A. INTRODUCTION

This chapter assesses the potential of the Proposed Project to affect historic and cultural resources. The Project Site, located in Staten Island's Tottenville neighborhood, is bounded by the Outerbridge Crossing to the north, Arthur Kill Road to the east, Richmond Valley Road to the south, and the Arthur Kill waterway to the west. As described in greater detail in Chapter 1, "Projection Description," the Proposed Project is a commercial center with the associated parking, open space, and street and infrastructure improvements.

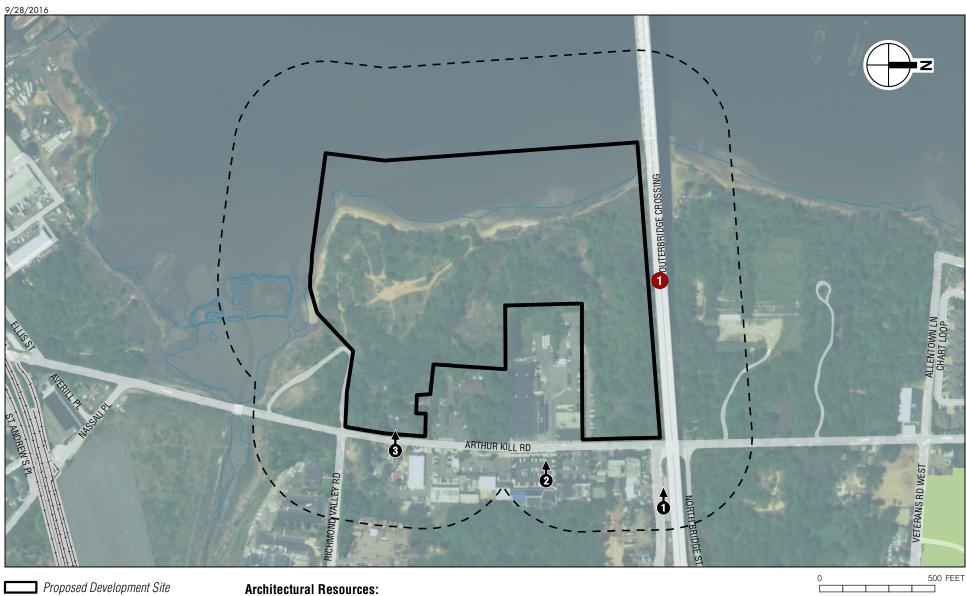
This analysis has been prepared in accordance with the 2014 New York City Environmental Quality Review (CEQR) Technical Manual. The Proposed Project would require permits from the United States Army Corps of Engineers (USACE) and the New York State Department of Conservation (NYSDEC). Therefore, this analysis also has been prepared in accordance with Section 14.09 of the New York State Historic Preservation Act (NYSHPA) and Section 106 of the National Historic Preservation Act (NHPA).

Historic and cultural resources include both archaeological and architectural resources. The study area for archeological resources is the Project Site itself where disturbance from excavation and construction can be anticipated.

Study areas for architectural resources are determined based on the area of potential effect for construction period impacts, as well as the larger area in which there may be visual or contextual impacts. The *CEQR Technical Manual* sets the guidelines for the study area as being typically within an approximately 400-foot radius of the Project Site boundary (see **Figure 6-1**). Within the study area, architectural resources analyzed include State and National Register (S/NR)-listed or S/NR-eligible properties, New York City Landmarks (NYCLs), New York City Historic Districts (NYCHDs), and properties pending such designation ("known architectural resources"). In addition, a survey of the study area was conducted to identify any previously undesignated properties that appear to meet S/NR or NYCL eligibility criteria ("potential architectural resources").

Impacts on architectural resources can include both direct physical impacts and indirect impacts. As set forth in the CEQR Technical Manual, direct impacts include the physical destruction, demolition, damage, alteration, or neglect of all or part of a historic property; changes to an architectural resource that cause it to become a different visual entity; and replication of aspects of the architectural resource so as to create a false historical appearance. Direct impacts also include construction-related impacts, such as damage from vibration (and additional damage from nearby construction that could occur from falling objects, subsidence, collapse, or damage from construction machinery.

Indirect impacts on architectural resources are contextual or visual impacts that could result from project construction or operation. As described in the *CEQR Technical Manual*, indirect impacts could result from eliminating or screening significant public views of a resource; isolating a



Photograph View Direction and Reference Number

Study Area (400-foot boundary)

Outerbridge Crossing

resource from its setting or relationship to the streetscape including changes to the resource's visual prominence; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance (e.g., a church with stained-glass windows).

PRINCIPAL CONCLUSIONS

PROJECT SITE

Archaeological Resources

In order to assess the archaeological sensitivity of the Project Site, a Phase 1 Archaeological Survey was prepared by Greenhouse Consultants, Inc. in June 2015. The study included both documentary research designed to identify the occupation and development histories of the Project Site as well as field testing designed to identify the presence or absence of archaeological resources within the Project Site. The Phase 1 report determined that there are areas of archaeological sensitivity within the Project Site due to occupancy by Native Americans before the time of European settlement in the 17th century, and use of the project site for industrial purposes such as a grist mill, lumber, wood and coal yard, and shipping company. The Phase 1 report recommended that additional Phase 1B and Phase 2 archaeological testing be performed at the project site. Therefore, additional Phase 1B and Phase 2 testing was completed and a draft report summarizing such work has been submitted to the New York City Landmarks Preservation Commission (LPC) and the New York State Historic Preservation Office (SHPO).² Based on the testing completed to date, the Proposed Project could potentially result in a significant adverse impact on archaeological resources due to site disturbance. Accordingly, the Applicant will complete any required additional investigation and/or mitigation in consultation with the LPC and SHPO. (See Appendix B and Chapter 20, "Mitigation.")

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¹ Greenhouse Consultants, Inc. (June 2015): "Phase 1 Archaeological and Historical Survey: Waterfront Commons, Block 7620, Lots 1 and 50; Block 7632, Lots 150 and 151; Richmond County, Staten Island, New York." Prepared for: Robert Konig, Esq., Woodmere, NY.

² Greenhouse Consultants, Inc. (January 2017): "Supplemental Phase 1B and Phase 2 Archaeological and Historical Investigations of Riverside Galleria (Formerly Waterfront Commons); Block 7620, Lot 1; Block 7632, Lots 1, 6, 60, 150, and 151; Richmond County, Staten Island, New York; 07PR04902." Prepared for: Robert Konig, Esq., Woodmere, NY.

Architectural Resources

There are no historic architectural resources located on the Project Site. With the Proposed Project, the only standing structure on the property, the Cole House is proposed to be renovated for use as a restaurant on the ground floor and office space on the second floor. Therefore, it is concluded that the Proposed Project would not result in any potential significant adverse impacts on historic architectural resources.

STUDY AREA

Architectural Resources

The Proposed Project would not result in significant adverse direct impacts on architectural resources in the study area. To avoid potential inadvertent construction-related impacts on the Outerbridge Crossing, a Construction Protection Plan (CPP) would be developed in consultation with SHPO and the Port Authority of New York and New Jersey (PANYNJ) and would be implemented by a professional engineer prior to any excavation of the Project Site. The CPP would follow the guidelines set forth in section 523 of the CEQR Technical Manual.

Public views of the truss, ramp, and bridge supports of the Outerbridge Crossing would remain visible from Arthur Kill Road and from the proposed new waterfront open space. Maintenance of the existing vegetated buffer south of the Outerbridge Crossing would help preserve views of the bridge from Arthur Kill Road. The Proposed Project would not isolate this architectural resource from its setting, or alter its relationship to the streetscape. The Proposed Project would not introduce an incompatible visual, audible, or atmospheric element to this architectural resource's setting, and would not introduce shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance. Therefore, the Proposed Project would not result in significant adverse indirect impacts on architectural resources in the study area.

B. EXISTING CONDITIONS

PROJECT SITE

ARCHAEOLOGICAL RESOURCES

To assess the archaeological sensitivity of the Project Site, a Phase 1 Archaeological Survey and supplemental Phase 1B and Phase 2 archaeological investigations were completed. These studies included both documentary research designed to identify the occupation and development history of the Project Site with field testing to identify the potential presence or absence of archaeological resources. For the purposes of analysis, the Project Site was divided into seven areas of investigation that were identified as Areas 1 through 7, as follows:

- Area 1: Situated at the northern end of the Project Site to the south of the Outerbridge Crossing, west of Arthur Kill Road, east of the Arthur Kill, and north of Area 5. This area measures approximately 100 meters (330 feet) in length and 300 meters (990 feet) in width.
- Area 2: Representing most of the southern portion of the Project Site south of Area 6; north of Area 3 and Weir's Mill Creek; southwest of Area 4; and east of the Arthur Kill. This area measures approximately 180 meters (600 feet) in length and 180 meters (600 feet) in width.

- Area 3: Located in the southern portion of the Project Site south of Area 2; north and west of Weir's Creek; and east of the Arthur Kill. This area measured approximately 30 meters (100 feet) in length and 120 meters (400 feet) in width.
- Area 4: This area represents the southeastern portion of the Project Site east of Areas 2 and 6. This area features an irregular shape and measures up to approximately 180 meters (600 feet) in length and up to 90 meters (300 feet) in width.
- Area 5: This area represents the western side of the Project Site and is located to the south of Area 1; north of Area 6; and east of the Arthur Kill. This area features an irregular shape and measures up to approximately 120 meters (400 feet) in length and 105 to 195 meters (350 to 650 feet) in width.
- Area 6: This area is located to the south of Area 5; west of Area 4; north of Area 2; and east of the Arthur Kill. This area measured approximately 90 meters (300 feet) in length and 120 meters (400 feet) in width.
- Area 7: This area is located at the extreme southeastern end of the Project Site, west of Arthur Kill Road and east of Areas 2 and 4. This area measured approximately 113 meters (375 feet) in length and 83 meters (275 feet) in width.

Precontact Archaeological Resources

The precontact period refers to the time when Staten Island was occupied by Native Americans before the time of European settlement in the 17th century. Precontact archaeological sensitivity in New York City is generally evaluated by a site's proximity to level slopes, water courses, well-drained soils, and previously identified precontact archaeological sites. As described in the Phase 1 report, Native American sites in southwestern Staten Island have been well-documented. Numerous archaeological sites have been identified within one mile of the Project Site, including two that were partially situated within the site itself. The Phase 1 report concluded that based on a literature review and site testing, the site was sensitive for archaeological resources and included at least one documented archaeological site, known as the Catbriar Site. The Phase 1 report recommended additional testing to identify the presence or absence of archaeological resources throughout the project site, to define the boundaries of the Catbriar Site, and to determine the significance archaeological resources and archaeological sites located on the project site.

Historic Period Archaeological Resources

Throughout a more than 200-year portion of the historic period, much of the Project Site was owned and occupied by members of the Dissoway, Cole, Totten, and Starr families, some of Staten Island's oldest families. As described in the Phase 1 report, historic maps indicate that throughout the historic period, the southern side of the Project Site was used for industrial purposes, initially as a grist mill; then as a lumber, wood, and coal yard; and it was later occupied by a shipping company. The northern side contained houses and farmland. Eight map-documented structures were identified within the boundaries of the Project Site.

Two areas within the Project Site were identified in the Phase 1 report as having potential historic period archaeological sensitivity. One was in the location of the former Totten/Starr family home in the northern portion of the site and the other is in in the southern portion of the site, where industrial archaeological resources associated with an early 18th century grist mill.

Results of Archaeological Testing

A testing grid was established across each of Areas 1 through 7 as part of the Phase 1 field testing effort. Shovel Test Pits (STPs) were excavated along these grids at 15-meter (50-foot) intervals. In those locations where adjacent STPs contained intact archaeological deposits, a narrower interval was utilized. In total, 591 STPs were excavated across the seven areas making up the Project Site. In addition, four backhoe trenches were excavated, one each in Areas 2 and 4 and two in Area 5.

Area 1

Within Area 1, 10 of the excavated STPs contained precontact lithic artifacts. With the exception of two STPs where lithic artifacts were recovered from a buried ground surface or subsoil, all of the artifacts were recovered from topsoil that was presumed to represent a plow zone. Historic period archaeological resources were also recovered from Area 1, including ceramics potentially dating to the late 17th or early 18th century. The testing within Area 1 resulted in the identification of a precontact archaeological site identified by Greenhouse Consultants, Inc. as the "Catbriar Site." Half of the STPs opened within the boundaries of the site contained precontact archaeological resources, including lithic tools and detritus (a chopper and chert flakes), fire-cracked rock, an intact hearth, pottery, and a possible shell midden. Most of these artifacts were recovered from the plowzone situated in the top 40 centimeters (1.3 feet) of the STPs. The Catbriar Site is located within an area that would be impacted by the Proposed Project. As such, Greenhouse Consultants, Inc. recommended that a Phase 2 archaeological investigation be completed to identify the site's boundaries and to determine its potential significance. Supplemental Phase 2 testing at this site resulted in the collection of Native American ceramics that were dated to the Middle to Late Woodland period, between approximately AD 500 and AD 1500. In addition to ceramic artifacts, other precontact archaeological resources were recovered, including lithic (stone) artifacts, shell middens, and a hearth feature.

A historic period site was also identified within the northwestern portion of Area 1 that included historic ceramics possibly dating to the 17th century. The Phase 1B/Phase 2 investigation defined this as the West Site, which was found to overlap with the Catbriar Site. The West Site was in the vicinity of a map-documented structure that had been identified on historic maps published in the mid-19th century.

Area 2

The majority of the artifacts recovered from Area 2 dated from the late 19th and 20th centuries although a single jasper flake was also recovered from one STP. Soil borings taken in this area identified a thick layer of fill across Area 2. The thickness of the fill was observed to be more than 10 feet within the backhoe trench that was excavated within Area 2. As such, Greenhouse Consultants, Inc. recommended that soil boring data be further analyzed and used to identify locations where backhoe testing could be completed within the eastern half of Area 2 to penetrate the fill levels and to allow for the archaeological investigation of buried precontact or historic period ground surfaces. The fill deposits within the western half extend beneath the water table and therefore, Greenhouse Consultants. Inc. did not recommend additional archaeological work in that portion of Area 2. Additional excavation conducted as part of the supplemental Phase 1B/Phase 2 survey did not identify intact archaeological resources at this site.

Area 3

All of the artifacts from Area 3 were recovered from a layer of fill that covers the area. Therefore, Greenhouse Consultants, Inc. recommended additional testing within this Area (similar to that recommended for Area 2) to identify archaeological resources associated with a historic mill that was formerly located on the property. No additional excavation was conducted in this area as part of the supplemental Phase 1B/Phase 2 survey due to revisions in the area of potential effect map which eliminated the potential for impacts in Area 3.

Area 4

Area 4 is located in the vicinity of the historic sawmill that was constructed in the Area in the 17th century. Greenhouse Consultants, Inc. identified surface evidence of the mill, including a piece of riveted iron, a headrace, and a potential mill seat. Greenhouse Consultants, Inc. determined that the landscape within Area 4 was heavily modified as a result of the industrial use of the area in the late 19th and early 20th century. The Phase 1 recommended additional historic research to document the history of the mill and the surrounding area as potentially an industrial archaeological investigation of the remnants of the mill complex. The Phase 1B/Phase 2 report included an in-depth assessment of Area 4 by an industrial archaeologist.

Area 5

Testing within Area 5 included the excavation of backhoe trenches and STPs. The artifacts recovered from this area date to both the historic period (representing the 18th century through the early 20th century) and the precontact period (including jasper or chert flakes and a partial quartz projectile point). The age of the historic period artifacts is consistent with the occupation of the 18th century home that was associated with the Dissoway, Totten, and Starr families. Greenhouse Consultants, Inc. recommended additional testing within this Area to further explore the precontact and historic archaeological sensitivity of the Area. Specifically, Greenhouse recommended that additional STPs be excavated along a 5-meter (16.4-foot) grid supplemented with excavation units or backhoe trenches as necessary. Such testing would be designed to collect additional evidence regarding the precontact occupation of the area as well as to determine the presence or absence of archaeological features associated with the historic home within the area. Additional excavation was conducted within Area 5 as part of the supplemental Phase 1B/Phase 2 survey that resulted in the identification of a partially disturbed archaeological site with both precontact and historic period components. Precontact components of the archaeological site include lithic debitage, fragments of bifacial tools, and fire cracked rock. Historic period components include 17th through 19th century ceramics that were determined to be associated with the historic period occupation of the Dissosway, Totten, and Starr families.

Area 6

None of the testing locations within Area 6 contained any cultural material associated with the historic or precontact occupation of the project site and Greenhouse Consultants, Inc. determined that no additional archaeological analysis is required for this Area. Therefore, no additional excavation was conducted within Area 6 as part of the supplemental Phase 1B/Phase 2 survey.

Area 7

Area 7 is associated with the Abram Cole house, which is located at 4927 Arthur Kill Road and was constructed in the vicinity in the mid-19th century and was also occupied by the Dissoway family. The artifacts recovered from this area dated to the 19th and 20th centuries and exhibited evidence of heat damage associated with a house fire that occurred in the vicinity of Area 7. Greenhouse Consultants, Inc. recommended an additional archaeological investigation of this Area to identify artifacts and features associated with the historic occupation of the Cole house as well as of a smaller, early 20th century house, currently in ruins, that is located near the Cole

house and which contains an intact brick cistern. In addition, the Phase 1 report recommended the reuse or preservation of historic bricks and a millstone that are currently located on the property of the Cole House. Based on additional historic research, additional excavation was not conducted within Area 7 as part of the supplemental Phase 1B/Phase 2 survey A potentially intact 20th century cistern associated with the Mary Cole Hillard house, also located within Area 7, was identified, but could not be archaeologically investigated as a result of the presence of trees obstructing potential excavation. Accordingly, this site will be further investigated prior to construction of the Proposed Project to determine if it contains any significant archaeological resources.

ARCHITECTURAL RESOURCES

There are no historic architectural resources located on the Project Site. There is one standing structure on the Project Site, which is a 3,900-sf single-family residential building (referred to as the "Cole House"), on Block 7632, Lot 6. However, the New York City Landmarks Preservation Commission (LPC) rejected an application to designate the Cole House as a City landmark, and the New York State Historic Preservation Office (SHPO) has determined that this building is not eligible for listing on the State/National Registers of Historic Resources.

STUDY AREA

ARCHITECTURAL RESOURCES

There is one known architectural resource in the study area: the Outerbridge Crossing (S/NR-eligible). The ramp, bridge supports, and approximately 250 feet of the easternmost portion of the truss of the Outerbridge Crossing are located within the study area (see photos 2 and 3 of **Figures 6-2 and 6-3**). The Outerbridge Crossing is a steel cantilever bridge that connects Tottenville, Staten Island with Perth Amboy, New Jersey. The bridge, built by PANYNJ, was designed by John Alexander Low Waddell and opened simultaneously with the Goethals Bridge on June 29, 1928. Originally called the Arthur Kill Bridge, the bridge was later renamed in honor of Eugenius H. Outerbridge, the first chairman of PANYNJ after it was created in 1921. Completion of the bridge marked the success of PANYNJ's first bi-state development project. The ramp and bridge supports of the Outerbridge Crossing are located adjacent to the Project Site to the north. The portion of the truss within the study area is located approximately 200 feet west of the Project Site.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

PROJECT SITE

ARCHAEOLOGICAL RESOURCES

In the No Action condition, it is assumed that the Project Site would not be altered and conditions on the site would remain unchanged. Therefore, areas of archaeological sensitivity would not be impacted absent the Proposed Project.

ARCHITECTURAL RESOURCES

In the No Action condition, it is assumed that the Project Site would not be altered and conditions on the site would remain unchanged.



View west of the east façade of the Captain Abram and Ann Dissosway Cole House located at 4927 Arthur Kill Road



View west of the ramp and bridge supports of the Outerbridge Crossing from South Bridge Street

Known Architectural Resources

RIVERSIDE GALLERIA Figure 6-2

2



View west of the easternmost portion of the truss of the Outerbridge Crossing from Arthur Kill Road

Figure 6-3 **RIVERSIDE GALLERIA**

STUDY AREA

ARCHITECTURAL RESOURCES

In the No Action condition, the physical condition of architectural resources within the study area is not expected to change. There are no City landmarks within the study area, and the only landmark structure on the S/NR in the study area is the Outerbridge Crossing, It is not expected that there would be any changes in this resource through the 2019 Build year.

Other Future Projects in the Study Area

As discussed in Chapter 2, "Land Use, Zoning, and Public Policy," there are two planned development projects in the 400-foot study area that are expected to be built by the 2018 analysis year. These include the construction of a three-story, 14,674-square-foot office extension to the rear of the existing two-story office building at 4830 Arthur Kill Road, and the construction of a one-story 11,707-square-foot retail building on a vacant lot located at 4885-4895 Arthur Kill Road. The developments are not anticipated to directly affect the Outerbridge Crossing and are consistent with the scale of buildings in the study area.

D. THE FUTURE WITH THE PROPOSED PROJECT

PROJECT SITE

ARCHAEOLOGICAL RESOURCES

Based on the investigations performed to date, the Proposed Project could potentially result in a significant adverse impact on archaeological resources due to site disturbance. Therefore, the Applicant will complete additional archaeology and mitigation in consultation with LPC and NYSHPO (see Chapter 20, "Mitigation").

ARCHITECTURAL RESOURCES

As stated above, there are no historic architectural resources located on the Project Site. The sole standing structure on the property is the Cole House. LPC rejected an application to designate the Cole House as a City landmark, and SHPO has determined that this building is not eligible for listing on the State/National Registers of Historic Resources. Additionally, with the Proposed Project, the Cole House would be renovated for reuse. Therefore, it is concluded that the Proposed Project would not result in any potential significant adverse impacts on historic architectural resources on the Project Site.

STUDY AREA

ARCHITECTURAL RESOURCES

Construction Protection

The Proposed Project would not result in significant adverse direct impacts on architectural resources in the study area. Although the Outerbridge Crossing is adjacent to the Project Site, an approximately 200-foot vegetated buffer—which corresponds to the distance between the bridge and existing adjacent commercial development east of the Project Site—comprising existing vegetation and four wetland mitigation ponds is proposed between the north edge of the

footprint of the Proposed Project and the south edge of the Outerbridge Crossing. Therefore, only construction of the wetland mitigation ponds would occur within 90 feet of the resource. If necessary, to avoid potential inadvertent construction-related impacts on this architectural resource, a CPP would be developed, as necessary, in consultation with SHPO and PANYNJ and would be implemented by a professional engineer prior to any project construction within 90 feet of the Outerbridge Crossing. The CPP would follow the guidelines set forth in section 523 of the CEQR Technical Manual.

Visual Assessment

With the Proposed Project, public views of the truss, ramp, and bridge supports of the Outerbridge Crossing would remain visible from Arthur Kill Road and from the proposed new waterfront open space. Maintenance of the existing vegetated buffer south of the Outerbridge Crossing would help preserve views of the bridge from Arthur Kill Road. The Proposed Project would also not isolate this architectural resource from its setting, or alter its relationship to the streetscape nor would it introduce an incompatible visual, audible, or atmospheric element to this architectural resource's setting, and would not introduce shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance. Finally, the proposed project would introduce new waterfront public views of the bridge from the proposed publically accessibly open spaces, which is a benefit of the proposed project. For these reasons, it is concluded that the Proposed Project would not result in any significant adverse indirect impacts on historic architectural resources in the study area.