

# **Riverside Galleria**

## **Draft Scope of Work to Prepare a Draft Environmental Impact Statement**

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### **A. INTRODUCTION**

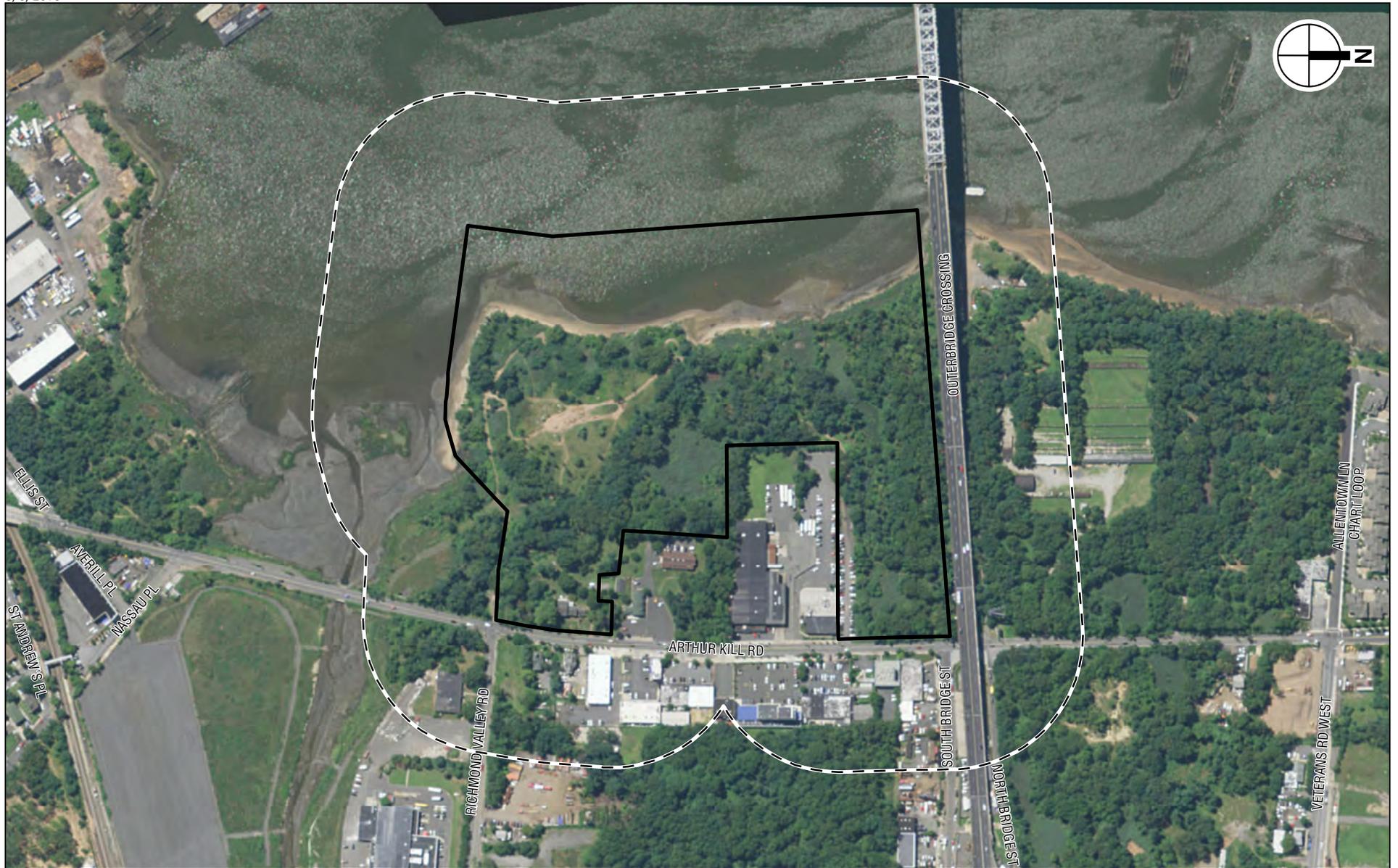
This Draft Scope of Work outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the proposed Riverside Galleria mixed commercial use development (the “Proposed Development”). The applicant, WF Liberty, LLC, proposes the redevelopment of a 13.05-acre portion of a 33.68-acre property (the “Project Site”), which is located along the Arthur Kill waterfront in western Staten Island. The Project Site is bounded by the structural supports for the Outerbridge Crossing Bridge 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 (see **Figure 1**). The Project Site is located in the West Shore area of Staten Island Community District 3, and encompasses Block 7620, Lot 1, and Block 7632, Lots 1, 6, 50, 150, and 151 (see **Figure 2**).<sup>1</sup>

The Proposed Development would result in a 589,619-gross-square-foot (gsf) mixed-use commercial center comprised of destination and smaller scale retail, supermarket, restaurant, cinema, and small office use, as well as 1,730 required and accessory parking spaces, with public waterfront open space, signage, and street and infrastructure improvements including the opening of Richmond Valley Road west of Arthur Kill Road and the addition of right turn lanes into the Project Site along Arthur Kill Road. The Proposed Development requires special permits, authorizations, and certifications from the New York City Planning Commission (CPC) and a Chair certification which include, but are not limited to: Special Permits allowing large-scale retail establishments with no limitation on floor area per establishment in an M1-1 zoning district as well as commercial buildings greater than 30 feet in height and modifications of yard requirements; modifying the special regulations applying in the Special South Richmond Development District (SRD); modifying the special regulations applicable to waterfront zoning lots; and cross-access requirements. The proposed actions, if approved, would allow the redevelopment of this mostly vacant waterfront site, portions of which have been previously used and disturbed. Assuming the requested approvals are granted, it is anticipated the proposed development would be completed and occupied in 2019.

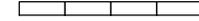
The above-described discretionary actions are necessary to implement the Proposed Development and are subject to review by CPC and the City’s Uniform Land Use Review Procedures (ULURP); the Proposed Development also requires a number of other City, State,

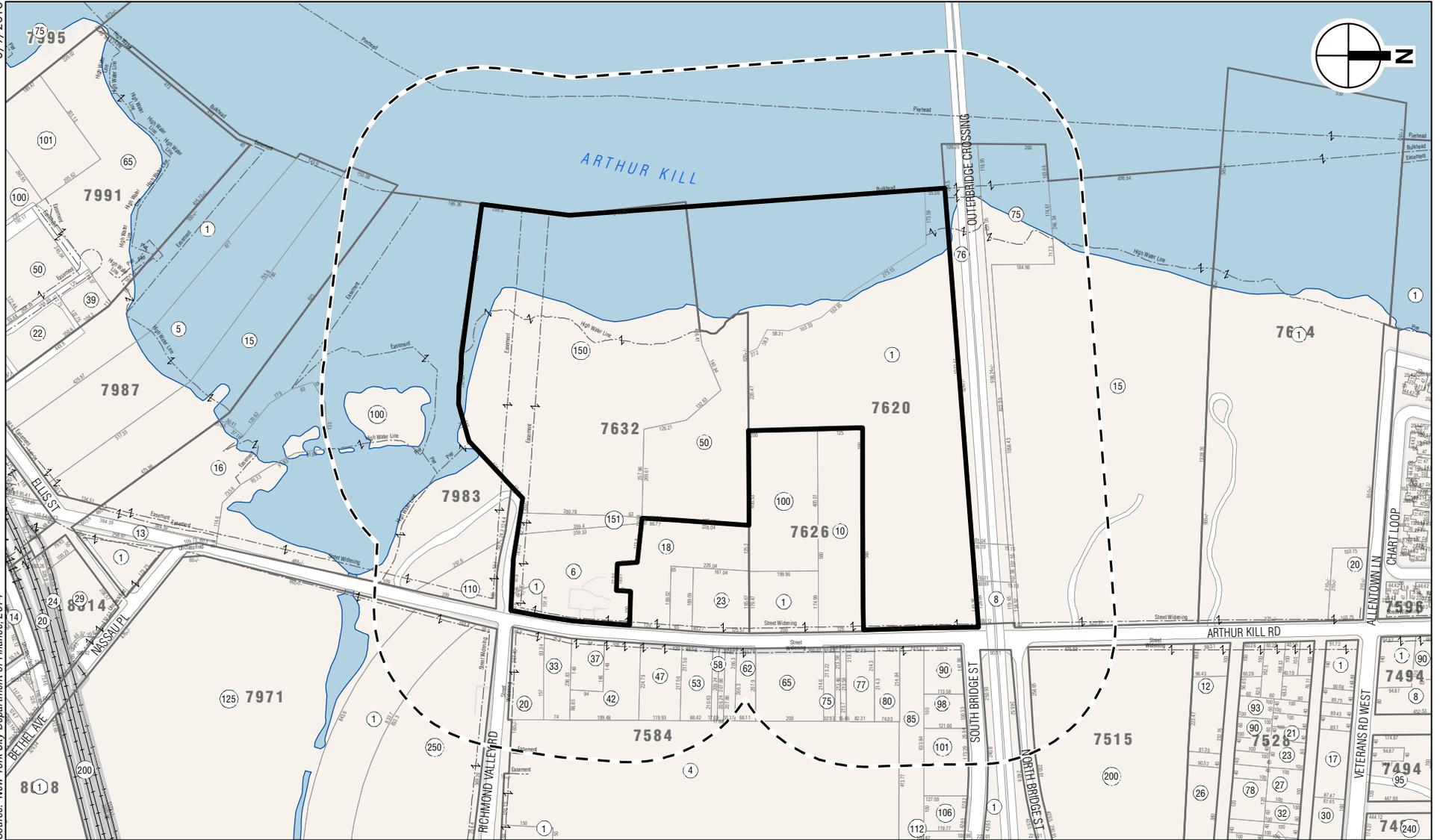
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<sup>1</sup> The Proposed Development is comprised of a Project Site that includes Block 7620, Lot 1 and Block 7632, Lots 1, 6, 50, 150, 151 and a Development Site that includes the proposed Project Site as well as the proposed improvements to Richmond Valley Road which involves small portions of two additional lots that are part of Block 7983, Lots 110 and 100.

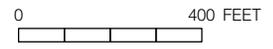


 Project Site  
 Study Area (400-foot boundary)

0 400 FEET  




-  Project Site
-  Study Area (400-foot boundary)
-  Tax Lot Boundary
-  Tax Block Boundary
-  Tax Lot Number
-  Condo Tax Lot Number
-  Condo Flag/Condo Number
-  Easement
-  Other Tax Boundary
-  Possession Hooks
-  Tax Lot Dimension



and Federal discretionary actions, including but not limited to a New York State Department of Environmental Conservation (NYSDEC) tidal wetland permit and a freshwater wetland permit from the U.S. Army Corps of Engineers (USACE). The New York City Department of City Planning (DCP), acting on behalf of CPC, is the Lead Agency for this environmental review. DCP has reviewed the activities that are necessary to construct and operate the Proposed Development and has determined that the proposal has the potential to result in significant adverse environmental impacts. Therefore, in accordance with the environmental review laws 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 on [DATE] requiring the preparation of an EIS to analyze the potential impacts of the Proposed Development.

The preparation of this EIS Draft Scope of Work will ensure that the potential environmental impacts of the Proposed Development are fully identified and studied, consistent with environmental law and regulations. Under those laws, public review of the Proposed Development will not begin until the Lead Agency has determined that the environmental issues have been adequately studied in a Draft EIS (DEIS), that will allow for meaningful review by the general public and decision makers. This Draft Scope of Work to Prepare a DEIS provides a description of the Proposed Development and all technical areas that are proposed to be analyzed in the DEIS. It has been prepared in accordance with the guidance of the City's 2014 *CEQR Technical Manual* and also meets the requirements of SEQRA. Both the positive declaration and this Draft Scope of Work have also been made available to the general public and the involved and interested agencies for the purposes of review and comment. As Lead Agency, DCP will lead a coordinated review with the involved agencies as part of this scoping process and through the preparation of the DEIS.

## **B. PROJECT DESCRIPTION**

### **REQUIRED GOVERNMENTAL APPROVALS**

To develop the Proposed Development, multiple approvals are required from the CPC and the CPC Chair that, if issued, would frame and establish the proposed site plan and thereby limit the site plan and programming of the Proposed Development. The Zoning Resolution (ZR) approvals that would shape the Proposed Development include the following:

Two Special Permits:

- Special Permit pursuant to ZR 74-922 to allow up to seven (7) large scale retail establishments in M1 districts with no limitation on floor area per establishment. Supermarkets are allowed as-of-right in M1-1 districts up to a maximum of 10,000 square feet. The design of the Proposed Development requires up to seven (7) Special Permits from CPC to authorize retail spaces and a supermarket larger than 10,000 sf.
- Special Permit pursuant to ZR 62-836, to allow bulk modification on waterfront blocks to modify the requirements of ZR 62-341(b)(3) and ZR 62-332. The design of the Proposed Development will require a Special Permit from CPC to:
  - Modify requirements set forth in ZR 62-341(b)(3) limiting height to 30 feet for commercial uses in lower density districts (M1-1).

- Modify requirements set forth in ZR 62-332 regarding waterfront yards which would establish a minimum rear yard for the proposed development as measured from the property line adjoining the separately owned and developed Block 7626, Lots 100 and 10.

These above modifications will allow CPC to establish a site plan layout that would not adversely affect access to light and air on surrounding waterfront public access areas, streets, and properties and will create a better site plan and a better relationship with the surrounding areas than would otherwise be possible through strict adherence to the regulations.

Five Authorizations:

- Authorization pursuant to ZR 62-822(a) to allow modification of location area and dimensional requirements of waterfront public access areas and visual corridors. The design of the Proposed Development requires an Authorization by the CPC to modify requirements regarding waterfront public access areas and visual corridors. These modifications are necessary given the existing buildings and tidal wetland adjacent areas on the Project Site and will establish a site plan that 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 within waterfront public access areas. The design of the Proposed Development will require an Authorization by the CPC to modify design element requirements set forth in ZR 62-60. This modification is necessary to accommodate the elevated shore public walkway proposed pursuant to ZR 62-822(a) which would allow for waterfront access while limiting impacts on tidal wetlands.
- Authorization pursuant to ZR 107-64 to waive the requirements of ZR 107-32 (tree removal). The design of the Proposed Development requires an Authorization by the CPC for removal of certain trees that would otherwise be prohibited by ZR 107-32; these are trees of 6 inches caliper or greater located outside of the proposed building footprints, driveways, areas for required parking, or located beyond 8 feet of the building walls. The removal of these trees is necessary to effectively utilize the open areas on the property as shown on the proposed site plan. This authorization allows CPC to establish a site plan that will authorize the removal of these trees and the protection of other trees not proposed to be cleared.
- Authorization pursuant to ZR 107-65 to modify the requirements of ZR 107-31 (topography). The design of the Proposed Development will require an Authorization by the CPC for the modification of natural topography beyond the amount allowed in ZR 107-31, in order to modify topography beyond two 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 Development and to accommodate public amenities including the waterfront public open space. This authorization would allow CPC to establish a site plan that authorizes these changes in topography with the protection of existing topography on the site where it would be unaltered.
- Authorization pursuant to ZR 107-68 to permit more than 30 accessory off-street parking spaces and modify the requirements of ZR 107-251(a). The design of the Proposed Development will require an authorization by the CPC for more than 30

accessory off-street parking spaces on the Project Site. Additionally, the Proposed Development will require an authorization of the modification of access restrictions with regard to curb cuts as set forth in ZR 107-251(a) (the two curb cuts proposed along Arthur Kill Road). These modifications are necessary to provide the required accessory parking at the site. This authorization would allow for the 1,730 accessory parking spaces that are proposed at the site.

One Certification:

- Certification pursuant to ZR 62-811 to certify compliance with the requirements of waterfront access and visual corridors. As documented on the plans and findings included with this application, the waterfront public access areas and visual corridors will comply with the applicable requirements as modified by authorizations pursuant to ZR 62-822(a) and ZR 62-822(b) described above. This certification would allow CPC to establish a site plan that requires access along the waterfront and establishes the protection of view corridors.

The Applicant will also seek one or multiple of the following Chair Certifications and/or Authorizations regarding cross access requirements:

- Chair Certification pursuant to ZR 36-592 to certify that cross access requirements are being met. As documented on the plans and findings included with this application, one of the required cross access connections will comply with the applicable cross access requirements (along the proposed northern private drive with a driveway access to the separately owned and developed Block 7626, Lot 10) and certification by the CPC Chair of such compliance is being sought for that connection.
- Chair Certification pursuant to ZR 36-596 to certify that no connection is required due to site constraints. As documented on the plans and findings included with this application, the Project Site is such that no cross access connection is required for the boundaries between several lots due to conditions on the site. Certification by the CPC Chairperson to the Department of Buildings that no cross access connection is required for those boundaries is being sought.
- Authorization pursuant to ZR 36-597 for a waiver or modification of cross access connections. Design of the Proposed Development makes it impracticable to provide a cross access connection at all of the boundaries. Certification by the CPC Chairperson to the Department of Buildings that no cross access connection is required for these boundaries is being sought.

These cross access requirements would ensure that adjoining non-applicant owned parcels would have a means of access and egress along shared property lines, where feasible.

Separate and apart from CPC discretionary actions, the Proposed Development requires a NYSDEC tidal wetland permit and an USACE Individual Permit for discharge of fill material into Waters of the U.S. (wetlands) for commercial development. These state and federal regulations manage development in and adjacent to tidal and freshwater wetlands. With respect to NYSDEC review and approvals relative to tidal wetlands protection, the Proposed Development requires a permit for activities in wetland adjacent areas for both the proposed buildings and the outfall proposed at Richmond Valley Road. As a result of this required approval, based on the site design discussions to date with the NYSDEC, building setbacks from tidal wetlands have been established (these setbacks are reflected in the current site plan), and there is also a requirement for green roofs to address stormwater management and runoff

controls. Additionally, there is a requirement for tidal wetland protection and enhancement along the shorelines of both the Arthur Kill and Mill Creek. A USACE permit is also required for impacts to freshwater wetlands located in the center of the site due to the proposed structures. Therefore, to meet USACE requirements, the Proposed Development would create approximately 2.4 acres of freshwater wetland within the preservation area that is proposed on the northern portion of the site (see **Figure 5a**). (Preliminary discussions with NYSDEC regarding the Proposed Development have taken place and coordination with NYSDEC and USACE will continue throughout the environmental review process.) 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 design of street improvements including the mapped right-of-way of Richmond Valley Road and Arthur Kill Road and for any infrastructure improvements within the City street and proposed drainage improvements.

### PROJECT SITE

The Project Site is bounded by the right-of-way and structural supports for the Outerbridge Crossing Bridge 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 Arthur Kill waterway to the west out to the mapped U.S Bulkhead and Pierhead line. There are also commercial buildings to the east of the Project Site that separate part of the site from 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), including the portion of the Project Site that is within the mapped right-of-way of Richmond Valley Road and Arthur Kill Road. Richmond Valley Road has a mapped width of 80 feet at the Project Site and the mapped right-of-way extends across the Project Site between Arthur Kill Road on the east and the mapped U.S. Pierhead and 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 bulkhead line, it is currently not built, with the exception of an approximately-50-foot-long segment west of Arthur Kill Road. The upland portion of the Project Site includes the area of the proposed development (approximately 13.05 acres), and approximately 10.86 acres that would be preserved as open space (approximately 3.44 acres), that would include a proposed public waterfront walkway and a preserved natural area comprised of wetlands and upland woods (approximately 9.97 acres, described in greater detail below).<sup>2</sup>

The Project Site has about 1,500 linear feet of shoreline along the Arthur Kill and 500 linear feet along Mill Creek. 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 property is relatively flat, but slopes slightly to the west and south while the northern half slopes slightly from the northeast to west.

As shown on **Figure 3**, along the shoreline of the Arthur Kill and Mill Creek there is a mix of tidal wetlands (e.g., intertidal salt marsh, intertidal mudflats, and maritime beach) and tidal wetland adjacent area on the Project Site that totals approximately 9.97 acres. The NYSDEC-regulated tidal wetland adjacent area also extends across a portion of the mapped but unbuilt Richmond Valley Road. The total area of NYSDEC-regulated tidal wetlands on the Project Site is 1.55 acres and the tidal wetland adjacent area totals approximately 5.87 acres. There are also

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<sup>2</sup> The component areas of the Project Site as described add to greater than the site (33.68 acres), due to overlap between the wetlands and both the area of lands underwater and the open space.



wooded freshwater wetlands on the Project Site as defined by the USACE methodology that total 3.58 acres.<sup>3</sup> An adjoining lot that is partially within the undeveloped portion of Richmond Valley Road (Block 7983, Lot 110) is owned by DEP; this lot is part of the DEP Mill Creek Bluebelt system and a small portion of the lot is within the right-of-way of the mapped, but unbuilt, Richmond Valley Road.

There is one standing structure on the Project Site, which is a 3,900-sf single-family residential building (referred to as the “Cole House”), on Block 7632, Lot 6. 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 is mostly zoned M1-1, which allows light manufacturing and warehouse uses; a small portion of the southerly portion of the Project Site is zoned M3-1 (see **Figure 4**). The M1-1 zoning district allows a range of commercial uses as-of-right, with a supermarket limited as-of-right to a maximum of 10,000 sf. Up to seven (7) Special Permits will be sought from CPC to allow retail spaces and a supermarket with floor area greater than 10,000 sf. In addition to the underlying zoning, the Project Site is located in the SRD, which is a special zoning overlay district that regulates changes to natural features, such as trees and topography, establish special building height and setback limits, and include designated open space. The City’s waterfront zoning also applies (see “Required Governmental Approvals,” above, for a complete description of the zoning regulations that apply to the Project Site).

Although the Project Site has frontage along Arthur Kill Road, a developed and separately owned lot also separates part of it from Arthur Kill Road. The Project Site also has frontage along the mapped but unbuilt right-of-way along Richmond Valley Road.

## PROPOSED DEVELOPMENT

### *BUILDING PROGRAM*

The Proposed Development would create a mixed-use commercial center up to three stories high (90 feet above grade) with destination and smaller-scale retail uses, a supermarket, restaurants, a small office use, and a cinema, with accessory parking, public 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) that would provide access to the site. **Figures 5a** and **5b** show the proposed site plan and **Table 1** shows the proposed building program. With the exception of the cinema, the proposed uses would be located on the first and second floor levels of the Proposed Development, and the cinema would be located on the second floor and third floor levels. The Proposed Development would also include a restaurant that is proposed to be located on the roof of the proposed cinema (the square footage of the restaurant space is included in the totals). The Proposed Development would retain the Cole House, the existing residential building on the Project Site, for use as a restaurant on the ground floor and office space on the second floor (e.g., management office).

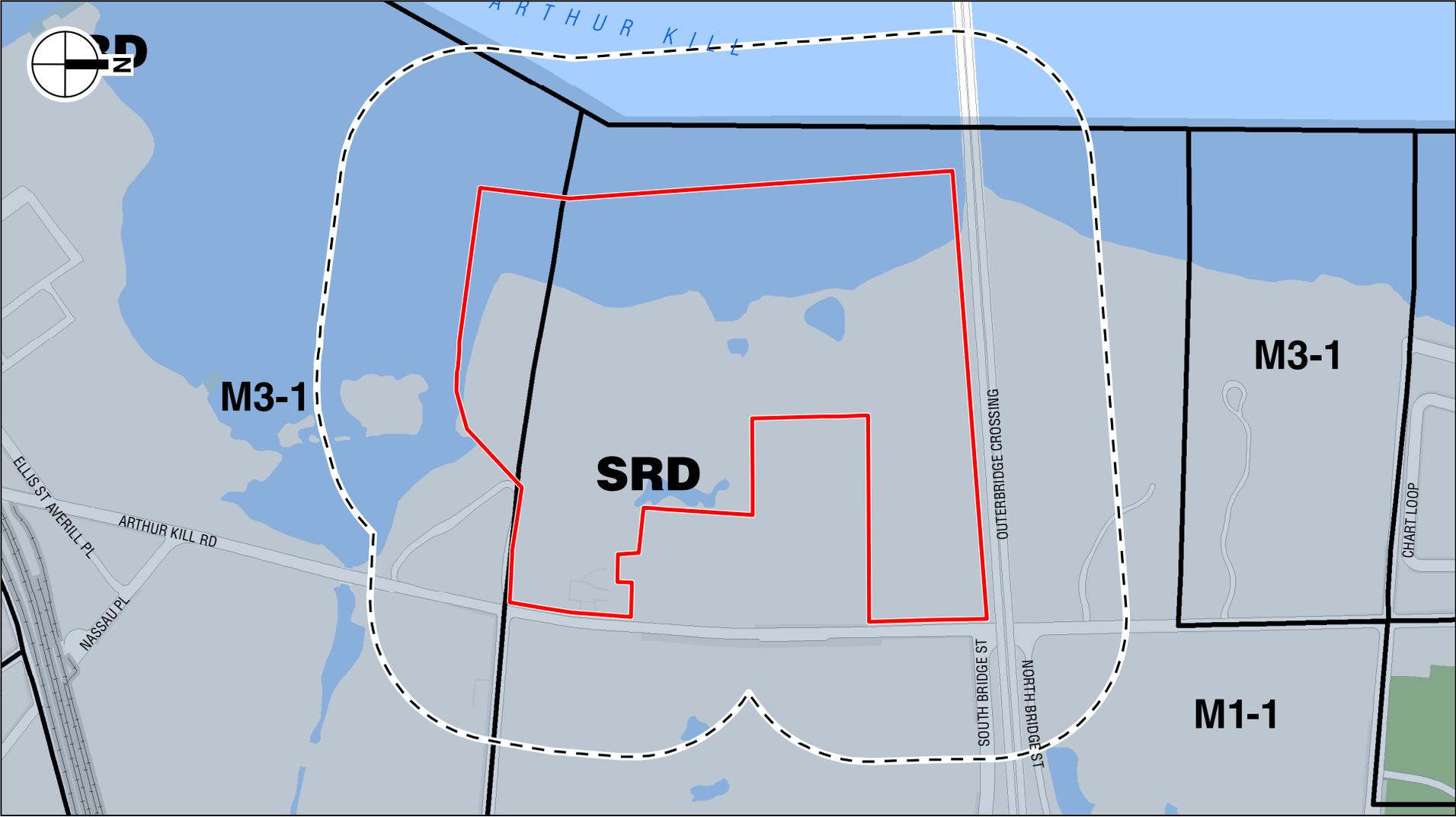
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<sup>3</sup> The sum of the NYSDEC-regulated and USACE-regulated wetlands areas is greater than the total area of wetlands (9.97 acres) due to overlap between these jurisdictional wetland descriptions.

3/9/2016



Source: NYC Dept. of City Planning, August 2014



-  Project Site
-  Study Area (400-foot boundary)
-  Zoning Districts

0 400 FEET





**Table 1  
Proposed Development—Development Program for  
Analysis**

Use	ZR Use Group	Approximate Size (gross square feet)
General Retail	6	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
<b>Total Floor Area</b>		<b>589,619 gsf</b>
<b>Note:</b> <sup>1</sup> Includes 3,700 sf of fast food establishment.		
<b>Source:</b> Studio V Architecture, PLLC, January 2016		

Inclusive of the Cole House and the rooftop restaurant, the proposed mixed-use development would contain 300,128 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.

As stated above, the Proposed Development is located in the Special South Richmond Development District, which requires waivers and authorizations pursuant to ZR 107-64, ZR 107-65, and ZR 107-68 to authorize removal of trees and modify the topography. Because of these and other approvals that apply to the Project Site, no other site disturbance other than that shown on **Figure 5a** would be allowed without CPC approval.

*PARKING AND CIRCULATION*

The general retail, restaurant, and limited office uses that are proposed total 355,398 gsf; these uses have a zoning requirement for accessory parking of one car per 300 sf, and thus require 1,185 parking spaces. The theater use is designed to have 1,088 seats with a zoning parking requirement for accessory parking of one car per eight seats and thus requires 136 parking spaces. The supermarket use totals 80,000 sf with a zoning parking requirement for accessory parking of one car per 200 sf and thus requires 400 parking spaces. Therefore, the Proposed Development requires a total of 1,721 accessory parking spaces per zoning (1,730 are proposed). This required accessory parking would be provided in a structured parking garage that would have 1,655 spaces, with an additional 75 surface parking spaces to be provided along the private drives, for a total of 1,730 accessory parking spaces on the Project Site. The parking in the proposed three-level garage would be provided as follows:

- Parking level 1: 1,310 cars
- Parking level 2: 200 cars
- Parking level 3: 145 cars

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 and deliveries. Additionally, 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.

Access to and egress from the Proposed Development would be via the existing signalized intersection of Arthur Kill Road and Richmond Valley Road and two additional proposed private drives to the north along Arthur Kill Road. At Richmond Valley Road, the Proposed Development would improve the existing mapped Richmond Valley Road right-of-way westward from Arthur Kill Road. Richmond Valley Road would be approximately 80 feet wide and 680 long, as measured from Arthur Kill Road to the entrance to the proposed parking garage. Additionally, there would be grading of slopes south of the southerly sidewalks to meet the grade of the adjacent property. Therefore, in addition to these proposed improvements to Richmond Valley Road, the southbound approach to this intersection along Arthur Kill Road would be widened to provide a right-turn-only lane for entry onto Richmond Valley Road and into the Proposed Development; the existing signal would also be modified to account for the proposed street improvements. As shown on **Figure 5a**, another entrance and exit would also be provided to Arthur Kill Road to the north. This is a new two-way private drive that would require a new curb cut along Arthur Kill Road. A right turn lane entrance along the southbound Arthur Kill Road would also be provided at this location. Finally, a two-lane entrance-only driveway leading to the proposed garage would be provided immediately north of Richmond Valley Road just north of the Cole House (see **Figure 5a**).

The Proposed Development includes constructing and opening as a public street the mapped but unbuilt portion of Richmond Valley Road that would extend west from Arthur Kill Road to the Arthur Kill waterfront (see **Figure 5a**). Since this will be a public street, this street design needs to meet NYCDOT design standards. Additionally, the proposed right turn lanes along Arthur Kill Road are in the mapped right-of-way and require NYCDOT design approval.

Pedestrian access into the Proposed Development would be provided with new sidewalks along Arthur Kill Road and Richmond Valley Road and also along the proposed private drives that are internal to the Project Site. Pedestrian access would be provided from these sidewalks to the proposed public waterfront walkway (described below). Additionally, the Proposed Development includes elevated walkways connecting the second floors of the proposed buildings (**Figure 6** shows an illustrative rendering). Access to the second level of retail space fronting Richmond Valley Road would be provided from Arthur Kill Road via a shopping passage to be provided at the entry plaza to be located near the Cole House. The proposed buildings along the westerly private drive (the main retail drive) would also have second-level pedestrian walkways connecting the retail establishments. This would include walkways parallel to the private drive with crossings over the private drive at various locations and linkages that would slope down to the waterfront walkway.

The main loading area adjacent to the supermarket would be accessible through the back road access off Arthur Kill Road, right next to the Cole House. The road is one way only and leads from Arthur Kill Road west to the loading area. After loading/unloading traffic would pass through the retail building onto the main retail drive, and then further onto Richmond Valley Road to exit the premises.

A secondary loading area right north off Richmond Valley Road would be accessible through either Richmond Valley Road driving west or through the private drive to the north, connecting to the main retail drive, and then via Richmond Valley Road. Two additional small loading areas would be located on the main retail drive, which would be accessible either via Richmond Valley Road or via the private drive to the north.



### *WATERFRONT PUBLIC OPEN SPACE*

As described above, approximately 10.86 acres of the Project Site would be open space under the Proposed Development, including providing a total of approximately 3.44 acres of landscaped public open space along the Arthur Kill waterfront (see **Figure 5a**). The proposed waterfront open space also includes a public walkway along the Arthur Kill. This waterfront open space would also include landscaping and tidal wetland enhancements along the shore line. The portion of the Mill Creek waterfront on the Project Site would also include landscaping improvements and wetland enhancements along the shore line. The proposed public waterfront public open space would complement the Proposed Development and would provide a new public amenity on the Project Site. The proposed open spaces and ecological improvements would be completed in conjunction with the Proposed Development.

The waterfront public open space would consist of an elevated shore public walkway providing access to the Arthur Kill waterfront, an entry terrace with seating and shade trees, an overlook with seating, and a beach area. All areas in the open space would be landscaped with native plantings and vegetation. Inland connections would be provided to allow access from the adjacent neighborhood on foot or by bicycle. All pedestrian areas would be ADA accessible.

### *NATURAL AREA PRESERVATION, RESTORATION, AND ENHANCEMENT*

The Proposed Project requires disturbances of freshwater wetlands as defined by USACE, construction in tidal wetland-adjacent area as regulated by DEC, and tree clearing, which is regulated by the SRD. Therefore, it is an objective of the Proposed Development to restore and protect both freshwater and tidal wetland habitats and to provide substantial replacement tree plantings that create and restore woodland habitats on the Project Site for their use by resident and migratory wildlife. Protecting, restoring, and enhancing these habitats would provide better nesting, foraging, and cover opportunities for wildlife while diversifying the Project Site's ecology.

Included in these proposed enhancements is a 2.476-acre (120,303 sf) freshwater wetland creation proposed to be sited in the northern portion of the Project Site while the proposed tidal wetland restoration and enhancements would be established along the west (Arthur Kill) and south (Mill Creek) shorelines (see **Figure 5a**). The western and southern shorelines would provide the tidal wetlands restoration and enhancements through the planting of native salt-tolerant intertidal, high marsh, and tree and shrub vegetation. The proposed tidal wetland and adjacent area restoration and enhancements total approximately 2.93 acres (127,725 sf). The Project Site's existing habitats and natural grade and contours serve as the basis for this proposed wetland restoration and enhancement design. Thus, the northern portion of the site, which includes wooded wetlands would be preserved and enhanced through the establishment of planted freshwater wetlands inclusive of existing native emergent marsh, scrub-shrub, and tree habitats. 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, and the lurid sedge) and common three-square. Scrub/shrub habitat would be planted with red chokeberry, bayberry, grey dogwood, elderberry, and arrowwood. 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.

*STORMWATER MANAGEMENT PLAN*

The Proposed Development includes a stormwater management design comprised of approximately 5.09 acres of green roof on the proposed structures 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 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.

**BUILD YEAR**

It is expected that the Proposed Development would be constructed and operating in 2019.

**PURPOSE AND NEED**

*PROJECT GOALS*

The goals of the Applicant are to: redevelop this underutilized waterfront property for the purposes of generating income, while providing site redevelopment and economic benefits for western Staten Island; create substantial new publicly accessible waterfront open space on the Project Site where none currently exists; improve Richmond Valley Road and open it to the waterfront; provide ecological enhancement and restoration at the site with the potential for educational opportunities; and preserve the historic and cultural features of the Project Site (e.g., the Cole House) for adaptive reuse.

The Proposed Development would provide an important commercial mixed-use destination for Staten Island residents with commercial retail uses supported by a multiplex cinema, and restaurant/dining uses a small amount of supporting office space. The frontage along the Arthur Kill waterfront, now privately owned, unimproved, and inaccessible to the public, would be transformed into a new public waterfront space that would support not only the needs of project-generated patrons, visitors, guests, and employees, but the community. 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 improvement includes constructing a mapped, but currently unbuilt, public street, Richmond Valley Road, out to the Arthur Kill which would open up new physical and visual waterfront access to the waterfront and which is consistent with applicable requirements of the Zoning Resolution. The Proposed Development would also provide ecological benefits with a natural area preservation and restoration on the northern portion of the Project Site where freshwater wetlands would be established, coupled with a storm water management improvements, including approximately 5.09 acres of green roof on the proposed structures, and tidal wetland restoration and enhancement along the western (Arthur Kill) and southern (Mill Creek) shorelines. It is expected that the proposed tree planting and wetland restoration design would substantially improve on-site habitats for resident and migratory wildlife through the provision of protected, restored, and enhanced freshwater and tidal wetland habitats.

In sum, approval of the Proposed Actions above would facilitate the proposed private development of property while advancing a number of public goals including providing public access to the waterfront, wetland and ecological enhancements, and reuse of a historic resource.

## C. ANALYSIS FRAMEWORK

### INTRODUCTION

The *CEQR Technical Review Manual* will serve as the principal guide for the methodologies and impact criteria to be used in evaluating the Proposed Development's potential impacts on the environment. The EIS will disclose the Proposed Development's potential adverse impacts on the environmental setting and it is anticipated that the Proposed Development would be completed and operational in 2019. Therefore, the environmental setting is not the current environment, but the future projected conditions in 2019. Thus, the technical analyses and consideration of alternatives to be provided in the DEIS will include descriptions of existing conditions, conditions in the future without the Proposed Development (i.e., the No Action condition in 2019), and conditions in the future with the Proposed Development (the With Action condition in 2019). The incremental difference between the No Action and With Action conditions is then used to determine the potential environmental impacts of the Proposed Development.

### NO ACTION CONDITION

In the No Action condition, it is assumed for the purposes of this analysis that there will not be any new development on the Project Site, which consists of vacant land, wetlands, unbuilt streets, and one residential structure. Therefore, conditions on the Project Site would not change from existing conditions. In this scenario, no redevelopment is provided that would enliven the waterfront and provide public access. The existing residential building on Block 7632, Lot 6 would remain in the No Action scenario.

### WITH ACTION CONDITON

The proposed actions would allow the Proposed Project and, through approval of the proposed site plan and building program, would determine the size, location, and height of the proposed buildings and footprints, and the configuration and number of accessory parking spaces. Given the actions necessary for implementation of the Proposed Development, most importantly up to seven (7) Special Permits for supermarket and retail uses over 10,000 sf, the parking requirements, and the site plan approvals that will address tree clearings, grading, waterfront open space, and view corridors, the Proposed Development would be limited to the building footprints, floor area, height, and parking as shown on the site plan and described in this Draft Scope of Work (see **Figures 5a** and **5b**). Given these regulatory approvals any deviations from the Proposed Development program or the site plan by increasing or changing floor area, shifting the building footprints or increasing heights, or adding or subtracting the number of proposed parking spaces, would require the Applicant (or subsequent landowner) to seek additional discretionary action(s) from CPC and possibly NYSDEC and USACE.

In order to provide a conservative environmental review of the Proposed Actions, a Reasonable Worst Case Development Scenario (RWCDS) for the With Action scenario was developed based on the Applicant's proposed development program. These retail types include general retail, restaurants, supermarket, a cinema, and small office as described in this Draft Scope of Work. With the proposed development, the built Floor Area Ratio (FAR) would be 0.46, which is less than the maximum FAR of 1.0 permitted under the current zoning. However, development larger than that proposed in the RWCDS and this Draft Scope of Work could not occur given the zoning approvals that are necessary including the Special Permit required for supermarket and retail uses greater than 10,000 sf, limitations on building heights through the

required height waivers, and the accessory parking requirements and approvals that together would limit the development program to that proposed above. There are also the waterfront zoning provisions requiring waterfront access and visual corridors coupled with the SRD requirements for tree clearing and protection and topographical modification. Together these approvals establish a comprehensive set of regulatory approvals for the Proposed Development. Moreover, the proposed site plan is further shaped and constrained by the tidal and freshwater wetlands and wetland adjacent area approvals that are required from NYSDEC and USACE. Thus, the Proposed Development described in this Draft Scope of Work is the maximum development for the Project Site, represents the best mix of uses for the Proposed Development, and provides a reasonable worst case development scenario as the basis for the project’s environmental review, with the necessary approvals and restrictions in place to ensure that the development program fully represents the development potential of the site as proposed by the Applicant. **Table 2** presents a summary of the RWCDs for the Proposed Development.

**Table 2**  
**Reasonable Worst Case Development Scenario**

<b>Block/Lot Number(s)</b>	<b>Project Info</b>	<b>Existing Conditions</b>	<b>No-Action</b>	<b>With-Action</b>	<b>Increment (With Action)</b>
Block 7620, Lot 1 & Block 7632, Lots 6, 50, 150, 151	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
	Commercial Floor Area	0	0	490,398 gsf	490,398 gsf
	Accessory Parking	0	0	94,421 gsf (1,730 spaces)	94,421 gsf (1,730 spaces)
	Mechanical and Operational	0	0	4,800	4,800
	Building Height (ft.)	25	25	Up to 90'	Up to 90'
	Publicly Accessible Open Space	0	0	3.44 acres	3.44 acres
	<b>Total Built Floor Area</b>	<b>3,900 gsf</b>	<b>3,900 gsf</b>	<b>589,619 gsf</b>	<b>585,719 gsf</b>

## **D. CITY ENVIRONMENTAL QUALITY REVIEW**

### **CEQR OVERVIEW**

New York City has an environmental review process, CEQR, pursuant to SEQRA and its implementing regulations (Part 617 of 6 New York Codes, Rules and Regulations). The City’s CEQR rules are found in Executive Order 91 of 1977 and subsequent rules and procedures adopted in 1991 (62 Rules of the City of New York, Chapter 5). CEQR’s mandate is to assure that governmental agencies undertaking actions within their discretion take a “hard look” at the environmental consequences of each of those actions so that all potential significant environmental impacts of each action are fully disclosed, alternatives that reduce or eliminate such impacts are considered, and appropriate, practicable measures to reduce or eliminate such impacts are adopted.

The CEQR process begins with selection of a “lead agency” for the review. The lead agency is generally the governmental agency which is most responsible for the decisions to be made on a proposed action and which is also capable of conducting the environmental review. For the Proposed Development, DCP, acting on behalf of CPC, is the CEQR lead agency.

DCP, after reviewing an Environmental Assessment Statement (EAS) for the Proposed Development, has determined that it has the potential for significant adverse environmental impacts and that an EIS must be prepared. A public scoping of the content and technical analysis

of the EIS is the first step in EIS preparation. Following completion of scoping, the lead agency will oversee preparation of a draft EIS (DEIS) that will then be certified and released for public review.

DCP and CPC will hold a public hearing during the Commission's period for DEIS review. That hearing record will be held open for 10 days following the public meeting after which the public review of the DEIS is closed. The lead agency will then oversee preparation of a final EIS (FEIS), which incorporates all relevant comments made during public review of the DEIS. The FEIS is the document that forms the basis of CEQR Findings, which the lead agency and each involved agency (e.g., NYSDEC) must make before taking any action within its discretion on the proposed action.

## SCOPING

The CEQR scoping process is intended to develop the framework for preparing the DEIS. The process provides agencies and the public with a voice in framing the scope of the EIS. During the period for scoping those interested in reviewing the draft EIS scope may do so and submit their comments in writing to the lead agency or at the public scoping meeting. The period for comments on the Draft Scope of Work will remain open for at least 10 days following the meeting, at which point the scope review process will be closed. The lead agency will then oversee preparation of a Final Scope of Work, which incorporates all relevant comments made on the scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The DEIS will then be prepared in accordance with the Final Scope of Work.

## E. PROPOSED SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The scope of the EIS will conform to all applicable laws and regulations and will follow the guidance of the 2014 *CEQR Technical Manual*.

The EIS will contain:

- A description of the proposed actions and their environmental setting;
- A statement of the environmental impacts of the proposed actions, including its short- and long-term impacts, and typical associated environmental impacts;
- An identification of any adverse environmental impacts that cannot be avoided if the proposed actions are implemented;
- A discussion of alternatives to the proposed actions;
- An identification of any irreversible and irretrievable commitments of resources that would be involved in the proposed actions should they be implemented; and
- A description of mitigation measures proposed to minimize adverse environmental impacts.

The analyses for the proposed actions will be performed for the expected year of completion of construction of the Proposed Development (2019). The No Action future baseline condition to be analyzed in all technical chapters will assume that absent the proposed actions, the Project Site will remain as under existing conditions.

Based on the preliminary screening assessments outlined in the *CEQR Technical Manual* and as described below and in the EAS, the following environmental areas would not require analysis in the EIS:

- Community Facilities; and
- Energy.

Below is a description of each environmental area in the *CEQR Technical Manual*, and its applicability to the Proposed Development. Categories to be included in the EIS contain a description of the tasks to be undertaken.

### **PROJECT DESCRIPTION**

The first chapter of the EIS introduces the reader to the Proposed Development and sets the context in which to assess impacts. The chapter contains a project identification (brief description and location of the project); the background and/or history of the project; a statement of the public purpose and need for the project; key planning considerations that have shaped the current proposal; a detailed description of the project; and discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Development and gives the public and decision-makers a base from which to evaluate the With Action and No Action scenarios.

Specifically, the project description will provide the following:

- **Project Purpose and Need.** This section will discuss the objectives of the proposal in terms of creation of jobs, economic and fiscal benefits to the City, and the preservation and protection of wetlands and public open space.
- **Site Design/Circulation/Landscaping.** Text and graphics will provide a complete description of the project location, proposed development plan, and any on- and off-site improvements. This section will also include details on architectural, landscaping, and circulation features of the proposed plan.
- **Reasonable Worst Case Development Scenario.** The chapter will provide a breakdown of the existing, No Action and With Action conditions for the Project Site. The chapter will also discuss the assumptions behind the Reasonable Worst Case Development Scenario.
- **Required Approvals.** This section will list and describe the required City and State actions and approvals, the roles of the involved public agencies, and the ULURP and CEQR processes. The section on approval procedures will explain the ULURP process, its timing, and hearings before the Community Board, the Borough President's office, CPC, and the New York City Council.
- **Environmental Review.** The environmental review process and the role of the Lead Agency will be described, as well as the objectives of the DEIS analyses its role as a full-disclosure document to aid in decision-making will be identified and its relationship to ULURP and the public hearings described.

### **LAND USE, ZONING, AND PUBLIC POLICY**

A land use analysis characterizes the uses and development trends in the area that may be affected by a project. The analysis also considers the project's compliance with and effect on the area's zoning and other applicable public policies. Even when there is little potential for an

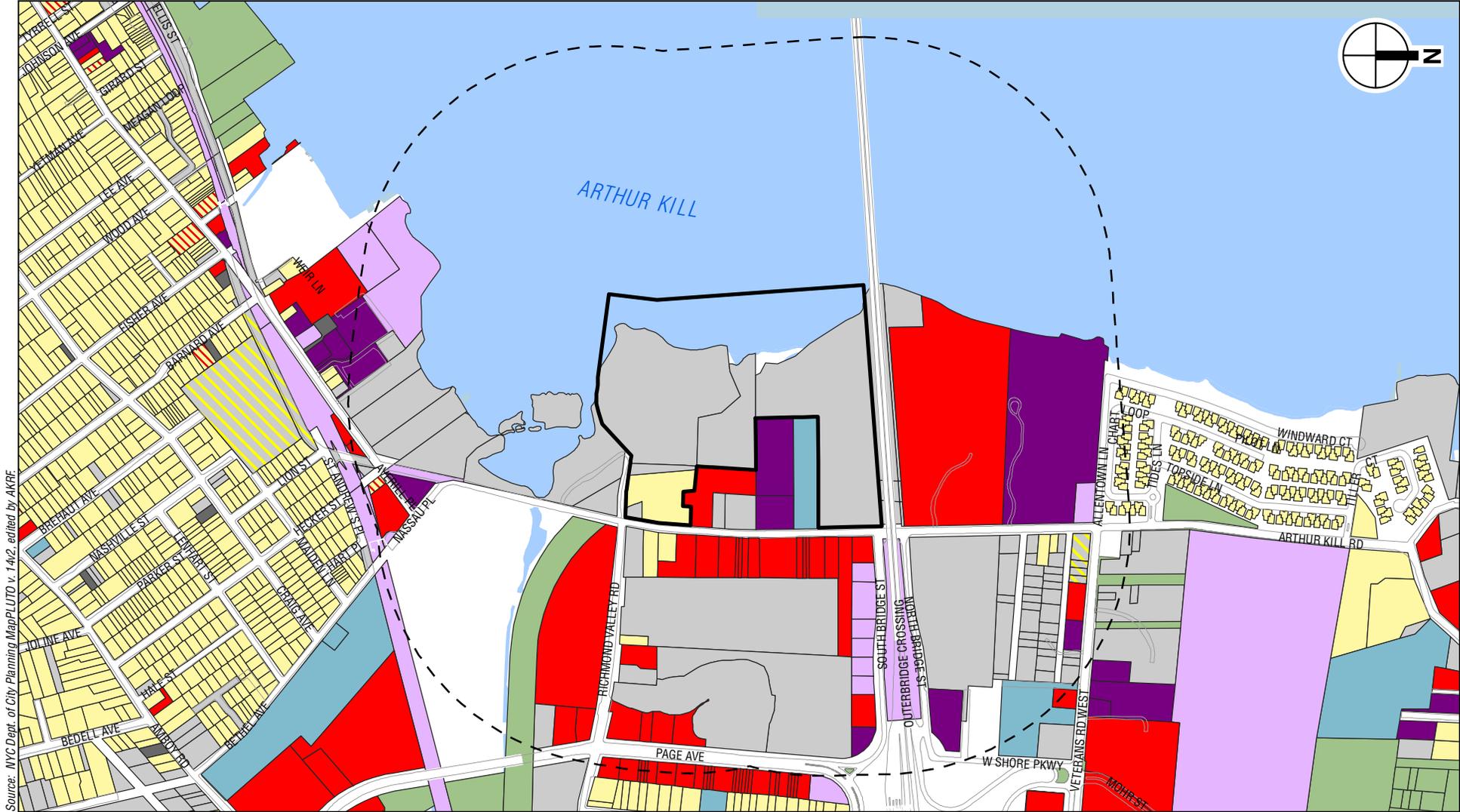
action to be inconsistent or affect land use, zoning, or public policy, a description of these issues is appropriate to establish conditions and provide information for use in other technical areas.

According to the *CEQR Technical Manual*, a detailed assessment of land use is appropriate if an action would result in a significant change in land use or would substantially affect regulation or policies governing land use. Because the Proposed Development would result in a change in land use on the currently undeveloped Project Site requiring a zoning special permit, the EIS will include a detailed land use assessment of the Proposed Development's consistency with land use, zoning, and public policy. That assessment, which provides a baseline for other analyses, will consist of the following tasks:

- Provide a brief development history of the Project Site and study area.
- Describe conditions in the Project Site, including existing uses and the current zoning.
- Describe predominant land use patterns in the study area, including recent development trends. The study area will include the blocks immediately surrounding the Project Site and land uses within approximately ¼-mile (see **Figure 7**).
- Provide a clear zoning map and discuss existing zoning and recent zoning actions in the study area.
- Summarize other public policies that may apply to the Project Site and study area, including any applicable Special Zoning Districts and any formal neighborhood or community plans.
- Prepare a list of other projects expected to be built in the study area that would be completed before or concurrent with the Proposed Development (No Action projects). Describe the impacts of these projects on land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area, including plans for public improvements.
- Describe the Proposed Development and provide an assessment of the impacts of the Proposed Development on land use and land use trends, zoning, and public policy. Consider the impacts related to issues of compatibility with surrounding land use, consistency with zoning and other public policy initiatives, and the effect of the project on development trends and conditions in the area.
- Since the Project Site is located in the City's designated Coastal Zone, an assessment of the project's consistency with the Waterfront Revitalization Program (WRP) will be provided. This assessment will begin with the completion of the Coastal Assessment Form (CAF), which identifies the WRP policies that are relevant to the Proposed Development. An explanation of the Proposed Development's consistency with each noted policy will be provided, which will determine whether the Proposed Development is supportive, neutral, or detrimental towards the achievement of that policy. Where needed, this assessment will draw upon other technical analyses in the EIS.

## **SOCIOECONOMIC CONDITIONS**

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic impacts may occur when a project directly or indirectly changes any of these elements. The purpose of the socioeconomic assessment is to disclose changes that would be created by a project and identify whether they would rise to a significant level. The



Source: NYC Dept. of City Planning MapPLUTO v. 14/2, edited by AKRE

- Project Site
- Study Area (Quarter mile boundary)
- Commercial and Office Buildings
- Industrial and Manufacturing
- Open Space and Outdoor Recreation
- Parking Facilities
- Residential
- Public Facilities and Institutions
- Vacant Land
- Residential with Commercial Below
- Transportation and Utility
- Vacant Land
- Under Construction



socioeconomic conditions chapter will examine the impacts of the Proposed Development on socioeconomic conditions on the Project Site and in the surrounding neighborhoods.

The analysis will follow the guidelines of the *CEQR Technical Manual* in assessing the Proposed Development's impacts on socioeconomic conditions. The analysis will present sufficient information regarding the impacts of the Proposed Development to make a preliminary assessment either to rule out the possibility of significant impacts or to determine that more detailed analysis is required to make a determination as to impacts. According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a Proposed Development would result in significant impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on a specific industry. Projects that would trigger a CEQR analysis include the following:

- Direct displacement of a residential population so that the socioeconomic profile of the neighborhood would be substantially altered. Displacement of less than 500 residents would not typically be expected to affect socioeconomic conditions in a neighborhood.
- Direct displacement of more than 100 employees; or the direct displacement of a business or institution that is unusually important as follows: it has a critical social or economic role in the community, it would have unusual difficulty in relocating successfully, it is of a type or in a location that makes it the subject of other regulations or publicly adopted plans aimed at its preservation, it serves a population uniquely dependent on its services in its present location, or it is particularly important to neighborhood character.
  - Introduction of substantial new development that is markedly different from existing uses, development, and activities within the neighborhood. Such an action could lead to indirect displacement. Residential development of 200 units or fewer or commercial development of 200,000 square feet or less would typically not result in significant socioeconomic impacts.
- Projects that are expected to affect conditions within a specific industry, such as a citywide regulatory change that could adversely impact the economic and operational conditions of certain type of businesses.

Although the Proposed Development would result in the direct displacement of one residential unit, an analysis of direct residential displacement is not required since fewer than 500 residents would be directly displaced. The Proposed Development would not directly displace any businesses, nor would the Proposed Development introduce residential uses that would require an assessment of potential indirect residential displacement. However, the Proposed Development exceeds the *CEQR Technical Manual* threshold of 200,000 square feet of retail development, requiring assessments of potential indirect business displacement due to increased rents and due to retail market saturation (i.e., retail competition), as well as a preliminary assessment of potential adverse effects on a specific industry. Detailed analyses will be conducted for those areas in which a preliminary assessment cannot definitely rule out the potential for significant adverse impacts.

### *INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED COMMERCIAL RENTS*

The concern with respect to indirect business displacement due to increased rents is whether a Proposed Development may introduce trends that make it difficult for some categories of

businesses to remain in the area. The indirect business displacement analysis will characterize employment and business trends within the study area, which is expected to conform to the ¼-mile land use study area described in Task 2, although adjustments may be made to the ¼-mile delineation to conform to Census tract boundaries. This analysis will consider the most recent available data from public and private sources such as New York State Department of Labor, the U.S. Census Bureau, and ESRI, as well as discussions with local real estate brokers as necessary. This information will be used to consider whether the Proposed Development would:

- Introduce enough of a new economic activity to alter existing economic patterns;
- Add to the concentration of a particular sector of the local economy enough to alter or accelerate existing economic patterns; or
- Indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment finds that the Proposed Development could introduce trends that would make it difficult for businesses to remain in the area due to potential rent increases, a detailed analysis will be conducted. The detailed analysis would follow the *CEQR Technical Manual* guidelines to determine whether the Proposed Development would increase property values and thus increase rents for a potentially vulnerable category of businesses, and whether relocation opportunities exist for those businesses.

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

Occasionally, development activity may create retail uses that draw substantial sales from existing businesses. While these economic pressures do not necessarily generate environmental concerns, they become an environmental concern when they have the potential to result in increased and prolonged vacancy leading to disinvestment. Such a change may affect the land use patterns and economic viability of the neighborhood. Indirect displacement due to market saturation is rare in New York City, where population density, population growth, and purchasing power are often high enough to sustain increases in retail supply.

Following *CEQR Technical Manual* guidelines, the analysis of indirect business displacement due to retail market saturation starts with a preliminary assessment to determine whether the project may capture the retail sales in a particular category of goods to the extent that the market for such goods would become saturated as a result, potentially resulting in vacancies and disinvestment on neighborhood commercial streets. Specifically, the preliminary assessment will:

- Determine if the categories of goods to be sold at the Proposed Development are similar to the categories of goods sold in stores found on neighborhood retail streets within the study area;
- Determine the primary trade area for the proposed anchor store(s)—the largest stores in the proposed development that are expected to be the primary sources of added retail sales;
- Estimate sales volumes of relevant retail stores within the trade area;
- Determine the expenditure potential for relevant retail goods of shoppers within the trade area;
- Compare sales generated by retail stores to the expenditure profile of the trade area;

## Riverside Galleria

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- Determine whether any factors would emerge, such as other planned retail projects, that would affect conditions within the trade area by the project's 2016 build year;
- Project the sales volume for the project's anchor tenant(s); and
- Compare the project's sales volumes with the dollars available within the trade area.

Based on this analysis, if the capture rate for specific, relevant categories of goods is found not to exceed 100 percent, according to the *CEQR Technical Manual*, the project would not have the potential for significant adverse impacts due to indirect business displacement as a result of competition, and no further analysis is warranted.

If the preliminary assessment identifies the potential for the Proposed Development to create market saturation for particular categories of retail goods, a detailed analysis would be conducted to assess whether the Proposed Development may result in an increase in vacancy in retail store fronts, affecting the viability of neighborhood shopping areas. This analysis would develop a profile of the existing retail environment within portions of the trade area that are most at risk of indirect business displacement due to retail market saturation. It would discuss retail conditions expected in the future without the Proposed Development, and then determine the Proposed Development's impacts on local shopping areas.

### *ADVERSE EFFECTS ON SPECIFIC INDUSTRIES*

Based on the guidelines in the *CEQR Technical Manual*, a preliminary assessment of effects on specific industries will be conducted to determine whether the Proposed Development would significantly affect business conditions in any industry or category of businesses within or outside the study area, or whether the Proposed Development would substantially reduce employment or impair viability in a specific industry or category of businesses.

### **OPEN SPACE**

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct effect on an area open space, or an indirect effect through increased population size. The Proposed Development would not have any direct effect on open space, as there are no publicly accessible open spaces on the Project Site. Therefore, an analysis of direct impacts on open space is not warranted.

With respect to potential indirect impacts, typically an assessment is conducted if a Proposed Development's population is greater than 200 residents or 500 employees. The Proposed Development would not introduce any new residents, but it would introduce more than 500 new employees as well as additional shoppers associated with the new retail uses. Therefore, an analysis of potential open space impacts due to indirect impacts is warranted. Consistent with the guidance of the *CEQR Technical Manual*, the study area for the open space assessment would include all census tracts with at least 50 percent of their area within a ¼-mile radius from the Project Site. The methodology set forth in the *CEQR Technical Manual* also consists of calculating the total non-residential population in the study area, and creating an inventory of publicly accessible open spaces within the study area (if any). The analysis will include a projection of conditions in the No Action condition, and assess any impacts associated with the new worker population that would be introduced by the Proposed Development.

The open space assessment will incorporate any new open spaces that are planned in the study area, including the new publicly accessible open space that will be created by the Proposed Development.

## SHADOWS

The *CEQR Technical Manual* requires a shadows assessment for proposed actions that would result in new structures (or additions to existing structures) greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features.

The Proposed Development would result in new structures taller than 50 feet. In addition, the proposed development is adjacent to mapped wetlands areas, which are a sunlight-sensitive natural resource. A shadows assessment is therefore required to determine how the Project-generated shadow might affect these resources.

The shadows assessment will follow the methodology described in the *CEQR Technical Manual*, and will include the following tasks:

- Develop a base map illustrating the Project Site in relationship to natural features in the area, and any publicly accessible open spaces or historic resources with sunlight-dependent features.
- Determine the longest possible shadow that could result from the Proposed Development to determine whether it could reach any sunlight-sensitive resources at any time of year.
- Develop a three-dimensional computer model of the elements of the base map developed in the preliminary assessment.
- Develop a three-dimensional representation of the Proposed Development.
- Using three-dimensional computer modeling software, determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Development on four representative days of the year.
- Document the analysis with graphics comparing shadows resulting from the No Action condition with shadows in the With Action condition, with incremental shadow highlighted in a contrasting color. Include a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.
- Assess the significance of any shadow impacts on sunlight-sensitive resources. If any significant adverse shadow impacts are identified, identify and assess potential mitigation strategies.

## HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources include both architectural and archaeological resources. An early-19th century house, known as the Dissosway-Cole House, is located on the Project Site; however, SHPO recently determined that Cole House, as it is referred to, is not eligible for listing on the State/National Registers of Historic Resources. The Outerbridge Crossing, which has been determined as eligible for listing on the State/National Register of Historic Places (S/NR), is located adjacent to the Project Site. Adjacent to and in the vicinity of the Project Site are a number of 19th century residences, which also may be of historic and architectural interest. As the project will be seeking a permit from NYSDEC and USACE, consultation with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) will be required pursuant to Section 14.09 of the New York State Historic Preservation Act (SHPA), Section 106

of the National Historic Preservation Act (NHPA), and 36 CFR Part 800 (Protection of Historic Resources). A historic and cultural resources analysis will be prepared in accordance with SEQRA and consistent with the *CEQR Technical Manual*, which will include the following:

- Prepare a Phase 1a Archaeological survey of the site and summarize the conclusions and recommendations based on a review by LPC and SHPO. Upon the completion of Phase 2 testing and any subsequent archaeological investigations that may be required (e.g., Phase 3 Data Recovery), the conclusions and recommendations of any additional archaeological investigations will also be summarized. All archaeological reports and protocols will be submitted to OPRHP and LPC for review and comment and all agency comment letters will be included as an appendix.
- Initiate project consultation with OPRHP via the agency's new Cultural Resource Information System. Information to be provided will include a description of the project, maps and photographs of the Project Site and surrounding area, and a description of any adjacent properties that are more than 50 years old.
- Map and briefly describe designated architectural resources within a 400-foot study area. Consistent with the guidance of the *CEQR Technical Manual*, designated architectural resources include: New York City Landmarks, Interior Landmarks, Scenic Landmarks, and New York City Historic Districts; resources calendared for consideration as one of the above by LPC; resources listed on or formally determined eligible for inclusion on the State and/or National Registers of Historic Places, or contained within a district listed on or formally determined eligible for listing on the Registers; resources recommended by the New York State Board for listing on the Registers; and National Historic Landmarks.
- Consistent with the *CEQR Technical Manual*, conduct a field survey of the study area to identify any potential architectural resources that could be affected by the Proposed Development. The field survey will be supplemented with research at relevant repositories, online sources, and current sources prepared by OPRHP and LPC.
- Seek determinations of eligibility from LPC and OPRHP for any potential architectural resources. Map and describe any identified architectural resources.
- Based on other planned development projects, qualitatively discuss any impacts on architectural and archaeological resources that are expected in the future without the Proposed Development.
- Assess the potential for the Proposed Development to have direct, physical impacts on architectural and archaeological resources. Assess the Proposed Development's potential to result in any visual and contextual impacts on architectural resources. Potential impacts will be evaluated through a comparison of the future no-action condition and the future with-action condition. The analysis will include a description of the consultation undertaken with OPRHP and LPC.
- Identify any measures that would be necessary to mitigate and/or reduce any potential significant adverse impacts on historic or cultural resources, in consultation with LPC and OPRHP.

## URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project requires actions that would result in physical changes to a Project Site beyond those allowable by existing zoning

and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared. A detailed analysis is then prepared if warranted based on the preliminary assessment. Since the Proposed Development requires discretionary approvals related to site design and building height, this assessment will include the following tasks:

- Define the study area for urban design and visual resources. The study area will be consistent with that of the study area for the analysis of land use, zoning and public policy.
  - Prepare a concise narrative of the Project Site and the study area. The narrative will address various components of urban design including streets, buildings, visual resources, open space, and natural resources. The narrative will be supported with photographs and information on building massing, floor area, lot coverage, building heights, open area, building setbacks, and average floor plate sizes.
  - Based on planned and proposed development projects and using the information gathered above for existing conditions, assess whether and how urban design conditions are expected to change in the future without the Proposed Development. This will include other planned projects in the area.
- Assess how the Proposed Development would affect the pedestrian's experience of the built environment relative to the future no-action condition and determine the significance of those changes. The preliminary assessment would present photographs, zoning and floor area calculations, lot coverage, building heights, project drawings and site plans, as such information is developed and becomes available. In addition, the analysis would present a three-dimensional representation of the future With Action condition streetscape.
- If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

## NATURAL RESOURCES

An assessment of natural resources is conducted when a natural resource is present on or near a development site and the Proposed Development may involve the direct or indirect disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetlands, including freshwater and tidal wetlands; terrestrial resources, such as grasslands and thickets; shoreline resources, such as beaches, dunes, and bluffs; gardens and other ornamental landscaping; and natural resources that may be associated with built resources, such as old piers and other waterfront structures. Although there is evidence of prior disturbance, the Project Site is an undeveloped, vegetated site comprised of upland forest, old field, tidal and freshwater wetlands. As the Proposed Development would result in construction affecting these resources, a natural resources assessment will be provided as part of the EIS.

The EIS will describe the existing natural resources within and adjacent to the Project Site (e.g., topography, floodplains, wetlands and terrestrial habitats and biota including rare, special concern, threatened and endangered species and special habitat areas). This description of existing natural resources will be developed on the basis of existing information from literature sources and other information obtained from governmental and non-governmental agencies combined with the results of a wetlands assessment conducted on the Project Site and reconnaissance and targeted plant and wildlife surveys conducted in accordance with the *CEQR Technical Manual*, with emphasis on the potential areas of disturbance. The natural resources

analyses will assess the potential for the construction and operation of the Proposed Development to affect these natural resources. Natural resources impacts to be discussed would include direct or indirect impacts. Impacts would be considered on the individual, population and community levels. The EIS analysis will consist of the following:

- Identify natural resources of concern to state, federal and city agencies, including those specified in the Special South Richmond Development District.
- Identify the regulatory programs that protect floodplains, wetlands, wildlife, threatened or endangered species, aquatic resources, or other natural resources within the Project Site.
- Develop a baseline assessment of existing site conditions based on existing information available from published literature and sources and data on current site conditions such as NYSDEC Natural Heritage Program (NHP); existing NYSDEC datasets (e.g., Breeding Bird Atlas data, Herp Atlas Project, tidal and freshwater wetland maps, etc.); New York-New Jersey Harbor Estuary Program (HEP), DEP, the New York City Department of Parks and Recreation (DPR), information on federally listed species from the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS); and other resources and the results of site reconnaissance and one targeted site survey for threatened or endangered plants and one for threatened or endangered wildlife, to qualitatively describe the terrestrial habitats and wildlife present within and adjacent to the Project Site, and aquatic resources of the Arthur Kill in the vicinity of the Project Site. Water quality and aquatic biota of the Arthur Kill will be described at a level of detail appropriate for the Proposed Development. In accordance with the *CEQR Technical Manual*, wildlife surveys would be conducted in spring, summer and fall and plant surveys in spring and late summer. The wetlands assessment would be conducted in the spring and would comprise identifying approximate boundary locations on the basis of the US Army Corps of Engineers three parameter approach and recording approximate wetland boundaries on Project Site map. Exact survey dates for the plant surveys would be determined based on the threatened or endangered plant species identified as having a potential to occur within the Project Site. For wildlife surveys, daytime visual encounter surveys would be conducted during which all birds, mammals, reptiles, and amphibians seen and/or heard while traversing the Project Site would be recorded. Evening frog call surveys would also be conducted during early spring to complement daytime surveys to assist in documenting the species present within the site.
- Information requests will be submitted to the NYSDEC Natural Heritage Program and the U.S. Fish and Wildlife Service to obtain data on the presence or absence of protected species in the area and a site survey will be undertaken to determine if there are any threatened and endangered species using the development site. If any of these species or habitats are observed, the size of the group, its range, and a description of the typical habitat will be provided.
- Describe expected changes to the natural resources at the Project Site and in the surrounding area in the future without the Proposed Development.
- Assess potential development impacts on natural resources habitats, plants and wildlife. This will include an assessment of potential direct impacts such as the removal of vegetation or the displacement of wildlife habitat. The analysis will also assess the potential for impacts on adjacent tidal wetlands and the potential for any direct or

indirect impacts on this regulated habitat and the water quality conditions of the Arthur Kill.

- Identify the measures that would be developed, as necessary, to mitigate and/or reduce any of the Proposed Development's potential significant adverse impacts on natural resources and incorporate any mitigation plans for wetland or other natural resources impacts.

## **HAZARDOUS MATERIALS**

According to CEQR criteria, a hazardous material assessment is conducted when elevated levels of hazardous materials exist on a site, when a project would increase pathways to their exposures, either human or environmental, or when an action would introduce new activities or processes using hazardous materials, thereby increasing the risk of human or environmental exposure. An analysis should be conducted for any site with the potential to contain hazardous materials or if any future redevelopment of the property is anticipated.

The Development Site is in large part vacant and in some areas previously disturbed. As a result, the Proposed Development would result in soil disturbance in areas that may contain hazardous materials, and an analysis is therefore warranted. The EIS hazardous materials analysis will summarize the Phase I Environmental Site Assessment, which includes the following:

- Review historical Sanborn maps, aerial photos, and other records to discern historical uses of the property and prior levels of disturbance.
- Examine Federal and State databases to determine if there are any records of hazardous materials contamination on the site or impacts to the site from activities in the surrounding area.
- Perform an inspection to determine any evidence of disposal or soil stains.
- Describe the potential for any project impacts due to hazardous materials due to site clearing, grading and excavation.
- Identify any measures that would be necessary to mitigate and/or reduce any potential significant adverse impacts due to hazardous material including the need for any remedial actions to protect the health of local residents, project construction workers, or future users of the site.

## **WATER AND SEWER INFRASTRUCTURE**

A CEQR water and sewer infrastructure assessment analyzes whether a project may adversely affect the City's water distribution or sewer system and, if so, assess the effects of such projects to determine whether their impact is significant, and present potential mitigation strategies and alternatives. According to the *CEQR Technical Manual*, only projects that increase density or change drainage conditions on a large site require a water and sewer infrastructure analysis. The Project Site is located in an area that is served by a separated sewer system, and the Proposed Development would exceed the CEQR analysis threshold (over 100,000 square feet of commercial use); in addition, the Proposed Development would result in an increase in the amount of impervious surface on a site five acres or larger. Therefore, an analysis of water and sewer infrastructure is warranted.

This DEIS chapter will therefore examine the potential for impacts on the City infrastructure systems and the capacity to adequately serve the project-generated demands for water supply,

sanitary wastewater treatment, and stormwater management. The DEIS analysis will include the following:

- Determine the current on-site stormwater patterns.
- Describe the existing water supply system serving the Project Site, including the location and size of water lines along Arthur Kill Road.
- Describe existing City sewers and the water pollution control plant (“WPCP”) serving the Project Site, including the WPCP capacity and disclose any current operational capacity issues at the WPCP.
- Determine future demands and anticipated changes in the stormwater, water, and wastewater systems in the With Action condition.
- To determine potential impacts of the Proposed Development on water supply, water demands will be estimated using published usage rates from the *CEQR Technical Manual* and the impacts of the project’s water demand on the City’s water supply system will be assessed including the system’s capacity to supply water.
- Project-generated sanitary sewage flows will be based on the projected water demand. The capacity of the WPCP to accommodate the incremental increase in sewage generated from the project will be assessed. The need for any sewer line extensions or other improvements will also be described as well as the need for any approvals related to these infrastructure improvements.
- For stormwater management, a description of the project’s proposed stormwater management infrastructure improvements will be provided as well as any approvals that are necessary to implement these infrastructure improvements. This would include the volume of incremental increase in stormwater runoff with the proposed development along with an analysis of the pre- and post-development condition stormwater release using the City’s stormwater design criteria. This assessment would include an assessment of potential impacts on stormwater drainage within the Mill Creek watershed of the Staten Island Bluebelt system in coordination with DEP Bluebelt staff.

### **SOLID WASTE**

A solid waste assessment determines whether a project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City’s Solid Waste Management Plan (“SWMP” or “Plan”) or with state policy related to the City’s integrated solid waste management system. The City’s solid waste system includes waste minimization at the point of generation, collection, treatment, recycling, composting, transfer, processing, energy recovery, and disposal.

According to the *CEQR Technical Manual*, a solid waste assessment is appropriate if a project generates 50 tons per week or more. Based on Citywide solid waste generation rates identified in Table 14-1 of the *CEQR Technical Manual*, the Proposed Development could generate more than 50 tons per week of solid waste. Therefore, the EIS will include an assessment of solid waste, including the following tasks:

- The existing ownership and operation of the Project Site’s waste collection system will be described.
- The solid waste and service demand generated by the project will be disclosed, based on estimates using Table 14-1 of the *CEQR Technical Manual*.

- The proposed location and method of storage of refuse and recyclables prior to collection will be described.
- The anticipated method of refuse disposal (i.e., private carters or the Department of Sanitation) will be described, including an estimate of the number of additional truck trips.
- Project features that enhance recycling (i.e., those that facilitate the separation, storage, collection, processing, or marketing of recyclables) will be identified.

## TRANSPORTATION

The *CEQR Technical Manual* states that quantified transportation analyses may be warranted if a proposed action results in more than 50 vehicle-trips and/or 200 transit/pedestrian trips during a given peak hour. The Proposed Development's trip generation is expected to exceed these thresholds for critical time periods (i.e., weekday AM, midday, and PM, and Saturday afternoon). Since parking will be provided on site and travel in this part of Staten Island is predominantly via autos, and transit and walk only trips to the proposed development would be minimal, the pedestrian and transit elements would not require detailed quantitative analysis. Therefore, quantified analysis will focus on traffic conditions and will provide an evaluation of vehicular access and circulation, and the potential impacts project-generated trips may have on key area intersections. While a detailed pedestrian analysis would not be required, a line-haul assessment of the S78 bus route, which has stops along Arthur Kill Road just south of the Proposed Development, is expected to be warranted. As part of the operational analyses, an assessment of traffic and pedestrian safety based on recent accident crash data would also be prepared. The transportation analysis will include the tasks outlined below.

### TRAVEL DEMAND AND SCREENING ASSESSMENT

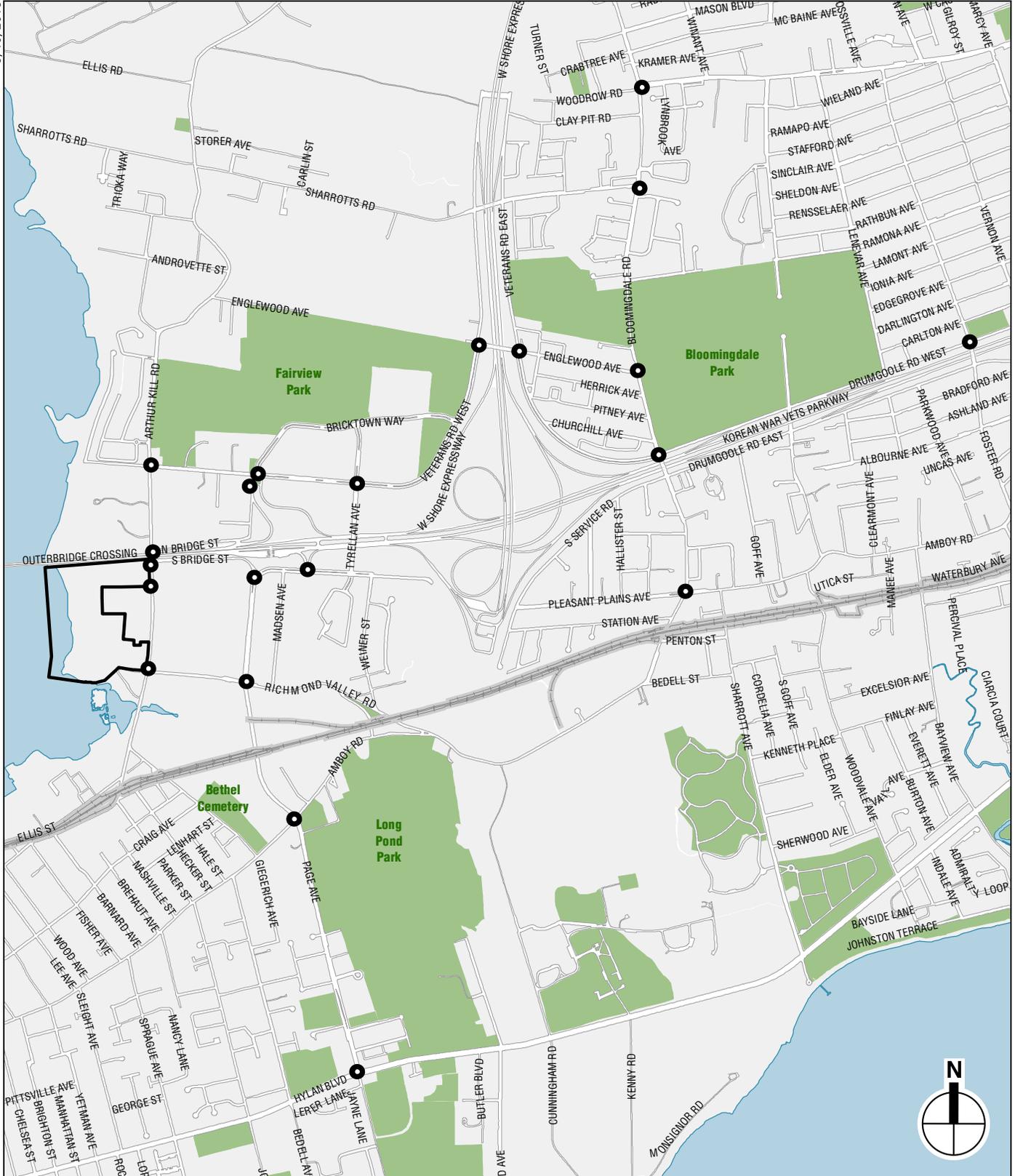
Prepare travel demand estimates and transportation analysis screening. Detailed trip estimates will be prepared using information from standard sources, including the *CEQR Technical Manual*, U.S. census data, approved studies, and *Institute of Transportation Engineers (ITE) Trip Generation Manual*. The trip estimates (Level-1 screening assessment) will be summarized by peak hour, mode of travel, and person vs. vehicle trips. The results of these estimates will be summarized in a Travel Demand Factors (TDF) memorandum for review and concurrence by the lead agency and New York City Department of Transportation (NYCDOT). In addition to trip estimates, detailed vehicle trip assignments (Level-2 screening assessment) will be prepared to identify the intersections warranting quantified analyses.

### TRAFFIC

The Proposed Development would generate additional vehicle trips in the study area, the impact of which will be assessed by evaluating existing traffic conditions, projecting those conditions to the No Action condition, identifying any potential adverse traffic impacts, and recommending any improvement measures that may be necessary to mitigate those impacts. The scope of work for the transportation analysis is as follows:

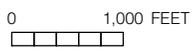
- A. Define a traffic study area consisting of intersections to be analyzed in the DEIS including the major routes leading to and from the project site (see **Figure 8**). These intersections will be analyzed for weekday and Saturday peak hours.

3/10/2016



-  Project Site
-  Recommended Traffic Analysis Location

NOTE: Final Traffic Study Area and Intersections Subject to TDF Memo Review



- B. Conduct traffic counts at analysis locations using automatic traffic recorder (ATR) machine counts and manual intersection turning movement counts. ATRs will provide 24-hour traffic volumes for a full week at selected arterial locations. Traffic counts and field observations of general traffic conditions and queues will be conducted during the AM, midday, and PM peak periods on a typical weekday and on Saturday in the afternoon period. If the mobile source air quality analysis identifies a potential for significant adverse impacts, additional traffic data collection may be performed to support a more refined air quality analysis.
- C. Inventory physical data at each of the analysis intersections needed for capacity analyses, including street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, typical parking regulations, and signal phasing and timing data. Signal phasing and timing data will be acquired from NYCDOT.
- D. Determine existing traffic operating characteristics at each analysis intersection including capacities, volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service (LOS) per traffic movement and per intersection approach. The *2000 Highway Capacity Manual* procedures using the latest approved Synchro Software (Version 8) will be used for this analysis.
- F. Calculate future No Action traffic volumes based on an approved background traffic growth rate for the study area and the volume of traffic expected to be generated for significant development projects anticipated to be in place by the analysis year for the proposed action. Intersection v/c ratios, delays, and LOS will also be determined for this No Action condition.
- G. Determine the volume of vehicle traffic expected to be generated by the Proposed Development and assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, and prepare traffic volume networks for the future With-Action condition for each analysis period.
- H. Determine the resulting v/c ratios, delays, and LOS for the future Build condition, and identify significant traffic impacts in accordance with the *CEQR Technical Manual* criteria.
- I. Identify and evaluate feasible traffic improvement measures to mitigate any significant traffic impacts to the extent practicable. The recommended mitigation measures, if any, will be reviewed with NYCDOT for approvals.
- J. Parking demand estimates with the Proposed Development will be calculated. These estimates will be compared to the proposed parking supply to determine the potential, if any, for a parking shortfall.

### TRANSIT

Based on preliminary trip estimates, an assessment of line-haul conditions along the S78 bus route along Arthur Kill Road is expected to be warranted. Ridership data (weekday AM and PM peak periods) will be requested from New York City Transit (NYCT). The analysis will involve determining whether background growth and additional demand generated by the Proposed Development would result in the existing bus service operating above its guideline capacity. If such exceedance was identified, a recommendation for increased frequency in service will be made, subject to NYCT's fiscal and operational constraints.

### *PEDESTRIANS*

The limited pedestrian trips with the Proposed Development would not trigger the need for a detailed analysis of pedestrian conditions. The DEIS will qualitatively describe the bicycle and pedestrian facilities serving the project site.

### *VEHICULAR AND PEDESTRIAN SAFETY ASSESSMENT*

The most recent three years of crash data from the New York State Department of Transportation (NYSDOT) for the study area intersections will be reviewed to identify high vehicular crash and pedestrian/bike accident locations, which according to the CEQR Technical Manual are those that had 48 or more crashes or 5 or more bike/pedestrian-related accidents over a 12-month period. An assessment of whether trips and changes resulting from the Proposed Development would adversely affect vehicular and pedestrian safety in the area. Where appropriate, safety improvement measures will be explored, in consultation with DCP and NYCDOT, to alleviate existing or potential future safety issues.

### *TRANSIT AND PEDESTRIANS*

The limited transit and pedestrian trips with the Proposed Development would not trigger the need for a detailed analysis of transit and pedestrian conditions. The DEIS will qualitatively describe the transit, pedestrian, and bicycle facilities serving the project site.

### *PARKING*

Parking demand estimates with the Proposed Development will be calculated. These estimates will be compared to the proposed parking supply to determine the potential, if any, for a parking shortfall.

### **AIR QUALITY**

Under CEQR, an air quality analysis determines whether a proposed project would result in stationary or mobile sources of pollutant emissions that could have a significant adverse impact on ambient air quality, and also considers the potential of existing sources of air pollution to impact the proposed uses. The air quality studies will include both mobile and stationary source analyses. The number of project-generated trips is expected to exceed the *CEQR Technical Manual* screening thresholds for analysis of carbon monoxide (CO) and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). Thus, a modeling analysis of mobile emissions air quality impacts will be conducted. The mobile source air quality analyses will have to address two distinct issues:

- The potential impacts of traffic-generated emissions on local air quality (i.e., CO concentrations and PM<sub>2.5</sub>) at representative locations within the study area; and
- The proposed development's consistency and compliance with the applicable National Ambient Air Quality Standard ("NAAQS") State Implementation Plan ("SIP") for the area and the *de minimis* criteria for CO.

Emissions from fossil-fuel fired mechanical systems (such as heating and hot water boilers) would be analyzed using a screening approach. The following specific tasks will be performed:

### MOBILE SOURCE ANALYSES

- Collect and summarize existing ambient air quality data for the study area. Specifically, ambient air quality monitoring data published by NYSDEC will be compiled for the analysis of existing conditions.
- Select receptor locations for the microscale analysis. Critical intersections in the traffic study area that exceed the CEQR screening thresholds will be selected for analysis, based on the background and project generated traffic volumes and levels of service, representing locations with the greatest potential for impacts to air quality. At each intersection, multiple receptor sites will be analyzed in accordance with CEQR guidelines.
- Calculate emission factors. Select emission calculation methodology and “worst-case” meteorological conditions. Compute vehicular emission factors for the intersection modeling using the USEPA-developed MOVES2014 model<sup>4</sup> and applicable assumptions based on guidance by USEPA, NYSDEC and DEP. Compute re-suspended road dust emission factors based on the USEPA procedure defined in AP-42 and the latest *CEQR Technical Manual* guidance.
- For the CO and 24-hour average PM<sub>2.5</sub> microscale analyses, select appropriate background levels for the study area from data collected by the NYSDEC monitoring stations.
- Use USEPA’s first-level CAL3QHC intersection model to predict the maximum change in CO concentrations, and the refined CAL3QHCR intersection model to predict the maximum change in PM<sub>2.5</sub> concentrations. At each CO microscale receptor site, calculate maximum 1- and 8-hour average CO concentrations for the future conditions without the proposed actions and the future conditions with the proposed actions. Concentrations will be determined at up to four peak periods. At each PM<sub>2.5</sub> microscale receptor site, the maximum 24-hour and annual average PM<sub>2.5</sub> concentrations will be determined for future conditions without the proposed actions, and the future conditions with the proposed actions.
- Evaluate potential impacts by comparing predicted future CO and PM<sub>2.5</sub> pollutant levels with standards and the City’s impact criteria. Total CO concentrations will be compared with the National Ambient Air Quality Standards (NAAQS); the predicted CO and PM<sub>2.5</sub> increment with *de minimis* criteria. If significant adverse impacts due to CO concentrations are predicted, refine results by performing detailed dispersion analysis at affected locations using USEPA’s refined CAL3QHCR intersection model and compare refined results to benchmarks.
- Determine the consistency of the Proposed Development with the strategies contained in the SIP for the area. At any receptor sites where violations of standards occur, analyses would be performed to determine what mitigation measures would be required to attain standards.
- Assess the potential CO and PM<sub>2.5</sub> impacts associated with proposed parking garage. Information on the conceptual design of the parking facilities will be employed to

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<sup>4</sup> USEPA, MOVES Model, User Guide for MOVES2014, July 2014. The MOVES model replaced the MOBILE6.2 emissions model, as the required model for regulatory purposes, subsequent to the publication of the Draft Scope of Work.

determine potential worst-case off-site impacts from emissions. An analysis will be used following the procedures outlined in the *CEQR Technical Manual* for parking facilities to determine maximum potential worst-case impacts. Cumulative impacts from on-street sources and emissions from the proposed parking facilities will be calculated.

#### *STATIONARY SOURCE ANALYSES*

- A screening analysis will be performed to determine whether emissions from any on-site fossil fuel-fired heating and hot water systems (for example, boilers or hot water heaters) are significant. The screening analysis will use the procedures outlined in the 2014 *CEQR Technical Manual* that consider the distance of the heating and hot water system exhaust to the nearest building of equal or greater height, the proposed building size, the height of the exhaust and the type of fuel used. Project on project and project on existing impacts will be determined. The analysis will consider the potential cumulative impacts from the Proposed Project. If the screening analysis identifies the potential for a significant adverse impact, a refined air quality analysis will be performed using the USEPA AERMOD model.
- A field survey will be performed to determine if there are any manufacturing or processing facilities within 400 feet of the Project Site. DEP's Bureau of Environmental Compliance files will be examined to determine if there are permits for any industrial facilities that are identified. A review of federal and state permits will also be conducted. If manufacturing or processing facilities are identified within 400 feet of the Project Site, an industrial stationary source air quality analysis as detailed in the *CEQR Technical Manual* will be performed. The AERMOD dispersion model screening database will be used to estimate the short-term and annual concentrations of critical pollutants at the potential receptor sites.
- The potential impacts from existing or proposed large or major emission sources within 1,000 feet of the Project Site will be determined. If potential significant adverse impacts are identified from existing large or major emission sources, a refined dispersion modeling analysis will be performed using the AERMOD model. Concentrations of pollutants of concern will be determined at off-site receptor sites, as well on project receptors. Predicted values will be compared with national and State ambient air quality standards and other relevant standards. In the event that violations of standards are predicted, examine design measures to reduce pollutant levels to within standards.

#### **GREENHOUSE GAS EMISSIONS**

According to the *CEQR Technical Manual*, a greenhouse gas (GHG) consistency assessment is appropriate for projects being reviewed in an EIS that would result in development of 350,000 square feet or greater. This section of the EIS will quantify GHG emissions generated by the Proposed Development and assess the Project's consistency with the City's established GHG reduction goal. Project-related GHG emissions will be estimated for the analysis year and reported as carbon dioxide equivalent (CO<sub>2</sub>e) metric tons per year. This quantified assessment will include operational emissions (emissions from the operation of the project buildings, including direct and indirect emissions), and mobile source emissions. The construction phase or the extraction or production of materials or fuels needed to construct the project is not likely to be a significant part of total project emissions. Therefore, emissions resulting from construction activity and construction materials will be assessed qualitatively. The Proposed Development would not fundamentally change the city's solid waste management system. Therefore a

quantified assessment of emissions due to solid waste management is not warranted. Features of the project that demonstrate consistency with the City's GHG reduction goal will be described.

The GHG analysis would consist of the following subtasks:

- *Direct Operational Emissions.* Emissions from on-site fossil fuel use, for example in heat and hot water boilers, would be quantified. Emissions would be based on available project specific information regarding the expected energy and fuel use or the carbon intensity factors specified in the *CEQR Technical Manual*.
- *Indirect Operational Emissions.* Emissions from purchased electricity generated off-site and consumed on-site during the project's operation will be estimated.
- *Indirect Mobile Source Emissions.* Emissions from vehicle trips to or from the Proposed Development will be quantified using trip distances and emission factors provided in the *CEQR Technical Manual*.
- *Construction Emissions.* Emissions from construction and emissions associated with the extraction or production of construction materials will be qualitatively discussed. Opportunities for reducing GHG emissions associated with construction will be considered.
- *Sustainability Features.* Features of the Proposed Development that reduce energy use and GHG emissions will be discussed and quantified to the extent that information is available.
- *Policy Consistency.* Consistency with the City's GHG reduction goal will be assessed. While the City's overall goal is to reduce GHG emissions by 30 percent below 2005 level by 2030, individual project consistency is evaluated based on proximity to transit, incentives for sustainable transportation, building energy efficiency, on-site production of renewable or clean energy, efforts to reduce carbon fuel intensity or improve vehicle efficiency for project-generated vehicle trips, and other efforts to reduce the project's carbon footprint.

## NOISE

According to the *CEQR Technical Manual*, a noise analysis is appropriate if an action would generate any mobile sources of noise, in particular through the introduction or rerouting of transportation sources such as vehicular traffic, aircraft, or trains. The noise study will examine impacts on sensitive land uses (including residences and parks) that could be affected by noise changes from development-generated traffic or operations. This work will include noise monitoring to determine existing ambient noise levels at four selected locations and will examine noise levels into the future, for both the With Action and No Action scenarios. Noise impacts will be determined by comparing No Action and With Action noise levels based on various noise standards, guidelines, and other noise criteria, including New York City CEQR Noise Standards and the impact criteria contained in the *CEQR Technical Manual* (a change of 3 to 5 dBA or more is considered a significant impact). The DEIS noise analysis will include the following:

- Select appropriate noise descriptors to characterize the noise environment and the potential impacts of the Proposed Development. Current city criteria regarding noise descriptors will be followed. Consequently, where and when appropriate, the  $L_{10}$ , day-night ( $L_{dn}$ ), and/or 1- and 24-hour equivalent ( $L_{eq(1)}$  and  $L_{eq(24)}$ ) noise levels will be examined.

- Receptor sites will be selected to include locations where the Proposed Development will have the greatest potential to affect ambient noise levels and where ambient noise levels may affect the project itself. A maximum of four receptor locations are assumed.
- Noise measurements will be performed during the weekday midday and PM peak periods, as well as Saturday midday peak periods using Type I instrumentation recording hourly  $L_{eq}$ ,  $L_1$ ,  $L_5$ ,  $L_{10}$ , and  $L_{50}$  values. (If there is a potential doubling of Noise PCEs at a sensitive receptor during the Saturday peak hour, noise measurements may be required for the Saturday peak hour analysis.)
- Based on the results of the traffic studies, determine whether project-generated traffic would have the potential for causing a significant noise impact. If project-generated traffic would result in a doubling of Noise PCEs (passenger-car-equivalents), a detailed mobile source noise analysis would be performed at the selected noise receptor locations.
- If necessary, and based on the baseline measurements, determine if any building attenuation is necessary to mitigate impacts. The level of building attenuation to satisfy CEQR requirements is a function of exterior noise levels. Measured values will be adjusted based on the results of the Noise PCE screening analysis, and the resultant future With Action noise levels will be compared to appropriate standards and guideline levels. As necessary, recommendations regarding general noise attenuation measures needed for the Proposed Development to achieve compliance with standards and guideline levels will be determined.

## **PUBLIC HEALTH**

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a Proposed Development, and if so, to identify measures to mitigate such impacts.

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any one of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

## **NEIGHBORHOOD CHARACTER**

Neighborhood character is defined by the *CEQR Technical Manual* as comprising a number of community elements, including land use and population, economic activities, development scale and building design, presence of notable landmarks, noise levels, traffic, and pedestrian patterns. If it is determined that the Proposed Development has the potential to alter certain elements contributing to the affected area's neighborhood character in other technical analysis areas—land use, zoning, and public policy; open space; urban design and visual resources; transportation; and noise—a neighborhood character analysis should be provided in the EIS. As it is expected that the Proposed Development would alter elements of the area's character, the EIS analysis will include a neighborhood character assessment, as follows:

- Summarize the predominant factors that contribute to defining the character of this neighborhood. This would include, among other features, its waterfront access and major roadway corridors, such as Arthur Kill Road.
- Based on planned development projects, public policy initiatives, and any proposed public improvements, describe changes that can be expected in the character of the neighborhood in the future without the proposed actions.
- Assess and summarize the impacts on neighborhood character. This analysis will rely on impacts as presented in other pertinent EIS sections, particularly land use, open space, and traffic.

### CONSTRUCTION IMPACTS

The *CEQR Technical Manual* recommends an assessment of construction-related impacts, with a focus on transportation, air quality, and noise, as well as consideration of other technical areas such as historic and cultural resources, hazardous materials, and natural resources. Project construction activities are expected to be typical for New York City, with the exception of tidal wetland protection strategies and are expected to last for 18 months. Typical construction activities include clearing and excavation, framing and finishing, parking and landscaping, and interior and finishing details. This chapter will describe the proposed construction program and phasing, and will qualitatively examine the potential short-term construction impacts of the proposed construction, as follows:

- Traffic Systems. This assessment will consider temporary use of travel lanes, sidewalks, and other facilities during the various phases of construction. A qualitative review of the construction plan and traffic generation will be prepared.
- Air Quality. The air quality analysis will provide a qualitative discussion of both mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions.
- Noise. The construction noise impact section will contain a qualitative discussion of noise from each phase of construction activity.
- Protection of Environmental Features. Discuss the potential construction-related impacts on natural resources (i.e., impacts from storm water runoff, utility extensions) and describe the measures that would be employed to avoid impacts to these features, such as a stormwater protection plan.

### ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the Proposed Development. The alternatives are usually defined when the full extent of the Proposed Development's impacts is identified, but at this time, it is anticipated that they will include the following:

- A No Action Alternative, which describes the conditions that would exist if the proposed actions were not implemented;
- An As-of-Right Alternative, which is the alternative that could be developed under the current zoning;

- A No Unmitigated Adverse Impacts Alternative, if unavoidable adverse impacts are identified in the EIS; and
- A discussion of other possible alternatives that may be developed in consultation with the lead agency during the EIS preparation process or that may be posed by the public during the scoping of the EIS.

For technical areas where impacts have been identified, the alternatives analysis will determine whether these impacts would still occur under each alternative. The analysis of each alternative will be qualitative, except where impacts from Proposed Development have been identified.

## **MITIGATION**

Where significant adverse environmental impacts are identified by the DEIS analyses, measures to mitigate those impacts will be described in this chapter. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

## **SUMMARY CHAPTERS**

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the regulations and the *CEQR Technical Manual*. They are as follows:

### *EXECUTIVE SUMMARY*

Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will use relevant material from the body of the EIS to describe the proposed action, its environmental impacts, measures to mitigate those impacts, and alternatives to the proposed action.

### *UNAVOIDABLE ADVERSE IMPACTS*

Those impacts, if any, which could not be avoided and could not be practicably mitigated, will be described in this chapter.

### *GROWTH-INDUCING ASPECTS*

This chapter will focus on whether the Proposed Development would have the potential to induce new development within the surrounding area.

### *IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES*

This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the Proposed Development be built. \*