**Executive Summary** 

# A. INTRODUCTION

The applicant, WF Liberty, LLC, is seeking a series of land use actions ("the Proposed Actions") to facilitate the redevelopment of a 17.72-acre portion of a 33.68-acre property (the "Project Site") along the Arthur Kill waterfront in Western Staten Island. The Project Site is located within the West Shore area of Staten Island Community District 3, and encompasses Blocks 7620, Lot 1, and Block 7632, Lots 1, 6, 50, 150, and 151. The proposed 17.72-acre development area would be the site of a 589,619-gross-square-foot (gsf) commercial center including the following: (a) destination and smaller scale retail, supermarket, restaurant, cinema, and small office use; (b) 1,721 required accessory parking spaces; (c), waterfront open space (including a publicly accessible walkway and beach); and (d) street and infrastructure improvements. These infrastructure improvements include the opening of Richmond Valley Road west of Arthur Kill Road and the addition of new turning lanes into the Project Site along Arthur Kill Road (collectively, all of the foregoing are referred to as the "Proposed Project").<sup>1</sup> The undeveloped portions of the 33.68-acre Project Site include 8.98 acres of lands underwater and 6.84 acres of land that is proposed to be preserved with the Proposed Project which includes tidal and freshwater wetlands and upland woods on the northern portion of the Project Site that are regulated by the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Army Corps of Engineers (USACE). The Project Site is bounded by the structural supports for the Outerbridge Crossing to the north, Arthur Kill Road to the east, the mapped but unbuilt Richmond Valley Road and the shoreline of Mill Creek to the south, and the Arthur Kill waterway to the west.

The Proposed Project requires special permits, authorizations, and certifications from the New York City Planning Commission (CPC) which include, but are not limited to: (a) special permits allowing retail establishments with no limitation on floor area per establishment in an M1-1 zoning district, as well as modifications to applicable waterfront zoning requirements to allow a commercial building greater than 30 feet in height and to alter yard requirements; (b) authorizations to allow modification of location, area, dimensional and design requirements

<sup>&</sup>lt;sup>1</sup> The Proposed Project is to be undertaken on: (a) the Project Site, which is controlled by the Applicant and includes Block 7620, Lot 1 and Block 7632, Lots 1, 6, 50, 150, 151; and (b) as to the opening of Richmond Valley Road, on small portions of two lots not controlled by the Applicant, but within the City's mapped right-of-way (Block 7983, Lots 110 and 100). Block 7983, Lot 110 is City-owned and under the jurisdiction of the New York City Department of Environmental Protection (DEP) as part of DEP's Mill Creek Bluebelt system. Block 7983, Lot 100 is privately owned by I Nassau Place Holdings, LLC. Portions of Lots 110 and 100 are within the mapped right-of-way of Richmond Valley Road and would be built out as part of the street. Additionally, outside of the mapped right-of-way, portions of these lots would be graded and landscaped to match the grade of the street. These portions of these lots total about 0.79 acres.

applicable to waterfront public access areas and visual corridors; (c) an authorization to waive tree removal requirements applicable in the Special South Richmond Development District (SSRDD); (d) an authorization to modify the special topography requirements applicable in the SSRDD; (e) authorizations to allow more than 30 accessory parking spaces in the SSRDD; and (f) a certification that requirements relating to shore public walkways and view corridors have been satisfied. The Proposed Actions, if approved, would allow the redevelopment of the Project Site, portions of which have been previously used and disturbed. With an estimated construction period of 13 months, it is anticipated that the Proposed Project would be built and occupied by 2019.The actions necessary to implement the Proposed Project include those that are subject to review by CPC under the City's Uniform Land Use Review Procedure (ULURP) as well as a number of other City, State, and Federal discretionary actions including, but not limited to, a NYSDEC tidal wetland permit and a freshwater wetland permit from the USACE.

The New York City Department of City Planning (DCP), acting on behalf of CPC, is the Lead Agency conducting the environmental review of the Proposed Project. DCP has reviewed the activities that are necessary to construct and operate the Proposed Project and has determined that it has the potential to generate significant adverse environmental impacts. Therefore, in accordance with the environmental review laws and regulations of the City and State of New York including Executive Order 91, City Environmental Quality Review (CEQR), the State Environmental Quality Review Act (SEQRA), and the New York Codified Rules and Regulations Part 617, DCP issued a positive declaration requiring the preparation of this Environmental Impact Statement (EIS) to analyze the potential environmental impacts of the Proposed Project.

# **B. PROJECT DESCRIPTION**

## **PROPOSED ACTIONS**

The Proposed Project requires the following discretionary approvals:

## TWO SPECIAL PERMITS

- Special Permit pursuant to ZR 74-922 (Certain large retail establishments) to allow retail establishments in M1 districts with no limitation on floor area per establishment. Supermarket and various retail uses are allowed as-of-right in M1-1 districts up to a maximum of 10,000 square feet. This Special Permit is necessary to facilitate the commercial viability of the Proposed Project and attract anchor tenants.
- Special Permit pursuant to ZR 62-837 (Bulk and parking modifications on waterfront blocks) to allow bulk modification on waterfront blocks to modify the requirements of ZR 62-341(b)(3) (Developments on land and platforms) and ZR 62-332 (Rear yards and waterfront yards). The design of the Proposed Project will require a Special Permit issued by the CPC:
  - To modify the requirements in ZR 62-341(b)(3) limiting height to 30 feet for a commercial building in an M1-1 district.
  - To modify requirements set forth in ZR 62-332 regarding waterfront yards.

# FIVE AUTHORIZATIONS

- Authorization pursuant to ZR 62-822(a) (Modification of waterfront public access area and visual requirements) to allow modification of location area and dimensional requirements applicable to waterfront public access areas and visual corridors. The design of the Proposed Project will require an Authorization by CPC to modify requirements regarding waterfront public access areas and visual corridors. These modifications are necessary given the existing building and tidal wetland adjacent areas on the Project Site and will provide equivalent public use and enjoyment of the waterfront and views to the water from upland streets and other public areas.
- Authorization pursuant to ZR 62-822(b) to allow modification of design requirements of ZR 62-60 (Design Requirements for Waterfront Public Access Areas) within waterfront public access areas. The design of the Proposed Project will require an Authorization by CPC to modify design element requirements set forth in ZR 62-60, which would result in a design for waterfront public access that is superior to what may otherwise be achieved through strict adherence to the applicable provisions, as determined through the Statement of Findings for the Authorization.
- Authorization pursuant to ZR 107-64 (Removal of trees) to modify the requirements of ZR 107-321 (Tree preservation). The design of the Proposed Project will require an Authorization by CPC for removal of certain trees that would otherwise be prohibited by ZR 107-321, specifically to authorize removal of trees of 6 inches caliper or more located outside of building footprints, driveways, areas for required parking, or located beyond 8 feet of the building walls. The removal of these trees is necessary due to the proposed filling of the site, to accommodate the proposed Shore Public Walkway and for the effective utilization of the open areas within the Project Site.
- Authorization pursuant to ZR 107-65 (Modifications of Existing Topography) to modify the requirements of ZR 107-31 (Topographic Regulations). The design of the Proposed Project will require an Authorization by the CPC for the modification of natural topography beyond the amount allowed in ZR 107-31, specifically to authorize alteration of topography beyond 2 feet of cut or fill outside of building footprints, driveways or utilities, or to meet mapped grades of a street. Modification of the topography is necessary to construct the Proposed Project and to accommodate public amenities including the waterfront publicly accessible open space.
- Authorization pursuant to ZR 107-68 (Modification of Group Parking Facility and Access Regulations) to modify the requirements of ZR 107-472 (Maximum size of group parking facility) to permit more than 30 accessory off-street parking spaces and modify the requirements of ZR 107-251(a) (Special provisions for arterials). The design of the Proposed Project will require an authorization by the CPC for more than 30 accessory off-street parking spaces for the Proposed Project. This modification is necessary to provide efficient vehicular circulation and parking for the Proposed Project.

## ONE CERTIFICATION

• Certification pursuant to ZR 62-811 (Waterfront public access and visual corridors) to certify compliance with the requirements of waterfront access and visual corridors. As shown on the Proposed Project plans, the waterfront public access areas and visual corridors will comply with all applicable requirements, except as modified by authorizations pursuant to ZR 62-822(a) and ZR 62-822(b) described above.

Separate and apart from approvals sought from CPC or its Chair, the Proposed Project requires a NYSDEC tidal wetland permit and a USACE Individual Permit for discharge of fill material into Waters of the U.S. (wetlands). With respect to NYSDEC's tidal wetlands jurisdiction, the Proposed Project requires a permit for activities in wetlands and wetland adjacent areas for both the proposed development and the outfall proposed at Richmond Valley Road. As a result of discussions with NYSDEC, building setbacks from tidal wetlands have been established (these setbacks are reflected in the proposed site plan), and the Proposed Project would include green roofs to enhance stormwater management and control of stormwater runoff. In addition, the Proposed Project includes tidal wetland protection and enhancement along the shorelines of both the Arthur Kill and Mill Creek. A USACE permit is required for proposed structures to be constructed in freshwater wetlands located in the center of the Project Site. To address USACE requirements, the Proposed Project includes creation of approximately 2.90 acres of freshwater wetlands within the 6.84-acre preservation area proposed for the northern portion of the Project Site. Preliminary discussions with NYSDEC regarding the Proposed Project have taken place and coordination with both the NYSDEC and USACE will continue throughout the environmental review and permit review processes. New York City Department of Transportation (NYCDOT), New York City Department of Environmental Protection (DEP), and New York City Fire Department (FDNY) approvals are also required for the street improvements including constructing and opening the mapped right-of-way of Richmond Valley Road and improvements along and connections to Arthur Kill Road. The opening of Richmond Valley Road would also require the use of a small portion of DEP Mill Creek Bluebelt property.

## **PROJECT SITE—EXISTING CONDITIONS**

The Project Site is bounded by the structural supports for the Outerbridge Crossing to the north, Arthur Kill Road to the east, the mapped but unbuilt Richmond Valley Road and the shoreline of Mill Creek to the south, and the Arthur Kill waterway to the west (out to the mapped U.S. Bulkhead line). There are commercial buildings to the east of the Project Site that lie between the Project Site and Arthur Kill Road. The Project Site totals approximately 33.68 acres (of which 8.98 acres are underwater lands and 24.70 acres are upland) which includes lands within the mapped right-of-way of Richmond Valley Road between Arthur Kill Road on the east and the mapped U.S. Bulkhead line in the Arthur Kill on the west. While the City map shows Richmond Valley Road extending westward from the intersection with Arthur Kill Road out to the mapped U.S. Bulkhead line, it is currently not built across the Project Site.

The Project Site has about 1,500 linear feet of shoreline along the Arthur Kill to the west and 500 linear feet along Mill Creek to the south. It is primarily wooded with some disturbed areas (e.g., trails) and evidence of fill and urban debris at the edges. The southern half of the Project Site is relatively flat, but slopes slightly to the west and south while the northern half slopes from the east-northeast to the west. There is one standing vacant residential structure on the Project Site, which is an unoccupied 3,900-square-foot single-family residential building (referred to as the "Cole House"), on Block 7632, Lot 6. 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 it is not eligible for listing on the State/National Registers of Historic Resources.

The Project Site has both tidal and freshwater wetlands and the regulated wetland adjacent area that are regulated by both NYSDEC and the USACE. Along the shoreline of the Arthur Kill and Mill Creek there is a mix of tidal wetland habitats (e.g., intertidal salt marsh, intertidal mudflats, and maritime beach). The total area of NYSDEC-regulated tidal wetlands on the Project Site is

approximately 0.95 acres and the tidal wetland adjacent area totals approximately 6.03 acres. A portion of this NYSDEC-regulated tidal wetland adjacent area also extends across the mapped but unbuilt Richmond Valley Road. There are also wooded freshwater wetlands on the Project Site as defined by USACE methodology totaling 3.58 acres.

The Project Site is predominantly zoned M1-1, which allows light manufacturing, warehouse, and a range of commercial uses, among them retail, office, and hotel uses. The southern portion of the Project Site is zoned M3-1. M1-1 zoning districts allow a range of commercial uses with certain uses limited as-of-right to a maximum of 10,000 square feet. In addition to the underlying zoning, the Project Site is located in the SSRDD, which is a special purpose district that regulates changes to natural features, such as trees and topography, establishes special building height and setback limits, and includes waterfront open space. The City's waterfront zoning also applies to the site (see "Proposed Actions," above).

Some of the eastern portion of the Project Site has frontage along Arthur Kill Road and other parts of the eastern portion of the Project Site are separated from Arthur Kill road by previously developed and separately owned lots. The Project Site also has frontage along the mapped but unbuilt right-of-way along Richmond Valley Road.

#### **PROPOSED PROJECT**

#### PROPOSED SITE PLAN

The Proposed Project would redevelop 17.72 acres of the 33.68-acre Project Site into a commercial center, with the necessary access drives, accessory parking, and 3.75 acres of waterfront open space. The remainder of the Project Site would remain undeveloped (including the 8.98 acres of underwater land). The northern portion of the Project Site, near the Outerbridge Crossing, and the western and southern shorelines along the Arthur Kill and Mill Creek contain natural areas (e.g., tidal and freshwater wetlands and wooded areas) that would also be preserved or enhanced. **Table S-1** summarizes the acreages on the Project Site that would be affected by the Proposed Project, as well as the areas that would not be developed.

#### BUILDING PROGRAM

The Proposed Project would develop a commercial center with destination and smaller-scale retail uses, a supermarket, restaurants, a small amount of office space, and a cinema, with accessory parking, waterfront open space along the Arthur Kill, and associated street and infrastructure improvements, including the build-out of Richmond Valley Road with the required infrastructure (e.g., storm sewers, water lines). The proposed uses would be located on the first and second floors of the Proposed Project. The Proposed Project would also include a restaurant that is proposed to be located on the roof of the commercial space adjacent to the proposed cinema (the square footage of the restaurant space is included in the totals). The Proposed Project would also retain the Cole House for use as a restaurant on the ground floor and office space on the second floor (e.g., management office).

Inclusive of the Cole House and the rooftop restaurant, the proposed commercial development would contain 300,128 gsf of general retail uses, supermarket of up to 80,000 gsf, 53,770 gsf of restaurant uses, a 55,000-gsf (1,088-seat) cinema, and 1,500 gsf of office space in the second floor of the Cole House, with 4,800 gsf of mechanical and operational space and 94,421 gsf of structured parking space (see **Table S-2**). The development area of the Proposed Project would be approximately 17.72 acres.

	Proposed Project Site Plan L	and Areas			
1.	Commercial development	Acres			
	1a. Commercial Building	5.07			
	1b. Private drives (including sidewalks and pedestrian walkways)	2.79			
	1c. Private decks/overlooks	0.31			
	1d. Cole House	0.05			
	1e. Accessory spaces (loading, storage, utility area, parking etc.)	3.49			
	1f. Waterfront landscaping	0.43			
	1g. Street and yard landscaping	0.40			
Subtotal 1.					
2.	Public Road Improvements				
	2a. Richmond Valley Road	1.13			
	2b. Street landscaping	0.10			
	2c. Arthur Kill Road	0.19			
Su	btotal 2.	1.42			
3.	Waterfront Open Space				
	3a. Tidal wetland and adjacent area restoration/mitigation and preserved area	2.81			
	3b. Publicly accessible walkways	0.82			
	3c. Beach	0.12			
Subtotal 3.					
4.	Preserved and Restored Areas				
	4a. Tidal wetland and adjacent area restoration/mitigation and preserved area	4.42			
	4ai. Overlap with private decks/overlooks	0.07			
	4aii. Overlap with publicly accessible walkway	0.12			
	4aiii. Overlap with freshwater wetlands	0.16			
	4aiv. Overlap with lands underwater	0.25			
	4av. Overlap with construction easements south of Richmond Valley Road	0.07			
	4avi. Overlap with waterfront open space	2.81			
	4avii. Overlap with waterfront landscaping	0.15			
	4b. Freshwater wetlands restoration/mitigation and preserved area	4.22			
	4bi. Overlap with private decks/overlooks	0.01			
	4bi. Overlap with private drive	0.06			
	4c. Other upland preserved areas	1.65			
	4d. Easement areas under Outerbridge Crossing	0.25			
Su	btotal 4.	6.84			
	Inderwater lands	8.98			
6. (	Construction easements south of Richmond Valley Road	0.14			
Tot	al Project Site	33.68			

 Table S-1

 Proposed Project Site Plan Land Areas

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Development Program for EIS Analysis							
Use	ZR Use Group	Approximate Size (in gsf)					
General Retail	6 or 10	300,128 gsf					
Restaurants <sup>1</sup>	6	53,770 gsf					
Supermarket	6	80,000 gsf					
Cinema	8	55,000 gsf					
Office	6	1,500 gsf					
Mechanical/Operational	N/A	4,800 gsf					
Parking	N/A	94,421 gsf					
Total Floor Area 589,619 gsf							
<b>Note:</b> <sup>1</sup> Includes 3,700 sf of fast food establishment. <b>Source:</b> Studio V Architecture, PLLC, July 2017.							

		Table S-2
Develop	ment Program	m for EIS Analysis
		Approvimate Size

Because the Applicant proposes to use and disturb the maximum amount of land which is developable and proposes to construct the Proposed Project to the maximum allowable building envelope and height, the Proposed Project is the maximum development that could occur on the Project Site and any development floor area or height increases would require additional CPC approvals.

#### CIRCULATION AND PARKING

#### Site Circulation

The Proposed Project would develop the existing mapped, but unbuilt, segment of the Richmond Valley Road to its 80-foot-wide mapped right-of-way width, westward from Arthur Kill Road (a distance of about 680 feet as measured from Arthur Kill Road). This street segment would be developed by the Applicant as a public City street and would provide access to the Proposed Project's private internal north-south access drive. Construction of Richmond Valley Road would require grading to meet existing grades on adjacent properties and the existing signal at this intersection location would be modified to reflect the proposed street improvements. In addition to the above, the southbound approach of Arthur Kill Road to its intersection with Richmond Valley Road would be widened to provide a right-turn-only lane for entry onto Richmond Valley Road; a two-lane entrance-only one-way private drive leading to the proposed garage would be developed here.

An additional entrance and exit drive for the Proposed Project would be provided along Arthur Kill Road at the north end of the proposed development. This would be a new private drive that would require a new curb cut along Arthur Kill Road. To best facilitate traffic flow, this northern private drive would be designed with two exiting lanes, including one exclusive left-turn lane and one exclusive right-turn lane. In addition, to minimize the conflicts along Arthur Kill Road, the southbound approach to this intersection along Arthur Kill Road would be widened to provide a right-turn only lane entrance into the Project Site. This exclusive right-turn entrance would optimize traffic flow accessing the proposed commercial center and would remove that traffic from the travel lanes along Arthur Kill Road at the Project Site.

Additionally, a two-lane entrance-only one-way driveway leading to the proposed garage would be provided on Arthur Kill Road north of Richmond Valley Road and the Cole House. This exclusive right-turn entrance would optimize traffic flow for vehicles accessing the Proposed Project and would remove the entering traffic from the Arthur Kill Road travel lanes.

# Parking

The Proposed Project requires a total of 1,721 accessory parking spaces per zoning. This required accessory parking would primarily be provided in a structured parking garage that would have 1,668 spaces, with an additional 53 surface parking spaces to be provided along the private drives, for a total of 1,721 accessory parking spaces on the Project Site.

It is expected that the proposed parking would be operational for 24 hours and the parking garage would have a gated entrance; during non-business hours, this parking is expected to be accessible only to maintenance and support staff, as well as for deliveries. In addition, new public on-street parking would be provided along the improved Richmond Valley Road. This is expected to provide a total of approximately 18 public parking spaces.

# Pedestrian Circulation

Pedestrian access and circulation would be provided with new sidewalks along Arthur Kill Road and Richmond Valley Road and also along the proposed private drives. Pedestrian circulation along these sidewalks would provide access from the proposed parking garage and on-street parking to the proposed storefronts and waterfront open space. In addition to this pedestrian circulation, the Proposed Project would include elevated walkways that would connect the second floors of the proposed commercial spaces. Access from Arthur Kill Road to the second level retail space along Richmond Valley Road would be provided via a shopping passage to be provided at an entry plaza near the Cole House. The proposed commercial spaces along the westerly private drive (the main retail drive) would also have second-level pedestrian walkways connecting the retail spaces.

## WATERFRONT OPEN SPACE

Approximately 3.29 acres of public open space would be provided with the Proposed Project including a shore public walkway including a beach area along the Arthur Kill. This waterfront open space would also include landscaping improvements and tidal wetland enhancements along the Arthur Kill and Mill Creek shorelines. The waterfront publicly accessible open space would consist of an elevated shore public walkway providing access to the Arthur Kill, an entry terrace with seating and shade trees, an overlook with seating, and a beach area. All areas in the landscaped public open space would have native plantings and vegetation. Inland connections across the site would also encourage pedestrian and bicyclist access from the adjacent neighborhood. All pedestrian spaces would complement the Proposed Project and provide a new public amenity on the Project Site.

The Proposed Project also meets the City's zoning requirements for the Project Site, which include providing the following Waterfront Public Access Areas pursuant to the Zoning Resolution Article VI, Chapter 2: a Shore Public Walkway running parallel to the waterfront, a Supplemental Public Access Area adjacent to the Shore Public Walkway, and an Upland Connection along both sides of River Drive and Outer Drive. These open spaces would be completed and opened and maintained in conjunction with the Proposed Project.

# STORMWATER MANAGEMENT

The Proposed Project includes a stormwater management design that includes an approximately 4.52-acre green roof on the proposed building coupled with other stormwater best management practices and infrastructure designed to comply with the *New York State Stormwater Management Design Manual*. There would be a total of four new stormwater outfalls one public outfall at the end of Richmond Valley Road (to be designed to DEP standards), and three private outfalls adjacent to the western shore.

The principal components of the proposed stormwater management include:

- Green roofs on the proposed commercial spaces with three new private drains to the Arthur Kill to handle the overflow runoff;
- A rain garden;
- Seepage basins to handle runoff from private drives; and
- A new stormwater outfall to the Arthur Kill that would be installed as part of the construction of Richmond Valley Road and designed and built to DEP drainage plan standards.

# NATURAL AREA PRESERVATION, RESTORATION, CREATION, AND ENHANCEMENT

The Proposed Project requires construction in freshwater wetlands (as defined by USACE) which includes installation of structures as well as freshwater wetland restoration as well as in tidal wetland-adjacent area as regulated by NYSDEC, which includes installation of outfalls and tidal wetland restoration, as well as tree clearing, which is regulated by City zoning in accordance with the SSRDD. Therefore, it will be a requirement of those permit approvals to both protect and restore freshwater and tidal wetland habitats and to both protect woodland stands and provide substantial replacement tree plantings that create and restore woodland habitats on the Project Site. Protecting, restoring, and enhancing these habitats would provide nesting, foraging, and cover opportunities for wildlife while diversifying the Project Site's ecology.

Included in these proposed enhancements is a 2.90-acre (126,250-square-foot) freshwater wetland creation proposed to be sited in the northern portion of the Project Site while the proposed tidal wetland restoration, enhancements, and preservation would be established along the west (Arthur Kill) and south (Mill Creek) shorelines with approximately 4.42 acres of tidal wetland restoration and enhancements along the Arthur Kill and Mill Creek shorelines. The tidal wetland restoration and enhancements is proposed to include the planting of native salt-tolerant intertidal, high marsh, and tree and shrub vegetation. The proposed tidal wetland and adjacent area restoration and enhancements would utilize the existing tidal wetland habitats and natural grades that would serve as the basis for the proposed wetland restoration and enhancement design.

Under the proposed wetland restoration plan, the northern portion of the Project Site, which includes wooded wetlands, would be used for the freshwater wetlands preservation and enhancement through the establishment of planted freshwater wetland species inclusive of existing native emergent marsh, scrub-shrub, and tree species. Under the proposed freshwater wetland design there would be three zones of freshwater wetlands: emergent marsh, scrub/shrub, and wooded. Emergent marshes would be planted with rushes (e.g., hard stem bulrush, soft rush) and sedges (e.g., fox sedge, lurid sedge) and common three-square. Scrub/shrub habitat would

be planted with red chokeberry, bayberry, grey dogwood, elderberry, and arrowood. Wooded wetlands would be planted with species native to Staten Island such as black willow, red maple, blackgum, pin oak, and sweetgum. In addition to the wooded freshwater wetland, a wooded coastal upland would be created along the Mill Creek portion of the Project Site, extending to the westerly end of Richmond Valley Road.

# **BUILD YEAR**

Assuming project approvals are granted in early 2018, construction is expected to start in mid-2018. A construction timeframe developed for the Proposed Project estimates about 13 months of construction. Thus, construction would is expected to be completed in mid-2019 followed by occupancy by the end of the year.

## PURPOSE AND NEED

The goals of the Proposed Project as stated by the Applicant are to redevelop this underutilized waterfront property for the purposes of generating income while providing economic benefits for western Staten Island; create substantial new publicly accessible waterfront open space where none currently exists; improve Richmond Valley Road westward from Arthur Kill Road to the waterfront; provide ecological enhancements and restoration at the site with the potential for educational opportunities, including educational placards identifying native shoreline wildlife along the Arthur Kill walkway; and preserve the cultural features of the Project Site (the Cole House) for adaptive reuse.

In the Applicant's opinion, the Proposed Project would provide an important waterfront commercial center for Staten Island residents with retail uses supported by a multiplex cinema, supermarket, and restaurant/dining uses. The frontage along the Arthur Kill waterfront, now privately owned, unimproved, and inaccessible to the public, would be transformed into a new publicly accessible waterfront open space that would support not only the needs of projectgenerated patrons, visitors, guests, and employees, but the community as well. The proposed commercial development, coupled with the waterfront open space and entertainment uses, has been designed to provide an attractive waterfront amenity for both residents of the neighborhood and Staten Island as a whole. In addition, public improvements include constructing a mapped, but currently unbuilt segment of a public street, Richmond Valley Road, out to the Arthur Kill, which would open up new physical and visual waterfront access and which is consistent with City coastal zone policies. Where possible, the Proposed Project would also widen Arthur Kill Road to the mapped width on the westerly side of the street to provide vehicular and pedestrian circulation improvements along that corridor and into the Project Site. The Proposed Project would also provide ecological benefits with a natural area preservation and restoration area on the northern portion of the Project Site where freshwater wetlands would be created and enhanced in conjunction with storm water management improvements, including approximately 4.52 acres of green roof on the proposed structures, and tidal wetland restoration and enhancements along the western (Arthur Kill) and southern (Mill Creek) shorelines. The Applicant has also stated that it is expected that the proposed ecological enhancements would improve on-site habitats for resident and migratory wildlife through the provision of protected, restored, and enhanced freshwater and tidal wetland wetlands.

# C. ANALYSIS FRAMEWORK

In the future without the Proposed Project (i.e., the No Action condition), it was assumed in this EIS that there would be no new development on the Project Site, which is currently vacant land with wetlands and unbuilt streets with one unoccupied residential structure.

The Proposed Actions (summarized above) would allow the Proposed Project (i.e., the "With Action" condition) and, through approval of the Project Site plan and building program, the size, location, height, and footprint of the proposed building, the accessory parking, the natural resources restoration and enhancement, and proposed open spaces would be established. To provide a conservative environmental review, a Reasonable Worst-Case Development Scenario (RWCDS) was developed for this EIS and used in the impact analyses. That RWCDS assumes the Proposed Project with a built Floor Area Ratio (FAR) of 0.46, which is below the maximum allowable FAR of 1.0 permitted under the current zoning; however, development greater than that analyzed in this EIS is not feasible without separate and additional discretionary actions, given the many and varied zoning and environmental approvals that are necessary to develop retail uses at the Project Site. At the City level, the discretionary zoning approvals include special permits for retail uses greater than 10,000 sf and modifications of building heights and yards established for waterfront blocks. There are also authorizations to modify the waterfront zoning provisions of the City's zoning resolution requiring waterfront access and visual corridors as authorizations to waive or modify the SSRDD requirements for tree removal and replacement, topography protection, and accessory parking. Together, this comprehensive range of approvals would limit the size and scale of the Proposed Project and cause it to be the RWCDS analyzed in this EIS. Future development at the Project Site is further limited to the Proposed Project by the tidal and freshwater wetland permit approvals required from NYSDEC and USACE. Thus, the Proposed Project described in this EIS provides a RWCDS that was used as the basis for this environmental review, with the necessary approvals and restrictions in place to ensure that the Proposed Project development program corresponds to the reasonable worst case development potential of the Project Site.

This RWCDS assumes that the Project Site would be developed with a 589,619-gsf commercial development containing 300,328 gsf of general retail uses, a supermarket of up to 80,000 gsf, 53,770 gsf of restaurant uses, a 55,000-gsf (1,088-seat) cinema, and 1,500 gsf of office space in the second floor of the Cole House, with 4,800 gsf of mechanical and operational space, and 94,421 gsf of structured parking space (see **Table S-3**). The *CEQR Technical Review Manual* was the primary guide used in developing the methodologies and impact criteria to analyze this development program in this EIS.

	<b>Reasonable Worst Case Development Scenario for EIS Analysis</b>								
Block/Lot Number(s)	Project Info	Existing Conditions	No-Action	With-Action	Increment (With Action)				
Block 7620,	Project Site Size (sf)	33.68 acres	33.68 acres	33.68 acres	0				
	Residential Floor Area	3,900 gsf	3,900 gsf	0	-3,900 gsf				
7632, Lots		0	0	490,398 gsf	490,398 gsf				
50, 150, 151	Accessory Parking	0	0	94,421 gsf (1,721 spaces)	94,421 gsf (1,721 spaces)				
	Mechanical and Operational	0	0	4,800 gsf	4,800 gsf				
	Building Height (ft.)	25	25	Up to 96'	Up to 96'				
				3.75 acres	3.75 acres				
	Waterfront Open Space	0	0						
	Total Built Floor Area	3,900 gsf	3,900 gsf	589,619 gsf	585,719 gsf				

	Table S-3
<b>Reasonable Worst Case Develo</b>	pment Scenario for EIS Analysis

# D. POTENTIAL IMPACTS OF THE PROPOSED PROJECT

# LAND USE, ZONING, AND PUBLIC POLICY

## LAND USE

This assessment finds that the Proposed Project would not result in significant adverse impacts relating to land use, zoning, or public policy. The Proposed Project would be compatible in use and scale with the surrounding area, which primarily contains commercial businesses along the study area's commercial corridors, in particular the shopping centers located along Arthur Kill Road adjacent to and across from the Project Site. Although the Proposed Project's commercial uses are allowed under existing zoning and the total bulk of the Proposed Project complies with the applicable zoning regulations, the Proposed Project requires special permits, authorizations, and certifications from the New York City Planning Commission (CPC) which include, but are not limited to: (a) special permits allowing large-scale retail establishments with no limitation on floor area per establishment in an M1-1 zoning district, as well as modifications to applicable waterfront zoning requirements to allow a commercial building greater than 30 feet in height and to alter yard requirements; (b) authorizations to allow modification of location, area, dimensional and design requirements applicable to waterfront public access areas and visual corridors; (c) an authorization to waive tree removal requirements applicable in the SSRDD; (d) an authorization to modify the special topography requirements applicable in the SSRDD; (e) authorizations to allow more than 30 accessory parking spaces in the SSRDD and (f) a certification that requirements relating to shore public walkways and view corridors have been satisfied.

## ZONING

The proposed modifications to the zoning regulations described above would apply only to the Project Site, and would allow the Proposed Project to achieve an efficient site plan while preserving a large portion of the Project Site's natural ecology. Because the Proposed Project would largely comply with the underlying zoning, with modifications that are allowed through existing measures in the ZR, and would not adversely affect land use conditions in the surrounding area, it would not result in a significant adverse impact to zoning.

## PUBLIC POLICY

The Proposed Project does not require any changes to public policies and would be consistent with applicable public policies, including those established by the City's Waterfront Revitalization Policies (WRP) policies (e.g., public access to the waterfront, natural features preservation and restoration) and the *Working West Shore 2030* report. In particular, the Proposed Project would support the *Working West Shore 2030* economic development goals by introducing commercial uses that would provide local job opportunities. While the Proposed Project would not implement all of the redevelopment objectives envisioned in *Working West Shore 2030* (specifically, it would not develop any residential space), the Proposed Project would largely support the plan's goals for the Charleston-Tottenville area, which include redeveloping vacant land with a mix of uses and improving access to the Arthur Kill waterfront with open space and recreational amenities. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts or conflicts with respect to public policies.

# SOCIOECONOMIC CONDITIONS

## DIRECT RESIDENTIAL DISPLACEMENT

Based upon the screening-level assessment, the Proposed Project would not result in significant adverse impacts due to direct residential displacement. According to the *CEQR Technical Manual*, displacement of less than 500 residents would not typically be expected to alter the socioeconomic character of a neighborhood. The Project Site includes a single-family home that is owned by the Applicant and is unoccupied. Thus, the Proposed Project would not cause any direct residential displacement.

## DIRECT BUSINESS DISPLACEMENT

Based upon the screening-level assessment, the Proposed Project would not result in significant adverse impacts due to direct business displacement. The Proposed Project would not result in the direct displacement of any businesses or employees.

## INDIRECT RESIDENTIAL DISPLACEMENT

Based upon the screening-level assessment, the Proposed Project would not result in significant adverse impacts due to indirect residential displacement. The Proposed Project would not include any residential development and therefore falls below the *CEQR Technical Manual's* 200-unit threshold warranting assessment.

## INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED RENTS

Based upon the preliminary assessment, the Proposed Project would not result in significant adverse socioeconomic impacts due to indirect business displacement from increased rents. While the Proposed Project would add a substantial amount of retail to the Project Site, the Proposed Project would not be introducing new economic activities that would alter existing economic patterns in the study area.

#### INDIRECT BUSINESS DISPLACEMENT DUE TO RETAIL MARKET SATURATION

Based upon the preliminary assessment, the Proposed Project would not result in significant adverse socioeconomic impacts due to retail market saturation. The 433,898 gross square feet

(gsf) of local and destination retail introduced by the Proposed Project would increase capture rates in the Primary Trade Area in the Shoppers' Goods (including Department Stores), Convenience Goods (including Grocery Stores), and Eating and Drinking Establishments retail categories. However, these capture rates would remain below 100 percent, which is the CEQR threshold requiring a detailed analysis. Therefore, the Proposed Project would not capture retail sales in any of these categories of goods to the extent that the market for such goods would be saturated. Similarly, while the 55,000-gsf cinema introduced by the Proposed Project could compete with existing and planned cinema uses, it would not result in any significant adverse impacts due to indirect displacement.

## ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Based upon the preliminary assessment, the Proposed Project would not result in any significant adverse impacts on specific industries. The proposed project would not result in significant indirect business displacement due to increased rents or retail market saturation, and would not substantially affect the economic viability or substantially reduce employment in any specific industry or category of business.

## **OPEN SPACE**

The Proposed Project would not result in significant adverse open space impacts. The Proposed Project would introduce approximately 1,280 new workers at the Project Site and provide approximately 3.75 acres of waterfront open space with an elevated publicly accessible walkway providing access to the Arthur Kill waterfront, a waterfront terrace with seating and shade trees, and a small beach. With the Proposed Project, the passive open space ratio in the study area would be approximately 1.49 acres per 1,000 workers, which exceeds the City's guideline of 0.15 acres per 1,000 workers. It is also expected that workers generated by the Proposed Project would utilize the proposed on-site publicly accessible opens spaces that would provide project employees and patrons with new passive recreational opportunities. For these reasons, it is concluded that the Proposed Project would not result in any significant adverse open space impacts.

## **SHADOWS**

The Proposed Project would not result in significant adverse impacts related to shadows on any open space or natural habitats. Based on a detailed shadows assessment, the preserved and enhanced tidal wetland and freshwater wetlands along the western shoreline and within the preserved area in the northern portion of the Project Site would be subject to limited shadow coverage from the proposed building. Given the limited extent and duration, this shadow is not expected to affect vegetation in these areas. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts due to shadows.

## HISTORIC AND CULTURAL RESOURCES

The Proposed Project would result in significant adverse impacts to archaeological resources, but would not result in significant adverse impacts to architectural resources. Possible mitigation measures are described in the Mitigation section below.

#### ARCHAEOLOGICAL RESOURCES

In order to assess the archaeological sensitivity of the Project Site, a Phase 1 Archaeological Survey was prepared that included both documentary research to identify the occupation and development histories of the Project Site as well as field testing to identify the presence or absence of archaeological resources. It was the conclusion of the Phase 1 report 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. That additional Phase 1B and Phase 2 testing was completed and a draft report summarizing such work was submitted to the New York City Landmarks Preservation Commission (LPC) and the New York State Historic Preservation Office (SHPO) for review. It was the conclusion of these reports that 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 "Mitigation," below).

#### ARCHITECTURAL RESOURCES

#### Project Site

Because there are no historic architectural resources on the Project Site, there would be no direct significant adverse impacts related to historic architectural resources.

#### Study Area

The Outerbridge Crossing, an architectural resource, is adjacent to the Project Site. Construction of the proposed wetland mitigation is the only project element that is within 90 feet of this resource. If necessary, to avoid any potential construction-related impacts on this architectural resource, a Construction Protection Plan (CPP) would be developed in consultation SHPO and the Port Authority of New York and New Jersey (PANYNJ) and would be implemented by a professional engineer prior to excavation of the Project Site. The CPP would follow the guidelines set forth in section 523 of the *CEQR Technical Manual*.

With the Proposed Project, public views of the Outerbridge Crossing would remain visible from Arthur Kill Road and from the proposed new waterfront open space. Maintenance of the existing vegetation in the preservation area south of the Outerbridge Crossing would also serve to 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 also 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. For these reasons, it is concluded that the Proposed Project would not result in significant adverse indirect impacts on historic architectural resources.

# URBAN DESIGN AND VISUAL RESOURCES

The Proposed Project would not result in any significant adverse impacts on urban design and visual resources or the pedestrian experience of the built and natural environment.

# Project Site

The Proposed Project would be constructed on land that is mostly vacant and wooded and generally slopes down to the Arthur Kill. Proposed is a single building consisting of individual and interconnected commercial spaces that would be constructed over a cellar level garage and behind an existing development that fronts Arthur Kill Road. The proposed commercial spaces would have large, long, and relatively narrow floorplates, which would be oriented east-west (along the westward extension of Richmond Valley Road) and north-south (along the proposed internal private drive). The tallest portion of the Proposed Project would be approximately 96-feet-tall and oriented along the internal private drive. Approximately 90 linear feet of the southern wing would front Arthur Kill Road at the south end of the Project Site. The tallest element of the Proposed Project is proposed in the center of the site. All of the proposed exterior walls are proposed to be finished with glass and wood cladding panels with an undulating green roof.

With the Proposed Project, Richmond Valley Road would be constructed westward from Arthur Kill Road to the waterfront and this section of the road would be a public street corridor (dedicated to the City) providing both visual and pedestrian access to the water. Pedestrian access into the Proposed Project would be provided with new sidewalks along Arthur Kill Road, the Richmond Valley Road extension, and the internal private drives. A natural area would be preserved and restored on the northern portion of the Project Site with additional waterfront open space, including a publicly accessible walkway along the Arthur Kill waterfront that would open up new waterfront views. Shorelines along both the Arthur Kill and Mill Creek would also have landscaping improvements and wetland restoration.

## Study Area

The Proposed Project does not require the closure of any streets; rather, a new public street to the waterfront and internal private drives would be developed and create new public view corridors across the Project Site to the waterfront.

The Proposed Project would also replace wooded and previously disturbed parcels with a new commercial center. Although the proposed commercial spaces would have large floorplates, they would not be inconsistent with the existing commercial building footprints in the study area, and the larger commercial and industrial developments along Arthur Kill Road and Richmond Valley Road. Thus, the Proposed Project would not be inconsistent with the current visual setting and street experience along these corridors.

The proposed maximum height of the development, at 96 feet, would be taller than the height of most of the existing buildings in the study area; however, as has been described above, the slope downward within the Project Site from east to west and the setback from Arthur Kill Road with intervening structures would reduce the perceived height of the proposed taller structural elements from the pedestrian perspective along Arthur Kill Road and from the surrounding area.

Since much of the Proposed Project would be located behind existing commercial and light industrial buildings fronting Arthur Kill Road, its visual presence in existing view corridors would be limited and the Proposed Project would not conflict with the urban scale of the study area. The Proposed Project has also been designed to respect its waterfront setting, with longer and low-rise commercial spaces along the east/west private drive and with green roofs that have an undulating design that references the surrounding landscape and waterfront location.

Pedestrian entrances and sidewalks would also open new public connections Arthur Kill Road to the waterfront in an area that currently has few pedestrian amenities.

For the above reasons, it is concluded that the Proposed Project would not adversely impact the urban design features of the study area and would also not adversely impact the pedestrian experience. Rather, the new pedestrian walkways through the Proposed Project, including those to and along the waterfront, would provide new public access to the waterfront.

#### VISUAL RESOURCES AND VIEW CORRIDORS

#### Project Site

The southern wing of the proposed building, which fronts Arthur Kill Road at the south end of the Project Site would be approximately 50 feet tall. With the downward slope of Arthur Kill Road, this proposed 50-foot-high project element would appear to about the same height as the approximately 32-foot-tall, 2½-story Cole House. In addition, the taller, 96-foot-high element of the Proposed Project would be set back approximately 300 feet west of Arthur Kill Road. Therefore, given the site topography and setback of the tallest elements of the Proposed Project from Arthur Kill Road, it is concluded that the Proposed Project would not adversely impact views from the pedestrian perspective along Arthur Kill Road. Although the backdrop of the Cole House would change from a wooded to a developed setting, the Cole House would remain in place, with its front lawn, stone retaining wall, and preserved tree, and its relationship with the Arthur Kill Road view corridor would be maintained.

Currently, there are currently no public views of the waterfront from Arthur Kill or Richmond Valley Roads, or from the Project Site; however, the Proposed Project would create a new public view corridor along Richmond Valley Road, with waterfront views provided from multiple locations within Project Site, including the proposed publicly accessible walkway along the Arthur Kill shoreline. The Proposed Project waterfront open spaces would therefore provide new public waterfront access locations to enjoy panoramic views of the Arthur Kill waterway and the Outerbridge Crossing, both of which are significant visual resources. Presently there are no such public views of these resources from the Project Site.

#### Study Area

Currently, views to the Outerbridge Crossing from around the Proposed Project site are largely obstructed due to existing buildings and vegetation along the west side of Arthur Kill Road. As described above, the Proposed Project's waterfront open space, including the publicly accessible walkway, would provide new and expansive public views to the Outerbridge Crossing and the Arthur Kill waterway. A partially obstructed view of the Outerbridge Crossing currently available from Arthur Kill Road may be somewhat obstructed by the Proposed Project; however, this particular view is currently limited and is not a significant publicly accessible view. Views of the Outerbridge Crossing from the elevated portion of Page Avenue at the southeastern corner of the study area, and of the Outerbridge Crossing and the Arthur Kill waterway from Allentown Lane at the northwestern corner of the study area, would also not be altered. Views of the Arthur Kill waterway from the Outerbridge Crossing would also not be adversely impacted by the Proposed Project.

In sum, the Proposed Project would not result in any significant adverse impacts on urban design or visual character, including both the built and natural environments.

## NATURAL RESOURCES

With the proposed wetlands enhancement and restoration, the Proposed Project would not result in any significant adverse impacts to natural resources. The Proposed Project involves commercial development of a primarily undeveloped waterfront lot that currently has freshwater and tidal wetlands, wooded wetland and upland habitats, a single-family house with a domestic lawn and trees, and wildlife species that are common to the Staten Island waterfront. With the Proposed Project, surface waters, groundwater, and aquatic biota both within and near the Project Site would not be adversely impacted. Freshwater wetlands and terrestrial natural resources would be directly impacted through clearing and grading; however green roofs coupled with green stormwater infrastructure and wetlands enhancements would maintain natural resources on the Project Site. Proposed green infrastructure inclusive of vegetated stormwater practices and green roofs coupled with freshwater and tidal wetland restoration would offset the potential impacts of clearing and the increased impervious surface coverage from the Proposed Project. The Proposed Project also includes the creation of freshwater wetlands and tidal wetland jurisdictional area enhancements in accordance with USACE mitigation guidance and consultation with NYSDEC. These mitigation measures are intended to compensate for the loss of USACE freshwater wetlands and would potentially improve existing habitat in the mitigation areas to the benefit of wildlife, waterfowl, and songbirds. Displacement of some wildlife is expected with the Proposed Project; however, the shoreline and wetland areas, which are the location of highest wildlife utilization, would remain undeveloped or enhanced with native vegetative plantings which would provide food and cover for wildlife. The Proposed Project would not impact the designated 100-year and 500-year flood hazard areas.

The Proposed Project also includes the restoration and enhancement of freshwater and tidal wetlands along the southern, western, and northern portions of the Project Site. The northern portion of the Project Site is more densely wooded and therefore provides an area for preservation of natural habitats with freshwater wetland creation and tidal wetland restoration would be provided along the western and southern shoreline. Under the proposed wetland design, native emergent marsh, scrub-shrub, and tree habitats would be planted and maintained within the freshwater wetland preservation area and the western and southern shorelines of the Project Site would have natural feature enhancement through the establishment of native salt tolerant intertidal and high marsh planting with trees and shrub vegetation in the adjacent area.

The objective of the wetland creation and restoration design is to improve onsite habitats for resident and migrating wildlife species by providing both food and cover for area wildlife and enhancing the diversity of flora and fauna. The proposed 2.90-acre (126,250-square-foot) freshwater wetland creation area on the northern portion of the Project Site would be designed to promote habitat continuity. Under the proposed design, the freshwater wetland creation areas would be excavated and graded with downward sloping contours to provide different planting zones and to facilitate connections with adjacent freshwater and tidal waters. Large, native trees would also be preserved to the extent possible. The proposed wetland creation zones have also been designed to utilize existing and natural hydrology to approximate a natural hydroperiod and to provide adequate hydrology to support the proposed plantings and the creation of hydric soils.

The proposed tidal wetland planting zones to be established along the northwestern, western, and southern shores of the Project Site total 2.64 acres (115,138 square feet). An additional 0.35

acres (15,365 square feet) is proposed to be restored through the removal of superficial concrete and other debris. Planting zones will also be established within the restoration and enhancement areas with intertidal marsh vegetation, high marsh vegetation, and tree and shrub vegetation. The existing grade and contours of the site will serve as the basis for the proposed restoration design. The tidal wetland and adjacent area restoration and enhancements have also been designed to utilize the natural shoreline substrates and tidal regime to maintain the proposed plantings.

The Proposed Project is not expected to result in any impacts on protected species. The eastern box turtle, listed as a New York State Species of Special Concern, is potentially in the vicinity of the project site. Clearing of on-site vegetation would result in the loss of some potential box turtle habitat. However, since the Proposed Project would maintain blocks of habitat within the freshwater wetlands in the northern preservation area, habitat requirements for this species would continue to be met on-site. Prior to site disturbance, an environmental monitor familiar with the eastern box turtle would conduct site reconnaissance to identify and relocate individual turtles to protected areas of the Project Site or an appropriate offsite location. The proposed project would also not conflict with natural resource policies of the WRP.

#### **HAZARDOUS MATERIALS**

The Proposed Project would not result in significant adverse impacts to hazardous materials. As noted below, the Proposed Actions include an (E) designation (E-443) for the Project Site related to hazardous materials to ensure that no significant adverse impacts related to hazardous materials occur.

Based on the potential for hazardous materials concerns identified by a Phase I Environmental Site Assessment, a Subsurface (Phase II) Investigation was conducted in accordance with a site investigation protocol approved by DEP. Based on the results of the Phase II Investigation, a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) would be developed, approved by DEP, and implemented prior to project construction to avoid the potential for human or environmental exposure to any identified or unexpectedly encountered contamination during project construction. The RAP will address requirements for soil management (e.g., stockpiling, disposal, and transportation); dust control; dewatering; quality assurance; and the closure and removal of any encountered petroleum storage tanks. The CHASP will identify potential hazards that may be encountered during construction and specify appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (e.g., protective equipment and emergency response procedures). In addition, renovation and reuse of the existing Cole House would follow, as may be relevant, regulatory requirements pertaining to asbestos-containing materials (ACM), lead-based paint, polychlorinated biphenyls (PCBs) and chemical use and storage. With the implementation of these measures, the Proposed Project would not result in any significant adverse impacts related to hazardous materials. Based on the results of the Phase II Investigation, a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) would be implemented during the subsurface disturbance associated with the Proposed Project. To ensure this would is undertaken as part of the Proposed Project, an (E) designation would be administratively placed on the parcels comprising the Proposed Project and documented on an updated Zoning Map. This (E) designation would require review and approval of the RAP and CHASP by the New York City Office of Environmental Remediation (OER).

## WATER AND SEWER INFRASTRUCTURE

The Proposed Project would not result in any significant adverse impacts related to City water supply or sewer infrastructure. Water demands of the Proposed Project would not overburden the City's water supply system. Similarly, the added sanitary wastewater treatment demands at the Oakwood Beach WPCP would represent a minor increase in wastewater flow and would not result in the plant being over overburdened or exceeding its functional capacity.

With the Proposed Project, there would be a stormwater management design that includes 4.52 acres of green roof on the proposed commercial structures, a rain garden, and other stormwater best management practices designed to comply with NYSDEC's *New York State Stormwater Management Design Manual*. There would also be a total of four stormwater outfalls to the Arthur Kill, including one new public outfall at the end of Richmond Valley Road (which would be designed and built to DEP standards and would be part of the City storm sewer system), and three private outfalls proposed on the Project Site. Once installed, DEP would assume operation of the proposed Richmond Valley Road system and the property owner would operate and maintain the private drainage system and outfalls. In addition, the private stormwater management system proposed within the commercial development area would properly handle drainage, would convey it to the Arthur Kill, would not overburden or adversely impact or any public storm sewers or adjoining properties, and would be operated and maintained by the property owner. Thus, the private drainage elements would also not adversely impact the City's stormwater system.

With this proposed design, the Proposed Project would not result in any significant adverse impacts on the City's stormwater management system. Rather, the Proposed Project would be installing a segment of the City's stormwater drainage system that would serve a larger drainage area than just the Proposed Project.

For these reasons, the Proposed Project would not result in any significant adverse impacts on the City's water and sewer infrastructure.

## SOLID WASTE AND SANITATION SERVICES

The Proposed Project would not result in a significant adverse impact on solid waste and sanitation services. The Proposed Project would not overburden solid waste and recycling management systems, nor would it conflict with, or require any amendments to, the City's solid waste management objectives.

## TRANSPORTATION

The Proposed Project would result in significant adverse impacts to traffic, and would not result in significant adverse impacts to pedestrians, transit, or parking. Possible mitigation measures are identified in the Mitigation section below.

## TRAFFIC

The Proposed Project would result in significant adverse impacts related to traffic. The potential for significant adverse traffic impacts arising from the Proposed Project was evaluated at 20 intersections for the weekday AM, midday, PM, and Saturday peak hours. Based on this analysis, it was projected that there would be significant adverse traffic impacts at 10 intersections during the weekday AM peak hour, twelve intersections during the weekday

midday peak hour, 15 intersections during the weekday PM peak hour, and 15 intersections during the Saturday peak hour.

**Table S-4** provides a summary of the impacted locations. Potential measures to mitigate the projected traffic impacts are listed in "Mitigation."

#### Table S-4

							Pro	posed Pro	oject
Intersection		Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday F Hour	Peak
EB/WB Street	NB/SB Street	Significant Impacts	Mit	Significant Impacts	Mit	Significant Impacts	Mit	Significant Impacts	Mit
Woodrow Road/School Driveway	Bloomingdale Road	Not Impacted	NA	Not Impacted	NA	WB-L	Yes	WB-L	Yes
Englewood Avenue	Veterans Road East	Not Impacted	NA	Not Impacted	NA	EB-LTR	Yes	EB-LTR	Yes
Veterans Road West/Allentown Lane	Arthur Kill Road	WB-LTR	Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes
North Bridge Street	Arthur Kill Road	WB-LR	No	WB-LR	No	WB-LR	No	WB-LR SB-T	No No
Richmond Valley Road	Arthur Kill Road	WB-TR	No	EB-L EB-TR WB-TR	No No No	EB-L EB-TR WB-L WB-TR NB-TR	No No No No	EB-L EB-TR WB-TR NB-TR	No No No No
Richmond Valley Road	Page Avenue	Not Impacted	NA	EB-L EB-TR NB-L	Yes Yes No	EB-L EB-TR WB-LTR NB-L	Yes Yes Yes No	EB-L EB-TR WB-LTR NB-L	No No No No
South Bridge Street	Page Avenue/ Boscombe Avenue	EB-LT	Yes	EB-LT	Yes	EB-LT	Yes	EB-LT	Yes
Boscombe Avenue	Route 440 Ramps	EB-L	No	EB-L	No	EB-L	No	EB-L	No
Veterans Road West	Tyrellan Avenue	WB-LTR	Yes	WB-LTR	Yes	EB-LTR WB-LTR	Yes Yes	EB-LTR WB-LTR	Yes Yes
Veterans Road West	North Bridge Street/Bricktown Way	EB-L WB-L	Yes Yes	EB-L EB-TR WB-L	Yes Yes Yes	EB-L EB-TR WB-L	Yes Yes Yes	EB-L EB-TR WB-T	Yes Yes Yes
Amboy Road	Page Avenue	EB-L	Yes	SB-L	Yes	EB-L NB-T SB-L	No Yes Yes	EB-L NB-L NB-T SB-T	No No Yes No
Hylan Boulevard	Page Avenue	EB-L SB-L	No No	SB-L	No	EB-L SB-L	No No	EB-L SB-L	No No
Amboy Road/Pleasant Plains Avenue	Bloomingdale Road	Not Impacted	NA	Not Impacted	NA	NB-LTR	Yes	WB-L NB-LTR	Yes Yes
Route 440 Off-Ramp	North Bridge Street	WB-L	No	WB-L	No	WB-L	No	WB-L	No
South Bridge Street	Arthur Kill Road	Not Impacted	NA	SB-LT	No	SB-LT	No	SB-LT	No
Total Impacted Interse	Total Impacted Intersections/Lane Groups					15/30		15/32	
Notes:         L = Left Turn, T = Through, R = Right Turn, DefL = De facto Left Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, Mit = Mitigation Provided, NA = Not Applicable									

# Summary of Significant Adverse Traffic Impacts Proposed Project

#### TRANSIT

The Proposed Project would not result in significant adverse impacts related to bus or rail transit. Based on the distribution of project-generated bus trips, the S78 Bus Route would experience more than 50 peak hour bus trips in the PM peak period (one direction) and therefore a quantified bus line haul analysis was conducted for this bus route. The analysis concluded that this bus route would not exceed CEQR guideline capacity for the analyzed PM peak period and therefore the Proposed Project would not result in any significant adverse impacts on bus

service. Additionally, because there would not be any subway/rail trips during any of the peak hours, a detailed analysis of the Staten Island Railway is not warranted and the Proposed Project would not result in any significant adverse rail impacts. Thus, it is concluded that the Proposed Project would not result in any significant adverse impacts on transit.

#### PEDESTRIANS

The Proposed Project would not result in significant adverse impacts related to pedestrian elements. All project-generated auto trips are expected to park on-site and all taxi trips are also expected be dropped off and picked up at the Project Site. Person trips associated with autos and taxis would therefore not use the pedestrian elements surrounding the Project Site. The remaining pedestrian trips would be below the *CEQR Technical Manual* threshold of 200 peak hour pedestrian trips and therefore it is concluded that the Proposed Project would not result in any significant adverse pedestrian impacts.

#### VEHICULAR AND PEDESTRIAN SAFETY

A review of recent accident data identified no high accident intersections in the study area for the 2013 to 2015 period.

#### PARKING

The Proposed Project would not result in significant adverse impacts related to parking. The Proposed Project would provide 1,721 on-site parking spaces. Based on a parking supply and demand analysis, on-site parking utilization is expected to reach a maximum of 85 percent during the Saturday peak hour. Therefore, it is concluded that the Proposed Project would not result in the potential for a parking shortfall or significant adverse parking impacts.

## **AIR QUALITY**

The Proposed Actions would not result in significant adverse impacts to air quality, including mobile source, stationary source, and industrial sources. The Proposed Project includes an (E) designation for the Project Site related to air quality to ensure that no significant adverse impacts related to air quality occur.

#### STATIONARY SOURCES

A stationary source screening analysis concluded that there would be no significant adverse impacts from nitrogen dioxide (NO<sub>2</sub>) or particulate matter (PM) emissions due to the Proposed Project's natural gas-fired combustion sources. To ensure that there are no significant adverse impacts of  $PM_{2.5}$  from the Proposed Project's heating and hot water system emissions, certain restrictions would be required through the mapping of an (E) Designation for air quality (E-443) regarding fuel type and exhaust stack location. The requirements of the (E) designation would be as follows:

Any new development on the above-referenced property must utilize only natural gas in any fossil fuel-fired heating and hot water equipment, and ensure that a single exhaust stack is utilized for fossil fuel-fired heating and hot water systems, with a minimum elevation of 99 feet above grade on the tallest element of the Proposed Project to avoid any potential significant air quality impacts within the Project Site or on neighboring properties. With these restrictions, emissions from the Proposed Project's heating and hot water systems would not result in any significant adverse air quality impacts.

To the extent permitted under Section 11-15 of the Zoning Resolution, the requirements of this (E) designation may be modified, or determined to be unnecessary, based on more advanced project design information or new technology, or updated standards that are relevant at the time the proposed project is developed.

#### MOBILE SOURCES

Based on mobile source air quality modeling, it was determined that concentrations of carbon monoxide (CO) and fine particulate matter (i.e., less than ten microns in diameter  $[PM_{10]}]$ ) due to project-generated traffic would not result in any violations of National Ambient Air Quality Standards (NAAQS). The results also determined that the CO and 24-hour and annual  $PM_{2.5}$  increments are predicted to be below their respective *de minimis* criteria.

Additionally, an analysis of the proposed parking garage disclosed that it would not result in any significant adverse air quality impacts.

#### INDUSTRIAL SOURCE EMISSIONS

The potential impacts of existing industrial operations and large emissions sources were also analyzed in accordance with the 2014 *CEQR Technical Manual* methodology. As part of this analysis, research was conducted to identify any industrial air emission sources within 400 feet of the Project Site boundaries and a review of the DEP permit database was performed to determine whether any existing business have potential emission sources of concern. This investigation did not identify any industrial source permits for the study area. A comprehensive search was also performed to identify any NYSDEC Title V or EPA Envirofacts database permits within 1,000 feet of the Proposed Project site and no major or large emissions sources permitted were identified for this study area. Therefore, it is concluded that there would not be any significant adverse air quality impacts due to industrial source emissions.

## **GREENHOUSE GAS EMISSIONS**

The Proposed Project would not result in significant adverse impacts related to greenhouse gas emissions. The building energy use and vehicle use associated with the Proposed Project would result in up to approximately 25,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) emissions per year. The CEQR Technical Manual defines five goals for consistency with the City's emission reduction objectives: (1) efficient buildings; (2) clean power; (3) sustainable transportation; (4) construction operation emissions; and (5) building materials carbon intensity. The building energy performance of the Proposed Project would meet the requirements for LEED Certification. The Proposed Project goals do not include transit-oriented or infill development since the Project Site is not located within one of the City's multi-modal transit hubs. Therefore, since the Proposed Project is not located in an area directly supported by transit, it is conservatively assumed for CEQR purposes that a relatively small percentage of employees, patrons, and visitors to the Proposed Project would use transit as a mode of travel. However, there have also been recent transit improvements in the area by the Metropolitan Transportation Authority (MTA) with the new Arthur Kill Station of the Staten Island Rail Road located immediately to the south of the Project Site and also along Arthur Kill Road. In addition, the Proposed Project would provide only the minimum required number of parking spaces as per zoning thereby limiting reliance on vehicle use and would also provide electric car-charging

stations and bicycle storage to encourage these sustainable alternative means of transportation. The Proposed Project would also support other GHG goals by its reliance on natural gas and the fact that, as a matter of course, construction in New York City uses recycled steel and includes cement replacements.

## NOISE

The Proposed Actions would not result in significant adverse impacts to noise. The Proposed Project includes an (E) designation for the Project Site related to noise to ensure that no significant adverse impacts related to noise occur.

A mobile source noise analysis concluded that, with the Proposed Project, there would be a noise level increase of up to 3.1 dBA at receptor site 4, located on Richmond Valley Road (east of the Project Site). At all other noise receptor sites, the predicted noise level increases resulting from the Proposed Project would be no greater than 1.2 dBA, which is considered imperceptible and not significant according to *CEQR Technical Manual* noise impact criteria. This noise level increase is projected during the Saturday MD peak period and exceeds the threshold for an impact for residential uses. However, there are currently no residential uses near receptor location 4, and the M1-1 zoning designation precludes future residential development. As such, no significant adverse impact would occur at this location. During the weekday MD and PM peak periods, noise level increases are predicted to be no greater than 2.3 dBA and would there not be a significant adverse noise impact at this location or other locations in the study area.

A building attenuation analysis for the interior of the Proposed Project building concluded that to ensure interior noise levels that meet CEQR interior noise level requirements, up to 30 dBA of building attenuation would be required. The attenuation requirements would be included in Noise (E) designation E-443. To implement these attenuation requirements an (E) designation for noise would be applied to the Proposed Project specifying 30 dBA of window/wall attenuation. The text of the (E) designation would be as follows:

To ensure an acceptable interior noise environment, the building façade(s) of future development facing Arthur Kill Road must provide 30 dB(A) window/wall attenuation, in order to maintain an interior  $L_{10}$  noise level not greater than 50 dBA for commercial uses. To maintain a closed-window condition in these areas, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided.

With the prescribed levels of building attenuation, the Proposed Project would not result in any significant adverse impact with respect to interior noise levels at the Project Site.

## **PUBLIC HEALTH**

The Proposed Project would not result in significant adverse impacts related to public health. As described above, the Proposed Project would not result in any significant adverse impacts with respect to hazardous materials, water quality, air quality, or noise. Therefore, it is concluded that the Proposed Project would not result in any potential significant adverse impacts on public health.

# **NEIGHBORHOOD CHARACTER**

The Proposed Project would not result in significant adverse impacts related to neighborhood character. The Proposed Project would not result in any significant adverse impacts on land use,

zoning, and public policy; socioeconomic conditions; open space; and urban design and visual resources. Although the Proposed Project would result in significant adverse traffic impacts, many of these impacts could be fully mitigated with standard mitigation measures, including signal timing/phasing and lane restriping changes. While there would also be unmitigated significant adverse traffic impacts, these impacts would occur along primarily commercial corridors where traffic patterns are already associated with shoppers and other visitors; therefore, the unmitigated impacts resulting from an increase in visitors to the Proposed Project would not be expected to significantly alter the character of the neighborhood street. The Proposed Project would result in a noise level increase during the Saturday MD peak period that would exceed the threshold for an impact for residential uses. However, there are currently no residential uses near receptor location 4, and the M1-1 zoning designation precludes future residential development. Therefore, the Proposed Project would not result in significant noise increases such that it would alter the character of the neighborhood. Potential archaeology impacts would also be mitigated through the implementation of mitigation measures, as described below. In sum, the Proposed Project would not result in a combination of significant adverse impacts or moderate effects that would cumulatively impact neighborhood character. Finally, the Proposed Project would also not result in a combination of moderate impacts to several neighborhood elements that could cumulatively impact neighborhood character. It is therefore concluded the Proposed Project is not inconsistent with the existing character of the neighborhood and would not result in any significant adverse impacts on neighborhood character.

#### CONSTRUCTION

The Proposed Project would not result in significant adverse construction impacts related to natural resources, hazardous materials or transportation. According to the CEOR Technical Manual, a standard development project in the City with an overall construction period lasting less than two years is considered unlikely to result any significant adverse impacts. During project construction, all required and standard measures would be implemented to ensure compliance with the New York City Air Pollution Control Code regulating construction-related dust emissions and the New York City Noise Control Code regulating construction noise. In addition, Maintenance and Protection of Traffic (MPT) plans would be developed for all curblane and/or sidewalk closures and in-street work. Approval of these plans and implementation of all temporary closures during construction would be coordinated with the NYCDOT Office of Construction Mitigation and Coordination (OCMC). A Construction Protection Plan (CPP) would also be prepared to avoid inadvertent construction-related impacts on the Outerbridge Crossing. With respect to hazardous materials, based on the findings of the Phase II Investigation, a RAP and CHASP would be prepared and submitted to DEP for review and approval prior to implementation during project construction. In addition, the Proposed Actions include an (E) designation (E-443) for the Project Site related to hazardous materials to ensure that no significant adverse impacts related to hazardous materials occur. All work within and near tidal and freshwater wetlands would also be subject to NYSDEC and USACE permits and the associated requirements that would be in-place to protect these wetlands during construction (e.g., soil erosion and sediment control plans). Through implementation of the above measures, adverse impacts during project construction activities would be avoided or minimized.

Given the limited duration of project construction and the proposed impact avoidance measures, it is concluded that the Proposed Project would not result in any significant adverse impacts during construction.

# **E. ALTERNATIVES**

The EIS examines alternatives to the Proposed Project. The purpose of this analysis, as set forth in the *CEQR Technical Manual*, is to provide the decision makers with the opportunity to compare with the Proposed Project reasonable alternatives that are consistent with the goals and objectives of the project sponsor and alternatives that could potentially reduce or eliminate significant adverse environmental impacts identified in this EIS. The following alternatives were considered and compared with the proposed project: the No Action Alternative and the Lesser Density Alternative.

# NO ACTION ALTERNATIVE

Under the No Action Alternative, the significant adverse impacts related to archaeology and traffic that are expected with the Proposed Project would not occur nor would there be the need for the related mitigation. In addition, it assumed that there would not be any new development on the Project Site and it would remain in its current condition consisting of vacant land, wetlands, and a mapped, but unbuilt, segment of Richmond Avenue: the existing residential building on Block 7632, Lot 6 (the Cole House) is also assumed to remain in the No Action Alternative. Under this alternative, the significant adverse impacts related to archaeology and traffic that are expected with the Proposed Project would not occur. However, the principal goals and objectives of the Proposed Project would also not be fully realized under this alternative. In particular, the No Action Alternative would not accomplish the Applicant's stated goals of redeveloping an underutilized waterfront property for the purposes of generating economic benefits while providing public benefits for the neighborhood and for the City's waterfront. The No Action Alternative would also not meet the Applicant's goals of providing new publicly accessible waterfront open space, improving Richmond Valley Road and opening it to the waterfront, providing wetland improvements at the Project Site and preserving the neighborhood character features of the Project Site, including adaptive reuse of the Cole House, which is assumed to remain vacant under this alternative.

## LESSER DENSITY ALTERNATIVE

Under the Lesser Density Alternative, as in the Proposed Project, there would be significant adverse impacts to archaeology and traffic. In this alternative, the impacts would be fully mitigated and there would be no unmitigated significant adverse impacts. The Lesser Density Alternative would redevelop a portion of the Project Site with a commercial center that is assumed to consist of a commercial center located at the southern end of the Project Site, which would include three 2-story retail buildings and surface parking; the existing residential building on the Project Site (the Cole House) is assumed to be demolished to provide frontage on Arthur Kill Road, which is the only portion of the Project Site that has sufficient street access for economically viable commercial uses.

This alternative development is assumed to contain 96,500 square feet (sf) of commercial space that may be comprised of local retail or commercial office uses, with 340 surface parking spaces. This development would be significantly smaller than the Proposed Project, by approximately 490,000 sf. The Lesser Density Alternative would include waterfront open space that meets the Waterfront Zoning requirements. As compared with the trips generated by the Proposed Project, this alternative would result in a proportional decrease of about 80 percent in total trips during all analysis periods. However, this alternative would also not provide a northern driveway connection with Arthur Kill Road and the vehicle trips under this alternative would therefore all

be concentrated at the intersection of Richmond Valley Road and Arthur Kill Road. At this intersection, total traffic volumes would decrease by only approximately 60 percent as compared to the Proposed Project. Based on existing roadway capacity and traffic conditions in the area under both the existing and No Action conditions, the reduced vehicular trip generation resulting from this alternative would still be expected to affect traffic capacity at certain intersections in the study area, particularly at the intersections located immediately near the Project Site (e.g., the intersection of Arthur Kill Road and Richmond Valley Road). However, under this alternative, given this decrease in vehicular trip generation, traffic impacts would be reduced as compared to the Proposed Project and it is not expected that there would be any unmitigated traffic impacts. However, the principal goals and objectives of the Proposed Project would also not be fully realized under this alternative. For example, the Lesser Density Alternative would reduce the economic benefits, would not improve the full extent of Richmond Valley Road and open it to the waterfront, would not provide ecological enhancement and restoration at the Project Site, and would not facilitate the adaptive reuse of the Cole House.

# **F. MITIGATION**

The mitigation measures described below identify mitigation for significant adverse impacts related to archaeological resources and transportation. Traffic impacts at eight intersections would remain unmitigated.

# ARCHAEOLOGICAL RESOURCES

A Phase 1 report prepared for the Proposed Project concluded that there are areas of potential archaeological sensitivity within the Project Site. Therefore, additional Phase 1B and Phase 2 testing was completed<sup>2</sup> and a draft report summarizing such work has been submitted to LPC and SHPO. 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. To the extent that mitigation is not completed prior to the issuance of the Final Environmental Impact Statement, the Applicant will record a restrictive declaration obligating it to complete such additional work to the satisfaction of LPC.

# TRANSPORTATION

The Proposed Project would result in significant adverse impacts with respect to traffic. (No significant adverse impacts were identified for transit, pedestrians, vehicular and pedestrian safety, and parking with the proposed project.) As discussed in "Transportation," traffic conditions were evaluated at 20 intersections for the weekday AM, midday, PM, and Saturday peak hours. In the 2019 With Action condition (the Proposed Project), there would be the potential for significant adverse traffic impacts at 10 intersections during the weekday AM peak

<sup>&</sup>lt;sup>2</sup> 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, N

hour, 12 intersections during the weekday midday peak hour, 15 intersections during the weekday PM peak hour, and 15 intersections during the Saturday peak hour.

Some of the locations where significant adverse traffic impacts are predicted to occur could be fully mitigated with the implementation of standard traffic mitigation measures (e.g., signal timing changes, approach daylighting, and lane restriping). However, the significant adverse impacts at the intersections of Arthur Kill Road at North Bridge Street, Arthur Kill Road at Richmond Valley Road, Page Avenue at Richmond Valley Road, Boscombe Avenue at the Route 440 Ramps, Amboy Road and Page Avenue, Page Avenue at Hylan Boulevard, North Bridge Street at the 440 westbound off-ramp, and Arthur Kill Road at South Bridge Street could not be fully mitigated during one or more analysis peak hours. At two of these intersections, improvement measures were recommended to partially mitigate the projected impacts at one or more of the impacted movements. No significant adverse impacts were identified for transit, pedestrians, vehicular and pedestrian safety, and parking.

# G. UNAVOIDABLE ADVERSE IMPACTS

The Proposed Project would result in unavoidable significant adverse transportation impacts related to traffic. Mitigation has been proposed to the extent practicable for these identified significant adverse impacts. This section summarized unavoidable significant adverse impacts resulting from the Proposed Project.

The Proposed Project would result in significant adverse traffic impacts at multiple intersections during several peak traffic periods. Some of these impacts can be fully mitigated; however, the significant adverse impacts at the intersections of Arthur Kill Road at North Bridge Street, Arthur Kill Road at Richmond Valley Road, Page Avenue at Richmond Valley Road, Boscombe Avenue at the Route 440 Ramps, Amboy Road at Page Avenue, Page Avenue at Hylan Boulevard, North Bridge Street at the Route 440 westbound off-ramp, and Arthur Kill Road at South Bridge Street could not be fully mitigated during one or more analysis peak hours. If no feasible mitigation measures can be identified, the significant adverse impacts would be unmitigated.

			Table S-5
Summary	of Significan	it Adverse Tr	affic Impacts
		Pro	posed Project

Weekday AM Weekday Midday Weekday PM Saturday P							v		
Intersection		Weekday AM Peak Hour		Peak Hour		Weekday PM Peak Hour		Saturday F Hour	eak
						Significant		Significant	
EB/WB Street	NB/SB Street	Impacts	Mit	Impacts	Mit	Impacts	Mit	Impacts	Mit
Woodrow Road/School Driveway	Bloomingdale Road	Not Impacted	NA	Not Impacted	NA	WB-L	Yes	WB-L	Yes
Englewood Avenue	Veterans Road East	Not Impacted	NA	Not Impacted	NA	EB-LTR	Yes	EB-LTR	Yes
Veterans Road West/Allentown Lane	Arthur Kill Road	WB-LTR	Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes	WB-LTR NB-LTR SB-LTR	Yes Yes Yes
North Bridge Street	Arthur Kill Road	WB-LR	No	WB-LR	No	WB-LR	No	WB-LR SB-T	No No
Richmond Valley Road	Arthur Kill Road	WB-TR	No	EB-L EB-TR WB-TR	No No No	EB-L EB-TR WB-L WB-TR NB-TR	No No No No	EB-L EB-TR WB-TR NB-TR	No No No No
Richmond Valley Road	Page Avenue	Not Impacted	NA	EB-L EB-TR NB-L	Yes Yes No	EB-L EB-TR WB-LTR NB-L	Yes Yes Yes No	EB-L EB-TR WB-LTR NB-L	No No No
South Bridge Street	Page Avenue/ Boscombe Avenue	EB-LT	Yes	EB-LT	Yes	EB-LT	Yes	EB-LT	Yes
Boscombe Avenue	Route 440 Ramps	EB-L	No	EB-L	No	EB-L	No	EB-L	No
Veterans Road West	Tyrellan Avenue	WB-LTR	Yes	WB-LTR	Yes	EB-LTR WB-LTR	Yes Yes	EB-LTR WB-LTR	Yes Yes
Veterans Road West	North Bridge Street/Bricktown Way	EB-L WB-L	Yes Yes	EB-L EB-TR WB-L	Yes Yes Yes	EB-L EB-TR WB-L	Yes Yes Yes	EB-L EB-TR WB-T	Yes Yes Yes
Amboy Road	Page Avenue	EB-L	Yes	SB-L	Yes	EB-L NB-T SB-L	No Yes Yes	EB-L NB-L NB-T SB-T	No No Yes No
Hylan Boulevard	Page Avenue	EB-L SB-L	No No	SB-L	No	EB-L SB-L	No No	EB-L SB-L	No No
Amboy Road/Pleasant Plains Avenue	Bloomingdale Road	Not Impacted	NA	Not Impacted	NA	NB-LTR	Yes	WB-L NB-LTR	Yes Yes
Route 440 Off-Ramp	North Bridge Street	WB-L	No	WB-L	No	WB-L	No	WB-L	No
South Bridge Street	Arthur Kill Road	Not Impacted	NA	SB-LT	No	SB-LT	No	SB-LT	No
Total Impacted Interse	ections/Lane Groups	10/12		12/20		15/30		15/32	
Notes:         L = Left Turn, T = Through, R = Right Turn, DefL = De facto Left Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, Mit = Mitigation Provided, NA = Not Applicable									

# H. GROWTH-INDUCING ASPECTS OF THE PROPOSED PROJECT

The Proposed Project would not result in any significant changes or adverse impacts in land use or zoning conditions, or land use trends which include new residential and retail developments that are expected to be completed in the study area by the 2019 build year. To implement the Proposed Project also requires a number of approvals that would apply only to the proposed Project Site and would not affect the zoning at any other sites; therefore, the proposed zoning actions would not allow or induce any off-site development. The commercial uses that are proposed would address an unmet demand on Staten Island and any additional development that may seek to take advantage of the increased consumer traffic and customer base drawn to the Project Site would be constrained by the limited amount of developable land in the area (which includes protected wetlands) and the existing zoning which is largely zoned for manufacturing uses (M1-1 and M3-1) that do not permit residential development and the M1-1 zoning district

regulates development of retail uses exceeding 10,000 square feet through the Special Permit process, which is a discretionary action. Much of the surrounding area is also within the SSRDD, which requires approvals to modify natural features such as trees and topography. Finally, all the street and infrastructure improvements that are proposed to be installed with the Proposed Project would improve services to the Project Site and would not create new or expanded capacity or development opportunities at other properties. For these reasons, it is concluded that the Proposed Project would not result in any impacts related to induced growth.

# I. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be necessary for the construction and operation of the Proposed Project including the materials dedicated to its construction, energy in the form of gas and electricity and the commitment of land resources. This commitment of resources and materials has been weighed against the Proposed Project's goals to redevelop an underutilized waterfront property for the purposes of generating economic benefits for western Staten Island and creating substantial new publicly accessible waterfront open space and it is concluded that the Proposed Project would not result in any significant adverse impacts with respect to the irreversible and irretrievable commitment of resources related to its construction and operation.