

**Draft Scope of Work for a  
Draft Environmental Impact Statement  
Matrix Global Logistics Park West Campus**

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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 a proposed warehouse/logistics center development, located near the intersection of Gulf Avenue and Frank W Gay Boulevard in Staten Island, New York City (the “proposed action”). The applicant, Matrix Staten Island Western Parcel Development, LLC (“Matrix”) is proposing the development of a warehouse/logistics center on the property located at 530-534 Gulf Avenue in the Bloomfield neighborhood of Staten Island Community District 2 (see **Figure 1**). The proposed action is located along the east side of the Arthur Kill and involves the development on an approximately 95-acre parcel containing regulated freshwater and tidal wetlands. The proposed action is located primarily on portions of Block 1835, Lots, 150, 300, and 550, a small portion of Lot 100, and a small portion of Block 1760, Lot 115; in total, these five (5) lots contain approximately 261 acres, of which approximately 63 acres are deed-restricted areas where development is not allowed. (See **Figure 2**).



The proposed action includes the creation of two buildings totaling approximately 1.78 million square feet (sf), 1,010 parking spaces, landscaping, utilities (including an 8-inch natural gas main), sewer and water infrastructure, roadway improvements, a stormwater management system, and accessory structures. In the proposed action, the applicant seeks to fill approximately 3.2 acres of freshwater wetlands, 0.02 acres of tidal wetlands, and develop within 24 acres of wetland adjacent area. The proposed action includes onsite wetland mitigation totaling approximately 6.4 acres. Primary access to the proposed action from Gulf Avenue would be provided by a proposed western extension of Frank W. Gay Blvd.

The project site contains historically mapped and currently delineated tidal and freshwater wetland areas that are regulated by the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Army Corps of Engineers (USACE), and permits are required for the planned construction of buildings, roads and road improvements, and stormwater management measures in the wetlands and wetland adjacent areas. It is expected that the proposed action would include wetland creation on the Project Development Area as mitigation. The NYSDEC permits are subject to review under the State Environmental Quality Review Act (SEQRA).

The project site is zoned M3-1, which allows for industrial uses. No special zoning overlay districts are mapped within the project site. The proposed action is consistent with the current zoning and does not require any special permits or approvals.



0 2,000 FEET

-  Project Site
-  Proposed Action Area





MATRIX GLOBAL LOGISTICS PARK WEST CAMPUS

Project Site Boundaries  
Figure 2

## **B. PROJECT IDENTIFICATION**

### **B.1 DESCRIPTION OF THE PROJECT AREA**

The project site is an approximately 261-acre parcel which currently contains five (5) zoning lots. These lots include parcels owned by Sutherland Marine Development, LLC (Block 1835, Lots 150, 300, and 550), of which Matrix is the contract purchaser; a parcel owned by the City of New York (Block 1835, Lot 100), which the project's proposed driveway crosses via an existing crossing; and a parcel owned by Staten Island Marine Owner's Association (Block 1760, Lot 115) that provides utilities and site access. The 261-acre parcel is undeveloped and contains approximately 104 acres of NYSDEC and USACE-regulated wetland areas, located along the northern, eastern and southern portions of the parcel. There are approximately 73 acres of NYSDEC- and USACE-regulated freshwater wetlands (FW) on the project site (approximately 72 acres of USACE-jurisdictional wetlands, approximately 1 acre of non-USACE-jurisdictional isolated wetlands), as well as approximately 49 acres of NYSDEC-regulated freshwater wetland adjacent area (FWAA), approximately 32 acres of NYSDEC-regulated tidal wetland (TW), and approximately 12 acres of NYSDEC-regulated tidal wetland adjacent area (TWAA). The NYSDEC-regulated wetland totals do not account for overlap between the NYSDEC freshwater wetland, freshwater wetland adjacent area, and tidal wetland adjacent area. Approximately 63 acres are deed-restricted and cannot be disturbed as required by a prior consent order.

### **B.2 PROJECT SITE HISTORY AND BACKGROUND**

The project site is part of a larger parcel extending to the south and east that contained a bulk oil and natural gas storage and distribution facility that was constructed in 1929 by the Gulf Oil Corporation and operated until approximately 1999. Ownership of the facility changed multiple times between 1970 and 1990; the most recent owner of the facility before its demolition was GATX, S.I. Inc., who purchased the facility in 1989. The portion of the project site that contained the former oil storage and distribution facility is hereafter referred to as the "GATX Property," and contained above-ground storage tanks in two sections (the "East Tank Field" and the "West Tank Field"). The tank fields, and a grid of streets to access the tanks, were generally constructed between the 1920s and 1950s. The facility was licensed with the New York State Department of Environmental Conservation (NYSDEC) as Major Oil Storage Facility (MOSF) No. 2-2180. This facility received petroleum products (including gasoline, fuel oil, jet fuel, lubricating oil, and crude oil) from ships before distributing them through a series of on-site pipelines and transferring them off-site using a railroad connection and tanker trucks.

The MOSF was subject to a 1992 Order on Consent (NYSDEC Reference No. R2-3484-91-02) for violations of oil storage regulations. Another Order on Consent (D2-0001-98-01-02) was agreed upon in 1998 based on alleged violations of the MOSF license, the 1992 Order on Consent, and additional regulations governing petroleum bulk storage tanks. The MOSF ceased operation in 1999, and most of the storage tanks, piping, and other above-ground structures were demolished by 2001.

Investigation and remediation of petroleum-impacted soil and groundwater on the GATX Property was performed by GATX and its consultant between about 1997 and 2006; much of the remediation was performed pursuant to the 1998 Consent Order between GATX and NYSDEC and a 2001 Corrective Action Plan (CAP) and its amendments. Remediation included dewatering, excavation of grossly impacted soil and hotspots, removal of free petroleum product, on-site biotreatment of impacted soil, cleaning of stormwater infrastructure including piping and oil/water

separators, monitored natural attenuation of groundwater, installation of site cover material, and stabilization of two portions of the GATX Property (known as the Western Surface Cover Area [WSCA] and Eastern Surface Cover Area [ESCA]) to render the site protective of human health and ecological receptors. The CAP assumed that the GATX Property would receive surface cover material of imported fill and impervious development components (such as concrete and asphalt pavement) and redeveloped for as-of-right commercial and/or industrial use, and wetland/open water areas would be protected during redevelopment (see the description of deed restriction below).

Additional remedial requirements included future obligations pertaining to maintaining the site surface cover, stormwater management, establishment of a Site Management Plan (SMP), and environmental monitoring of any proposed disturbance to the regulated site cover areas. Remediation is largely complete, excepting the final portion of the site surface cover in the WSCA, which is proposed to be completed in coordination with the site redevelopment (the proposed action). In addition to the environmental cleanup, the NYSDEC Consent Order included preservation of dedicated wetlands (see the description of deed restrictions below).

In 2004, GATX sold its properties to 380 Development, LLC, a subsidiary of Event Equipment Leasing and its parent company, International Speedway Corporation (ISC), but GATX retained responsibility for completing the 1998 Consent Order requirements, except for the final surface cover. At the time, ISC acquired the property with the anticipation of developing a mixed-use project known as the Motorsports Entertainment Complex, which included a NASCAR raceway. ISC formally abandoned the NASCAR project in 2006. 380 Development, LLC, the entity that owned the property, was subsequently acquired by Staten Island Marine Development, LLC (SIMD) from ISC in August 2013.

In September 2013, SIMD, through its subsidiary 380 Development, entered into a Modified Order on Consent (MOC) with the NYSDEC to govern the completion of the outstanding remediation requirement—constructing the final surface cover to eliminate exposure pathways. As part of the MOC requirements, 380 Development entered into an agreement with NYSDEC to preserve in perpetuity approximately 242 acres of wetlands, wetland adjacent area buffers, and open space located within the entire SIMD-owned property (referred to as “deed restricted wetland areas”).

In 2016, the eastern portion of the SIMD property (including the ESCA) was purchased by Matrix Development Group. This eastern parcel was redeveloped as a logistics park with industrial and distribution buildings, known as the Matrix Global Logistics Park, which includes fulfillment centers and warehouses. Redevelopment was conducted in accordance with the MOC, CAP, and an NYSDEC-approved Engineering Work Plan (EWP) and its addenda. The Matrix Global Logistics Park is now governed by a 2016 SMP, which contains requirements pertaining to management and reporting on engineering and institutional controls. The MOC, CAP, and EWP anticipated redevelopment of the eastern and western portions of the GATX Property; however, the western portion of the property (which includes the project site) has remained undeveloped.

### **B.3 DESCRIPTION OF THE PROPOSED ACTION**

The proposed action includes the creation of two buildings totaling approximately 1.78 million sf, 1,010 parking spaces, landscaping, utilities (including an 8-inch natural gas main), sewer and water infrastructure, roadway improvements, a stormwater management system, and accessory structures. To facilitate the proposed action, the three lots where development would primarily occur (Block 1835, Lots 150, 300, and 550) would be subdivided to create five new lots. Therefore, with the proposed action, the number of lots on the project site would increase from 5 to 7. Access

and utility improvements would also be made on small portions of Block 1835, Lot 100 and Block 1760, Lot 115.

### *B.3.1 DEVELOPMENT PROGRAM*

The proposed action includes approximately 1.78 million gross square feet (gsf) of Use Group (UG) 16 uses<sup>1</sup> and 1,010 accessory parking spaces. In the future, the buildings are likely to contain UG 6 uses,<sup>2</sup> as accessory office space may be required by future tenants. The proposed action would facilitate the applicant's proposal through approval of the site plan, which establishes the location, maximum floor area, allowable UGs, and building footprint of the proposed development, and the configuration and number of parking spaces. The proposed action would therefore be limited to the building footprints, UGs, and floor area shown on the authorized site plan and the layout and maximum number of parking spaces. However, the site plan does not set the size and location of the individual tenants within the development, which could fall under UG 6 and 16, and allows flexibility for where the approved and permitted uses are located within the approved development footprint.

As shown in **Figure 3**, the proposed site plan would include buildings of approximately 1,055,322 gsf (Building 1) and approximately 714,891 gsf (Building 2), containing UG 16 and potentially UG 6. Both buildings would be constructed of precast concrete exterior walls with architecturally distinctive glazed areas at building entries, with low-sloped energy efficient membrane roof assemblies with provisions to accommodate solar photovoltaic arrays. The proposed action would also include accessory structures, e.g., utility facilities (water tank, water pump house, sanitary pump station, electrical block house), guard houses, and an MTA/NYCT bus station restroom.<sup>3</sup> In addition, each building would have landscaping features, as well as dedicated parking areas, with almost all automobile parking contained in structured and rooftop parking facilities. The proposed action includes 1,010 accessory parking spaces. The proposed development program is summarized in **Table 1**.

Based on preliminary transportation projections, auto and truck trips resulting from the proposed warehouse/logistics center are expected to peak during the morning (6:45 AM-7:45 AM), midday (12:00 PM-1:00 PM) and evening (5:15 PM-6:15 PM) on weekdays, and during the midday (12:45 PM-1:45 PM) on Saturdays.<sup>4</sup> The transportation analysis to be prepared for the proposed action is discussed in Part E.5, Impact on Transportation.

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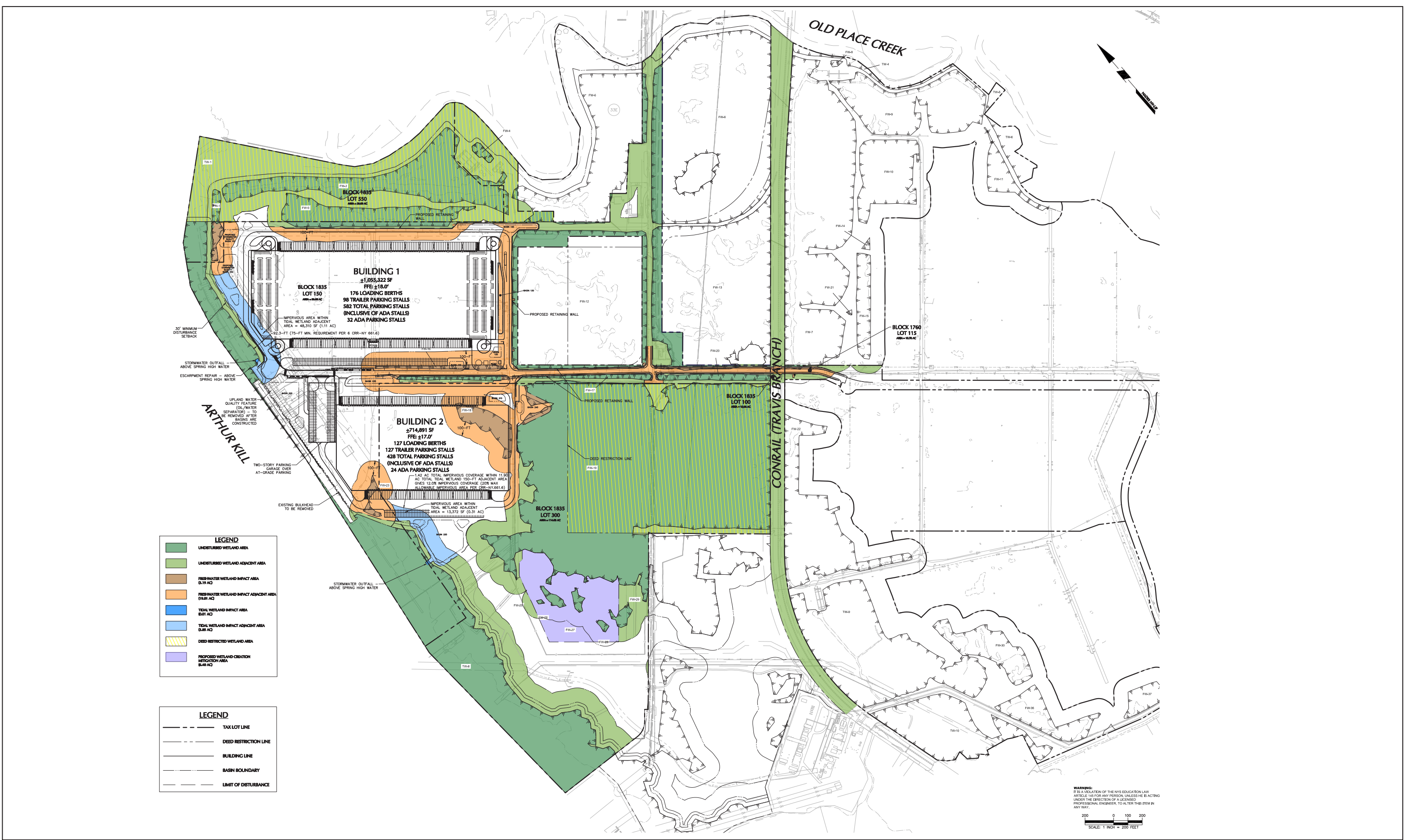
<sup>1</sup> Use Group 16 is a category of uses defined in the New York City Zoning Resolution (ZR) generally consisting of automotive and semi-industrial uses, including warehouses and trucking terminals.

<sup>2</sup> Use Group 6 is a category of uses defined in the ZR generally consisting of retail and commercial uses, including business and professional offices.

<sup>3</sup> In coordination with MTA, a new bus stop would be created near the warehouse/logistics center buildings. The stop would be served by two local routes (S40 and S90) that currently serve the Matrix Global Logistics Park to the east of the project site. This stop would facilitate warehouse/logistics center employees commuting by bus; the restroom would be an amenity for the MTA drivers.

<sup>4</sup> Based on the preliminary trip generation estimates, the proposed action would result in approximately 580 auto trips and approximately 160 truck trips in the weekday AM peak; approximately 300 auto trips and approximately 100 truck trips in the weekday midday peak; approximately 560 auto trips and approximately 170 truck trips in the weekday evening peak; and approximately 510 auto trips and approximately 120 truck trips in the Saturday midday peak.





**Table 1**  
**Proposed Development Program**

Building	Address	Zoning Use Group (UG) <sup>1</sup>	Occupancy	Gross Floor Area (gsf) <sup>2</sup>	Zoning Floor Area (zsf)	Accessory Car Parking Spaces <sup>3</sup>	Trailer Parking Spaces	Truck Loading Berths
1	532 Gulf Ave.	16, 6	S-1, B	1,055,322	1,055,322	582	98	176
2	534 Gulf Ave.	16, 6	S-1, B	714,891	714,891	428	127	127
<b>Total</b>				<b>1,770,213<sup>4</sup></b>	<b>1,770,213</b>	<b>1,010</b>	<b>225</b>	<b>303</b>

**Notes:** <sup>1</sup> The proposed action would facilitate the applicant's proposal through approval of the site plan, which would set the size and location of the proposed development, and the configuration and number of parking spaces. The proposed development will be limited to the building footprints and floor area shown on the conceptual site plan and the layout and number of parking spaces. However, the site plan does not set the size and location of the individual tenants within the development, which could fall under Use Group 6 and 16, and allows flexibility for where the approved and permitted uses are located within the approved development footprint.

<sup>2</sup> Gross square foot (GSF) areas are approximate.

<sup>3</sup> One parking space is required for every 2,000 GSF of S-1 (Storage) warehouse uses and for every 300 GSF of B (Business/support office) uses.

<sup>4</sup> The accessory structures (utility facilities, guard houses, bus station restroom) are not calculated into the overall ZSF and GSF

**Sources:** Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C

### *B.3.2 CIRCULATION PLAN AND UTILITIES*

Currently, a signalized entrance roadway at the eastern boundary of the project site provides access from Gulf Avenue, which has an existing curb cut on the open and built portion of Gulf Avenue. The proposed action would utilize the existing traffic light located at the easterly curb cut for the Matrix Global Logistics Park site on Gulf Avenue (see **Figure 1**). Primary access to the proposed action from Gulf Avenue would be provided by an extension of Frank W. Gay Boulevard designed to minimize impacts to wetlands and habitats of species of concern. Design features that have been incorporated to minimize wetland and habitat impacts include roadway realignment and replacing roadside slopes with retaining walls. Pipes will also be proposed underneath the roadway to provide paths for wildlife passage. As requested by NYSDEC, these pipes will be installed roughly at existing grades to so that they do not hydraulically connect wetlands of different salinity.

The extension of Frank W. Gay Boulevard would also include the primary utility connections for the proposed action. A 12-inch water main and a sanitary force main (connecting to a sanitary pump station constructed adjacent to Building 1) would be constructed along Frank W. Gay Boulevard to provide potable water and sanitary sewer service to the proposed action. An 8-inch gas line would also be constructed along Frank W. Gay Boulevard; electric and telecom service would be provided by overhead lines along the street. The utility services would tie into the existing utilities serving the Matrix Global Logistics Park on the eastern parcel.

In total, including building area and on-site circulation/utility improvements, the proposed action would result in disturbance of approximately 95 acres of the project site (out of a total area of approximately 261 acres).

In addition to the on-site circulation/utility improvements, the proposed action may require off-site roadway modifications to improve access to the project site, particularly along Gulf Avenue. The need for and extent of such improvement measures would be determined as part of the traffic impact analysis in the EIS (see the scope of work presented below) and coordinated with the

appropriate regulatory agencies, including the New York City Department of Transportation (NYCDOT).<sup>5</sup>

### *B.3.3 PROPOSED WETLAND IMPACTS AND PROPOSED MITIGATION*

The proposed action seeks to develop on a portion of the mapped NYSDEC-Class 1 emergent wetland and USACE-regulated FW and NYSDEC-regulated FWAA and TWAA but would preserve approximately 47 acres of wetland areas through a deed restriction. These proposed 47 acres of wetlands to be protected via deed restriction are separate from another adjacent project's deed restricted wetland acreage required by a prior consent order. The proposed action would also provide several landscaped buffers between the proposed buildings and the regulated wetland areas to be preserved. Stormwater management areas (e.g., wet ponds, swales, and bioretention basins) would be provided adjacent to each of the buildings within the proposed action.

The applicant proposes to mitigate for the proposed taking of 3.2 acres of freshwater wetlands at a ratio of 2:1 through the creation of 6.4 acres of emergent freshwater wetlands on site that would be in addition to the 47 acres of deed restricted wetlands. Historically disturbed upland areas surrounding existing isolated wetlands will be excavated and contoured to form a wetland creation area with hydrologic connections to preserved onsite emergent freshwater wetlands. The wetland creation areas would be protected through deed restrictions, like the previously deed restricted wetland areas currently on site. The proposed mitigation will provide freshwater wetland values attributable to the wetland plantings including, but not limited to, wildlife habitat, storm control, ecosystem cleansing, and aesthetics. The focus of the planting design would be to improve onsite habitat for resident and migrating wildlife species by creating new freshwater wetland habitat. The proposed mitigation area would provide habitat, food, and cover for area wildlife, and serve to enhance the subject mitigation area by providing vegetative cover.

### *B.3.4 STORMWATER MANAGEMENT*

Currently, stormwater runoff from the site flows either overland to the Arthur Kill and its tidal tributaries or into onsite wetlands. Runoff that flows to the wetlands is then pumped into onsite oil/water separators and then discharged to the Arthur Kill and its tidal tributaries.

The proposed action will include a stormwater management system in accordance with a Stormwater Pollution Prevention Plan (SWPPP) to be prepared in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, the New York State Stormwater Management Design Manual, and the Notice of Intent, as required by the existing NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit for Stormwater Discharges from Construction Activity Discharge—Industrial (Permit No. NY-0004502, NYSDEC Permit Number 2-6401-00042/00001).

Because the water bodies that ultimately receive the runoff are tidal, stormwater management for the proposed action is not required to address runoff quantity. Stormwater management for the proposed action will be designed to address water quality and runoff reduction volume through

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<sup>5</sup> For projects undergoing environmental review in New York City, when the analysis identifies significant adverse impacts that require mitigation affecting local streets, NYCDOT must be consulted. Although potential mitigation measures, such as changes to lane striping and/or intersection signal timing, are identified by the analysis, the need for improvements is typically confirmed following completion of environmental review, and NYCDOT's approval of the measures occurs at that time.

bioretention basins, wet ponds, and hydrodynamic separators. The stormwater design will also investigate and address how runoff volume from the action might impact the onsite wetlands (see E.4.4 Impact to Wetlands). The development will maintain existing drainage patterns to the maximum extent practical.

#### *B.3.5 BUILD YEAR*

The proposed action would take up to approximately 24 months to construct. Assuming commencement of construction in early 2023, the proposed action would be completed in 2025. Therefore, for the purposes of environmental analysis, the proposed action is assumed to be completed, fully tenanted and operational in 2025.

### **C. PROPOSED APPROVALS**

The applicant is requesting the following non-ministerial approvals:

- A New York State Department of Environmental Conservation (NYSDEC) freshwater wetlands permit under Articles 24 and 15 of the New York Environmental Conservation Law (ECL), tidal wetland permit under Article 25 of the New York ECL and Section 401 Water Quality Certification.
- U.S. Army Corps of Engineers (USACE) permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.
- A NYSDEC Part 360 non-specific permit is likely to be required pursuant to the New York State Materials Management Program related to the importation of fill for development purposes.
- NYSDEC approval of the Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the New York State Standards and Specifications for Erosion and Sediment Control and the New York State Stormwater Management Design Manual, and Notice of Intent, as required by existing Industrial State Pollutant Discharge Elimination System permit NY-0004502, NYSDEC Permit Number 2-6401-00042/00001, prior to initiation of any site disturbance of one acre or more of uncontaminated area.
- If construction dewatering is necessary for the proposed buildings, roads, utilities, etc., a Part 601 Water Withdrawal permit may be required, and an individual State Pollutant Discharge Elimination System (SPDES) permit may be required for related discharges.
- An Article 11/Part 182 Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern; Incidental Take Permit may be required, depending on surveys and evaluations noted below.

In addition, as noted above, the proposed action may require approval by the appropriate regulatory agencies, including NYCDOT, for off-site roadway improvements. The need for and extent of such improvements would be determined as part of the traffic impact analysis in the EIS.

As noted above, the proposed action is consistent with the current zoning and does not require any special permits or approvals. In addition, the utility improvements associated with heating systems

for the proposed action (e.g., gas-fired units) do not require any discretionary air quality permits, such as a NYSDEC State Facility or Title V permit.<sup>6</sup>

## **D. PURPOSE AND NEED FOR THE PROPOSED ACTION**

As with the previous project to develop the Matrix Global Logistics Park, the proposed action would transform an undeveloped and historically environmentally compromised site into a warehouse/logistics center. This development would support the needs of shipping entities, such as state-of-the art e-commerce logistics tenants or private shipping companies (e.g., FedEx) to deliver goods to consumers throughout New York City. Demand for distribution centers continues to grow with the increase in e-commerce activity nationally and in the City, and the proposed action would serve this demand. Furthermore, the proposed action would develop land that once contained bulk oil storage facilities with new uses compatible with surrounding industries. The proposed action would create new employment opportunities and generate economic and fiscal benefits to Staten Island and the City. The proposed action is also consistent with the vision set forth in Working West Shore 2030 to: (1) create quality jobs for Staten Islanders and reduce the need for off-island commutes; and (2) provide better connections between job centers and the rest of the borough and region.

## **E. ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATION MEASURES**

This Draft Scope has been prepared to facilitate participation in the environmental review of the proposed action, offering an opportunity for the public and interested agencies to provide comment. After receiving and considering comments on this the Draft Scope, NYSDEC, as Lead Agency, will prepare and issue a Final Scope of Work. Then, the DEIS will be prepared in accordance with the State Environmental Quality Review Act (SEQRA) and implementing regulations set forth in 6 NYCRR Part 617.

The DEIS described in this Draft Scope will examine the full range of potential environmental impacts related to both short-term construction activities and long-term operational changes that may result from implementation of the proposed action. Because the proposed action is expected to be completed in 2025, its environmental setting is not the current environment, but that of the future. Therefore, the DEIS technical analyses will characterize current conditions and forecast these conditions to 2025 (the “analysis year”), for the purpose of determining impacts. The DEIS will provide a description of “Existing Conditions,” and assessments of future conditions without the proposed action (the “No Action condition”) and with the proposed action (the “With Action

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<sup>6</sup> NYSDEC permits are required for projects that have the potential to emit pollutants exceeding set thresholds. The proposed action’s heating system has not been confirmed at this time: it is expected that the buildings may use electric heating in accordance with the recently adopted New York City local law restricting new gas installations in buildings under seven stories without applications prior to December 2023. If gas heating is used, it would be typical of warehouse/logistics center buildings. These gas-fired units would be required to meet the energy efficient requirements of the NYC Building Code, and are not expected to exceed these thresholds. Under local regulations by the New York City Department of Environmental Protection (DEP), a work permit is required for boilers with a heat input rating of 4.2 million Btu-per hour or greater, or non-emergency engine generators greater than 600 horsepower in size. The proposed action is not expected to requiring any boilers or generators of theses sizes, therefore a DEP permit also not required.

condition”). Absent the proposed action, in the “No Action condition,” there would be no changes or alterations to the project site, which would remain an undeveloped parcel, the same as the existing condition. The analyses of the No Action condition accounts for other nearby developments that would occur in the future independent of the proposed action. In each technical area of the analysis, the With Action condition will be compared to the No Action condition to evaluate the potential for significant adverse impacts of the proposed action in 2025. The DEIS will also address alternatives, including the No Action Alternative, and propose mitigation strategies for any identified significant adverse impacts, to the extent practicable.

The format of the DEIS and methodologies that will be used to assess the potential environmental impacts of the proposed action will follow SEQRA guidelines. This Draft Scope follows the approaches identified in SEQRA to the extent applicable, and the DEIS may include information requested by NYC agencies as well, if applicable.

The DEIS will present an assessment of the potential for impacts from the proposed action. Based on a preliminary evaluation of the proposed action following the SEQRA Environmental Assessment Form guidance, detailed analysis is not warranted in the following technical areas: geological features; agricultural resources; aesthetic resources; open space and recreation; critical environmental areas; noise, odor and light; and community character (including community facilities and services); public water supply and wastewater treatment infrastructure; energy; noise; and sanitation services.<sup>7</sup> No significant adverse impacts to these technical areas would occur with the proposed action. Should a Part 360 non-specific facility permit be required, it will be discussed in a solid waste assessment. Concerning historic and cultural resources (districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance), the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) determined, in a report dated February 25, 2022, that the proposed action would not affect any historic properties, including archaeological and/or historic resources. Therefore, additional analysis of historic resources is not warranted.

The study areas and assessment methodologies proposed to determine the potential for impacts associated with the proposed action are described below. In each of the technical areas outlined below, the DEIS will describe the environmental setting (existing conditions); discuss how potential impacts will be evaluated; evaluate the potential short- and long-term significant adverse impacts from construction and operation of the proposed action; and discuss how measures to avoid or minimize impacts will be developed and evaluated. After these avoidance and minimization measures have been assessed, the DEIS will address mitigation of any unavoidable adverse impacts if warranted.

## **E.1 PROJECT DESCRIPTION**

The Project Description will identify and explain the proposed action and the purpose and need for the proposed action. It will contain a brief discussion of current conditions on the project site and in the surrounding area; the No Action Condition; the proposed action, including a description of the proposed site plan, the height and bulk of the proposed buildings, and preserved

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<sup>7</sup> The SEQRA impact generally align with technical analysis areas included in City Environmental Quality Review (CEQR) guidance, e.g., community facilities and services, urban design and visual resources, and neighborhood character. In addition to the SEQR evaluation, an assessment of the proposed actions following CEQR guidance was performed which determined that detailed analysis is not warranted in the CEQR socioeconomic conditions and shadows technical areas.

jurisdictional wetlands, stormwater wet ponds, and landscaping areas; and figures to depict the proposed action. It will also include description of the approvals required and the approvals process. The analytical framework will also be included in this chapter. The figures will present in its surrounding context.

## **E.2 IMPACTS ON LAND USE, ZONING, AND PUBLIC POLICY**

This analysis will evaluate the potential short- and long-term impacts of the proposed action in terms of land use compatibility and trends in zoning and public policy. This analysis will also evaluate potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts. Specifically, the assessment will:

- Provide a brief development history of the project site and the study area. The study area will include the project site and the area within approximately ¼-mile.
- Describe the existing land use setting of the project site and the study area, including predominant land use patterns in the study area and recent development trends for the ¼-mile study area.
- Provide a zoning map and discuss existing zoning and any recent zoning actions in the study area.
- Summarize other public policies that may apply to the project site and study area, including any formal neighborhood or community plans.
- Describe conditions in the project site absent the proposed action. Prepare a list of other projects expected to be built in the study area that would be completed before or concurrent with the proposed action. Describe the effects 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 action and provide an assessment of the impacts of the proposed action on land use and land use trends, zoning, and public policy. Consider the effects related to issues of compatibility with surrounding land use, consistency with zoning and other public policy initiatives, and the effect of the proposed action on development trends and conditions in the area.
- Because the project site is located in New York City's designated Coastal Zone, an assessment of the proposed action's consistency with the New York City 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 action. Where needed, this assessment will draw upon other technical analyses in the EIS.

## **E.3 IMPACT ON LAND**

### *E.3.1 IMPACT ON LAND SURFACES*

This section will describe the existing land surface of the project site, including existing landcover within the project site such as developed areas, vegetated areas and any disturbed unvegetated areas, topography, soil and depth to groundwater, and hazardous materials (see Section E.1.2). The analysis will evaluate the potential short- and long-term impacts of the proposed action to the land surface due to disturbance, including excavation, movement, and removal of soil; import and

placement of fill and/or cover material; potential erosion associated with removal of vegetation; and construction in or near onsite and offsite wetlands (see also E.3.2, Hazardous Materials).

#### *E.3.2 IMPACT ON HAZARDOUS MATERIALS*

This section of the EIS will address the potential presence of hazardous materials, petroleum products, and/or other environmental conditions on the project site and assess the potential short- and long-term impacts due to impacts due to land disturbing actions resulting from the project. The EIS will summarize a completed Phase I Environmental Site Assessment (ESA), as well as historical reports, work plans, environmental investigations, and remedial work, including:

- Investigation completed by GATX and its consultants, including sampling focused on:
  - General site characterization
  - Tanks and piping
  - Historical spills and facility operations
  - Groundwater
- Remediation completed by GATX and its consultants/contractors, including:
  - Removal of storage tanks and piping
  - Excavation and on-site biotreatment of grossly impacted soil
  - Free product recovery
  - Cleaning of stormwater infrastructure, including oil/water separators
  - Excavation dewatering, and treatment of groundwater prior to discharge
  - Monitored natural attenuation of groundwater impacts
- 2001 CAP, prepared by Roux Associates
- 2005 Due Diligence Investigation Results, prepared by EcolSciences
- Remediation completed by 380 Development, LLC and its consultants/contractors, including excavation and off-site disposal of soil hotspots
- 2011 EWP (and its addenda), prepared by KE Engineering Services PC
- Import and placement of Surface Cover material, pursuant to the EWP (including dates of import, material import sources, and analytical standards for the imported fill quality)
- 2016 SMP, prepared by KE Engineering Services PC
- 2022 Pre-Purchase PFAS Preliminary Screening Investigation Letter Report, prepared by Langan

The EIS will include any necessary recommendations for additional testing or other activities that would be required either prior to or during construction and/or operation of the project, including a discussion of any necessary remedial or related measures. Additional testing, if required, will target Recognized Environmental Conditions (RECs) identified by the Phase I ESA that are in areas to be disturbed by the proposed action and are outside of the WSCA.

#### **E.4 IMPACTS ON NATURAL RESOURCES/WETLANDS**

Natural resources include any water, water vapor, land including land surface or subsurface, air, fish, wildlife, biota and any other natural features that comprise the environment. An assessment of natural resources is appropriate if natural resources exist on or near the site of the proposed action, or if an action involves disturbance of that resource.



The natural resources assessment will describe the existing natural resources within and adjacent to the project site at a level of detail suitable for evaluating potential impacts to these resources from the project, including groundwater, floodplains, aquatic resources, wetlands and terrestrial ecological communities, wildlife, and threatened or endangered or special concern plants and animal species,. This description of existing natural resources will be developed based on existing information from literature sources and other information obtained from governmental and non-governmental agencies combined with the results of the site-specific wetlands survey, natural resources inventory, and tree survey. The natural resources analyses will assess the potential for the construction and operation of the proposed action 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 natural resources analysis will:

- Identify natural resources of concern to state, federal and city agencies.
- Identify the regulatory programs that protect floodplains, wetlands, wildlife, threatened or endangered species, aquatic resources, or other natural resources within the project site.
- Use existing information available from published literature and sources such as New York Department of Environmental Conservation (NYSDEC) Natural Heritage Program (NYNHP); existing NYSDEC datasets (e.g., Breeding Bird Atlas data, Herp Atlas Project, tidal and freshwater wetland maps, etc.); Natural Areas Conservancy Nature Maps; New York City soil surveys; New York-New Jersey Harbor Estuary Program (HEP), DEP, the New York City Department of Parks and Recreation (NYC Parks), information on federally listed species from the United States Fish and Wildlife Service (USFWS); and other resources and the results of site-specific wetlands delineations, ecological community and seasonal wildlife surveys, and targeted threatened or endangered species surveys to qualitatively describe the ecological communities and wildlife present within and adjacent to the project site as identified below.
  - Completed Studies:
    - Wetland Function and Value Assessment, prepared by Ecolsciences, Inc. completed in 2015,
    - Wetland Function and Value Assessment, prepared by Princeton Hydro, LLC, completed in 2016, and
    - A Survey for the Eastern Mud Turtle and other freshwater turtles, prepared by Jason Tesauro Consulting, LLC, dated August 21, 2019 (Survey completed in accordance with NYNHP protocols provided by NYSDEC).
  - Ongoing Studies:
    - Four season NRI conducted by Capital Environmental Consultants, Inc. (March 2022 – present)
- Assess the future conditions for natural resources within the vicinity of the project site in the No Action condition.
- Assess the potential impacts to the projected future natural resources within and adjacent to the project site from the proposed action, including direct and indirect impacts to natural resources during construction (short-term) and operation (long-term) of the project. Direct impacts could include clearing of vegetation, loss of wetlands, and loss of species habitat due to filling activity. Indirect impacts could include increased noise and human activity during construction and operation of the project, shading of wetlands and other terrestrial habitat due to buildings and parking structures, and stormwater discharge. The potential impacts of the alternatives will also be assessed and compared to the proposed action.

- Identify the regulatory programs and permits that would apply to the proposed action and the measures that would be developed, as necessary, to mitigate and/or reduce any of the proposed action's potential significant adverse effects on natural resources.

#### *E.4.1 IMPACTS ON GROUNDWATER*

Groundwater resources within the project site will be described based on existing sources of information including groundwater level monitoring conducted by KE Engineering Services, PC and the information resulting from the implementation of the Geotechnical Investigation Work Plan to be conducted by Langan.

The analysis will evaluate the potential short- and long-term impacts of the proposed action on groundwater resources due to land disturbing activities such as excavation and grading, and implementation of the protection measures described under Section E.3.2 Hazardous Materials, and operation of the proposed action by considering the stormwater management measures and any long-term protection measures described under Hazardous Materials. This section will describe potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts.

#### *E.4.2 IMPACTS ON FLOODING*

The floodplain resources within the project site will be described based on existing information such as the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) and Revised Preliminary FIRMs. The analysis will evaluate potential project-generated short- and long-term impacts to the floodplain and potential flood risks on the project site and adjacent properties, while also taking into consideration future changes due to climate change and sea level rise. This section will describe potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts.

#### *E.4.3 IMPACTS ON AQUATIC RESOURCES INCLUDING SURFACE WATER RESOURCES, WATER QUALITY, AQUATIC BIOTA (I.E., AQUATIC VEGETATION, BENTHIC INVERTEBRATES, AND FISH).*

Aquatic resources, including surface waters, water quality, and aquatic biota such as aquatic vegetation, benthic invertebrates, fish, aquatic reptiles and amphibians, will be described based on existing information such as water quality classification - Title 6 of the New York Code of Rules and Regulations (NYCRR) Part 701, NOAA Essential Fish Habitat mapper, and results of site-specific surveys conducted within the project site listed in Section E.4.

The analysis will evaluate potential short- and long-term impacts to these resources due to the proposed action including potential discharge of sediment during construction activities, loss of habitat, discharge of stormwater, and any other operational impacts due to site management activities. This section will describe potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts.

#### *E.4.4 IMPACTS ON WETLANDS*

Wetlands within and adjacent to the project site will be described based on existing information such as the results of site-specific wetland studies and wetland function and value assessments listed in Section E.4 and NYSDEC and USACE jurisdictional determinations.

The analysis will evaluate potential short- and long-term impacts to onsite and adjacent wetlands, wetland functions and wetland adjacent areas due to the project-related activities such as potential

discharge of sediment during construction activities, placement of fill, changes to the drainage patterns, stormwater management practices and effects to wetland water balance, and any other operational impacts due to site use and management. This section will describe potential measures to avoid and minimize impacts to wetlands, including integration of design measures such as the development of stormwater management practices that take into account natural drainage patterns and serve to supplement onsite preserved wetland and wetland adjacent areas, and if necessary, to mitigate impacts. Mitigation measures for any unavoidable adverse impacts are proposed and will need to be further evaluated in the DEIS. They will entail wetland creation, preservation, and wetland enhancement.

*E.4.5 IMPACTS ON PLANTS AND ANIMALS INCLUDING VEGETATION AND ECOLOGICAL COMMUNITIES, WILDLIFE, AND SOILS.*

Plants and the ecological communities they comprise, wildlife, and soils within the project site will be described based on existing information including site-specific surveys listed in Section E.4, NYSDEC datasets (e.g., Breeding Bird Atlas data, Herp Atlas Project), USDA Natural Resources Conservation Service (NRCS) Soil Surveys, Natural Areas Conservancy Nature Maps, and New York City soil surveys. The analysis will evaluate potential short- and long-term impacts of project-related activities on these resources such as vegetation clearing, increased noise and human activity during construction and operation of the proposed action, and shading of ecological communities due to buildings and parking structures. This section will describe potential measures to avoid and minimize impacts to these plant and animal resources, and if necessary, to mitigate impacts.

*E.4.6 IMPACTS ON SIGNIFICANT, SENSITIVE, OR DESIGNATED RESOURCES*

Significant, sensitive or designated resources on and adjacent to the project site will be described based on existing information including the New York Coastal Zone, and NYC WRP designated Special Natural Waterfront Area (SNWA) Northwestern Staten Island Harbor Herons SNWA (Harbor Herons Complex). The analysis will evaluate potential short- and long-term impacts of project-related activities along with a development of potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts.

*E.4.7 IMPACTS ON THREATENED, ENDANGERED AND SPECIAL CONCERN SPECIES*

Threatened, endangered or special concern species known or with the potential to occur on and adjacent to the project site will be described based on existing information such as site inquiries and reviews conducted by NYSDEC Natural Heritage Program (NHP), National Marine Fisheries Service (NMFS) (Northeast Region) National Oceanic and Atmospheric Administration (NOAA), and the USFWS; and the NYSDEC's New York Nature Explorer, Breeding Bird Atlas (2000-2005), Herpetological Atlas Project, List of protected fish and wildlife (6 NYCRR Part 182), List of protected plants and trees (6 NYCRR Part 193), and results of site-specific surveys listed in Section E.4. The analysis will evaluate potential short- and long-term impacts of project-related activities along with a development of potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts.

**E.5 IMPACT ON TRANSPORTATION**

The objective of a transportation analysis is to determine whether a proposed action may have a potentially significant adverse impact on traffic operations and mobility; public transportation

facilities and services; pedestrian elements and flow; safety of roadway users (pedestrians, bicyclists and vehicles); and parking. This analysis will evaluate potential short- and long-term impacts of project-related activities on these transportation resources, describe potential measures to avoid and minimize these impacts, and if necessary, to mitigate impacts.

A screening process is used to determine if quantified analyses of transportation conditions are warranted. The preliminary assessment begins with a trip generation analysis to estimate person and vehicle trips that would result from the proposed actions. The SEQR guidelines state that if a project is expected to generate fewer than 100 peak hour vehicle trips, further quantified traffic analyses are not warranted. However, the CEQR guidelines identify a two-tier screening process. If a project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips (Level 1 screening thresholds), further quantified transportation analyses are not warranted. When the Level 1 are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trips at specific transportation elements and to identify potential locations for further detailed analyses. If the trip assignments show that the proposed actions could generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses may be warranted to assess transportation conditions in the Study Area.

The proposed action's trip generation is expected to exceed the thresholds for detailed transportation analyses during the weekday AM, midday, PM, and Saturday midday peak hours. Therefore, quantified analyses will be required to assess the potential impacts of project-generated trips on key traffic intersections, pedestrian locations, nearby transit services, the area's parking resources and vehicular and pedestrian safety. If the proposed action would result in a potentially significant adverse impact to transportation conditions, the EIS would identify improvement measures to avoid, minimize or mitigate such adverse impacts.

Specific tasks to be undertaken as part of the Transportation assessment are as follows:

#### *E.5.1 TRAVEL DEMAND SCREENING ASSESSMENT*

The transportation analysis will use the Reasonable Worst Case Development Scenario (RWCDS) to assess the potential transportation impacts of the proposed action. Travel demand estimates for the proposed action will be prepared based on trip generation, modal split and vehicle occupancy data and assumptions from standard sources such as U.S. Census data, approved studies, information provided by the project team and other references. The trip estimates (Level 1 screening assessment) will be summarized by peak hour, mode of travel and person versus vehicle trips. In addition, detailed trip assignments (Level 2 screening assessment) will be performed to verify the intersections and pedestrian/transit elements for undertaking quantified analysis. The results of these trip estimates and assignments will be summarized in a Travel Demand Factors (TDF) Memorandum for review and concurrence by the Lead Agency and the New York City Department of Transportation (NYCDOT).

#### *E.5.2 TRAFFIC*

The traffic study area for detailed traffic counts and capacity analyses is expected to include up to seventeen (17) intersections, primarily located along key roadways including Gulf Avenue, Edward Curry Avenue, and Goethals Road North. These intersections will be verified based on the results of Level 2 screening assessment per the TDF Memorandum. Furthermore, in consultation with NYCDOT, the New York State Department of Transportation (NYSDOT) and

the Port Authority of New York and New Jersey (PANYNJ), the need for traffic analysis of highway segments in the vicinity of the project site will be evaluated and verified based on the results of the Level 2 screening assessment per the TDF Memorandum.

### *E.5.2.1 Data Collection*

New data collection will be conducted, including manual turning movement video counts, Automated Traffic Recorder (ATR) counts, vehicle classification counts and pedestrian counts.

In addition, information pertaining to street widths, traffic flow directions, lane markings, parking regulations and bus stop locations at study area intersections will be inventoried, and traffic control devices (including signal timings) in the study area will be recorded and verified with official signal timing data from NYCDOT.

### *E.5.2.2 Existing Traffic Analysis*

Balanced peak hour baseline traffic volume networks will be prepared to conduct a detailed capacity analysis of the study area intersections. The capacity analysis will be conducted using the *2000 Highway Capacity Manual* (HCM) methodology with NYCDOT's approved version of *Synchro*. The existing volume-to-capacity (v/c) ratios, delays and Levels of Service (LOS) for the weekday AM, midday, PM, and Saturday midday peak hours will be calculated and summarized.

### *E.5.2.3 Future No-Action Condition Analysis*

Future No-Action Condition traffic volumes will be calculated by incorporating the background growth to existing traffic volumes, and accounting for any incremental changes in traffic volumes expected to result from future planned developments in the study area. Trip estimates for future projects will be determined using the approved set of travel demand factors and other appropriate references. In addition, geometric and traffic control changes that could be implemented within the study area, independent of the proposed action, would be incorporated into the Future No-Action Condition traffic analysis. The Future No-Action Condition v/c ratios, delays and LOS at the study area intersections will be calculated and summarized.

### *E.5.2.4 Future With-Action Condition Analysis*

A traffic impact analysis for the proposed action will be conducted by adding incremental project-generated trips onto the Future No-Action Condition traffic network. Physical and operational changes resulting from the proposed action will also be incorporated into the analyses. The potentially significant adverse traffic impacts will be evaluated, and if any potentially significant adverse impacts are identified, improvement measures will be recommended to mitigate such impacts.

## *E.5.3 PARKING*

Project-generated parking demand is expected to be accommodated by the proposed supply of off-street accessory parking spaces on the project site, and is not expected to result in project-generated public parking demand. However, a qualitative description of on-street public parking in the study area will be provided as part of the transportation analyses. If warranted, a quantitative parking assessment will be prepared for inclusion in the EIS.

#### *E.5.4 TRANSIT*

The project site is served by two (2) MTA/New York City Transit (NYCT) local Staten Island bus routes (S40 and S90) which are accessible at a stop along Frank W. Gay Boulevard, within the Matrix Global Logistics Park—Staten Island (GLPSI) to the east of the project site. As part of the proposed action, the existing S40 and S90 bus service is proposed to be extended to a new stop(s) within the project site.

A qualitative description of available transit options in the study area will be provided as part of the transportation analyses. If warranted, a quantitative bus line-haul assessment will be prepared for inclusion in the EIS.

#### *E.5.5 PEDESTRIANS*

A qualitative description of pedestrian infrastructure in the study area will be provided as part of the transportation analyses. If warranted, a quantitative pedestrian assessment will be prepared.

#### *E.5.6 VEHICULAR AND PEDESTRIAN SAFETY*

Accident data for the study area intersections and other nearby sensitive locations from the most recent three-year period will be obtained from NYCDOT. The data will be summarized by accident-type on a rolling 12-month basis to determine if any of the study area locations may be classified as a high pedestrian/bicycle accident location. If any high accident locations are identified, measures will be recommended to alleviate potential safety issues.

### **E.6 IMPACT ON AIR QUALITY**

The analysis will evaluate potential short- and long-term impacts of project-related activities on air quality (including potential impacts related to mobile source of air quality emissions), describe potential measures to avoid and minimize these impacts, and if necessary, to mitigate impacts.

#### *E.6.1 MOBILE SOURCE ANALYSIS*

##### *E.6.1.1 Carbon Monoxide (CO)*

A screening analysis will be performed for intersections included in the traffic study area to determine the potential for significant carbon monoxide impacts and which locations may need further detailed study. Intersections will be chosen based on the procedures outlined in the NYSDOT Environmental Manual (TEM), or latest available NYSDOT guidance and the EPA Guidelines for Modeling Carbon Monoxide Roadway Intersections.

For intersections with a Level of Service of “D” or worse in the Build Condition, the TEM capture criteria will be used to determine whether intersections require further study. If any of the capture criteria are met, a volume threshold screening analysis will be performed at affected intersections. The intersections selected for the screening analysis will be based on the traffic network.

If any intersections do not pass the volume threshold screening criteria, a mobile source analysis would be performed using vehicular CO engine emission factors from EPA’s MOVES model based on provided speed and vehicle mix data and EPA’s AERMOD dispersion model to predict the maximum change in carbon monoxide concentrations, and to determine if the potential for exceedances of the CO ambient standard exists at intersections near the project site. The area to be included in this modeling effort will be determined using EPA’s recommendations in the

Guideline for Modeling Carbon Monoxide from Roadway Intersections (i.e., all significant mobile source emissions within 1,000 feet of the intersection of concern).

Mobile sources will be considered in the context of Section 7(3) of the New York Climate Leadership and Community Protection Act (CLCPA) if the final disadvantaged communities (DACs) maps and analysis identify impacts to DACs at the site or along traffic routes.

#### *E.6.1.2 Particulate Matter (PM)*

A screening analysis will be performed for particulate matter (PM) less than 10 microns and less than 2.5 microns in diameter (PM<sub>10</sub> and PM<sub>2.5</sub>) from mobile sources. Based on EPA guidance regarding PM, traffic data for the intersections that would be affected by the proposed action, such as the LOS, the increase in the number of diesel vehicles, and potential receptor locations will be considered to determine whether a refined microscale modeling analysis would be warranted for PM<sub>10</sub> and PM<sub>2.5</sub>.

If the screening analysis indicates the need for a refined PM analysis, maximum predicted PM<sub>10</sub>/PM<sub>2.5</sub> concentrations will be determined using appropriate MOVES emission factors and applying corresponding traffic data. Following the procedures outlined in the Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas (November 2013), 24-hour PM<sub>10</sub> and PM<sub>2.5</sub> and annual average PM<sub>2.5</sub> concentrations will be determined using the EPA's AERMOD model at simulated receptors for the critical analysis year. Using the procedures in the Transportation Conformity Guidance, four peak hour periods (morning peak, midday, evening peak, and overnight) will be analyzed using the latest available five years of meteorological data from the most representative meteorological station near the project site. Maximum predicted PM<sub>10</sub>/PM<sub>2.5</sub> concentrations will be compared to the NAAQS and the potential for significant adverse air quality impacts would be determined. Mitigation measures will be proposed, if required.

PM will be considered in the context of Section 7(3) of the CLCPA if the final disadvantaged communities (DACs) maps and analysis identify impacts to DACs at the site or along traffic routes.

#### *E.6.2 MESOSCALE ANALYSIS*

An analysis of mesoscale emissions will be performed to estimate emissions generated by the proposed action and examine the regional impacts of the proposed action on air quality.

### **E.7 IMPACT ON GREENHOUSE GAS EMISSIONS, CLIMATE CHANGE, AND COMMUNITY RESILIENCY & RISK ACT**

In accordance with State and City guidance, greenhouse gas (GHG) emissions generated by the proposed action will be quantified, and an assessment of consistency with both the State and City's established GHG reduction goals will be prepared. The analysis will evaluate potential short- and long-term impacts of project-related activities on GHG emissions, describe potential measures to avoid and minimize these impacts, and if necessary, to mitigate impacts.

Emissions will be estimated for the analysis year and reported as carbon dioxide equivalent (CO<sub>2</sub>e) metric tons per year. GHG emissions other than carbon dioxide (CO<sub>2</sub>) will be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential. Both 20-year and 100-year global warming potentials will be used consistent with the requirements under NYSDEC and NYCDEP.

The GHG analysis will include quantification of direct emission (GHG emissions from on-site boilers used for steam, heat, and hot water; any natural gas; fuel used for on-site electricity generation, if any; and GHG emissions from the proposed action's vehicle fleet) and indirect emissions (GHG emissions from purchased electricity generated off-site and GHG emissions from vehicle trips to and from the project site). Emissions from project construction and emissions associated with the extraction or production of construction materials will be qualitatively discussed. Opportunities for reducing GHG emissions associated with construction and operations will be considered.

Relevant measures to reduce energy consumption and GHG emissions that could be incorporated into the proposed action will be discussed, and the potential for those measures to reduce GHG emissions from the proposed action will be assessed to the extent practicable. Consistency with the Climate Leadership and Community Protection Act (CLCPA) will be assessed to determine if the proposed action would interfere with achieving the Statewide Emission Limits as established in 6 NYCRR Part 496. Additionally, consistency with the City's GHG reduction goal will be discussed.

In addition to GHG emissions, climate change has contributed to rising sea levels and increases in storm surge and coastal flooding. An analysis of climate change is deemed warranted for projects at sites located within the 100- or 500-year flood zone. Since a portion of the project site is within the flood hazard zone, the potential impacts of climate change on the proposed action and its infrastructure will be evaluated. The analysis will evaluate potential short- and long-term impacts to the floodplain and potential flood risks taking into consideration future changes due to climate change and sea level rise. Potential measures to avoid and minimize impacts, and if necessary, to mitigate impacts, will be described (see also Section E.4.2 Impacts on Flooding). The discussion will focus on sea level rise and changes in storm frequency projected to result from global climate change and the potential future impact of those changes in storm frequency on project infrastructure and uses, in accordance with the Community Risk and Resiliency Act (CRRRA) and CLCPA.

The CRRRA, as enacted in 2014, included five major provisions. The 2019 Climate Leadership and Community Protection Act (CLCPA) amended the CRRRA by expanding the scope to include consideration of all climate hazards, not only sea-level rise, storm surge and flooding. In order to show compliance with the CRRW and CLCPA, the climate change assessment will perform the following tasks:

- Identification of all impacts to the site and the surrounding area in terms of flooding, climate risk, resiliency, etc.;
- Description of how project design accounts for future physical climate risk due to all climate hazards including, but not limited to, sea-level rise, storm surge, and flooding;
- Identification of how natural resilience measures were incorporated into project design to conserve, restore or mimic natural landforms and processes to reduce climatic risks; and
- Concurrence with the recommendation within the State Flood Risk Management Guidance (SFRMG) regarding flood-risk management guideline elevations that incorporate possible future conditions, including the greater risks of coastal flooding presented by sea-level rise and enhanced storm surge, and of inland flooding expected to result from increasingly frequent extreme-precipitation events.



## **E.8 IMPACT ON PUBLIC HEALTH**

A public health analysis is warranted if a project would result in a significant unmitigated adverse impact in other analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any of these technical areas, and the lead agency determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas. The analysis will evaluate potential short- and long-term impacts of project-related activities on public health, describe potential measures to avoid and minimize these impacts, and if necessary, to mitigate impacts. In addition, an evaluation of the measures to protect the health and safety of workers during construction and operation of the proposed action will be provided. This evaluation will focus on the health and safety requirements of the U.S. Occupational Safety and Health Administration (OSHA).

## **E.9 MITIGATION**

Where potential significant adverse impacts are identified in the EIS analyses, reasonable and practicable measures that have the potential to avoid, mitigate, or minimize these impacts will be identified. A summary of these findings and a timeframe for implementation, if available, will be presented in the EIS. Where impacts cannot be mitigated, they will be identified as unavoidable significant adverse impacts.

## **F. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS**

The proposed action may result in adverse impacts that are unavoidable. Unavoidable adverse impacts are defined as those that would occur if a proposed project or action is implemented regardless of the mitigation employed, or if mitigation is impracticable. These unavoidable impacts will be specifically documented in the EIS based on the impact analysis and identification of potential mitigation measures outlined above. The description of the unavoidable adverse environmental impacts shall include necessary information on the extent, likelihood and long term consequences of the identified impacts.

## **G. ALTERNATIVES**

The purpose of an alternatives analysis in an EIS is to examine reasonable alternatives to the proposed action that achieve the goals and objectives of the proposed action and reduce, mitigate, or eliminate potential impacts resulting from the proposed action. Alternatives shall be prepared in sufficient detail so that impacts can be compared to those of the proposed action. A detailed explanation shall be provided of why a particular alternative may not be feasible. In addition to evaluating impacts of the Proposed Project, the EIS will consider a range of alternatives to the Proposed Project, including:

- The No Action alternative.
- An alternative that reduces or minimizes potential impacts on NYSDEC- and USACE-regulated wetland and wetland adjacent areas.
- An alternative that reduces potential impacts on NYSDEC- and USACE-regulated wetland and wetland adjacent areas to solely impacts related to access roadways and utilities.
- An alternative that elevates the access roadway on piles or similar method.
- An alternative that considers a different circulation plan and access to the project site.
- An alternative that considers a water-dependent use on the project site.

- If the proposed action results in unmitigated significant adverse impacts in any technical analysis area (e.g., transportation), the EIS will analyze any alternatives that would avoid those impacts.

A description and evaluation of each Alternative will be provided at a level of detail sufficient to permit a comparative assessment of each alternative discussed.

## **H. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

This section of the EIS will identify or evaluate the irreversible and irretrievable commitment of resources that the proposed action may require. This evaluation will consider the resources, both natural and human-made, which would be expended in the construction and operation of the proposed action, including commitments of energy and materials.

## **I. GROWTH INDUCEMENT**

The proposed action is not anticipated to alter regional growth patterns, impact residential settlement patterns, or affect growth in employment centers. Growth inducement aspects of the proposed actions need to be addressed “where applicable and significant.” Growth inducement impacts are not anticipated, and, if any, will be treated in the context of land use impacts.