



# Memorandum

Date: October 27, 2010

To: Eileen Weingarten, Vice President  
Forest City Ratner Companies

From: Alyssa Loorya, Senior Archaeologist

Subject: **End of Field Summary, Phase 1B Archaeological Testing, Atlantic Yards Arena and Redevelopment Project, Blocks 1127, Lots 48 and 50, Brooklyn, New York**  
**05PR04690**  
**ESD/SEQRA-K**

## INTRODUCTION

In September 2010, URS conducted Phase 1B archaeological testing at the Atlantic Yards Redevelopment Area, located in Brooklyn, Kings County, New York. The Atlantic Yards project includes plans for an 800,000 square-foot arena (Atlantic Yards Arena) and an urban complex of housing, commercial, and retail space, in addition to approximately eight acres of landscaped public open space. The project area encompasses a small portion of City Block 1128, and all or most of City Blocks 927, 1118, 1119, 1120, 1121, 1127, and 1129. The blocks are located between Vanderbilt Avenue, Flatbush Avenue, Dean Street, and Atlantic Avenue (Figure 1). The New York City Landmarks Preservation Commission (LPC) performed a preliminary evaluation of the project area and determined that a Phase 1A study was required for Block 1118, Lots 6, 21, 22, 23, and 25; Block 1119, Lot 1; and Block 1127, Lots 45, 46, 47, 48, 50, 55, and 56. Historical Perspectives, Inc., conducted a Phase 1A archaeological assessment to evaluate the project's potential effects on archaeological resources within these specified areas (HPI 2001)<sup>1</sup>. Based on the research presented in the Phase 1A, Phase 1B archaeological investigations were proposed for specific areas determined to have a potential for archaeological sensitivity. Those areas were Block 1119, Lot 1 and Block 1127, Lots 48, 50, 55 and 56.

URS conducted a previous Phase 1B archaeological investigation on Block 1119, Lot 1, and Block 1127, Lots 55 and 56 (URS 2007)<sup>2</sup>. Since no evidence of either intact deposits or features was encountered, no further work was recommended. Both the New York Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York City Landmarks Preservation Commission concurred with this recommendation (LPC). At the time of the 2007 URS Phase 1B investigation, no testing was conducted on Block 1127, Lots 48 and 50, due to the presence of standing structures slated for demolition at a later date (Figure 2; Photographs 1 and 2). The Phase 1A documentary study concluded that there was the potential for historic shaft features—such as wells, cisterns, and privies associated with mid- to late-nineteenth-century structures—to be present within the two lots. In addition, the foundation remains of a structure that dates from the mid-eighteenth- to mid-nineteenth-century may also be present within Block 1127, Lot 48. This memo outlines the recent archaeological testing and results within these remaining two lots that required an investigation. A full report detailing the results of fieldwork, artifact analysis and recommendations, will be submitted for your review and transmittal to the OPRHP and the LPC.

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1. *Stage 1A Archaeological Assessment, Atlantic Yards Arena and Redevelopment Project*, prepared by Historical Perspectives, Inc., 2001

2. *Phase 1B Archaeological Investigation for Atlantic Yards Arena and Redevelopment Project, Block 1119, Lot 1 and Block 1127, Lots 55 and 56*, prepared by URS Corporation, 2007.

## PROPOSED STAGE 1B INVESTIGATION MEASURES

A previously approved testing protocol outlined the tasks to be performed for the archaeologically sensitive areas identified in the Phase 1A study (URS 2006)<sup>3</sup>. All work was conducted in accordance with the State Environmental Quality Review (SEQR) guidelines (Part 617) and the New York Historic Preservation Act of 1980, Section 14.09, the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's "Protection of Historic and Cultural Properties" (36 CFR 800). The study was conducted pursuant to the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*, prepared by the New York Archaeological Council and adopted by the New York State Office of Parks, Recreation, and Historic Preservation (NY SHPO 1994). In addition, it was performed according to the City Environmental Quality Review (CEQR) (Executive Order No. 91 of 1977) and conducted pursuant to New York State guidelines for such projects and pursuant to the guidelines established by the LPC for Phase 1B archaeological work in New York City. Alyssa Loorya, MA RPA, served as Principal Investigator for this project.

### *Block 1127, Lot 48 (475 Dean Street)*

The Phase IA study recommended two areas for testing in Lot 48 (HPI 2001). The first was a 25-x-15-foot area, designated Area B, located adjacent to the area to be tested in Lot 50 (Figure 3). The area was covered in concrete and an enclosed fire escape was attached to the recently demolished brick building. Originally, eight shovel test pits (STPs) had been laid out, but the impassable nature of the soils in the northern half of the test area required shifting the testing methodology to backhoe trenching. Testing consisted of a series of five STPs and machine excavation (Figure 4).

The five STPs excavated in the northern half of the test area were fairly consistent, with 1.5 feet of sandy fill materials and some late-nineteenth- to early-twentieth-century artifacts, followed by a silty sand devoid of any cultural materials.

The backhoe test trench was positioned in the northern half of the test area in the vicinity of the former stair (see Figure 4). This trench measured 9 x 26 feet and was excavated to a depth of 5 feet. In this area, a 2-foot-thick concrete foundation was uncovered, extending beyond the 5-foot excavation depth (Photograph 5). The area north of the foundation wall was filled with brick and concrete building rubble and metal pipes. The area south of the foundation wall also contained a significant degree of rubble, as well as some disassociated large cobbles.

The second area recommended for testing as part of Lot 48 was a 30-x-15-foot area, designated Area C, located along 6<sup>th</sup> Avenue and is referred to as the 6<sup>th</sup> Avenue Out Parcel (see Figure 3). This lot is identified as Lot 43 on several historic maps, however, for the purposes of this investigation it is being referred to its modern designation as Lot 48. Formerly, a one-story stuccoed brick structure stood on this parcel (see Photograph 2).

Subsurface investigations consisted of two machine-excavated trenches—measuring 2 x 16 feet and oriented north-south, and 3 x 10 feet and oriented east-west (Figure 5). Both trenches consisted of redeposited fill materials composed of rubble and recycled concrete aggregate (RCA) (Photograph 6). The brick within the

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3. *Phase 1B Archaeological Field Testing Protocol for Atlantic Yards Arena and Redevelopment Project, Block 1119, Lot 1 and Block 1127, Lots 48, 50, 55 and 56*, prepared by URS Corporation, 2006.

rubble dated post-1875. At 4 feet, modern plastic caution tape was exposed. The trenches were excavated to 5 feet, when the walls began to collapse. Safety concerns prohibited further excavation.

Both Areas B and C showed evidence of modern disturbance in the form of brick and concrete building debris, RCA, and the recent demolition. The underground storage tank was not located. No intact surfaces, features, or artifact deposits were uncovered.

### ***Block 1127, Lot 50 (473 Dean Street)***

The area recommended for testing within Lot 50 measured 25 x 25 feet and was designated Area A (see Figure 3). This area was located between the former three-story dwelling at the front of the lot and a two-story building that stood at the rear of the lot. The area had been used as a garden/yard area that consisted of stone slab sidewalks, and concrete bordered, raised flowerbeds. Subsurface investigations consisted of five STPs and three machine-excavated trenches.

The scope of work called for two parallel transects, 10 feet apart, to be tested at 5-foot intervals. Based on site conditions, which included a range of demolition debris and the potential to locate an underground storage tank (location and depth unknown), a checkerboard pattern of STPs was laid out along with three trench locations (see Figure 4).

All of the STPs showed evidence of disturbance. All the STPs were excavated to approximately 3 feet below starting grade and contained small amounts of artifacts, including nails, glass, pearlware, and modern debris. Soils within the STPs ranged from rubble fill to silty sandy clay at approximately 3 feet below grade (Photograph 7). STP A4 was adjacent to the remains of a raised concrete flowerbed. STP A4 was excavated to 2.8 feet below surface and contained brick fragments, nails, glass, and pearlware. Within STP A5, the remnant of a narrow brick wall was uncovered (Photograph 8).

Three backhoe test trenches were positioned to expose the length and depth of the brick wall uncovered in STP A5 and to traverse the area both east to west and north to south to ascertain a broader stratigraphic profile (see Figure 4). The trenches were excavated to approximately 4.5–5 feet below surface.

Trench 1 was oriented north-south and was excavated to 5 feet below surface. The trench, measuring 10 feet long by 2 feet wide, exposed a 4-foot-long brick wall segment, previously located in STP A5. The wall is a modern construction that was two courses wide and 13 courses deep, or 6 feet wide by 3 feet deep. The surrounding soils consisted of clean sand.

Trench 2, measuring 2 x 12 feet, was oriented east-west at the northern end of the test area. Excavated to 5 feet below surface, the trench consisted of modern rubble and debris. The loose soils collapsed easily beyond 4 feet and further excavation in this area is not possible (Photographs 9 and 10).

Trench 3 was located in the area of a raised concrete flowerbed and associated 2-x-2-foot stone slabs, which had been removed; these were remnants of the modern garden/courtyard area. The trench measured 2 x 17 feet and was on a north-south orientation. Excavated to 4.5 feet below surface, the only materials observed were brick fragments, rubble, and metal pipes (Photograph 11).

Within Area A, a significant amount of disturbance was observed throughout the area. Along the east side of the test area, there were significant amounts of debris and rubble laden fill. Along the westernmost end of the test area, natural strata were uncovered within 3 feet of the starting grade. These silty sandy strata, observed in STPs A2 and A3, began at 1.9 feet below surface and contained water-worn, rounded cobbles. All STPs and trenches showed evidence of rubble fill deposits. No intact surfaces, features, or artifact deposits were uncovered.

## **SUMMARY**

The Phase 1B archaeological testing of Block 1127, Lots 48 and 50, revealed significant and widespread disturbance of this area. Prior to the archaeological testing, the contractor was asked to scrape and remove 18–24 inches of rubble from the site. Test trenches, on average, involved the excavation of 5 additional feet, for a total excavation depth averaging 7 feet. Many of the STPs could not be fully excavated due to impassable rubble, leading to a shift in the testing strategy. Machine-excavated test trenches revealed significant disturbance and a high volume of building debris and rubble. No intact surfaces, features, or artifact deposits were uncovered. No further archaeological testing is recommended for these areas.

cc: Sonya Covington/FCRC  
Edward Morin/URS

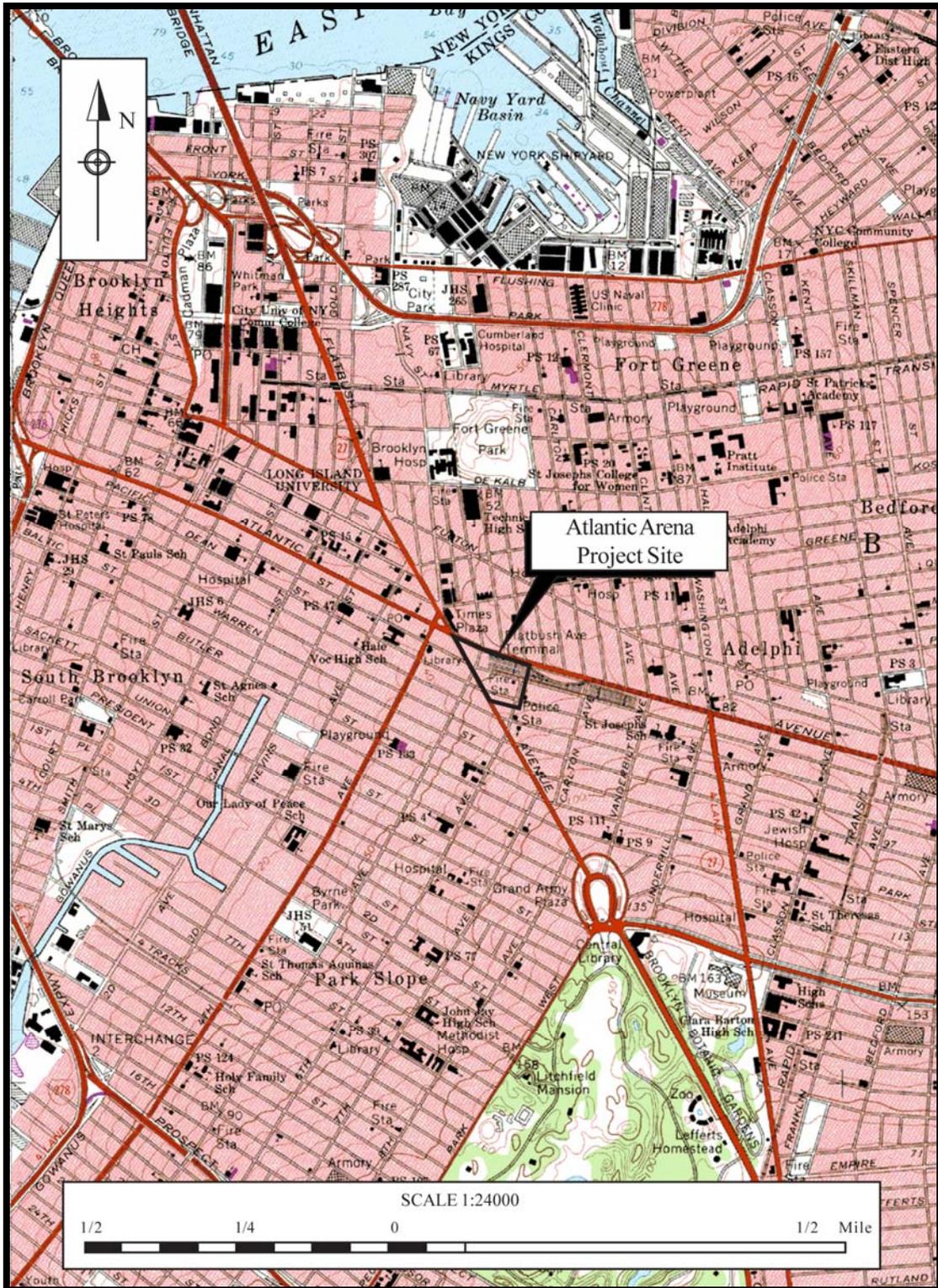


Figure 1 Location of Atlantic Yards Arena and Redevelopment Project area.

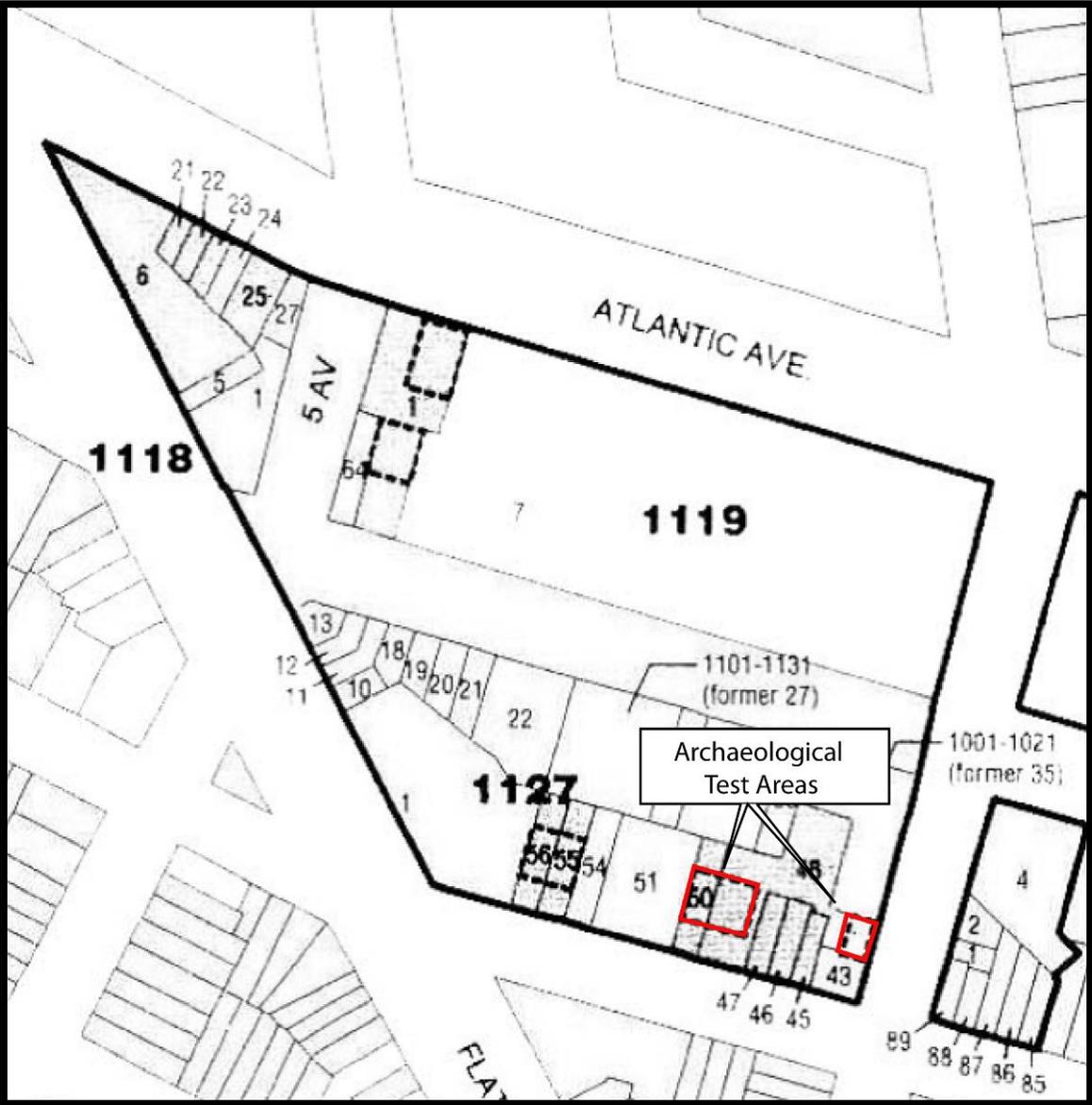
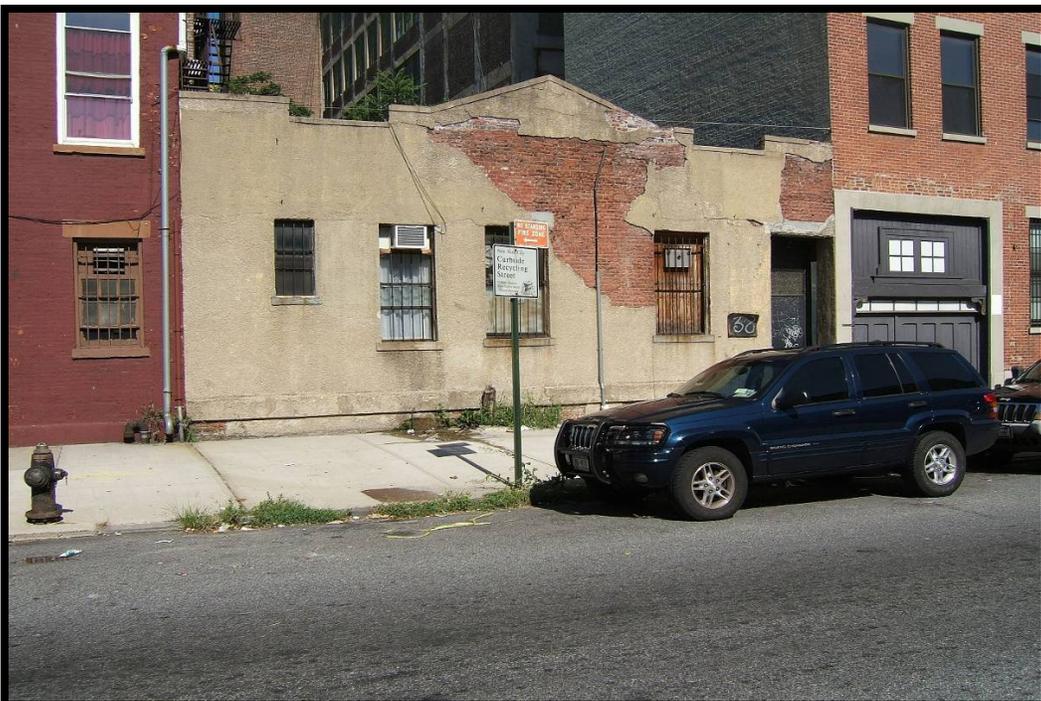


Figure 2 Project area map based on 1929 atlas in *Stage 1A Archaeological Assessment, Atlantic Yards Arena and Redevelopment Project*, prepared by Historical Perspectives, Inc.



Photograph 1 Block 1127, Lot 50, prior to demolition.



Photograph 2 Block 1127, Lot 48, prior to demolition. Looking northeast along 6<sup>th</sup> Avenue.



Photograph 3 Block 1127, Lots 48 and 50, post-demolition.



Photograph 4 Block 1127, Lots 48 and 50, post-demolition and removal of 18 to 24" of rubble fill.

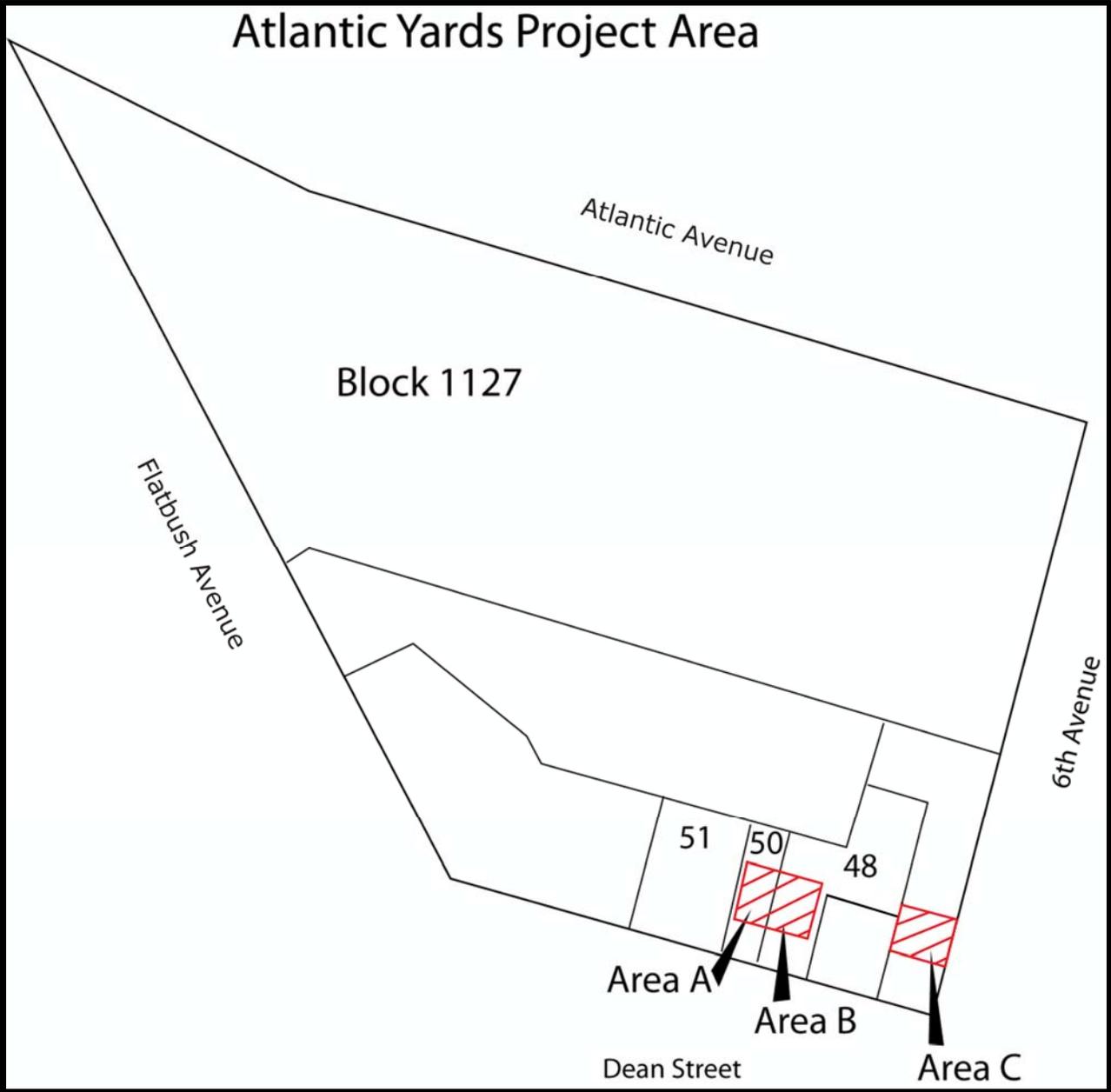


Figure 3 Atlantic Yards test area locations.

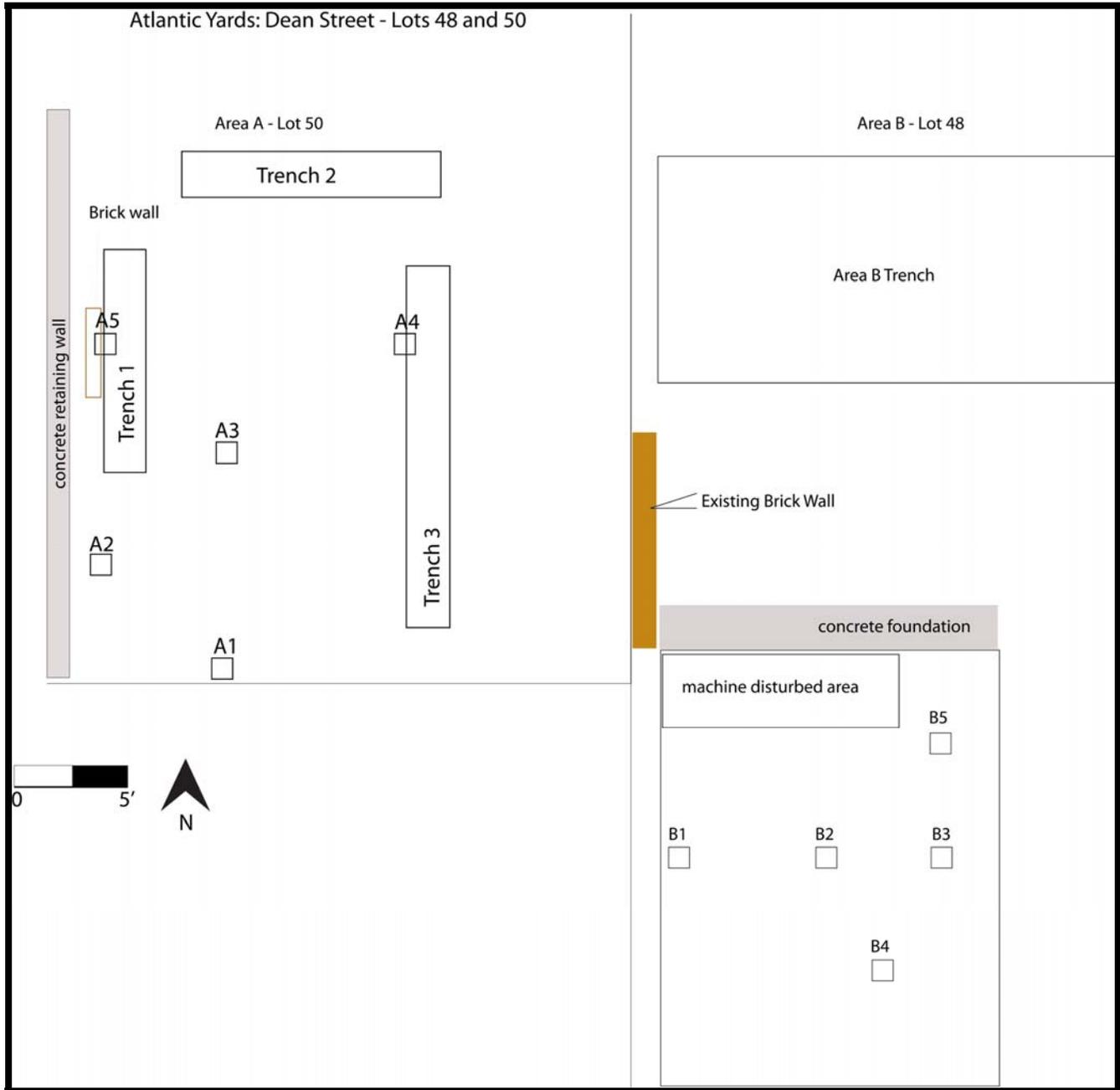


Figure 4 Areas A and B, shovel test pit and test trench locations.

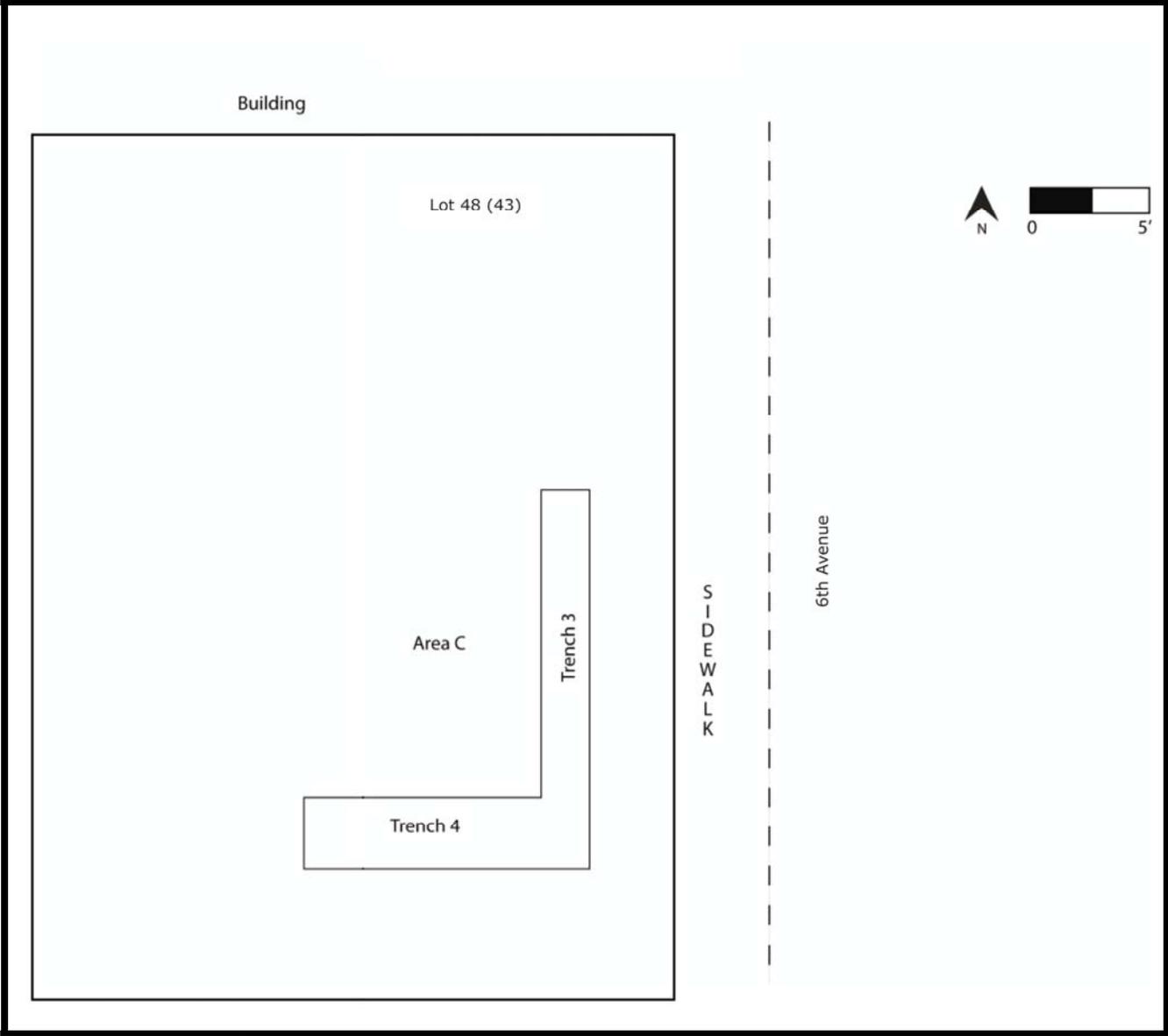


Figure 5 Area C, 6<sup>th</sup> Avenue Out Parcel, test trench locations.



Photograph 5 Block 1127, Lot 48, uncovering concrete foundation.



Photograph 6 Test Trench 5, Block 1127, Lot 48.



Photograph 7 Block 1127, Lot 50, STP A3.



Photograph 8 Block 1127, Lot 50, STP A5.



Photograph 9 Test Trench 2, Block 1127, Lots 48 and 50.



Photograph 10 Test Trench 2, Block 1127, Lots 48 and 50.



Photograph 11 Test Trench 3, Block 1127, Lot 50.