HISTORICAL PERSPECTIVES INC.



Phase IB Archaeological Field Investigation

4830 Arthur Kill Road Block 7584, Lot 85 Staten Island, Richmond County, New York

LPC Project # 12DCP014R

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Prepared For:

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EXECUTIVE SUMMARY

Celerant Technology, Corp. is proposing new development and parking facilities at 4830 Arthur Kill Road, in the Charleston neighborhood of Staten Island, Richmond County, New York (Figure 1). The parcel, which until recently was known as Block 7584, Lots 4 and 85, has recently been merged into one lot, now identified as Block 7584, Lot 85 (Figure 2). The project site consists of an approximately 47,000 square foot rectangular parcel located along the east side of Arthur Kill Road, 102.19 feet south of South Bridge Street. The site is partially developed with a two-story, 8,525 square foot office building and 29 accessory at-grade parking spaces. Access to the site is provided via a 14-foot curb cut onto Arthur Kill Road which would be widened from the current 14 feet to 16 feet. The proposed project includes construction of an approximately 14,634 square foot, at grade extension to the rear of the existing building to be occupied as office space. The project would also include the addition of 54 accessory at-grade parking spaces, requiring some grading. Development of the parcel would require the removal of 45 of the 85 existing \geq 6-inch caliper trees. Forty of these existing trees would remain and 24 new trees would be planted for a total of 64 trees on the site (Rothkrug 2011).

In April 2012, Historical Perspectives, Inc. (HPI) completed a required Archaeological Documentary Study [Phase IA] for the proposed project, which is also referred to as the Area of Potential Effect, or APE, in compliance with the *Guidelines* of the LPC (CEQR 2010; LPC 2002). HPI concluded that the southern and central portions of the undeveloped APE may retain precontact archaeological sensitivity, if not disturbed, as shown on Figure 3. HPI concluded that the remainder of the APE is too disturbed from grading, filling, and other earthmoving to retain precontact archaeological sensitivity. Based on these conclusions, HPI recommended that a program of Phase IB archaeological testing be implemented along the southern and central portions of the undeveloped section of the APE to determine whether precontact period archaeological resources may still be present within the APE. The Phase IB testing program would consist of the excavation of hand-excavated shovel tests (STs) along the central and southern portions of the APE, placed at 50-foot intervals. The LPC concurred with the revised Archaeological Documentary Study recommending Field Investigations [Phase IB], and approved an Archaeological Testing Protocol for the project site (Sutphin 2012).

This report presents the results of the Phase IB Archaeological Field Investigation. A total of 16 ST locations were examined and 14 STs excavated during the Phase IB Field Investigation. Results of the field testing did not reveal any precontact period artifacts in any of the STs. While Transect 1 along the southern edge of the project site contained generally intact soils, Transect 2 along the central section of the project site revealed fill deposits containing modern debris associated with widespread disturbance from earthmoving. Based on these results HPI recommends that no further archaeological investigations are warranted.

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I. INTRODUCTION

Celerant Technology, Corp. is proposing new development and parking facilities at 4830 Arthur Kill Road, in the Charleston neighborhood of Staten Island, Richmond County, New York (Figure 1). The parcel, which until recently was known as Block 7584, Lots 4 and 85, has recently been merged into one lot, now identified as Block 7584, Lot 85 (Figure 2). The project site consists of an approximately 47,000 square foot rectangular parcel located along the east side of Arthur Kill Road, 102.19 feet south of South Bridge Street. The site is partially developed with a two-story, 8,525 square foot office building and 29 accessory at-grade parking spaces. Access to the site is provided via a 14-foot curb cut onto Arthur Kill Road which would be widened from the current 14 feet to 16 feet. The proposed project includes construction of an approximately 14,634 square foot, at grade extension to the rear of the existing building to be occupied as office space. The project would also include the addition of 54 accessory at-grade parking spaces, requiring some grading. Development of the parcel would require the removal of 45 of the 85 existing \geq 6-inch caliper trees. Forty of these existing trees would remain and 24 new trees would be planted for a total of 64 trees on the site (Rothkrug 2011).

As part of the proposed project, sponsors submitted project materials to the New York City Landmarks Preservation Commission (LPC) for an initial archaeological review in accordance with New York City Environmental Quality Review (CEQR) regulations and procedures. The LPC responded:

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from Native American occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010) (Santucci 2011).

In April 2012, Historical Perspectives, Inc. (HPI) completed the required Archaeological Documentary Study [Phase IA] for the proposed project, which is also referred to as the Area of Potential Effect, or APE, in compliance with the *Guidelines* of the LPC (CEQR 2010; LPC 2002). HPI concluded that the southern and central portions of the undeveloped APE may retain precontact archaeological sensitivity, if not disturbed, as shown on Figure 3. HPI concluded that the remainder of the APE is too disturbed from grading, filling, and other earthmoving to retain precontact archaeological sensitivity. Based on these conclusions, HPI recommended that a program of Phase IB archaeological testing be implemented along the southern and central portions of the undeveloped section of the APE to determine whether precontact period archaeological resources may still be present within the APE. The Phase IB testing program would consist of the excavation of hand-excavated shovel tests (STs) along the central and southern portions of the APE, placed at 50-foot intervals. The LPC concurred with the revised Archaeological Documentary Study recommending Field Investigations [Phase IB], and approved an Archaeological Testing Protocol for the project site (Sutphin 2012).

This report presents the results of the Phase IB Archaeological Field Investigation. The HPI field team was led by Cece Saunders, M.A., R.P.A, Field Director and Project Manager. Julie Abell Horn, M.A., R.P.A. wrote the report.

II. METHODOLOGY

The portion of the project site slated for Phase IB field testing measures ca. 50 feet wide (northsouth) and ca. 414 feet long (east-west). In order to ensure adequate coverage of the testing area, two transects, spaced ca. 37.5 feet (11.5m) apart, were laid out along the east-west axis of the testing area and hand excavated Shovel Tests (STs), approximately 50cm in diameter, were excavated at 50 foot (15m) intervals along these two transects (Figure 4). Those planned STs that fell within clearly disturbed areas or in standing water were not excavated. Standards for excavations, screening, recording, labeling, mapping, and cataloging, as outlined by the NYAC *Guidelines* (1994) were observed. Field notes recorded all pertinent data including artifacts and the levels where they were found. Soil colors were determined with the *Munsell Soil Color Chart.* Stratigraphic profiles of all STs were recorded. A photographic record was undertaken. All STs were promptly backfilled. Appendix A presents the results of the field testing.

III. FIELD RESULTS

As noted in the Phase IA report, the eastern section of the project site where the Phase IB testing occurred is undeveloped woodland, with trees and light to heavy understory (Figure 4). Earthmoving associated with development along adjacent South Bridge Street appears to have affected the northern side of this area, with disturbance from grading and filling visible bordering the abutting buildings, and disturbance from other earthmoving and dumping visible within parts of the central portion of this area (Photograph 1). There is a steep unnatural embankment of soil here (Photograph 2). At the time of the Phase IB testing, there was standing water in several locations. The southern edge of this area appeared to be less disturbed than the northern portion, although debris piles and other evidence of earthmoving were visible, particularly nearest the parking lot on the western side of the project site (Photograph 3).

Transect 1 was located along the southern edge of the project site, and included STs 1-8 (Figure 4; Photograph 4). This transect contained STs with generally intact stratigraphic profiles containing an A, B, and C horizon (Appendix A). However, several of the STs may have had pockets of disturbance within these horizons that were not visible as they were being excavated. STs 1, 3, 5, 7, and 8 all had one or more historic or modern artifacts found in the A or B horizons. All of the historic artifacts were small fragments and none appeared to represent a primary deposition. No precontact artifacts were found in any of the STs on this transect.

Level	Horizon	Depth (cm)	Soil Color	Soil Texture	Artifacts/Comments/
					Reason for Termination
1	Humus/A	0-10	10 YR 2/2	Loam	NCM
2	В	10-27	10 YR 4/4	Loamy sand	NCM

A typical stratigraphic profile for this transect was ST 4 (Photograph 5), below.

Level	Horizon	Depth (cm)	Soil Color	Soil Texture	Artifacts/Comments/
					Reason for Termination
3	С	27-51	10 YR 5/3 mottled	Coarse sand	NCM, sterile subsoil
			w/2.5 YR 5/4		

Transect 2 was located through the central portion of the project site, approximately 37.5 feet (11.5m) north of Transect 1 (Figure 4). It included STs 9-16, although STs 10 and 12 were not excavated due to clear disturbance from grading and filling in the locations where they were sited. Of the STs from Transect 2, only ST 14 contained a mostly intact soil profile, although like the STs from Transect 1, it too had what was probably a pocket of disturbance within the B horizon where bits of coal and cinder were found. The western extension of Transect 2 would have placed an additional ST within standing water; it was neither laid out nor excavated.

The soil profile for ST 14 is below.

Level	Horizon	Depth (cm)	Soil Color	Soil Texture	Artifacts/Comments/
					Reason for Termination
1	Humus/A	0-6	10 YR 3/2	Silt loam	NCM
2	В	6-18	10 YR 4/4	Sandy silt	Coal*, cinder*,
				loam	probably from pocket
					of disturbed soil
3	С	18-37	7.5 YR 5/6	Sandy silt	NCM, sterile subsoil

* Discarded

The remainder of the STs from Transect 2 (STs 9, 11, 13, 15, and 16) showed clearly disturbed soil profiles (Appendix A). These STs had no intact A or B horizons, but instead consisted of fill soil (likely a mixture of the former A and B horizon soils that had been redeposited through earthmoving on the site over time) containing fragments of modern trash (such as plastic, soda and beer bottle fragments, etc.). STs 13, 15 and 16 did encounter a C horizon beneath the fill, although it was not possible to determine whether this C horizon itself had been truncated from earthmoving before being buried under the fill. No precontact artifacts were found in any of the STs on this transect.

VI. CONCLUSIONS AND RECOMMENDATIONS

A total of 14 STs were excavated during the Phase IB Field Investigation. Results of the field testing did not reveal any precontact period artifacts in any of the STs. While Transect 1 along the southern edge of the project site contained generally intact soils, Transect 2 along the central section of the project site revealed fill deposits containing modern debris associated with widespread disturbance from earthmoving. Based on these results HPI recommends that no further archaeological investigations are warranted.

VII. REFERENCES

City Environmental Quality Review (CEQR)

2010 *City Environmental Quality Review Technical Manual*. City of New York, Mayor's Office of Environmental Coordination. May, 2010.

Historical Perspectives, Inc. (HPI)

2012 Phase IA Archaeological Documentary Study, 4830 Arthur Kill Road, Block 7584, Lot 85, Staten Island, Richmond County, New York. Prepared for Celerant Technology Group and EPDSCO, Great Neck, New York.

Landmarks Preservation Commission (LPC)

2002 Landmarks Preservation Commission Guidelines for Archaeological Work in New York City.

Rothkrug, Hiram A.

2011 New York City Environmental Quality Review, Environmental Assessment Statement Short Form, 4830 Arthur Kill Road.

Santucci, Gina

2011 Environmental Review letter for 4830 Arthur Kill Road Project. Landmarks Preservation Commission, New York, NY. November 22, 2011.

Sutphin, Amanda

2012 Archaeology Review letter for 4830 Arthur Kill Road Project. Landmarks Preservation Commission, New York, NY. May 1, 2012.

United States Geological Survey (U.S.G.S.)

1981 Arthur Kill, N.J.-N.Y. 7.5 Minute Topographic Quadrangle.

Wohl &O'Mara, L.L.P.

2010 Survey of Block 7584, Lot 85.





Figure 1: Project site on *Arthur Kill, N.Y-N.J.* 7.5 Minute Quadrangle (U.S.G.S. 1981).

500 0 500 1500 2000 2500 FEET





Figure 2: Project site on modern aerial photograph (NYC OASIS 2010).

5<u>00 0 500 1500 2000 250</u>0 FEET



Figure 3: Project site showing area of precontact archaeological sensitivity on modern survey map (Wohl & O'Mara, L.L.P. 2010).







Figure 4: Project site, shovel tests, and photograph locations on modern survey map (Wohl & O'Mara, L.L.P. 2010).







Photograph 1: Example of disturbance visible within project site, with South Bridge Street in background. View looking north.



Photograph 2: Cut embankment near ST 5. View looking east.



Photograph 3: Disturbance at southwest end of testing area. View looking south with Celerant Technology parking lot to right beyond chain link fence.



Photograph 4: Archaeological technicians excavating ST 5. View looking east.



Photograph 5: Profile of ST 4. View looking southwest.

Appendix A: Field Summary

ST	Level	Horizon	Depth	Soil Color	Soil Texture	Artifacts/Comments/
#			(cm)			Reason for Termination
1	1	Humus/A	0-12	10YR 2/1	Loam	NCM
1	2	В	12-23	10YR 4/4	Loamy sand	1 small red transferprint
						whiteware sherd, probably from
						pocket of disturbed soil
1	3	С	23-32	10 YR 5/2	Clay sand	NCM, sterile subsoil
2	1	В	0-9	10YR 4/2	Loamy sand	NCM
2	2	С	9-62	10YR 4/6	Coarse sand	NCM, sterile subsoil
3	1	Humus/A	0-9	10YR 2/1	Loam	NCM
3	2	В	9-26	10 YR 4/4	Loamy sand	1 ceramic sherd, probably from
						pocket of disturbed soil
3	3	B/C	26-50	10 YR 4/4 and 10	Coarse sand	Coal fragments*, disturbed C
				YR 5/6		horizon
4	1	Humus/A	0-10	10 YR 2/2	Loam	NCM
4	2	В	10-27	10 YR 4/4	Loamy sand	NCM
4	3	С	27-51	10 YR 5/3 mottled	Coarse sand	NCM, sterile subsoil
				w/2.5 YR 5/4		
5	1	Humus/A	0-15	10 YR 2/1	Loam	NCM
5	2	В	15-33	10 YR 4/4	Loamy sand	Ceramic sherd, flecks of
						charcoal, probably from pocket
						of disturbed soil
5	3	С	33-47	10 YR 5/3 mottled	Coarse sand	NCM, sterile subsoil
				w/2.5 YR 5/4		
6	1	Humus/A	0-12	10 YR 2/1	Loam	NCM
6	2	В	12-32	10 YR 4/4	Loamy sand	NCM
6	3	С	32-48	10 YR 5/3 mottled	Coarse sand	NCM, sterile subsoil
				w/2.5 YR 5/4		
7	1	Humus/A	0-12	10 YR 3/2	Silt loam	Cast iron door lock
7	2	В	12-27	10 YR 4/4	Sandy silt loam	NCM
7	3	С	27-39	7.5 YR 5/6	Sandy loam	NCM
8	1	Humus/A	0-9	10 YR 3/2	Silt loam	Glazed tile*
8	2	В	9-24	10 YR 4/4	Sandy silt loam	NCM
8	3	С	24-36	7.5 YR 5/6	Sandy loam	NCM
9	1	Humus/A	0-6	10 YR 3/2	Silt loam	
9	2	С	6-33	7.5 YR 5/6	Sandy loam	Wet, wetland ca. 3m east
10						Disturbed, not excavated
11	1	Fill		10 YR 3/2 mottled	Silt loam	Metal [*] , glass [*] , stopped due to
				w/7.5 YR 5/6		rock impasse
12						Disturbed, heavily cut and
						graded by machinery, not
						excavated
13	1	Fill	0-76	10 YR 3/2 mottled	Silt loam	Clear, brown, and green modern
						bottle glass*, coal*, cinder*,
						plastic*, hotel whiteware*

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ST	Level	Horizon	Depth	Soil Color	Soil Texture	Artifacts/Comments/
#			(cm)			Reason for Termination
13	2	С	76-89	7.5 YR 5/6	Sandy silt	NCM, sterile subsoil
14	1	Humus/A	0-6	10 YR 3/2	Silt loam	NCM
14	2	В	6-18	10 YR 4/4	Sandy silt loam	Coal*, cinder*, probably from
						pocket of disturbed soil
14	3	С	18-37	7.5 YR 5/6	Sandy silt	NCM, sterile subsoil
15	1	Fill	0-27	10 YR 3/2 mottled	Silt loam	Deteriorated cloth*, plastic*
15	2	С	27-39	7.5 YR 5/6	Sandy silt	NCM, sterile subsoil
16	1	Fill	0-27	10 YR 3/2	Silt loam	Plastic*, brick*, glass*,
						whiteware*
						No intact A or B horizon
16	2	С	27-55	7.5 YR 5/6	Sandy silt	NCM, sterile subsoil

Appendix A: Field Summary