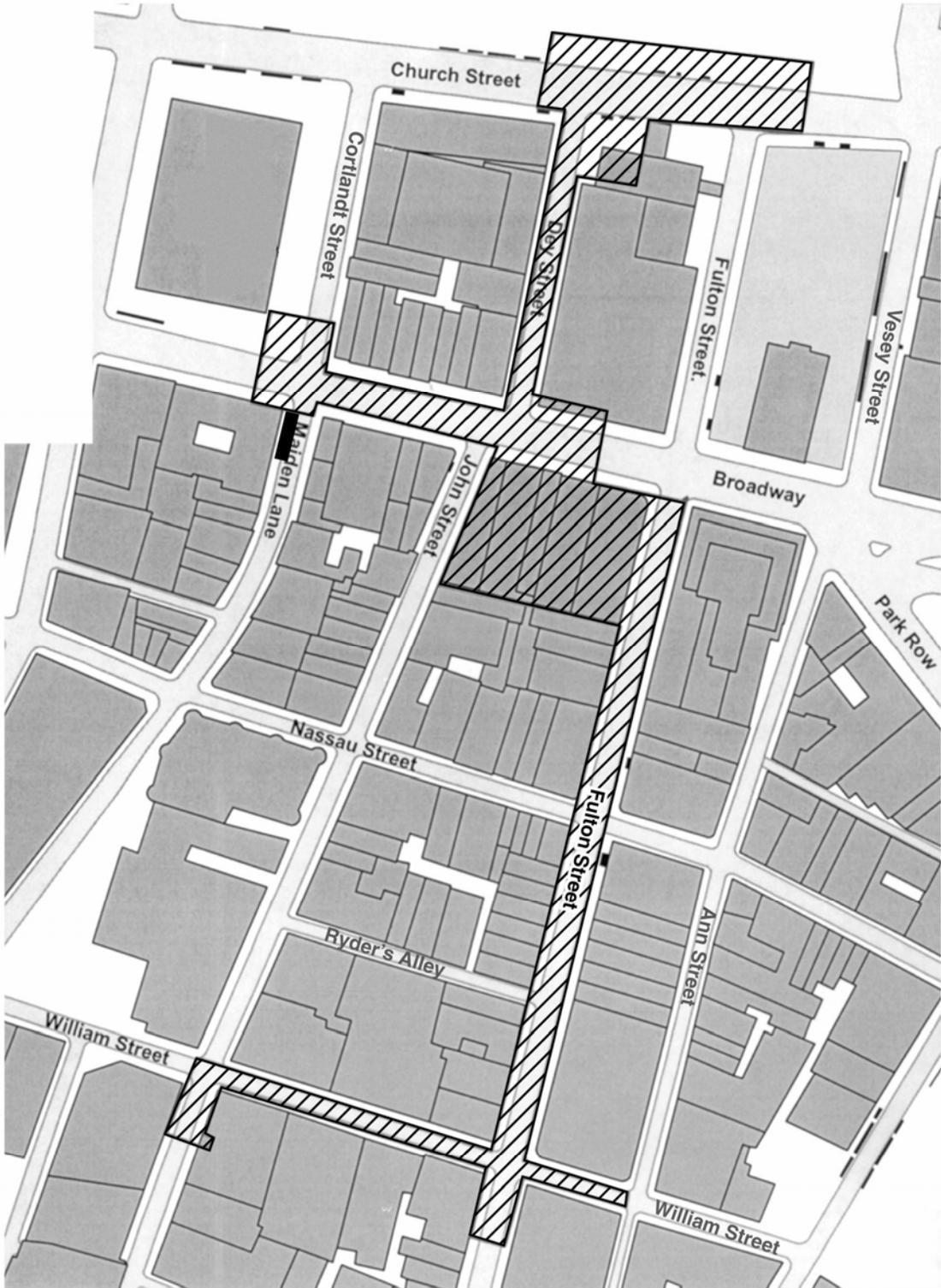
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○ project location, approx., not to scale
↑





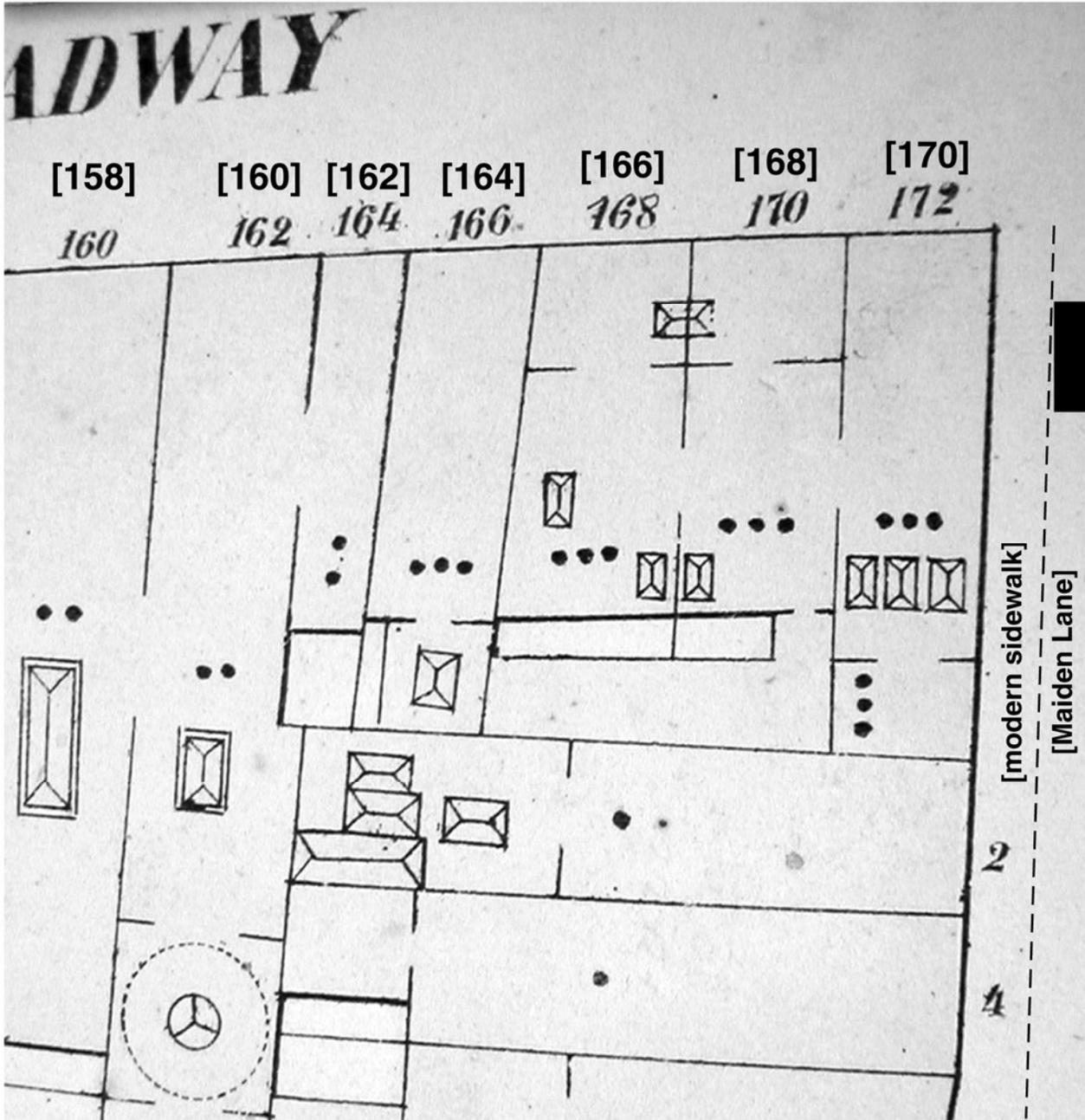
Base map source: Louis Berger 2004

-  archaeological APE 2004
-  trench location





3 Construction worker attempting to determine the thickness of the basement wall of 170 Broadway. The attempt was ultimately abandoned when it became apparent that the wall was more than a brick facing to the wall exposed on the south side of the Maiden Lane utility trench. (Geismar 5/9/05)

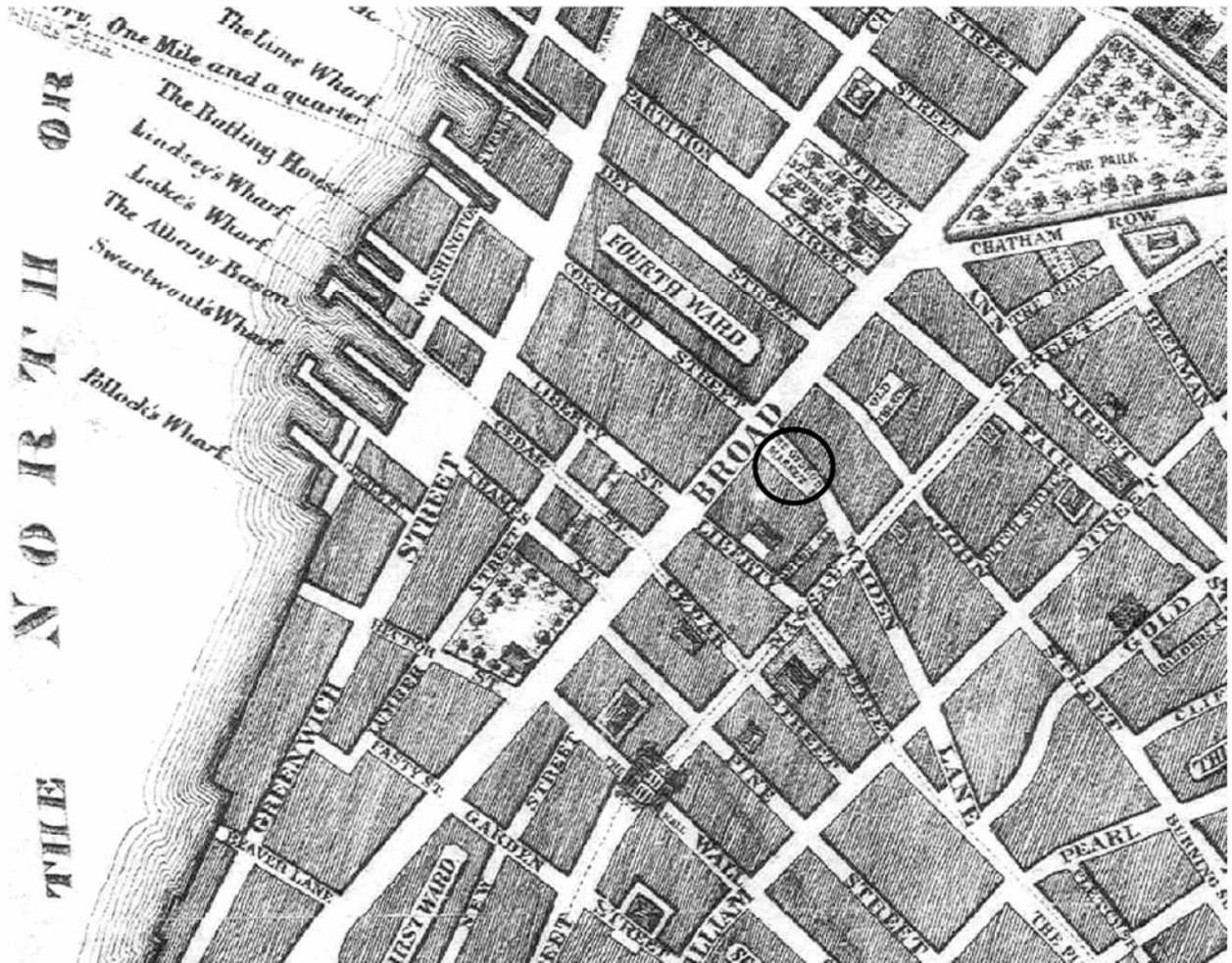


 utility trench location, approx.

[170] pre-1830 address

0  30
Ft.

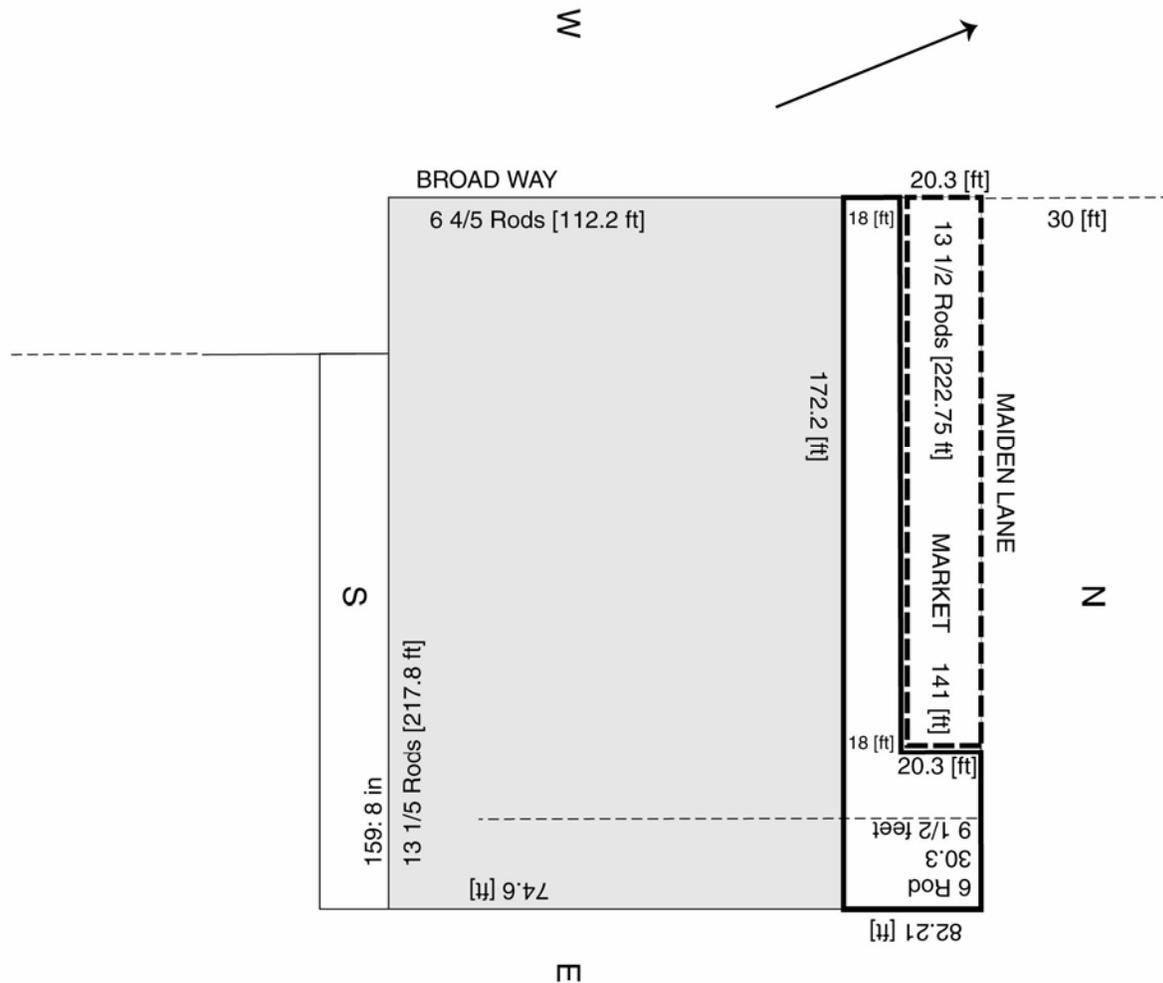




Oswego Market

no scale





- Hendrick de Blasen Boer property
- survey Oswego Market
- circulation

Note on back of sketch:

Bounds of Oswego Market at Maiden Lane

Situate out of the Land Gate Eastward. The Broadway bordered to the South. The Buildings and the Lott of ground of Hendrick de Blasen Boer. To the west the Said Broadway to the North Maiden Lane broad at the side of the Broadway Six Rods and four fifths of a Rod the North Side thirteen and a half Rod Behind at the East Side Six Rods nine and One Fourth of a Rod long at the South Side thirteen Rods and one fifth part of one Rod.

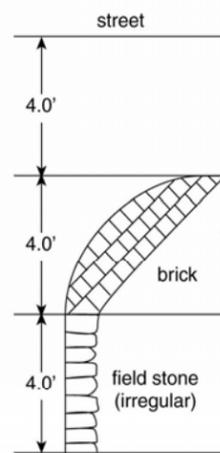
* Drawn from sketch of map by Shelly Spritzer



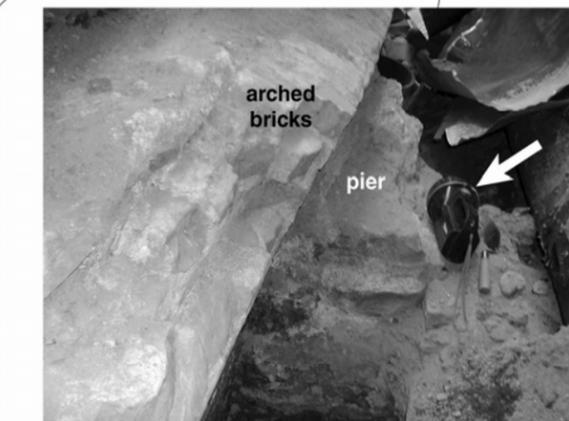
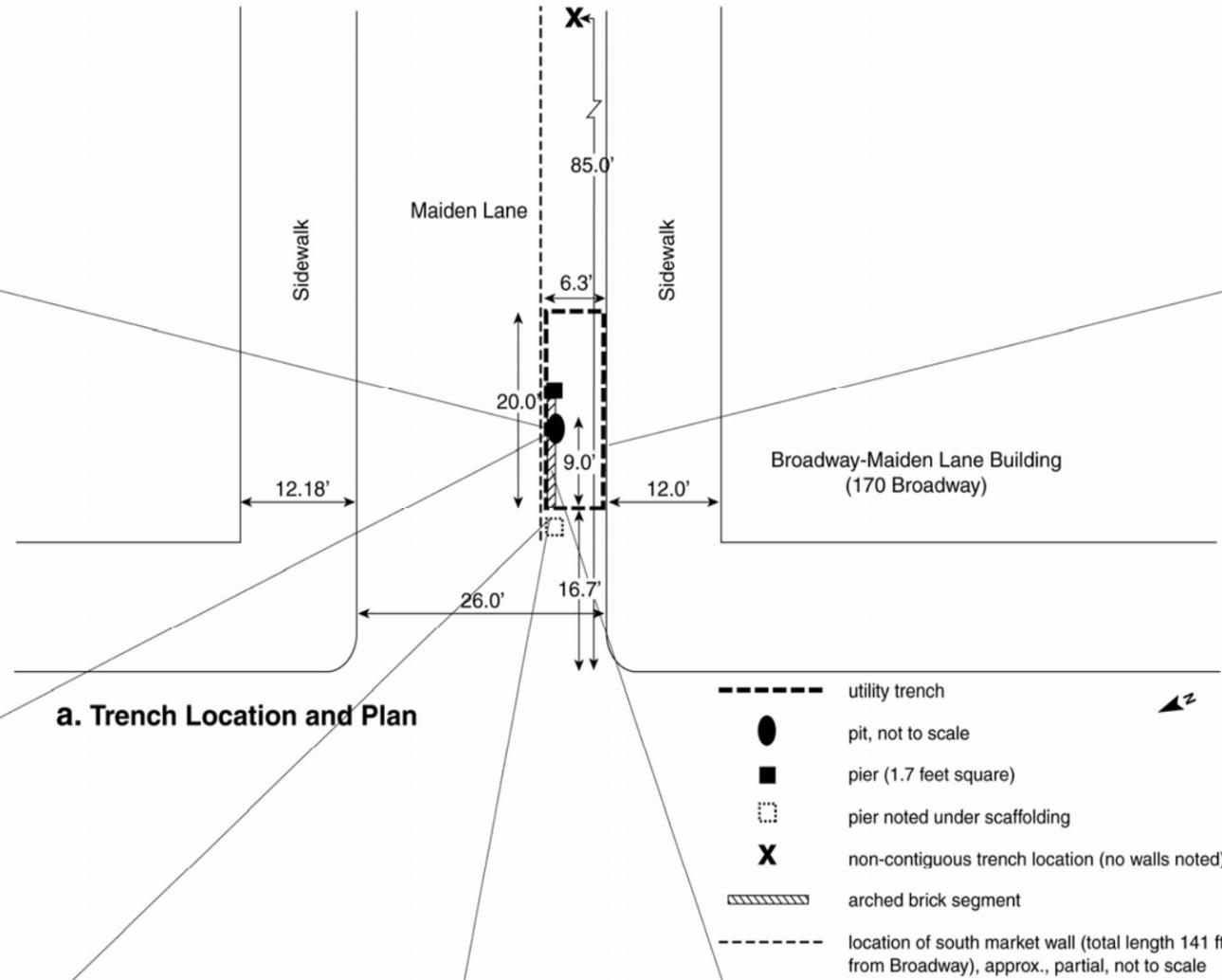
e. Excavator in the pit under excavation next to north wall (right arrow). A partially exposed steam pipe (left arrow) that runs down the center of the trench is next to the pit. The view is looking down from above the trench. (Geismar 5/9/05)



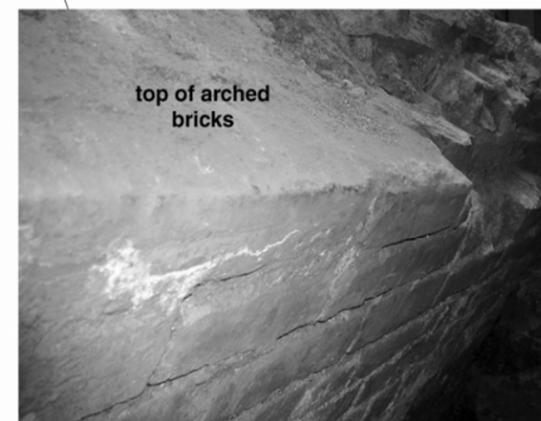
f. Pit (5 feet deep) next to the north wall after excavation. A dirt floor with cobbles (arrow) has been exposed. (Spritzer 5/10/05)



b. Projected profile (schematic) of north wall and arched brick remnant.



c. Arched brick remnant (left) with fragment of brick pier faced with mortar or cement seen from above (view is east). A flashlight lies on the broken pier (arrow). Remnants of the covering removed from the steam pipe that runs down center of the trench are in the upper right corner. (Geismar 5/10/05)



d. Detail of flat face of arched brick construction found above the stone wall exposed on the north side of the trench. (Spritzer 5/10/05)



g. View of south wall from above. "Soldier" bricks (upper arrow) under fill are visible above encased live wires. A brick inset, apparently a sealed-off access, in the stone wall (lower arrow), is visible below the wires. (Geismar 5/10/05)



h. View of utility trench looking east from above. Note remnants of arched brick construction (arrow) above the north stone wall (not visible). (Geismar 5/10/05)



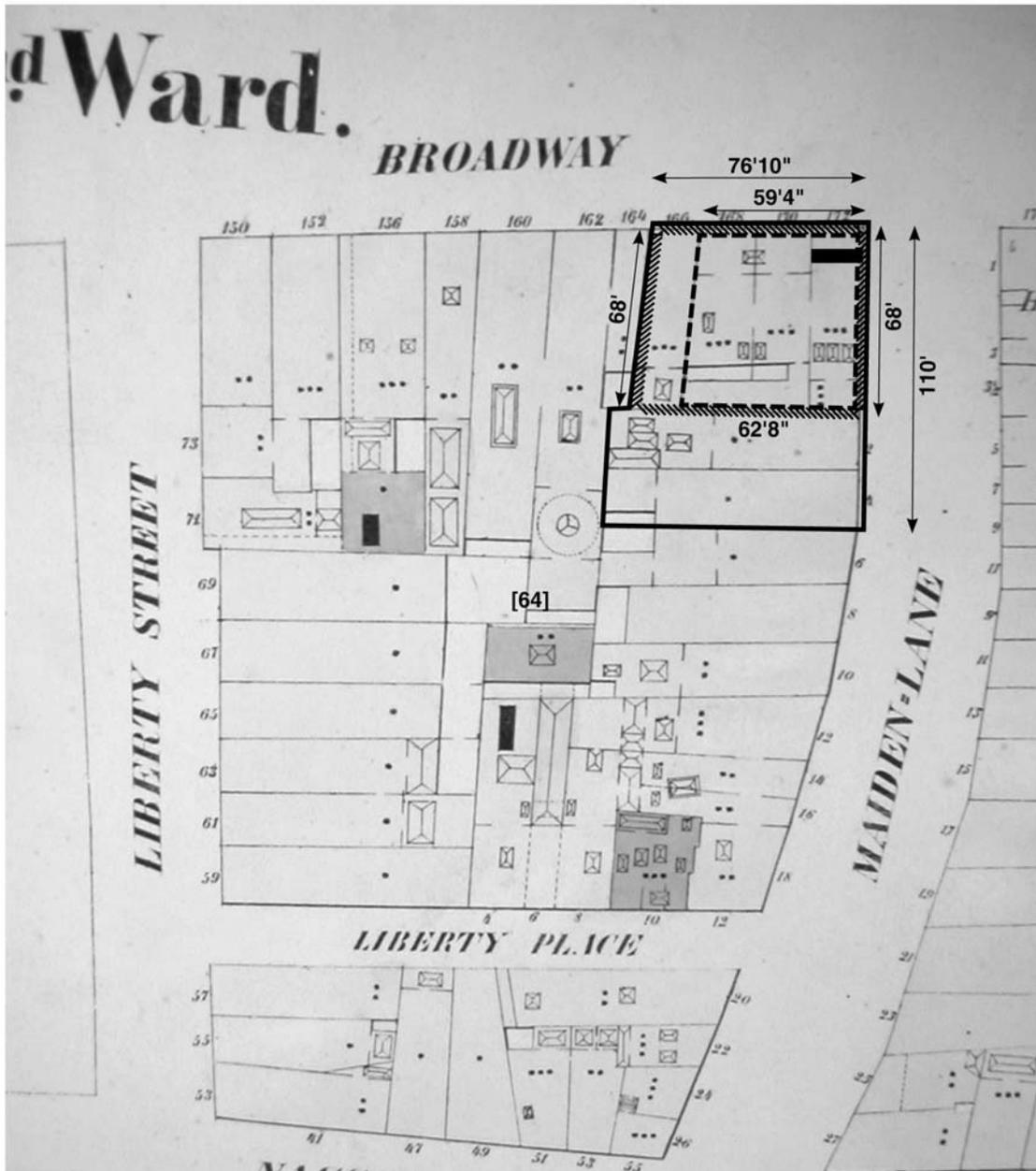
10 Brick street vault, an extension of the basement in the City Hall Restaurant on Duane Street. The vault's arch, which runs perpendicular to a brick street wall, is shored by iron beams. The long steel beam seen in the upper foreground replaced cast-iron columns that originally supported the structure. (Geismar 5/19/05).



11 Underside of the sidewalk exposed adjacent to the brick street vault seen in Figure 10. Here, too, steel beams were introduced to support the vault. Note the mortared stones of the end wall of the vault. (Geismar 5/19/05)

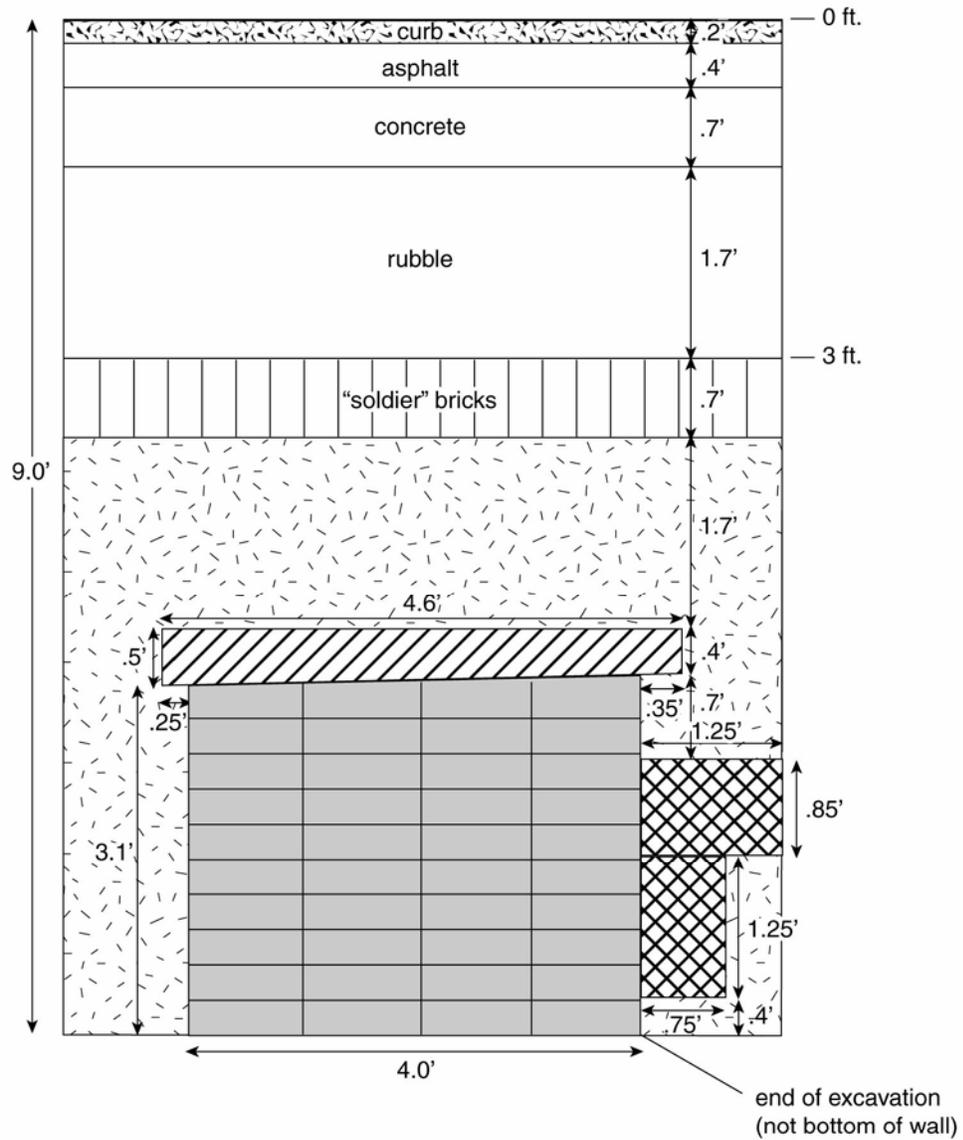


12 Long view of the brick arch of the street vault now incorporated into the bar of the City Hall Restaurant on Duane Street. View is looking toward the brick street wall. Elements of the restaurant's downstairs bar are to the left. (Geismar 5/19/05)



Three buildings at the corner of Maiden Lane and Broadway owned by Eleazar Parmley since 1830 (dashed line) were combined and later altered into a larger building or rebuilt (hatched line). This building was then razed to make way for the Broadway-Maiden Lane Building (170 Broadway) on an expanded lot in 1901 (solid line).





-  stone slab
-  flat stones, insets
-  stone wall
-  bricks