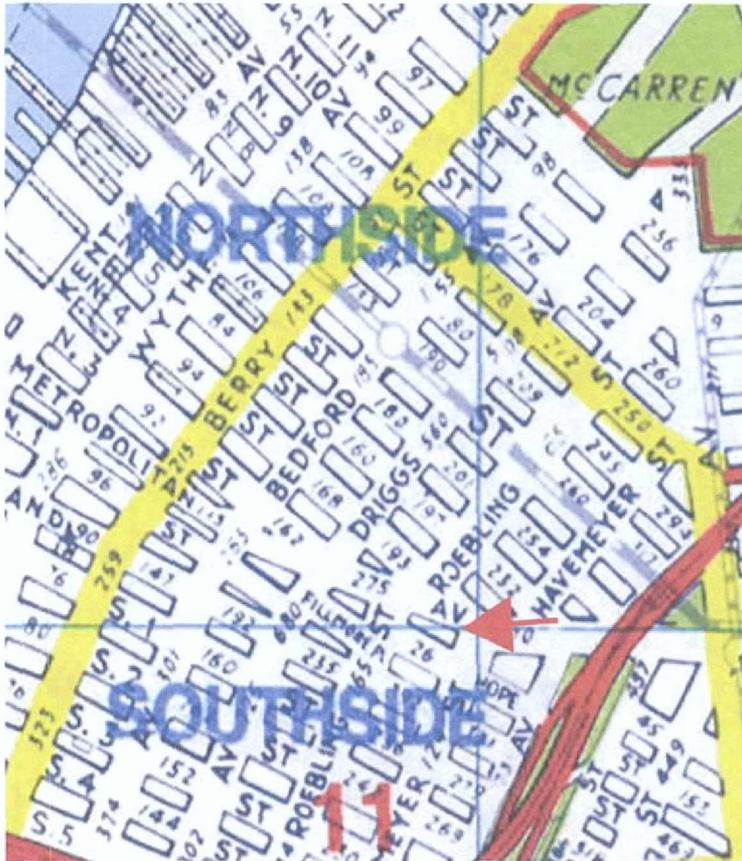


5370 K  
Bergoffen

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**90 HAVEMEYER STREET**  
Block 2368, lots 27 and 28  
Brooklyn, New York  
Report on Phase IB Archaeological Testing  
04BSA075 K

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Date: January 3, 2005

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## INTRODUCTION

The 90 Havemeyer Street project site (“project site”) is located on block 2368 at the southern boundary of the Northside section of Williamsburg one block west of the Brooklyn-Queens Expressway (Meeker Avenue). The block is bounded by Metropolitan Avenue on the north, Havemeyer Street on the East, Hope Street on the South, and Roebling Street on the West (Cover). Currently, the site is vacant, and is being used as a parking lot (Fig. 5). The project site area has been a mixture of residential and industrial buildings since at least the 1860s.

The ground elevation at the intersection of Metropolitan Avenue and Roebling Street is 20.5 feet above msl, and ca. 18 feet above msl at the intersection of Metropolitan Avenue and Havemeyer Street (Sanborn 1905). This gentle west-to-east slope is evident on the site. To the north, the land dips down into a shallow depression, ca. 9 feet above msl, around North 6th/North 7th Streets. In the 19th century, the “low ground east of Rodney Street caused Metropolitan Avenue to be flooded in times of heavy rain from Rodney to Union Avenue”, with as much as four or five feet of water (Armbruster 1942, 240).

The assessment of the potential archaeological sensitivity of the project site, comprising lots 26, 27 and 28, was included in the Phase IA Archaeological Assessment of the Greenpoint-North Williamsburg Rezoning Project, CEQR 04DCP003K, prepared by Celia J. Bergoffen Ph.D., R.P.A. and submitted in March 2004. In that study it was determined that lots 27 and 28 (part of site 268 in that report), were potentially sensitive for 19th century remains, while lot 26 was not. Lot 28, corresponding to 92 Havemeyer Street, was potentially sensitive for both a cistern and a privy, while lot 27, formerly 90 Havemeyer Street, had the potential to contain a privy only (Bergoffen 2004, p. 84).

Probably only a short period of time, if any, elapsed between the two lots’ development for private housing and the buildings’ connection to the water and sewer system, but in the absence of tax assessments, detailed maps of the project site from the 1850s and early 1860s, and missing sewer records, precise dating is not possible:

1. The earliest tax assessments for these lots date to 1868, but this does not furnish the construction dates for these buildings, and there may also have been earlier ones on the property;

2. The 1850 Dripps map indicates that there were probably already houses on the project site by mid-century, although these stood at the back of the lots and were not the same as the buildings recorded on the Higginson's 1868 map; (a cistern might then have been located in the front yard, but in this position, it could have been impacted by the construction, on the front of the lots, of the homes shown on the 1868 map);
3. Since the books containing the sewer records for these lots were lost, it is not possible to determine the exact date at which the buildings were connected to the sewer system.

It was also not possible to find evidence of earlier occupation on the site by tracing a resident's name back in the listings because the owners listed in the 1868 tax assessments evidently did not reside on their properties: their names were not found in contemporary Brooklyn city directories.<sup>1</sup>

The Phase IA Assessment therefore could not rule out the possibility that the buildings were initially equipped with a cistern and privies. Because the evidence of later construction impacts was minimal, it was determined that these lots were potentially sensitive for 19th century remains and should be subjected to archaeological testing prior to development.

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<sup>1</sup> Note that neither Federal nor State Census records for 1850-1865 record street addresses beside the lists of names.

## HISTORICAL BACKGROUND

The district of Williamsburg is bounded by Greenpoint to the north, the Queens county line to the east, and Flushing Avenue to the south. This land was purchased from the Indians by Willem Kieft in 1638, becoming part of the town of Bushwick, which was chartered in 1660. In the early 18th century it was part of the Colonel Francis Titus farm, and it remained farmland throughout the 18th century, along with its surrounding area.

At the turn of the 19th century, Richard M. Woodhull started running a horse ferry from Corlaer's Hook at the foot of Grand Street in Manhattan to a landing place at what is now Metropolitan Avenue, formerly the Long Island Road. Thinking that the area would soon be developed for housing, Woodhull bought land near the road to the ferry, then called Bushwick Street. He renamed the street "Williamsburg" in honor of his friend and the town's first surveyor, U.S. engineer Colonel Williams, who was a grand-nephew of Benjamin Franklin (Armbruster 1942: 1). As it turned out, Woodhull was ahead of his time -- New Yorkers were not yet ready to move across the river -- and he went bankrupt. His property was sold and divided up into lots (Armbruster 1942: 42-44).

In the early 19th century, a new village grew up at the foot of Grand Street. Here, Thomas Morrell, who later purchased part of the Woodhull property, began in 1812 to run a second ferry to Grand Street in Manhattan that competed with Woodhull's. The heart of the new village, called "Yorkton", extended from North 2nd Avenue (Metropolitan Avenue) to South 1st Street (one block south of Grand Street; Armbruster 1942: 45). It was laid out after the tracts of Woodhull and Morrell were combined to form a parcel extending twenty-six blocks north-south by twelve blocks east-west (Armbruster 1942: 181). In 1814, Williamsburg was still a village of 759 inhabitants with Grand Street roughly marking the limit of the settled area (Armbruster 1942: 46). In the 1820s, aside from the farm houses connected with twenty-three farms, there were only a few buildings on the road leading to the North Second Street ferry (Prime 1845: 348). The 25 acres lying immediately west of the project site (bounded approximately by Roebling Street), consisted of "small fields for cultivation and pasturage" surrounded by a "good stone wall" (in 1825, Stiles 1869, 387-88).

The process of development accelerated with the opening, in 1828, of a shore Road from the Brooklyn line at Division Avenue to Grand Street (Armbruster 1942: 4). This was followed in 1829 with the building of North 3rd Street and South 2nd Streets (Stiles 1870, 392). In 1830, the village had 1007 inhabitants and 148 buildings, including commercial establishments (Stiles 1870, 392). But “Plan of the Villiage of Williamsburgh Kings County” dated 1833 shows that the project site was not yet built up, although there were by that time houses along North 2nd (Metropolitan Avenue) and North 3rd Streets, along Kent Avenue south of Grand Street, and on the riverside between Grand and South 2nd Streets (Armbruster 1942, 4-5)

By the mid-1830s the growth of the area resulted in the division into lots of the 14th ward, which includes the project site block. The village, extended in 1835 and with a new ferry service to Peck Slip, now boasted seventy-two streets -- only thirteen open and graded, however, while the remainder were almost all dirt roads (Armbruster 1942, 5, 8; Stiles 1870, 394). Between 1843 and 1845 a further four hundred houses were built and “the town and village of Williamsburgh” declared its independence from Bushwick -- only to be absorbed some ten year later by Brooklyn, in 1855 (Armbruster 1942, 9). The town’s charter was drawn up by S.M. Meeker, a Williamsburg lawyer and village counselor after whom the street now subsumed by Brooklyn-Queens Expressway was named (Armbruster 1942, 104). Driggs Avenue, two blocks west of the project site, is named after Edmund D. Driggs, the last village president (1850-52, Armbruster 1942, 87, 148).

Large parts of Williamsburg were built up and occupied during the 1840s, certainly before 1859, when sewer service first became available (Prime 1845: 350). On the other hand, the 1850 Dripps map records that the project site block still had only a few structures on it by that date (Fig. 3). The map is difficult to interpret, but there may have been houses on the back of the project site lots at that time. The 1858 Dripps map, which does not indicate individual houses, merely shows developed blocks, including the project site block, as shaded in. Certainly, the 1850s were a boom decade in the city’s development, as clearly seen in the large increase in the entries in the Williamsburgh directory, first published in 1847: from 5300 inhabitants listed in 1850, the number rose to 10,925 in 1854 (Armbruster 1942, 6). The directory listings are a good gauge of housing development, since single-family homes -- which seem to account for

almost all of the buildings in the project area -- generally had one head of household listed per dwelling. The total population of Williamsburg in 1851, when it was chartered as a city, had grown to 30,780 (Stiles 1870, 387; Armbruster 1942, 103, 109).

The early 1850s produced several studies that addressed the problem of the district's inadequate water-supply. In 1854-55, thirty-seven public cisterns located largely between North 6 and South 6 Streets may have provided water for those who resided in the center -- including perhaps the possible residents of the project site block -- but people living further north and east relied on their own facilities in their backyards (Brooklyn City Directory 1854-55). Five more public cisterns were built by 1857 (Brooklyn City Directory 1857-58). In the meantime, in 1855, the Nassau Water Company had been incorporated, and in the following year, began the excavation of a reservoir in present-day Prospect Park (Stiles 1869, 422). In December 1858 water from the reservoir was introduced into the city mains (Manufacturers 1886, 60-61; Stiles 1869, 429), and correspondingly, the Brooklyn City Directory of 1859-1860 no longer list any public cisterns. Apparently, residences and business "began at once" to benefit from the new water system (Stiles 1869, 430)

As for sewer service, a Board of Sewer Commissioners had been constituted In April 1857 "to devise and carry into effect a plan of drainage and sewerage for the whole city [of Brooklyn]" (Stiles 1869, 428).<sup>2</sup> By the time the water system was completed, a sewer plan had been adopted and its construction, in the 1st, 3rd, 13th and 14th wards was underway (Adams 1859, 1). Indeed, the Croton Aqueduct Department noted that a "System of sewerage was adopted immediately after introduction of full supply of water," (*Report Made to the Common Council of the City of New York, 1864*, cited In Goldman 1988, 140).

The earliest preserved data In the Brooklyn Sewer Department are the permits recorded in Book 4, which begins In 1867. The two connections for 92 Havemeyer Street (lot 28) were listed in the lost sewer connection record books 1 and 3. The connection for Lot 27, 90

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<sup>2</sup> The city council had actually authorized construction of sewers on main thoroughfares already in the early 1850s, but these were meant exclusively to carry storm water and were not part of an overall sewer system (Goldman 1988, 141). Some five-and-a-half miles of these storm sewers had been laid by 1857 (Union History Co. 1899, 227).

Havemeyer Street, was also recorded In book 3. It is not known at what date book 1 began -- presumably around 1860. The dates of the connection(s) for lot 28 therefore fall between ca. 1860 and 1867, while for lot 27, we can only say that sewer service was introduced perhaps ca. 1865-1867. The Dripps 1850 map shows that there may have been houses on the project site by that date, but only on the back of lots 27 and 28. Our earliest detailed map of the project site block, the Higginson's 1868 map, shows that there were then houses on the front of both lots. According to the first tax assessments of 1868, James F. Brewster owned the building on lot 28, but did not reside there. Nor did Emily E. Armstrong, who owned the property next door, on lot 27.

## FIELD REPORT

Field testing was conducted over a period of three days, December 17-19, 2004, using an excavator supplied by the client. Celia J. Bergoffen, Ph.D., R.P.A. and Elaine Smollin, archaeologist, monitored the excavation of the trenches. The strategy was to open trenches at the rear of the building that formerly stood at 92 Havemeyer Street to test for the presence of a cistern or privy both immediately behind the main wing of the house and behind its rear extension, and to test for the presence of a privy or privies by opening a trench across the rear of both lots 27 and 28 (Figs. 1 and 4). It was originally intended to open a trench closer to the rear of the former house at 90 Havemeyer Street, but a telephone pole at the corner of the site made this inadvisable.

December 17

We began with the excavation of trench 1 at the rear of lot 28, working from south to north about 1 ft. from the property line. This trench measured ca. 11.6 feet west/east by ca. 23 ft. north/south. The parking lot is covered by a ca. 0.25 ft. layer of asphalt over a ca. 0.25 ft. deep gravel bed. There were some traces of ash below the gravel layer, but the next ca. 1.5 to 2.0 ft. of deposit consisted of yellowish-brown sandy soil filled with refuse, mostly metal, but very little building debris (Fig. 6). Beneath this was a ca. 0.3 ft. thick layer of powdery whitish-grey ash. This was followed by a deep layer, down to ca. 5 ft. below grade, of brown sand. The refuse deposits ended ca. 4 ft. below grade and at 5 ft., we encountered a clean layer of reddish-brown sand.

In the afternoon, we continued along the same line excavating trench 2, at the rear of lot 27. This trench was 13.0 ft. west/east and ca. 22.0 ft. north/south. Below the asphalt and gravel layers was a shallow ca. 0.2 ft. deposit of yellowish-brown silty soil followed by ca. 0.2 ft. of ash, and then very dark brown loosely packed soil, down to ca. 4.0 ft. in depth. This layer was packed with building debris, including many sections of ceramic pipe and a few of floor tiling, a couple of marble paving slabs and concrete, and a small amount of brick (Fig. 7). We also noted

two pieces of butchered beef bones and a couple of oyster shells. At ca. 4.0 ft. depth, the dark brown layer gave way to an orange-brown silty soil devoid of cultural remains (Fig. 8).

There was no indication that a privy had existed in either trench, and both were backfilled by the end of the day.

December 18

Trench 3 was opened at the rear of the main wing of the former building at 92 Havemeyer Street (lot 27), beginning approximately 19 ft. west of the east property line, on the southern half of the lot. The main part of this trench was ca. 10 ft. north/south by ca. 17 ft. east/west. It was extended a further ca. 4.0 ft. to the north, but this part was excavated to a depth of only ca. 2 ft., whereas we excavated to 6.0 ft. below grade in the main trench. Below the asphalt and gravel was a shallow deposit of fine brown soil that contained almost no cultural remains. But at ca. 1.0 ft. below grade at the eastern end of the trench, we encountered many large stones and cobbles in a denser, clayey brown soil. We took these at first to be a possible feature, such as the covering of a cistern, but determined that they were merely collapse from the adjacent building. There were many sections here of wide ceramic pipes, in the 24- to 36 inch diameter range. Along the northern edge of trench 3, ca. 2.0 ft. below grade, we encountered a boulder that could not be dislodged by the excavator. The boulder ran alongside a void that evidently marked the south face of the rear extension of 92 Havemeyer Street, ca. 12.0 ft. north of the south lot line. We continued excavating south of this line. A very large slab of concrete in our eastern balk proved eventually to be building collapse (perhaps a section of flooring, Fig. 9). This slab of concrete rested above the west foundation wall of the former building on this site. The preserved top of the 1.5 ft. thick wall lay ca. 4.5 ft. below grade. There was a large amount of brick collapse in the fill immediately west of the building line, but no refuse or other cultural remains. The southern corner and end of the foundation's south wall, ca. 1.0 ft. below grade, were also exposed.

On the western side of the trench, the backhoe ramp was excavated to ca. 4.5 ft. depth. Here we exposed a small section of an earlier asphalt pavement ca. 1 ft. below grade, indicating

that the area was probably twice repaved, the second time possibly in association with the burning of the extension (below).

There was no trace of a cistern along the back wall of the former building's main wing, or in its immediate backyard. This trench was backfilled.

Trench 4 was opened immediately behind the former rear extension, in the northern half of the trench, beginning ca. 47 ft. west of the east property line. The trench measured 13 ft. north/south by 14 ft. west/east, straddling the former yards of both lots. As usual, the cap was asphalt over gravel. Roughly in the northern half of the trench, this was followed by very dark brown, loose soil, as observed in trench 2, but in the southern part of the trench the earth became black with organic matter mottled with yellow clayey soil, over a deep deposit of burned and charred wooden beams and planks (Figs. 10 and 12). There were few or no remains other than the wood debris, and no other types of building debris. This material evidently came from a frame building (the 1912 Hyde map shows the building as brick-clad frame). It was somewhat surprising to find that the densely deposited wood debris from this "destruction layer" had not been better cleared from the yard, but merely packed down, sprinkled with dirt, and then asphalted over. This intentional fill leveled the surface, filling in the basement level.

At the western edge of the opening, ca. 0.6 ft. below surface, we hit the top of a colossal slab built of concrete with some brick "trim", that proved to be the foundation of a staircase. It was tipped up slightly to the west, although it cannot have traveled far from its original position. The excavator was unable to dislodge it. In the blackened soil around it was quantities of metal refuse.

At the end of the day, we left this trench exposed to a depth of ca. 3 ft.

December 19

Initially, the presence of organic residues in yellow clayey soil seemed similar to privy deposits or to a refuse pit, and we leveled the trench by hand to check for an outline of one or the other. But this layer, which began to yield large car parts, was too large and diffuse for either a privy or a refuse pit. The depth of wood deposit was especially deep and dense at the southern

end of the trench, south of the foot of the step foundations. In this southwestern corner of the trench, at approximately 4.0 ft. depth, water began very slowly to collect (Fig. 11). We had not found water or charred wood piles in trench 1, whose eastern edge lay 7 ft. west of trench 4. Trench 5, connecting trenches 4 and 1, was therefore opened to try to expose the other side of the steps, to find out if was a relationship between the steps and the water, and to see how much further the charred wood deposit continued to the west (Fig. 13). We stopped excavating in trench 4 at depths of 3.9 ft. In the southwestern corner of the trench, ca. 3.6 ft. on the east side of the trench and ca. 3.4 ft. in the northwest corner. There was no trace of the building's west foundation wall or of any brick or stone construction materials in trench 4 that might be associated with a cistern. The stairs were evidently not *in situ* as, according to the Sanborn maps, we were in the backyard.

Trench 5 was an enlargement of trench 4 to the west, beginning at the north edge of the staircase foundation. Below the asphalt and gravel layer, the stair foundation continued a further 2 ft., bringing its width to ca. 5 ft. Its preserved height was ca. 2.5 to 3.5 ft., and it was quite immovable. In the southern part of trench 5, the layer of charred wood in very dark grey to black "oily" soil continued, but now interspersed with other building debris: thin sheets of plastic roofing or waterproofing material. As in trench 4, the water welled up under the wood debris, but there was no sign of brick or stone construction, or of a pit. As mentioned, there was no sign of water in the much wider trench 1, which was excavated to a depth of ca. 4.4 to 5 ft. immediately to the west and south of trench 5. Since this was clearly not a privy or cistern associated with the 19th century occupation, but a phenomenon associated with 20th century fill, it did not justify opening another trench south of trenches 5 and 4. Trenches 4 and 5 were backfilled and the excavation terminated.

## CONCLUSIONS AND RECOMMENDATIONS

Trenches 1, 2, 4 and 5 tested for the presence of a privy at the rear of both former yards and found no evidence for such; trenches 3 and 4 showed that there was no cistern in the yard immediately behind the main wing or the rear extension of the former building at 92 Havemeyer Street. This building had brick foundation walls 1.5 ft. thick. The burnt wood debris from either or both of this brick-clad frame building and its extension were packed down in the yard behind the extension. The concrete stair foundation must have been moved from its original position. Although the building was some 53 feet deep and trench 4 began 47 feet from the east lot line, we did not locate the building's foundation, or any part of its walls. The quantity and size of metal debris in the former yard, as well as the extent of the ash layer and the depth of the charred wood layer in trench 4, suggest a period of neglect. Asphalt was spread above these fills of destruction debris and industrial refuse. At a later date, the parking lot was re-asphalted.

There are several possible reasons why no privy or cistern was found associated with the buildings at 90-92 Havemeyer Street:

1. If the inhabitants during the 1850s, (assuming there were any) used the public cisterns, or their cisterns and their privies were located west of the present west property line;
2. If the buildings on the Higginson's map were erected in the 1860s at the same time as sewer and water service became available, and cisterns and privies would therefore not have been needed;
3. If the buildings were erected before sewer service was installed, but not first occupied until after they were connected to the sewer system, in which case no privies would have been needed;
4. That a privy was in fact located behind 90 Havemeyer, but in the area near the present-day telephone pole, where it was not possibly to excavate safely.

Whichever the reason, it is the determination of this report that the 90 Havemeyer Street site is not sensitive for archaeological remains, and that neither further archaeological testing, nor mitigation is indicated.

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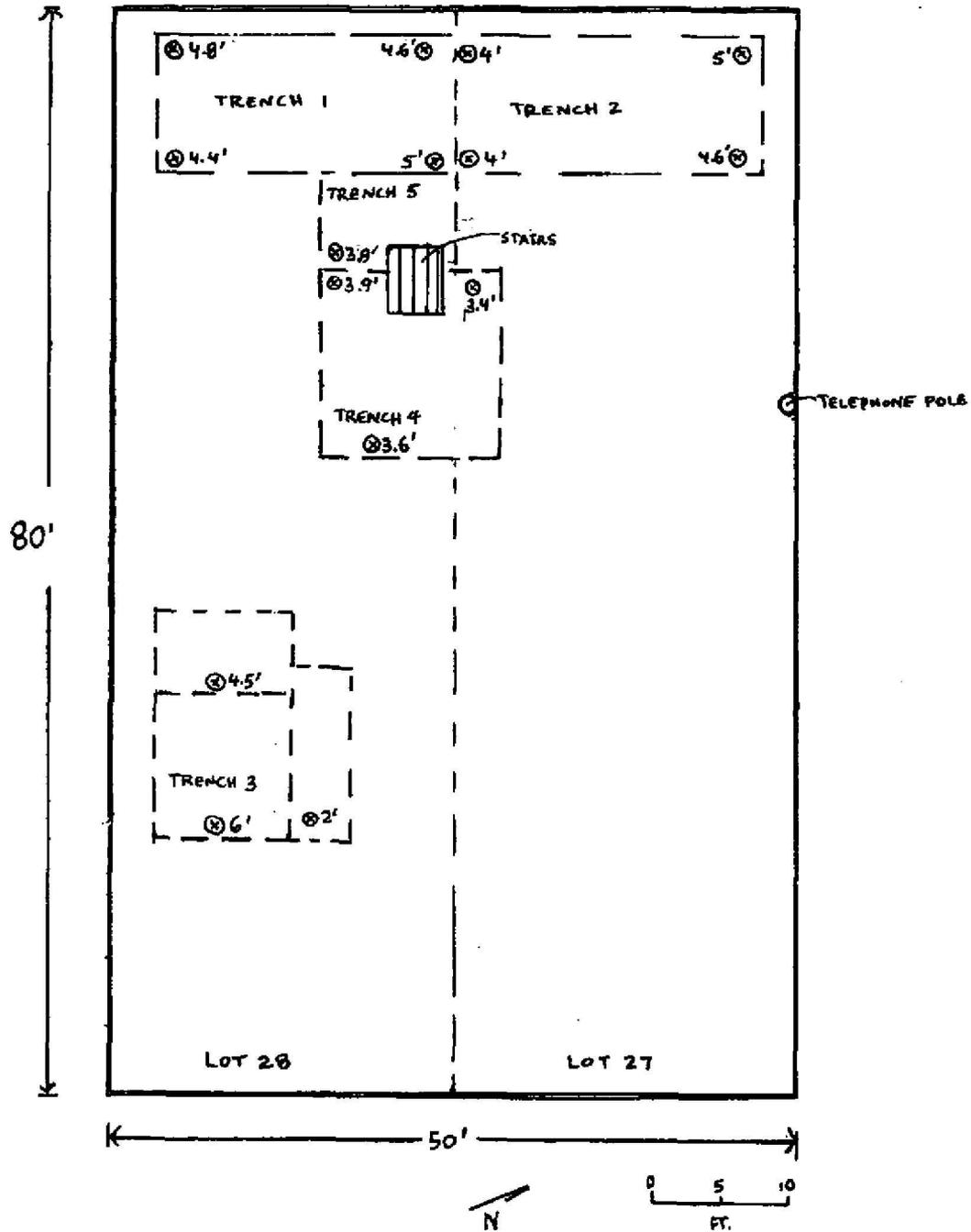


Fig. 1 Plan of Block 2368, lots 27 and 28 showing the location of the excavation trenches and closing depths

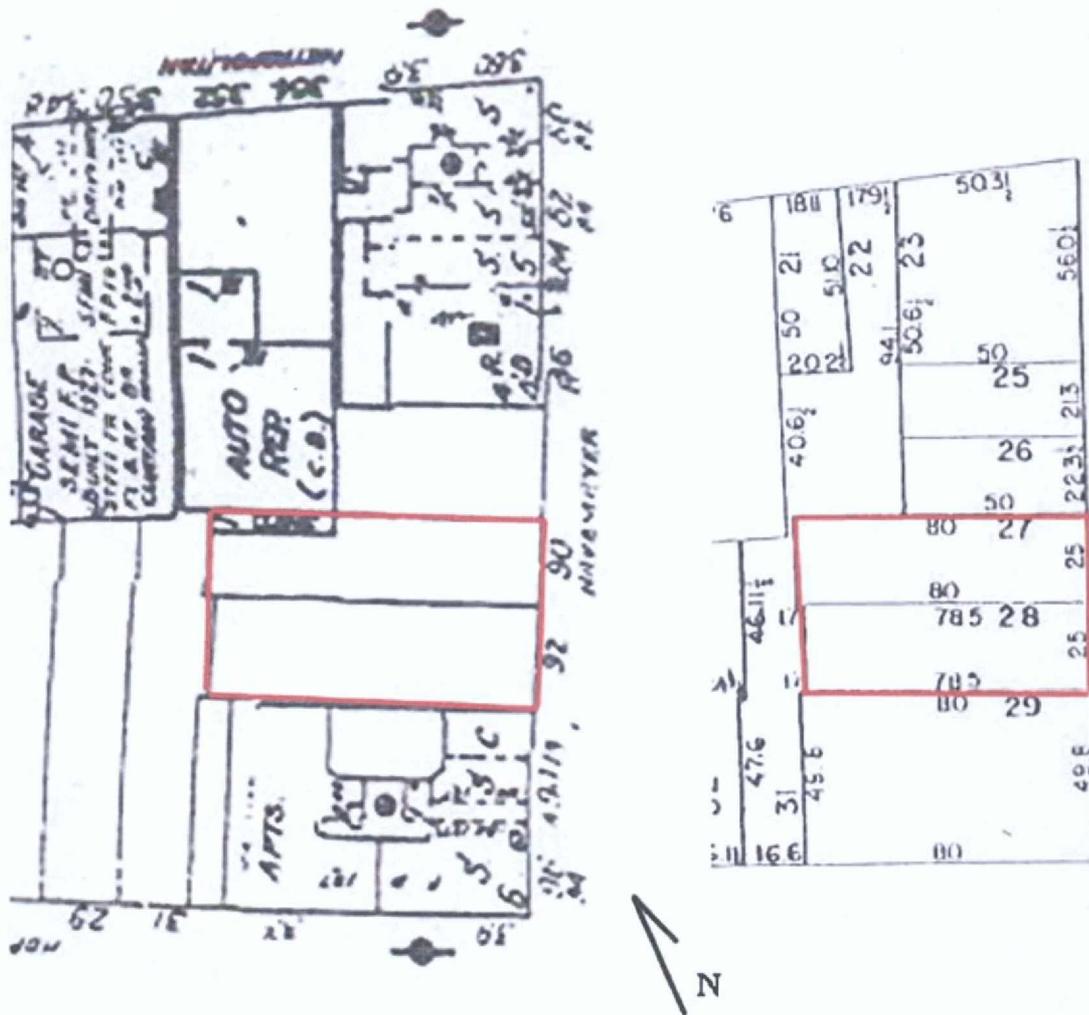


Fig. 2 2000 Sanborn map (left) and tax map (right) of Block 2368 showing the location of the project site



**Fig. 3 1850 Dripps map showing the location of block 2368 and the project site**





**Fig. 5** View of the 90 Havemeyer Street site looking west



**Fig. 6** View of the west bank of trench 1



**Fig. 7 View of the north end of trench 2 showing building detritus**



**Fig. 8 View of trench 2 looking north**



fallen concrete floor slab

brick south wall of 92 Havemeyer Street

brick west wall of 92 Havemeyer Street

**Fig. 9 View of the east balk of trench 3**



**Fig. 10 View of trench 4 looking west, with concrete stair foundation**



**Fig. 11 View of the southwest corner of trench 4 looking south**



**Fig. 12 View of trench 4 looking south**



**Fig. 13 View of the southwest corner of trench 4 looking west**