# Fort Greene Park Fieldtesting Memo Report Block 2088, Lot 1, Brooklyn

# NYCDPR Project No. B032-116M **DRAFT**



Fort Greene Park with Test Areas A and B Indicated

Prepared for New York City Department of Parks & Recreation (NYCDPR) Prepared by Joan H. Geismar, Ph.D., LLC June 1, 2017

# Fort Greene Park Fieldtesting Memo Report Block 2088, Lot 1, Brooklyn

NYCDPR Project No. B032-116M

# ABSTRACT

Archaeological fieldtesting was carried out at historic Fort Greene Park on May 9, 2017. The goal was to determine if excavation associated with new park drainage (water control structures) could impact significant archaeological resources associated with 19th-century domestic occupation that briefly preceded creation of Washington Park in 1847, later Fort Green Park. Specifically, testing addressed the issue of a cistern and privies associated with two back-to-back mid-19th-century tenanted dwellings and an unrelated shanty that persisted through the early years of the park's creation. In 1867, Frederick Law Olmsted and Calvert Vaux redesigned and reconfigured the park and it was renamed Fort Greene Park.

Testing verified the deep fill deposits documented in recent soil borings that proved to be virtually devoid of cultural material. No archaeological features were encountered and no further archaeological investigation is recommended. However, given the park's historical past, it is recommended that an archaeologist be on call during the planned excavations to address any unanticipated finds. Should there be such a discovery, work should stop in the sensitive area to allow archaeological assessment and documentation if necessary. Avoidance of the resource would be the goal.

Prepared for NYCDPR Prepared by Joan H. Geismar, Ph.D., LLC June 1, 2017

Joan H.Geismar, Ph.D. Archaeologist

40 East 83rd Street New York, NY 10028 (212) 734-6512 (212) 650-1521 fax joan.gelsmar@gmail.com

To: Paul Kidonakis, RLA/Parks
From: Joan H. Geismar/Joan H. Geismar, Ph.D., LLC, Archaeologist *Re*: Fort Greene Park Fieldtesting Memo Report
Date: June 1, 2017

This memo report presents an archaeological assessment related to the introduction of new water detention/retentions structures (drainage) at Fort Greene Park, Brooklyn (Block 2088, Lot 1; Figure 1). Joan H. Geismar, Ph.D., LLC prepared the report for The New York City Department of Parks & Recreation (NYCDPR Project No. B032-116M). The goal was to determine if the proposed undertaking could or would adversely impact archaeological resources in areas of potential effect (APE) in this 30 +-acre park, a New York City Landmark. In this case, the APE includes two areas of concern, one, the former site of an ephemeral shanty town just west of the park's North Portland Avenue entrance on Myrtle Avenue (the "Myrtle Avenue Landscape," designated Area A), the other where former house lots were developed south of the park's Willoughby Street entrance on Washington Park<sup>1</sup> (the "Southeast Park Path," identified as Area B (Figure 2). Both were developed or occupied between 1839 and 1847, initially shortly before the former fort site was slated to become Washington Park, but also later while the park was in formation. Washington Park was then redesigned and renamed Fort Greene Park in 1867 (Geismar 2005:6-10).<sup>2</sup>

Between 2000 and 2005, an archaeological assessment and fieldtesting focused on McKim, Meade and White's 1905 Park Plaza but also addressed the entire park's development history and archaeological potential (Geismar 2005). Research indicated that deep fill was introduced on the east side of the park in connection with Frederick Law Olmsted and Calvert Vaux's 1867 redesign of what was then Washington Park. To a degree, this was also true of at least some of the Myrtle Avenue APE (Area A), since recent soil borings documented from 5 to 5.5 feet of fill in both APEs (see Appendix A).<sup>3</sup> It appears that excavation required for the new drainage structures might extend slightly deeper than the documented fill in the identified areas of concern (see Soil Borings B-3 and PB-1, Appendix A).<sup>4</sup>

Fieldtesting on May 17, 2017, entailed archaeologically monitoring four backhoe trenches (one test trench was located in Area A near the North Portland Avenue entrance to the park, the three others were located in Area B on the east side of the Park south of the Willoughby Street gate).<sup>5</sup> While trench depths exceeded the 5-foot (1.5 m) limit for safe entry, close observation of each trench excavation and of the excavated dirt indicated the proposed undertaking would not impact archaeological resources.

<sup>&</sup>lt;sup>1</sup> Before the park was created, Washington Park, which borders the east side of Fort Greene Park, was called Cumberland Street.

<sup>&</sup>lt;sup>2</sup> The *Brooklyn Daily Eagle* of the time includes several articles about the removal of the shanties that apparently persisted even after Washington Park was established but were finally removed in 1851 (*Brooklyn Daily Eagle* 1849-1851).

<sup>&</sup>lt;sup>3</sup> Note: there was no sample recovery in PB-1 between 5 and 6.5 ft. (1.5 and 2.0 m) below the ground surface (BGS) so the exact depth of fill is undetermined.

<sup>&</sup>lt;sup>5</sup> Due to testing logistics, Test No. 4 is in Area A and Test Nos. 1, 2, and 3 are in Area B.





project location

Page 2 of 18

# FORT GREENE PARK FIELD Areas A and B (Approximate)



Page 3 of 18

#### FIELDTESTING

As noted, four test trenches were excavated in identified areas of concern. Three of them (Nos. 1 to 3) were located in Area B on the east side of the park, the other, No. 4, was in Area A just west of the Myrtle Avenue entrance at North Portland Avenue on the park's north side (see Figure 2). The trench locations were determined by coordinating the proposed undertaking with an 1847 map shown in the 2005 report (Stoddard 1847; Figure 3 this report). Test No. 1 addressed the possibility of locating a cistern associated with a dwelling that fronted on Washington Park (then Cumberland Street; see Figure 3). The focus was where a rear appendage formed an "L," the typical location of cisterns intended to collect roof run-off.

Test Nos. 2 and 3 paralleled the rear property line between the backyards of this same house and its rear neighbor, both tenanted properties owned by John Russ (Geismar 2005:Table 1), where privy pits for backyard outhouses are typically located. Test No. 4 is where shanty structures are indicated on the 1847 map (see Figure 3).<sup>6</sup> The degree of past disturbance at this location is a question since it is adjacent to the DEP Access Corridor for a Croton water tunnel introduced into the park in 1913 (Figure 4) although it is more than likely that construction was confined to the tunnel right-of-way. However, as noted in the 2005 report, this construction included "raising the

grade" (Quennell Rothschild 1988: 2.1 cited in Geismar 2005:11), although it did not appear to affect the eastern part of the test area where Test No. 4 was located. Perhaps most importantly, the shanty structures, which also included animal pens, etc., were by definition ephemeral (e.g., see Photo 1). This apparently allowed them to be "transplanted by their owners to a place called



**Photo 1.** Shanties at West 55th Street and Seventh Avenue in Manhattan, possibly c.1868. Oil painting by Ralph Albert Blakelock 1868 (?).

Jackson's Farm, in the neighborhood of Clason and DeKalb avenues (sic)..." (*Brooklyn Daily Eagle* 1851). Therefore, it is a question whether this shanty complex included substantial and ubiquitous 19th-century outdoor sanitary features such as dry-laid stone privies and mortared stone or brick cisterns. It seems more than likely that box or bucket privies or even latrine trenches may have been the available sanitary facility and that water was collected in barrels, but this is speculation.

<sup>&</sup>lt;sup>6</sup> Test No. 4 is a former shanty location that possibly belonged to John Ayers but no additional information is available (Geismar 2005:Table 1).



FORT GREENE PARK FIELD Areas A and B Locations (Base: Stoddard 1847 in

Joan H. Geismar, Ph.D., LLC

**FORT GREENE PARK FIELD** Croton Water Tunnel and DEP Access Corridor (Parks 2016)



Under my direction, field personnel comprised Shelly Spritzer for archaeological support and Kevin Maloney of Malbro Contractors who provided and operated the CAT 303e with a 22-inch (0.6 m) bucket and was assisted by Michael Kearny. It should be noted that meter measurements throughout the report are to the first tenth. Test locations are indicated in Figures 5 and 6.

#### **Test No. 1 in Area B** (Potential: cistern associated with 1840s dwelling) **Date**: 5-9-17 **Length**: 13.7 ft. (4.2 m) **Width**: 3.2 – 4.9 ft. (1.0 – 1.5 m) **Depth**: 2.4 to 6.6 ft. (0.5 1to 1.5 m)

Beneath approximately 1.0 ft. (0.3 m) of topsoil the fill in Test No. 1 was a clean brown soil that became a darker yellow brown with depth and included many small stones. A pipe cut diagonally across the southeastern corner of the trench at about 2.4 ft. (0.7 m) below the ground surface (BGS). This was followed by what proved to be a scatter of large stones at about 5.0 ft. (1.5 m) BGS. No feature was located and although a basically clean soil, a brick fragment at 5.5 ft. BGS indicated fill. (See Figure 7 for a schematic plan, profile, and image).

## **Test No. 2 in Area B** (Potential: privy pit associated with same 1840s dwelling as Test No. 1) **Date:** 5-9-17 **Length**: 26.5 ft. (8.1 m) **Width**: c. 3.0 ft. (0.9 m) **Depth**: 2.8 to 7.5 ft. (0.9 to 2.3 m)

Test No. 2 was sited parallel to the rear property line of the lot investigated for a cistern in Test No. 1. The trench followed the east side of the line for 26.5 ft. (8.1 m). The rationale for choosing this location as well as the location of Test No. 3 is that privies were by law and by convention about 2 ft. (0.6 m) from a lot's rear property line. Boulders were encountered in the north end of the trench at about 4.5 ft. (1.4 m) BGS. Clean fill was found to about 5.0 ft. (1.5 m) BGS when the soil, with its small stones, became a darker yellow brown (10 YR 3/6), apparently a glacial till. No feature was located and the trench was backfilled before opening Test No. 3. See Figure 8 for a schematic plan, profile, and image.

# **Test No. 3 in Area B.** (Potential: privy pit associated with 1840s dwelling) **Date**: 5-9-17 **Length**: 32.2 ft. (9.8 m) **Width**: c. 3.0 ft. (0.9 m) **Depth**: 7.3 to 7.6 ft. (2.2 to 2.3 m)

Test No. 3 was excavated parallel to and approximately 2 ft. (0.6 m) west of Test No. 2. That is, on the west side of the property line that divided the two developed lots in the mid-19th century. Excavation fairly quickly caused the northern end of the baulk between this trench and Test No. 2 to collapse. Approximately 6-ft. (1.8 m) of "rotten" stone, about 1 ft. (0.3 m) high, was documented in the east wall about 4.5 ft. (1.4 m) from the southern end of the trench. The soil in the Test No. 2 and 3 was comparable. No feature was found and the trench was backfilled. See Figure 9 for a schematic plan, profile, and image.

# **Test No. 4 in Area A** (Potential: evidence of 1840s shanty occupation) **Date**: 5-9-17 **Length**: 8.6 ft. (2.6 m) **Width**: 3.3 ft. (1.0 m) **Depth**: 6.7 ft. (2.0 m)

Test No. 4, a pit more than a trench, was located in the eastern part of the planned excavation for the new water control feature where shanties were documented in 1847. As agreed earlier in the day in discussion with Paul Kidonakis, this section, approximately at street grade (the grade increased to the west), was taken to a depth of 6.7 ft. (2.0 m). Below 0.6 ft. (1.5 m) of very dark topsoil, were layers of brown to yellow brown, very clean soils (one water worn rock

# FORT GREENE PARK FIELD Area A, Test No. 4 (Parks 2017)



# FORT GREENE PARK FIELD Area B (Test Nos. 1, 2, 3) (Parks 2017)





# FORT GREENE PARK FIELD Schematic Plan and Profile Test No. 1 in Area B

7c Test No. 1 looking east with Washington Park in the background. The yellow caution tape (arrow) covers an iron pipe exposed in the southeast corner of the trench. (Geismar 5/9/17)



# FORT GREENE PARK FIELD Schematic Plan and Profile Test No. 2 in Area B

8C Test No. 2 looking north. The trench is near the rear property line of a former tenanted dwelling, the possible location of a privy pit in the 1840s. Note the color variation in the excavated soils. (Geismar 5/9/17)

# FORT GREENE PARK FIELD Schematic Plan and Profile Test No. 3 in Area B



**9c** Test No. 3 looking north. The trench, on the west side of the property line addressed in Test No. 2, now partially backfilled, was also the possible location of a privy pit for a tenanted dwelling in the 1840s. The baulk (arrow) between the two trenches soon partially collapsed. (Geismar 5/9/17)

was noted at about 6.0 ft. (1.8 m) in a sandier soil with small stones and small roots). No features were encountered and the trench was backfilled. See Figure 10 for a schematic plan, profile, and image.

# FINDINGS AND RECOMMENDATIONS

Four test trenches (Test Nos. 1 to 4) were excavated to determine if the planned introduction of water detention/retention (drainage) structures could adversely impact significant archaeological resources associated with the brief, mid-19th-century domestic occupation of what is now Fort Greene Park. The testing program, carried out on May 9, 2017, determined there were no archaeologically significant issues. In fact, virtually clean fill was documented throughout the tested areas. Therefore, no further archaeological investigation is recommended. However, given the park's long history and historical significance, and since there could always be an unanticipated find in such a setting, it is recommended that an archaeologist be on call during excavation for the new drainage structures. Should anything of archaeological significance be encountered, all parties should agree that work would stop in the sensitive area to allow an assessment, and if warranted, documentation of the find with avoidance the goal.



10a East-West Schematic Plan



**10c** South wall (arrow) of pit-like Test No. 4 where one of several shanties was located in the 1840s. (Geismar 5/9/17)

## REFERENCES

#### Blakelock, Ralph Albert

1868? *Shanties, Seventh Avenue and Fifty-fifth Street*. Oil on Canvas. On-line: Streethttp://www.questroyalfineart.com/shanties-seventh-avenue-and-fifty-fifth-street/

#### Brooklyn Daily Eagle

1849 – 1851 Articles/letters *re* squatters' shanties in what was then Washington Park. On-line: <u>https://bklyn.newspapers.com/image/50244500/?terms=WASHINGTON%2BPARK%</u> <u>2BSHANTIES</u>

May 30, 1849, P. 3 Col. 1: call to remove the "filth and dirt" of the shanties from the "Pubic Grounds" around Myrtle Avenue.

June 22, 1849, P. 2 Col. 2: refers to the Common Council's resolution to remove squatters from the park.

June 23, 1849, P. 2 Col. 1: Imminent removal of squatters called for however legal action required.

April 23, 1851, p. 3 Col. 1. Owners ordered to remove shanties within 10 days, June 27, 1851, P. 3 Col. 1: "The swarm of Shanties... removed off Washington Park... apparently transplanted by their owners to a place called Jackson's Farm, in the neighborhood of Clason and DeKalb avenues (sic)..."

#### Geismar, Joan H.

2005 The Restoration and Installation of the Bronze Eagles and Related Site Work in Fort Greene Park, Borough of Brooklyn, Archaeological Assessment. Contract No. B032-103M. Prepared for the New York City Department of Parks through Gandhi Engineering, Inc.

#### Parks

2017 Diagram of Drainage in Areas A and B. Digital Plan: B032-116M\_Diagram of drainage\_Diagram 5.1 and 6.1. Courtesy of Paul Kidonakis, Parks.

2016 DEP Access Corridor. B032-116M Fort Greene Park. 2016-07-27. Courtesy of Paul Kidonakis, Parks.

## Quennell Rothschild & Associates [now & Partners]

1988 Master Plan for Fort Green Park (Draft). Prepared for the City of New York Parks and Recreation. Cited in Geismar 2005:11)

## Stoddard, John S.

1847 Opening Map for Washington Park. Topo Bureau File No. 12038. Filed the 29<sup>th</sup> of November 1847 by Alonzo B. Hammond, Alfred G. Stevens, and Since Approved for Opening Washington Park. Brooklyn Borough Presidents Office, Topographical Bureau.

#### USGS

2017 *Brooklyn Quadrangle*. My Topo Map Print. On-line: *https://www.mytopo.com/maps/* [Brooklyn, NY].

# APPENDIX A SOIL BORING LOGS (B-3 AND PB-1)

(See Figures 5 and 6 for locations)



# **BORING LOG**



Page 1 of 1

Project:	Fort Green	e Park Proj. No.: 1048-												-087EC			
Location: Myrtle Avenue and Washington Park, Borough of Bro								rooklyn, K	ings County, 1	New York	:		Client:	Island Pump a	nd Tank Cor	p.	
Surface Ele	vation:	60.0 mse					Date St	arted:	7/21/2016		Groundwater Data	Depth	El.	Additional Groundwater	Depth	El.	
Terminatio	15.0 feet						ompleted				(ft)	(mse)	Data	(ft)	(mse)		
Proposed L	SWM					Logged		F. Van Cleve		While Drilling: <b>V</b>	NE						
Drill/Test	HSA/SPT					Contra		IP&T		At Completion: 🔻	NE						
Hammer T		Automatic umple Information					Rig Ty	pe:	Diedrich	n D50							
-		ample li I	nformat	lion				Depth			DESCI	DIDTION OF	MATEDIALS				
Depth (Feet)	Number	Type Rec (in) NYC Class		Blows per 6" or drill time (min/ft)		N	(ft)			DESCRIPTION OF MATERIALS (Classification)				Remarks			
								_	Surface Cover	6" Topso	oil						
1 - 3	S-1	SS	9	7	3	3	7	_		Light bro (FILL)	own medium to fine sand						
1				<u> </u>	4	8									Hard augeri	ing @ 3.5'	
3 - 5 S	S-2	SS	16	7	23	28	51		Fill	Light brown medium to fine sand, some silt, trace fine gravel, trace debris (concrete and tile), moist, very dense (FILL)							
						20		5									
5 - 6.3	S-3	SS	NR	7	26 50/3"	49 	99/3"			No recov	very	Hard augering @ 6.0'					
7 - 9	S-4	SS	10	3b	11 14	14 12	28	_		Brown n	nedium to fine sand, little	Hard augeri	ing @ 8.0'				
-					14	12											
9 - 11	S-5	SS	6	3a	15	16	31		Glacial	Brown n SM)	nedium to fine sand, little	e medium to fi	ne gravel, trace	e silt, moist, dense (SP-			
11 - 13	S-6	SS	18	3a	14 18	16 20	34		Deposits	Brown n SM)	nedium to fine sand, som	Hard augeri	ing @ 12.0'				
13 - 15	S-7	SS	17	3b	10 20	10 65	30			As above	e, medium dense (SP-SM						
								20		Boring F	B-1 was terminated at 15	5 feet below th	e ground surfa	ce.			

(For Boring Location see **X** on Figure 5)



**BORING LOG** 

Boring No.: B-3

Page 1 of 2

														~		
Project:	Fort Green												Proj. No.:	1048-16		
Location: Myrtle Avenue and Washington Park, H													Island Pump a		<u> </u>	
Surface Elevation:				.7 mse			Date S		7/28/2016		Groundwater Data	Depth	El.	Additional Groundwater	Depth	E1.
Termination Depth:			27.7 feet					ompleted:			W/I 'I D 'II' 🗖	(ft)	(mse)	Data	(ft)	(mse)
Proposed Location: Drill/Test Method:			Walkway			Logged by:			F. Van Cleve IP&T		While Drilling:	NE				
		HSA/SPT Automatic				Contractor: Rig Type:		Diedrich		At Completion: <b>V</b>	NE					
Hammer T		ample Ir			-		Kig Ty	pe:	Diedrici	1050						
					Plowe	nor 6"		Depth			DESCR	IPTION OF	MATERIALS			
Depth	Type Rec (in)		NYC Class	Blows per 6" or drill time		N	(ft)	Strata			(Classificat			Rem	arks	
(Feet)	Number	Ty	Re	ΖŪ	(min	(min/ft)						10	1			
								_	Surface	9" Topsoil						
									Cover	> Topson	5					
					5	8		_								
1 - 3	S-1	SS	7	7			13		-		edium to fine sand, little	silt, trace coa	irse to fine grav	el, trace fine roots, moist		
				ĥ	5	5 5		—		(FILL)						
									Fill							
			17	7	3	3										
3 - 5	S-2	SS					7			As above, trace debris (wood), moist (FILL)						
					4	8		5								
				$\square$	10	E		-							1	
5 - 7	S-3	SS	18	6	12	5	10			Brown medium to fine sand, little coarse to fine gravel, trace silt, moist, loose (SP-SM)						
		33			5	4	10									
					Ľ	•										
7-9	S-4	SS		6	4	3		-								
			18				5			Orange brown fine sand, little silt, trace fine gravel, moist, loose (SM)						
					2	1		_	-							
				<u> </u>		0										
	S-5				3 2	2		10								
9 - 11		SS	15	6			4			Orange brown fine sand, trace silt, moist, loose (SP-SM)						
					2	3										
11 - 13	S-6				4	4	1									
		SS	16	6	-	т	9			Orange bro	brown fine sand, little silt, moist, loose (SM)					
					5	4		_	_							
						-										
					8	4		-								
13 - 15	S-7	SS	14	6			8		E	Orange brown fine sand, trace silt, trace fine gravel, moist, loose (SP-SM)						
					4	3		15								
					4	5										
15 - 17	S-8	SS	20	6	4	9	0		Glacial	As above (SP-SM)						
15-17					4	3			Deposits	ns above						
					-	Ŭ										
								_								
						1										
								20							Rock in spli	t spoon
20 20 4	S-9	00	1	2-	94	50/1"	50/1			Creation					sampler	1
20 - 20.6	5-9	SS	1	2a			50/1"			Gray coar	se gravel, dry, very den	se (GP)			-	
															Hard augeri	ng @ 21.0'
								_								
								_								
								-								
								25								
				-	17	50 /11	-			Brown me	edium to fine sand, som	e coarse to fin	e gravel, trace	silt, moist, verv dense		
25 - 26.6	S-10	SS	16	3a	47 5	50/1"	50/1"		]	Brown medium to fine sand, some coarse to fine gravel, trace silt, moist, very dense (SP-SM)						
										1					I	

(For Boring Location X on Figure 6)