A. INTRODUCTION

As discussed in **Chapter 1, "Project Description,"** the Proposed Project would involve the development of an approximately 164,000 square foot (sf) property identified as Queens Block 911, Lot 1 (the "Development Site"). The separate property identified as Block 911, Lot 49, which lies adjacent to and south of the Development Site (not part of the Proposed Project) is also included for this assessment; together, the Development Site and Block 911, Lot 49 are referred to, herein, as the "Project Area." The Project Area would be developed with residential units, retail space, community facility space, and accessory parking garage/spaces along the waterfront on the Halletts Point peninsula. In addition, shoreline hardening measures are proposed, as is an outfall at the end of 3rd Street.

This chapter examines the potential effects of the Proposed Actions on the terrestrial and aquatic natural resources and floodplains near the Project Area on Halletts Point in Astoria, Queens. Per the guidance of the *City Environmental Quality Review* (CEQR) *Technical Manual*, a natural resources assessment includes a preliminary screening of available information to identify natural and aquatic resources that may be present within the Project Area or in the vicinity of it. The natural resources assessment ultimately is concerned with determining whether there would be potential for the Proposed Actions to affect natural resources and, if so, whether any effect would amount to a significant adverse impact to those resources.

In accordance with the *CEQR Technical Manual*, this chapter will include a description of the applicable federal, state and local regulations and programs; an inventory and description of existing conditions; and an assessment of impact as a result the Proposed Actions, for the following resources:

- Groundwater
- Surface Water
- Water Quality
- Floodplains/Flood Hazard Areas
- Freshwater/Tidal Wetlands
- Coastal Resources
- Aquatic Biota
- Wildlife
- Threatened & Endangered Species/Habitats

B. PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in significant adverse impacts to groundwater, surface water, water quality, floodplains, wetlands, coastal resources, aquatic biota, wildlife or threatened or endangered species within or near the Project Area.

The proposed construction activities would not result in a net increase of fill below Mean High Water (MHW) and Spring High Water (SHW). There would be no net loss to the adjacent New York State Department of Environmental Conservation (NYSDEC) tidal wetlands or aquatic habitat. However, as a portion of the Project Area falls within a NYSDEC-regulated wetland adjacent area, approvals from NYSDEC and the U.S. Army Corps of Engineers (USACE) for the proposed shoreline hardening measures are required to raise the site. The proposed stormwater outfall proposed at 3rd Street, which would result in direct discharge of stormwater flows into the East River, would be permitted by NYSDEC and USACE, and the stormwater generated on-site would be treated for water quality prior to discharge. This activity would occur above the Spring High Water (SHW) line and would not result in the loss of tidal wetlands.

Additionally, a State Pollution Discharge Elimination System (SPDES) permit from NYSDEC would be required for stormwater discharges during the construction period because construction of the Proposed Project involves more than one acre. The stormwater management measures would improve the quality of the stormwater currently discharged into the East River. As current stormwater runoff is not treated, this is a potential benefit to the adjacent tidal wetlands and associated aquatic resources.

Coordination with NYSDEC and USACE will be conducted during the application process. If any mitigation measures for the impacts associated with the hardening activities or outfall are required, they will be determined during that time.

The buildings and associated amenities are being constructed within the 100-year floodplain. As a result, construction would comply with New York Building Code requirements. The proposed construction activities would not adversely impact the flood levels or flood risks within the Project Area or within the Halletts Point Peninsula. Street trees located within 50 feet of the Project Area are under the protection of the New York City Department of Parks and Recreation (NYCDPR), and NYCT coordination with NYCDPR would be conducted. It is anticipated that there would be minimal impacts to street trees or adjacent wildlife habitat. In addition, no threatened or endangered species are known to occur, or have the potential to occur in the vicinity of the Project Area.

Therefore, the Proposed Actions would not result in significant adverse impacts to natural resources. Without the Proposed Actions, it is anticipated that the natural resources conditions within the study area would generally resemble existing conditions.

C. METHODOLOGY

The physical and biological components of the Project Area, including geology and soil composition, groundwater levels, surface water quality, floodplains, wetlands, vegetation, wildlife habitats, and threatened/endangered animals and plants are identified and characterized. Information pertaining to biological resources is obtained from the NYSDEC Natural Heritage program, as well as secondary sources of information for New York City, as identified in the *CEQR Technical Manual*.

The natural resources assessment considers the potential impacts that would be expected to result from proposed changes to the Project Area, including any potential indirect impacts that may result to natural resources off-site, such as surrounding water bodies and naturalized areas that may provide habitat. The natural resources assessment also considers whether the Proposed Project would be compliant with applicable federal, state, and City policies pertaining to natural resources in the vicinity of the Project Area.

Study Area and Data Sources

A primary study area has been defined to include the Project Area and the area within 1/4-mile of the Project Area) (see **Figure 8-1**). This study area provides the opportunity to assess potential direct and indirect impacts off-site.

A secondary study area, delineated by a -1/4-mile radius around the Project Area, is also utilized to identify natural resources in the vicinity that either are: related to applicable federal, state, and City policies governing the management of natural resources; or, which potentially could be affected by changes occurring at the site (such as changes to surface water run-off, habitat alteration, etc.) (see **Figure 8-1**). More specifically, the secondary study area facilitates identification of ecological communities and significant habitat as part of the broader context of ecologically related natural resources, such as floodplains, water resources, and wetlands.

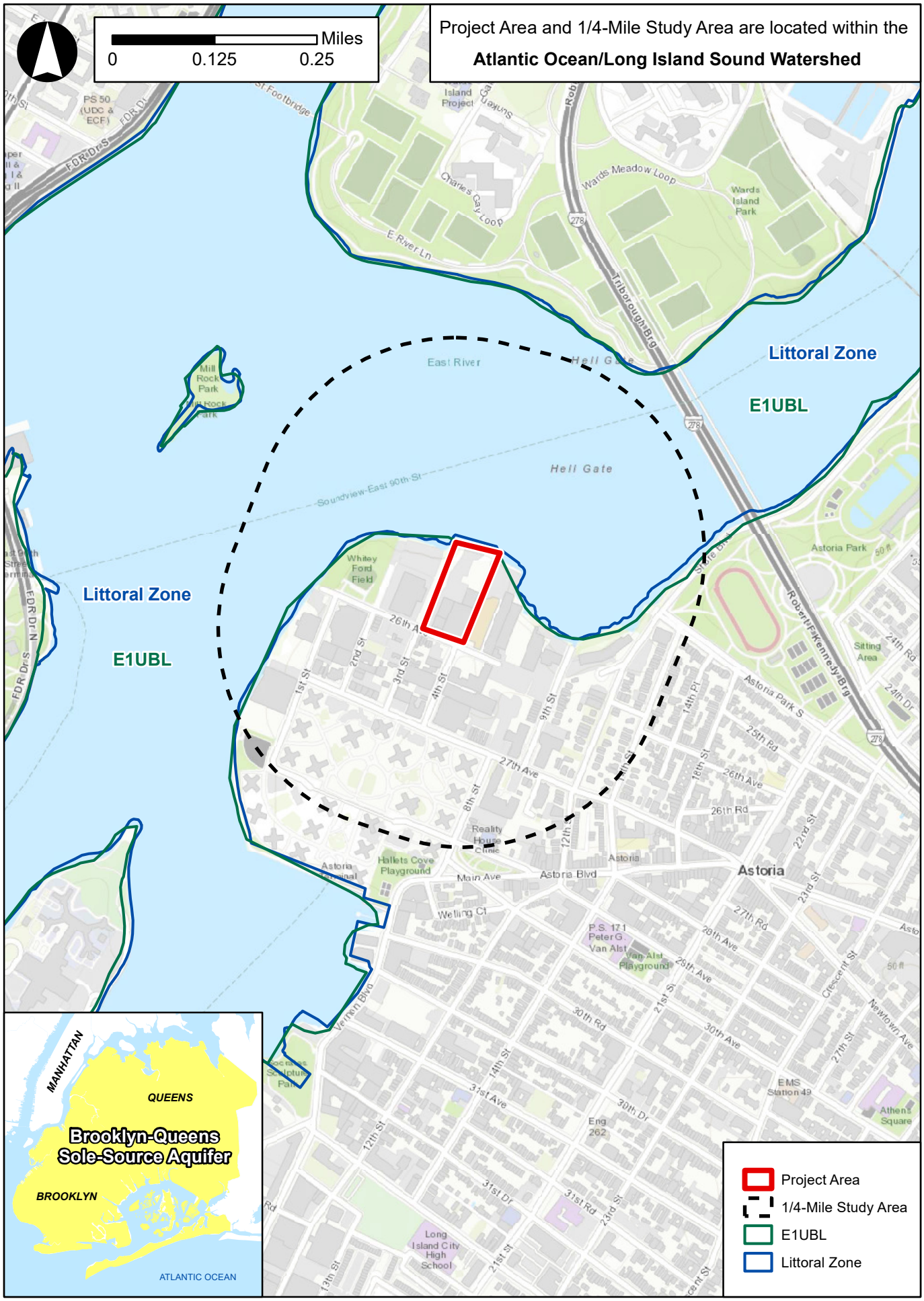
The natural resources assessment includes a review of publicly available data sources, including United States Geological Survey ("USGS") topographic mapping, United States Department of Agriculture ("USDA") soil surveys, National Wetlands Inventory ("NWI") mapping, New York State Department of Environmental Conservation ("NYSDEC") coastal wetlands mapping, NYSDEC freshwater wetlands mapping, USGS water resource mapping, data from NYSDEC's Environmental Mapper (GIS), Federal Emergency Management Agency ("FEMA") floodplain mapping, and available aerial photography. In addition, coordination with the NYSDEC Natural Heritage Program and the U.S. Fish and Wildlife Service has been conducted to identify potential impacts resulting from the Proposed Actions to endangered, threatened, or special concern terrestrial species in the study area.

D. REGULATORY CONTEXT

Various federal and state agencies, as well as local agencies, promulgate programs that relate to the management of natural resources and, as such, provide regulatory context applicable to the assessment of natural resources for the Proposed Project, as presented below:

FEDERAL

- ***Presidential Executive Order 11990*, entitled "Protection of Wetlands,"** requires any projects requiring permits from federal agencies, including the U.S. Army Corps of Engineers, to protect wetlands to the fullest extent possible. This Executive Order has resulted in the promulgation of both state and federal regulations governing disturbance to wetlands.
- ***The Clean Water Act* of 1972** was enacted to restore and maintain the chemical, physical, and biological integrity of the waters of the United States. It regulates point sources of water pollution, such as discharges of municipal sewage, industrial wastewater, and stormwater, and the discharge of dredged or fill material into navigable waters and other waters including wetlands.
- ***Presidential Executive Order 11988* entitled "Floodplain Management"** requires Federal agencies to avoid, to the extent possible, the long-term and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. FEMA has the primary federal jurisdiction for administration of EO 11988. FEMA guidance for compliance with EO 11988 is found at 44 CFR 9.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; NYC OpenData, 2020; NYC GIS Clearinghouse, 2020.

- ***Presidential Executive Order 13690*** **entitled "Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input"** amended EO 11988 and established the Federal Flood Risk Management Standard (FFRMS) to improve the nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other threats. EO 13690 reinforces the important concepts outlined in EO 11988, such as avoiding adverse impacts in a floodplain and minimizing potential harm if an action must be located in a floodplain. EO 13690 and the FFRMS expand upon these tenets and concepts by requiring agencies to use a higher vertical flood elevation and corresponding horizontal floodplain than the base flood for federally funded projects to address current and future flood risk and so that projects last as long as intended.
- **The *Endangered Species Act of 1973*** recognizes that endangered species of wildlife and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people. This Act provides for the protection of critical habitats on which endangered or threatened species depend for survival.

NEW YORK STATE

- **The New York State *Tidal Wetlands Act*** (pursuant to ECL Article 25) applies anywhere tidal inundation occurs on a daily, monthly, or intermittent basis. In New York, tidal wetlands occur along the tidal waters of the Hudson River up to the salt line and along the saltwater shore, bays, inlets, canals, and estuaries of Long Island, New York City, and Westchester County. NYSDEC administers the tidal wetlands regulatory program and the mapping of the state's tidal wetlands. A permit is required for almost any activity that would alter wetlands or their buffer zones, otherwise known as "Adjacent Areas" (up to 150 feet inland within New York City).

- **The New York State *Freshwater Wetlands Act*** (pursuant to ECL Article 24) applies to those non-tidally-influenced wetlands within the State of New York that are identified and mapped by the NYSDEC (generally those wetlands greater than 12.4 acres in size). NYSDEC administers the freshwater wetlands regulatory program and the mapping of the freshwater wetlands in New York. A freshwater wetlands permit is required for almost any activity that would alter freshwater wetlands or their adjacent areas (up to 100 feet inland).
- **The *State Pollutant Discharge Elimination System*** ("SPDES") was created to regulate discharges to the State's waters to protect and maintain surface and groundwater resources. The following activities require SPDES permits constructing or using an outlet or discharge pipe (point source) that discharges wastewater into surface or groundwater of the State; constructing or operating a disposal system (sewage treatment plant); discharge of stormwater; or, any industrial activity. Construction activities that disturb one acre or more also must obtain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity.

- ***Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern*** *(ECL, Sections 11-0535[1]-[2], 11-0536[2], [4], Implementing Regulations 6 Part NYCRR 182).* The Endangered and Threatened Species of Fish and Wildlife, Species of Special Concern Regulations prohibit the taking, import, transport, possession, or selling of any endangered or threatened species of fish or wildlife, or any hide or other part of these species as listed in 6 NYCRR Part 182.6. Under these regulations, adverse modification of occupied habitat of endangered or threatened species is prohibited without authorization from NYSDEC.

- ***Waterfront Revitalization of Coastal Areas and Inland Waterways Act*** *(Sections 910-921, Executive Law, Implementing Regulations 6 NYCRR Part 600 Et. Seq).* The Waterfront Revitalization of Coastal Areas and Inland Waterways Act offers local governments the opportunity to participate in the State's Coastal Management Program (CMP), on a voluntary basis, by preparing and adopting local waterfront revitalization programs (LWRP) providing more detailed implementation of the State's CMP through use of existing broad powers such as zoning and site plan review. When an LWRP is approved by the New York State Secretary of State, State agencies' actions must be consistent with the approved LWRP to the maximum extent practicable. When the Federal government concurs with the incorporation of an LWRP into the CMP, Federal agencies' actions must be consistent with the approved addition to the CMP.
    - 19 NYCRR Part 600, 601, 602, and 603 provide the rules and regulations that implement each of the provisions of the Waterfront Revitalization of Coastal Areas and Inland Waterways Act including, but not limited to, the required content of an LWRP, the processes of review and approval of an LWRP, or LWRP amendments.
    - The New York City Waterfront Revitalization Program (WRP) is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. The NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and Federal authorities (i.e. the USACE and the USFWS) adopted the City's ten WRP policies for most of the properties located within its boundaries. In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in Vision 2020: The New York City Comprehensive Waterfront Plan, released in 2011. The changes solidify New York City's leadership in the area of sustainability and climate resilience planning as one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. They also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure, and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP. **Chapter 2, "Land Use, Zoning, & Public Policy,"** includes a discussion of the Proposed Project's consistency with New York City's WRP.

LOCAL

- The New York City Department of Parks and Recreation ("NYCDPR") has implemented the **"Forever Wild" Program** to protect the City's most ecologically important areas. Through this program, NYCDPR designates "Forever Wild" nature preserves that, as part of the City parks system, typically are available for public enjoyment.

- ***New York City Street Tree Zoning Amendment and Local Law 3 of 2010****.* The City of New York passed a zoning text amendment that requires trees to be planted along the curb of City

streets following the construction of new buildings and certain types of alterations citywide. All applicants must apply to the New York City Department of Parks and Recreation (DPR) for street tree planting permits. The current zoning requires all new buildings and all enlargements exceeding 20 percent of the floor area to have one tree for every 25 feet of road frontage, including existing trees. Like other zoning rules, these requirements must be satisfied in order for the builder to obtain a Certificate of Occupancy. Species shall be selected from the list of approved street trees for New York City. The methodology used to determine the number and size of trees to be replanted (e.g., caliper replacement method) is determined in consultation with DPR in accordance with this zoning amendment and local law and Chapter 5 Title 56 of the Rules of the City of New York (RCNY).

- ***Flood Resilience Zoning Text Amendment***. The City of New York passed a zoning text amendment to encourage flood-resilient building construction throughout designated flood zones. The changes are needed in order to remove regulatory barriers that would hinder or prevent the reconstruction of storm-damaged properties. The amendment enables new and existing buildings to comply with new, higher flood elevations issued by FEMA and new requirements to the New York City Building Code. Building to these new standards will reduce vulnerability to future floods and help avoid higher flood insurance premiums.

Local Law 15 of 2020, Bird Friendly Building Design and Construction Requirements. The New York City Council adopted Local Law 15 of 2020, which requires that materials that reduce bird strike fatalities be installed on newly constructed or altered buildings. The Local Law, effective January 10, 2021, amends the New York City Administrative Code (AC) and the New York City Building Code (BC) to mandate the use of bird friendly materials in exterior walls, balconies, parapets, and other similar locations. Projects filed on or after January 10, 2021, will be required to use bird-friendly materials in all new buildings, and where alterations of buildings include the replacement of all exterior glazing.

E. EXISTING CONDITIONS

Per the guidance of the *CEQR Technical Manual*, the natural resources assessment considers subsurface and surface conditions in the Project Area and vicinity, including geology, soils, groundwater, surface waters, wetlands, floodplains, vegetative communities, wildlife habitat, as well as threatened and endangered species habitat.

GROUNDWATER AND AQUIFERS

The Brooklyn-Queens Aquifer System, which underlies the Project Area, is designated by United States Environmental Protection Agency ("USEPA") as *a* Sole Source Aquifer ("SSA"). (Please refer to **Figure 8-1: Water Resources and Wetlands**). By definition, an SSA is an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer; however, groundwater is not currently utilized for the potable water supply in the Project Area or in this part of New York City.

The average depth to bedrock on the proposed site area is less than 100 feet. There are no rock outcroppings or unique geological features in the Project Area or in the study area. The predominant soil types present in the Project Area are "Urban land, reclaimed substratum of 0 to 3 percent slopes" (UrA) which is an urban soils. Urban soils are primarily made up of fill soils and tend to be compacted.

FLOODPLAINS

According to the FEMA Flood Insurance Rate Maps (FIRM), the Project Area is located within the designated 100- year flood and 500-year flood zone. As shown in **Figure 8-2: Flood Zones**, over half of the Project Area is located within the 100-year flood zone. The 100-year flood zone refers to an area with a one percent chance of flooding every year, whereas the 500-year flood zone identifies areas with a two percent chance of flooding. According to FEMA designations, the 100-year floodplain is Zone AE, which is defined as a high-risk area, and the 500-year flood zone is designated as Zone X. This area has a flood elevation of 12 to 14 feet based on the North American Vertical Datum of 1988 (NAVD88). This equated to an approximated mean sea level.

SURFACE WATERS AND WETLANDS

The Project Area is located within the Atlantic Ocean/Long Island Sound Watershed, which drains most of the New York City Metropolitan Area and all of Long Island. However, no surface water bodies or NWI/NYSDEC mapped wetlands are located on or adjacent to the Project Area.

The Project Area is located adjacent to the East River on the northeast quadrant, as shown on **Figure 8-1: Water Resources and Wetlands**. Aerials show that the East River shoreline is covered in riprap and weedy vegetation

The East River has a Cowardin classification of "estuarine subtidal wetlands with an unconsolidated bottom (E1UBL)" according to the U.S. Fish and Wildlife Service National Wetland Inventory (NWI) mapping, and as shown in **Figure 8-1: Water Resources and Wetlands**.

NYSDEC mapping indicated that the East River is classified as Littoral Zone, which is considered a tidal wetland. The littoral zone wetlands are shallow waters that are less than 6-feet in depth at Mean Low Water (MLW). According to studies, NYSDEC has jurisdiction to an elevation of teen feet above the Mean High Tide, which according to the Astoria Cove EIS (September 2014), is the height of the Project Area's waterfront embankment. The northeast quadrant of the Project Area abuts this habitat.

WATER QUALITY

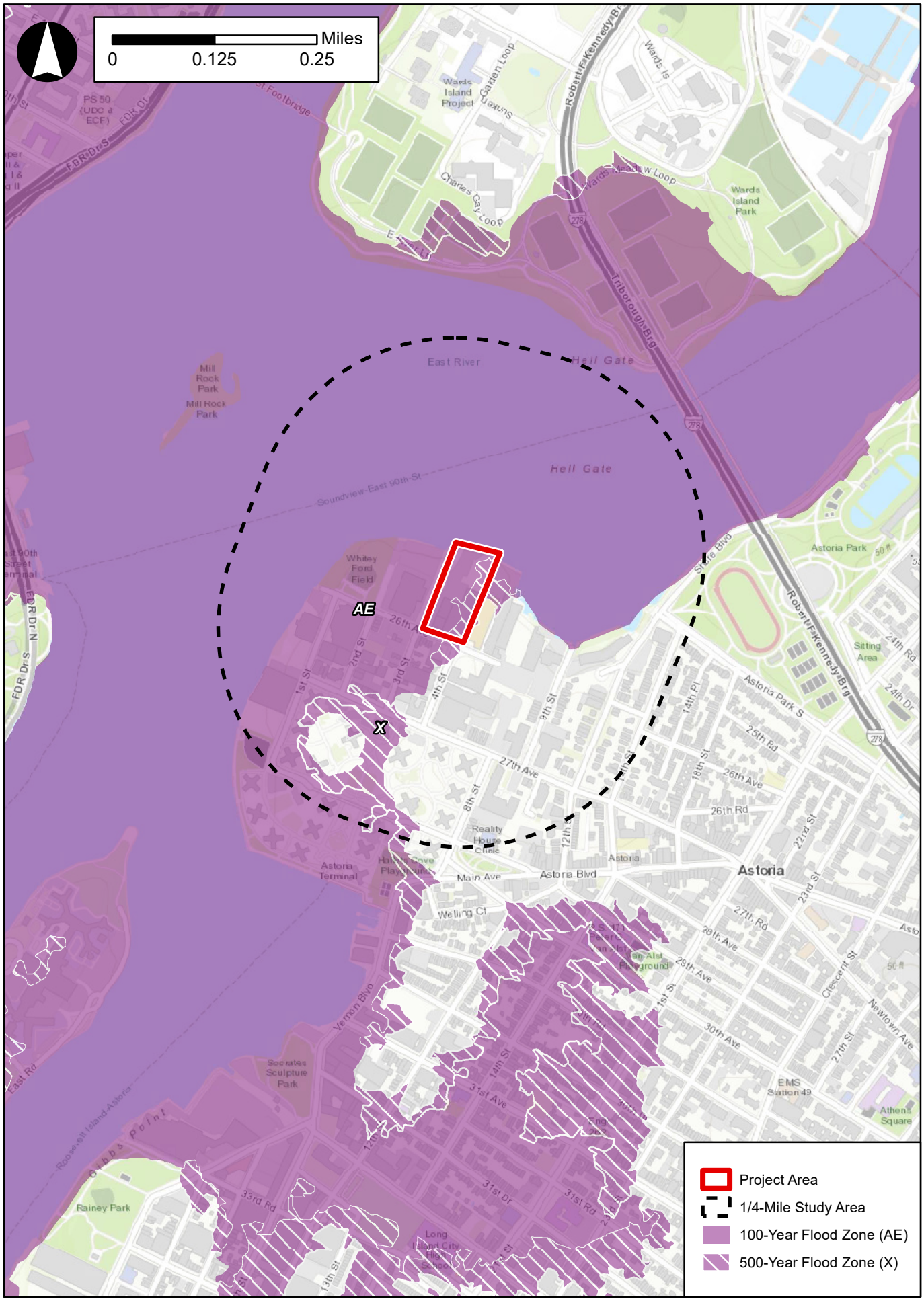
According to the NYSDEC Mapper, the East River has a Use Classification 1 for marine waters, which identifies the best usage is for secondary contact and fishing. Based on the NYCDEP 2018 New Harbor Water Quality Report, New York has invested more than $12 billion over the last decade to improve water quality in the New York Harbor. According to the report, there are 26 Harbor Survey monitoring stations in the East River-Long Island Sound area, which represents the northeast portion of New York Harbor. The pollution load of the waters in these areas are similar and are part of the Long Island Sound Estuary Program, which is focused on management of the waterways. Overall water quality in the region has improved in many of the performance metrics.

AQUATIC BIOTA

In addition, NYSDOS Office of Planning and Development identifies and maps "Significant Coastal Fish and Wildlife Habitat" (SCFWH) in the State of New York. In order to be listed as a SCFWH, NYSDEC evaluates the significance of coastal fish and wildlife habitat areas and, following a recommendation from NYSDEC,

Figure 8-2

Flood Zones



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; NYC OpenData, 2020; NYC GIS Clearinghouse, 2020.

NYSDOS designates and maps specific areas as SCFWH. No SCFWH are identified on or immediately adjacent to the Project Area.

The shallow shorelines of the East River result in limited habitat for finfish and other aquatic biota for spawning, migration and nursery/foraging areas. There is limited light penetration and extensive development along the shorelines of the East River, which results in limited submerged aquatic vegetation (SAV). SAV is a primary habitat for foraging fish, and therefore there are limited species inhabiting the waters adjacent to the Project Area. Phytoplankton and macro-algae have been identified in the East River. The most common varieties of finfish are those that that are typical of coastal estuaries and waterways, such as black sea bass (*Cetropristis striata*), carp (*Cyprinus carpio*), catfish (*Siluriformes*), and white perch (*Morone americana*).

WILDLIFE

The Project Area is comprised of urban, manmade landscapes. The terrestrial ecology of the area is limited to the riprap lakeshore, street front areas and urban lots. Vegetation in the area consist of grassed and vegetation that grows in dry waste areas and invasive exotic species that thrive in disturbed landscapes.

There is no natural wildlife habitat in the Project Area. Species that have adapted to urban conditions, such as raccoons (*Procyon lotor*) and other creatures would be the primary residents in the Project Area and surrounding area. This would apply to bird species as well. With no primary habitat for birds, species such as pigeons (*Columbia* spp.), sparrows (*Passer* spp.) and European starlings (*Sturnus vulgaris*) would be the most likely to be found within the Project Area.

THREATENED, ENDANGERED, AND SPECIAL CONCERN SPECIES AND SIGNIFICANT HABITAT AREAS

The USFWS Information, Planning and Consultation (IPaC) web identified the piping plover (*Charadrius melodus,* threatened), red knot (*Calidris canutus rufa,* endangered), roseate tern (*Sterna dougallii dougallii*, endangered) and the seabeach amaranth (*Amaranthis pumilus*, threatened) as occurring in or near the Project Area. There are no habitats that would support these species located within the Project Area. Consultation with USFWS confirms that there is "No Affect" to the identified species as a result of the Proposed Project. As noted above, consultation with the NYSDEC Natural Heritage Program indicated that the Project Area is located within the Rare Plants and Rare Animals layer. As a result, coordination with NYSDEC is being conducted, see **Appendix D: Natural Resources Agency Correspondence** for all correspondence**.**

The NYSDEC Natural Heritage Program refers to different types of habitats or ecosystems as "natural ecological communities." The NYSDEC Natural Heritage Program documents only those locations of natural communities where the community type is rare in New York State or, for more common community types, where the community at that location is a high-quality example and meets specific, documented criteria for state significance in terms of size, undisturbed and intact condition, and the quality of the surrounding landscape. These documented natural communities are identified by NYSDEC as "Significant Natural Communities of New York State," and may include areas of rare or high-quality wetlands, forests, grasslands, ponds, streams, and other types of habitats, ecosystems, and ecological

areas. Consultation with the NYSDEC Natural Heritage Program indicated that there the Project Area is located within the Rare Plants and Rare Animals layer. As a result, coordination with NYSDEC is being conducted, see **Appendix D: Natural Resources Agency Correspondence.**

F. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

It is assumed that in the future without the Proposed Actions, Projected Development Site 1 would be developed as a warehouse use. The existing M1-1 zoning permits a 1.0 FAR for manufacturing and commercial uses. It is assumed that Projected Development Site 1 would be developed with a 2-story 172,612 gsf warehouse and 82 accessory parking spaces.

Under the No-Action condition, it is assumed that the existing vacant warehouse building on Projected Development 2 would be re-occupied with 28,750 gsf of warehouse uses and 14 accessory parking spaces.

Groundwater and Floodplain

In the future without the Proposed Actions, it is anticipated that the Projected Development Sites would be developed with as-of-right warehouse uses. Any development that would occur within the Project Area in the future without the Proposed Actions would be designed and constructed in accordance with all applicable City and State flooding and erosion regulations, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones").True floodplain boundaries may extend further inland than currently mapped as a result of projected rises in sea level caused by global climate change, but, overall, floodplains as well as groundwater within the Project Area are expected to remain largely unchanged.

Water Quality and Aquatic Biota

In the No-Action condition, water quality in the East River is expected to continue gradually improving as a result of several initiatives. Examples include the East River and Open Waters Waterbody/Watershed Facility Plan developed as part of the citywide Long Term Control Plan (LTCP) to address combined sewer overflow (CSO) discharges, Vision 2020, and the NYC Green Infrastructure Plan. Improved water quality in the East River that is expected as a result of these and other initiatives should improve living conditions for aquatic biota and potentially allow more pollution-intolerant species to occur in the river. Overall, however, communities of aquatic biota within the East River in the No-Action condition are expected to be largely composed of the same species as at present.

Terrestrial Ecological Communities, Vegetation, and Wildlife

Terrestrial natural resources within the study area are not expected to change in the No-Action condition. Although the Project Area is anticipated to be developed with as-of-right warehouse uses in the No-Action condition, this area is composed of vacant dirt areas and a vacant warehouse building. As such, no terrestrial natural resources would be disturbed in the No-Action condition.

G. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

The Proposed Actions would result in waterfront redevelopment that would consist of residential, retail, community facility uses, as well as publicly accessible open space, and infrastructure improvements, including installation of a new stormwater outfall, new sanitary and storm sewers, and construction of a waterfront esplanade. The new stormwater outfall would convey runoff from the Project Area to the East River following treatment for quality. Treatment methods would be designed to meet NYSDEC requirements for water quality (e.g., removal of at least 80 percent of total suspended solids) for discharge of stormwater to the East River. Examples of methods that would be considered include gravel infiltration beds beneath the boardwalk, hydrodynamic separators, and in-line filters. The location of the proposed outfall and the area it would serve are discussed in further detail in **Chapter 10, "Water and Sewer Infrastructure."**

Erosion and sediment control and stormwater management measures implemented post-construction would be in accordance with the SWPPP developed for the Proposed Project. Green infrastructure practices, such as bioswales, rain gardens, or rainwater collection and reuse, would be considered for inclusion as part of the SWPPP to the extent practical. In the event that construction dewatering is necessary, the recovered groundwater would be treated in accordance with NYSDEC and/or DEP requirements prior to being discharged to the East River or the DEP storm sewer. A Long Island Well Permit would be requested as necessary, depending on the rate of groundwater withdrawal.

Groundwater

Construction and Operation

The development that would occur as a result of the Proposed Actions would adhere to all applicable rules and regulations governing groundwater. Consequently, significant adverse impacts to groundwater would not occur as a result of construction or operation of the Proposed Project or projected development. Because groundwater is not used as a potable water supply in the area, there would be no potential impacts to drinking water supplies. The Proposed Project and projected development would also receive local drainage and runoff approvals for use of municipal water and sewer.

Floodplains

Construction and Operation

As discussed above in "Existing Conditions," the Project Area is located within the designated 100- year flood and 500-year flood zone. As shown in **Figure 8-2**, over half of the Project Area is located within the 100-year flood zone. Because the floodplains within and adjacent to the Project Area are affected by coastal flooding rather than local or fluvial flooding, the construction and operation of the Proposed Project and projected development would not exacerbate flooding conditions on or near the Project Area. Coastal floodplains are influenced by astronomic tide and meteorological forces (e.g., northeasters and hurricanes) rather than fluvial flooding and are therefore not affected by the placement of obstructions (e.g., buildings) within the floodplain. Development of the Proposed Development and projected development would not result in significant adverse impacts to flood levels, flood risk, or the flow of flood waters within the project site or in other portions of the Halletts Point peninsula.

The design and construction of the Proposed Project and projected development would comply with the current and any future changes in the New York City Building Code requirements, the flood resilience zoning text amendment for construction within the 100-year floodplain for the applicable building category, and any future changes in the floodplain zones designated by FEMA (including the preliminary FIRMs). As discussed in detail in **Chapter 2, "Land Use, Zoning, and Public Policy,"** under the currently contemplated plans, the finished floor elevations for the all residential, retail, and community facility uses and the mechanical/electrical/plumbing spaces for the Proposed Project would be above the currently applicable FEMA FIRMs 100-year flood elevation. Therefore, the Proposed Actions would minimize the potential for public and private losses due to flood damage and reduce the exposure of public utilities to flood hazards. The Proposed Project and projected development would be designed and constructed in accordance with all applicable City and State flooding and erosion regulations, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones").

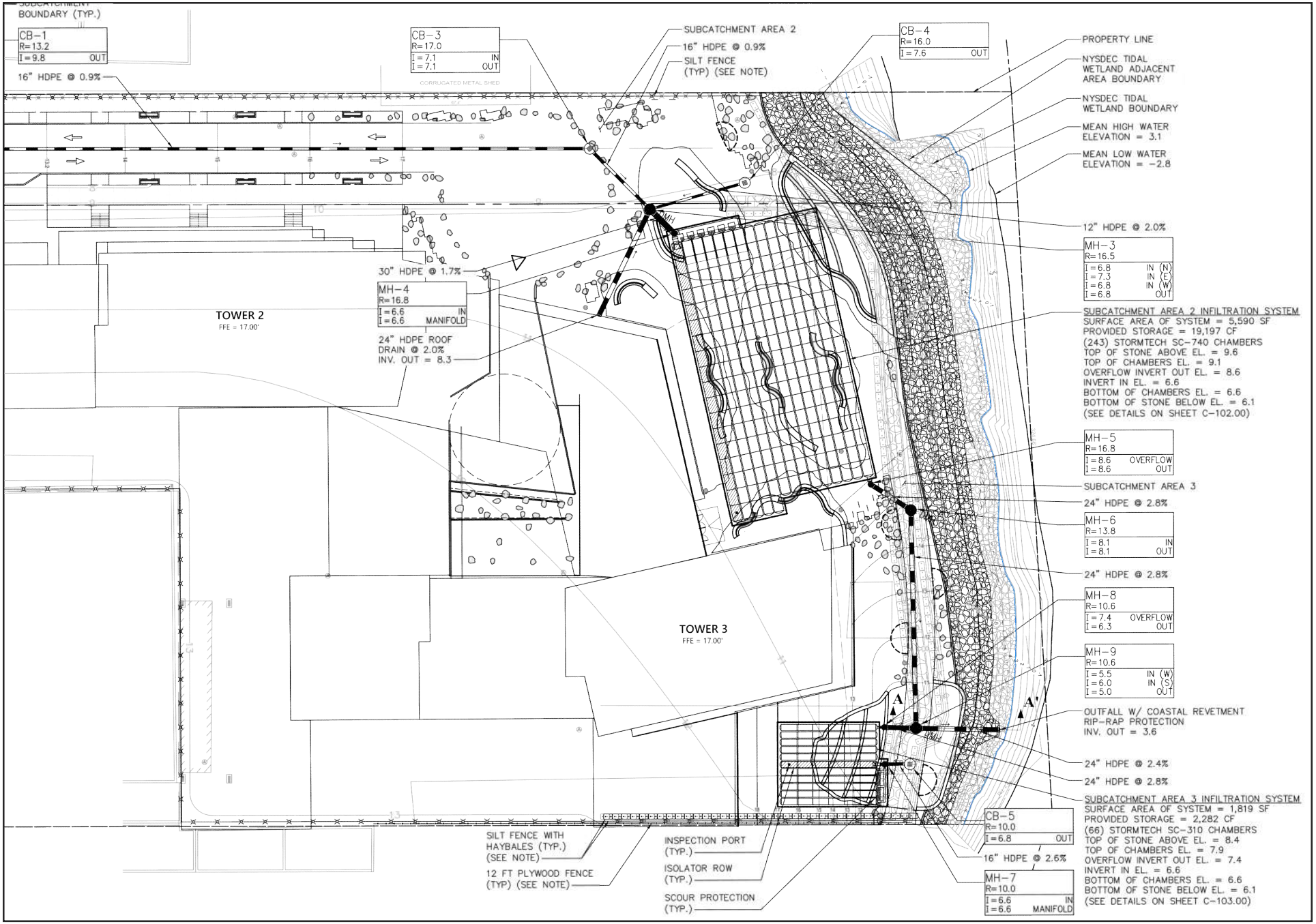
Wetlands and Aquatic Resources

Construction

As indicated in **Figure 8-3**, the portions of the proposed waterfront open space that would extend into the tidal wetland adjacent area are limited to the shoreline riprap. Proposed construction activities that would be located within the tidal wetlands adjacent area include: construction of a new stormwater outfall and the replacement of portions of the existing riprap in-kind, as necessary. These activities would not result in a net increase in fill below SHW or MHW or a change in shoreline configuration that would result in loss of NYSDEC littoral zone tidal wetlands. No net fill would be involved in the replacement of the existing riprap. In addition, the new stormwater outfall would be constructed above the SHW elevation and would not have the potential to adversely affect aquatic resources.

Further discussions will be held with the NYSDEC during the NYSDEC application process. At that time, additional measures may be incorporated either on- or off-site to eliminate the potential for significant adverse impacts to NYSDEC littoral zone tidal wetlands, if deemed necessary. With the implementation of such measures, there would be no significant adverse impacts to NYSDEC littoral zone tidal wetlands, water quality, or aquatic biota as a result of the Proposed Actions.

The Proposed Project would be covered under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-10-001. To obtain coverage under this permit, a SWPPP would be prepared and a Notice of Intent NOI would be submitted to NYSDEC. The SWPPP would comply with all of the requirements of GP-0-10-001, NYSDEC's technical standard for erosion and sediment control, presented in "New York Standards and Specifications for Erosion and Sediment Control," and NYSDEC's Stormwater Management Design Manual. Implementation of erosion and sediment control measures and stormwater management measures identified in the SWPPP would minimize potential impacts on littoral zone tidal wetlands and aquatic resources along the edges of the Project Area associated with discharge of stormwater runoff during land-disturbing activities resulting from construction of the Proposed Project.


BOUNDARY (TYP.)
CB-1
R=13.2
I=9.8 OUT
16" HDPE @ 0.9%
CB-3
R=17.0
I=7.1 IN
I=7.1 OUT
SUBCATCHMENT AREA 2
16" HDPE @ 0.9%
SILT FENCE
(TYP) (SEE NOTE)
CB-4
R=16.0
I=7.6 OUT
PROPERTY LINE
NYSDEC TIDAL
WETLAND ADJACENT
AREA BOUNDARY
NYSDEC TIDAL
WETLAND BOUNDARY
MEAN HIGH WATER
ELEVATION = 3.1
MEAN LOW WATER
ELEVATION = -2.8
12" HDPE @ 2.0%
MH-3
R=16.5
I=6.8 IN (N)
I=7.3 IN (E)
I=6.8 IN (W)
I=6.8 OUT
30" HDPE @ 1.7%
MH-4
R=16.8
I=6.6 IN
I=6.6 MANIFOLD
TOWER 2
FFE = 17.00'
24" HDPE ROOF
DRAIN @ 2.0%
INV. OUT = 8.3
SUBCATCHMENT AREA 2 INFILTRATION SYSTEM
SURFACE AREA OF SYSTEM = 5,590 SF
PROVIDED STORAGE = 19,197 CF
(243) STORMTECH SC-740 CHAMBERS
TOP OF STONE ABOVE EL. = 9.6
TOP OF CHAMBERS EL. = 9.1
OVERFLOW INVERT OUT EL. = 8.6
INVERT IN EL. = 6.6
BOTTOM OF CHAMBERS EL. = 6.6
BOTTOM OF STONE BELOW EL. = 6.1
(SEE DETAILS ON SHEET C-102.00)
MH-5
R=16.8
I=8.6 OVERFLOW
I=8.6 OUT
SUBCATCHMENT AREA 3
24" HDPE @ 2.8%
MH-6
R=13.8
I=8.1 IN
I=8.1 OUT
24" HDPE @ 2.8%
MH-8
R=10.6
I=7.4 OVERFLOW
I=6.3 OUT
MH-9
R=10.6
I=5.5 IN (W)
I=6.0 IN (S)
I=5.0 OUT
TOWER 3
FFE = 17.00'
A
A'
OUTFALL W/ COASTAL REVETMENT
RIP-RAP PROTECTION
INV. OUT = 3.6
24" HDPE @ 2.4%
24" HDPE @ 2.8%
SUBCATCHMENT AREA 3 INFILTRATION SYSTEM
SURFACE AREA OF SYSTEM = 1,819 SF
PROVIDED STORAGE = 2,282 CF
(66) STORMTECH SC-310 CHAMBERS
TOP OF STONE ABOVE EL. = 8.4
TOP OF CHAMBERS EL. = 7.9
OVERFLOW INVERT OUT EL. = 7.4
INVERT IN EL. = 6.6
BOTTOM OF CHAMBERS EL. = 6.6
BOTTOM OF STONE BELOW EL. = 6.1
(SEE DETAILS ON SHEET C-103.00)
CB-5
R=10.0
I=6.8 OUT
16" HDPE @ 2.6%
MH-7
R=10.0
I=6.6 IN
I=6.6 MANIFOLD
SILT FENCE WITH
HAYBALES (TYP.)
(SEE NOTE)
12 FT PLYWOOD FENCE
(TYP) (SEE NOTE)
INSPECTION PORT
(TYP.)
ISOLATOR ROW
(TYP.)
SCOUR PROTECTION
(TYP.)

Operation

Operation of the Proposed Project is not expected to result in long-term significant adverse impacts to existing NYSDEC-designated tidal wetland adjacent areas or aquatic resources within the East River. Implementation of the SWPPP developed for Projected Development Site 1 would minimize potential impacts to existing NYSDEC-designated tidal wetland adjacent area, water quality, and aquatic biota. Some runoff from the Project Area currently enters the East River untreated. In instances of heavy combined flows (i.e., storm events) a portion of the combined flow is discharged untreated to the East River outfall via existing combined sewer overflow (CSO) outfalls. The new stormwater outfall would convey runoff from the Project Area to the East River following treatment for quality, reducing the potential impacts to NYSDEC tidal wetland adjacent area and aquatic resources due to the discharge of runoff from the Project Area. Stormwater management measures implemented as part of the Proposed Project would regulate the rate at which runoff is discharged to adjacent storm sewers and then to the East River through the proposed outfall. Green infrastructure practices, such as bioswales, rain gardens, or rainwater collection and reuse would be considered for inclusion as part of the SWPPP to the extent practical. Overall, discharge of runoff from the Project Area to the East River due to the Proposed Actions would not result in significant adverse impacts to the NYSDEC tidal wetland adjacent areas or aquatic resources, and project operation may slightly improve water quality and habitat conditions for aquatic biota by capturing stormwater that presently enters the river from the Project Area untreated.

In addition, no shading of the river would occur as a result of the proposed esplanade. During operation of the Proposed Project, the esplanade would not result in significant adverse impacts to East River water quality, aquatic biota, or areas regulated as littoral zone tidal wetland. As discussed in **Chapter 6, "Shadows,"** the proposed buildings would cast shadows on the East River. However, as further discussed in Chapter 6, the East River experiences only limited utilization by fish at various times of the year due to its swift currents, lack of shoals and protected habitat, and poor water quality. Therefore, incremental shadows cast by the Proposed Project would not be large enough in extent or long enough in duration to significantly increase the shading of aquatic habitats and fish populations, and the Proposed Project would not have an adverse shadow impact on this resource.

Terrestrial Ecological Communities and Vegetation

Construction

The Project Area contains vacant land and a vacant warehouse building. No terrestrial ecological communities or vegetation are present within the Project Area. Therefore, the Proposed Actions would not result in the loss of any terrestrial ecological communities or vegetation during construction.

Operation

Operation of the Proposed Project would not have any adverse impacts to terrestrial ecological communities or vegetation. A landscaping plan developed for the Proposed Project would incorporate several native plant species that currently do not occur on the Project Area. Native plants used in the landscaping plans could benefit some species of wildlife, including insects and songbirds. The proposed landscaping along the shoreline would increase the ecological community and plant diversity on the project site by adding coastal plants representative of an estuarine tidal system.

Wildlife

Construction

Construction of the Proposed Project and projected development would not have significant adverse impacts to wildlife at either the individual or population level. The terrestrial wildlife habitat in the area is presently extremely limited, as the Project Area consists of vacant land and a vacant warehouse building. As such, the Proposed Actions would not eliminate or degrade quality wildlife habitat. Overall, construction of the Proposed Project and projected development would not have significant adverse impacts to wildlife or wildlife habitat within the Project Area or in the surrounding area.

Operation

Operation of the Proposed Project and projected development would not result in significant adverse impacts to wildlife resources. The Proposed Project would result in habitats for wildlife and would thus support native wildlife species. Examples include gray squirrel, rock pigeon, house sparrow, and European starling. Increases in human activity that would occur as a result of the Proposed Actions would not be expected to adversely affect wildlife because wildlife in the area is limited to disturbance-tolerant, urban-adapted species. The proposed waterfront landscaping would have the potential to increase the abundance of the habitat available for urban tolerant wildlife species currently present within the study area.

Bird Collisions

As the Proposed Actions would result in the development of three large residential towers located along the water, this could potentially increase the frequency of bird collisions at the Project Area.

Most passerine species migrate at night. Over land, they usually fly at 2,100 to 2,400 feet. Over water, migration takes place at a much higher altitude, from 6,000 to 12,000 feet. Weather conditions often affect the migratory altitude as birds may fly higher or lower to avoid or take advantage of prevailing winds.[1] The Proposed Actions would result in new buildings ranging in height from 150 to 350. As such, none of the proposed buildings would extend into the air space commonly used by migrating birds.

Daytime collisions of birds with lower story reflective glass windows of buildings commonly occur throughout New York City.[2] The landscaped habitat that would be available within the Project Area would be used mostly by common, resident bird species (e.g., European starling, house sparrow, rock dove) that seldom collide with windows relative to migrants. The landscaped habitats resulting from the Proposed Actions would not represent highly attractive stopover habitat that would concentrate migrants, and, therefore, large numbers of migrants would not be expected to occur in proximity to the proposed buildings and be at risk of daytime collisions. Further, the Proposed Project would be fully compliant with Local Law 15 of 2020 requiring "bird friendly" materials on the building's exterior to further reduce collision hazards.

[1] http://www.birds.cornell.edu/AllAboutBirds/studying/migration/pathways

[2] Gelb, Y., and N. Delacretaz. 2006. Avian window strike mortality at an urban office building. Kingbird 56(3):190-198.

Threatened, Endangered, and Special Concern Species and Significant Habitat Areas

As discussed under "Existing Conditions," the USFWS Information, Planning and Consultation (IPaC) website identified the piping plover (*Charadrius melodus,* threatened), red knot (*Calidris canutus rufa,* endangered), roseate tern (*Sterna dougallii dougallii*, endangered) and the seabeach amaranth (*Amaranthis pumilus*, threatened) as occurring in or near the Project Area. There are no habitats that would support these species located within the Project Area. Consultation with USFWS confirms that there is "No Affect" to the identified species as a result of the Proposed Actions.

Overall, the Proposed Actions would not result in any significant adverse impact to threatened, endangered, and special concern species and significant habitat areas.

H. CONCLUSIONS

The Proposed Project would ensure that the appropriate management of solid waste and sanitary wastewater generated, and stormwater would be appropriately managed on-site as part of a separate sewerage system (e.g., separate wastewater and stormwater sewers) serving the Project Area and surrounding area. Therefore, the Proposed Project would not result in significant adverse impacts to groundwater (e.g., the Brooklyn-Queens Sole Source Aquifer) or to the East River.

As a portion of the Project Area falls within a NYSDEC-regulated wetland adjacent area, the Proposed Project would require approvals from NYSDEC and the USACE for the proposed shoreline hardening measures required to raise the site. In addition, a new stormwater outfall is proposed to be located at 3rd Street to enable direct discharge of stormwater flows into the East River. The outfall would be permitted by NYSDEC and USACE, and the stormwater generated on-site would be treated for water quality prior to discharge.

It is anticipated that the Proposed Project's construction activities would disturb more than one acre and, therefore, would need to meet standards for coverage under the SPDES General Permit. A SWPPP will be prepared. A SWPPP typically includes a description and detail of the erosion and sediment control measures during construction; post-construction stormwater management strategies; and, periodic certifications, inspections, and reporting (if required). With these measures in place, no significant adverse impacts to water resources would result during or following construction.

It will be confirmed that no biological resources are present in the Project Area. Therefore, no direct effect to natural resources would be expected with the Proposed Actions, which is limited to the Project Area. Further, given that the Proposed Actions would not result in any significant adverse impacts to water quality, surface water bodies, or wetlands, either during construction or operation, the Proposed Actions would not result in significant adverse impacts to habitat areas related to water bodies and wetlands. As such, the Proposed Actions would not result in significant adverse impacts on plant and animal species of concern, significant habitats, or ecologically related areas and, therefore, would not result in significant adverse impacts to natural resources.

In summary, the Proposed Actions would not result in any significant adverse impacts related to natural resources, and it would be consistent with all applicable policies related to natural resources. No further analysis of natural resources is warranted.