

PUBLIC SAFETY ANSWERING CENTER II CHAPTER 9: INFRASTRUCTURE

A. INTRODUCTION

For City Environmental Quality Review (CEQR) analysis purposes, the City's "infrastructure" comprises the physical systems supporting its population, including water supply, wastewater treatment, and stormwater management. Given the size of New York City's water supply system and the City's commitment to maintaining adequate water supply and pressures, few actions have the potential to cause significant impacts on this system. Other infrastructure components, such as solid waste management, energy and transportation, are addressed separately under CEQR and are assessed in separate chapters of this FEIS, although this chapter briefly describes improvements to the roadway infrastructure planned as part of the Proposed Action, such as the mapping of a new public street ("Marconi Street").

This chapter examines the capacity of the City's water supply, sanitary sewer, and storm sewer to handle the additional loads generated by the Proposed Action. As discussed in Chapter 1, "Project Description," the Public Safety Answering Center II ("PSAC II") is a proposal to construct a second emergency communications 911 center for the City of New York ("the City") on an approximately 8.75 acre site (Block 4226, Lot 75 and part of Lots 40 and 55) in the Pelham Parkway section of the Bronx. The proposed development would consist of an approximately 640,000 gross square foot (gsf) office building and a 500-space accessory parking garage. The proposed facility is envisioned to be a parallel redundant hot site to PSAC I, located in Downtown Brooklyn, and would be expected to typically handle about half of the City's emergency calls. However, the proposed facility would be designed to accommodate emergency 911 communications for the entire City during heightened security days and if PSAC I should become non-operational for any reason. The Build year for the proposed PSAC II development is 2012.

For conservative CEQR analysis purposes, this chapter considers two staffing level conditions at the proposed PSAC II development, including typical day-to-day operations ("Typical Operations") and an event when the personnel of PSAC I would be temporarily relocated to the proposed development and the staffs of both PSAC I and PSAC II would be combined at the site ("Consolidated Operations"). On a typical day, PSAC II would have a staff size of approximately 850 employees that would work in eight-to 12-hour overlapping shifts (a maximum of 315 employees per shift) throughout a 24-hour period. During Consolidated Operations, the facility would have a maximum staff size of up to 1,700 employees (includes the staffs of both PSAC I and PSAC II) that would work over a 24-hour period in overlapping shifts. A maximum of approximately 630 employees are expected to work at the proposed development site at any given time for temporary Consolidated Operations at PSAC II. The workers introduced to the proposed development and the surrounding area as a result of the Proposed Action are expected to place new demands on the City's water supply and sewage treatment/disposal systems.

The Proposed Action also involves an amendment to the City Map to map a private access roadway (Block 4226, part of Lots 30, 35, and 40), as a public street to provide permanent vehicular access and utility services to the proposed development. The proposed public street would extend north of Waters

Place for approximately 0.63 miles and would terminate in a hammerhead cul de sac at the southern boundary of the proposed development site. As part of this mapping action, the City would acquire portions of the western edges of Lots 30, 35, and 40 on Bronx Block 4226 from the respective landowners for the public street. The proposed street would be City-owned and maintained by the New York City Department of Transportation (NYCDOT).

The *CEQR Technical Manual* states that detailed analysis of wastewater treatment is needed for those actions with very large flows that have the potential for significant adverse impacts on sewage treatment. As such, the Proposed Action is analyzed for the volumes of wastewater it would generate in relation to the State Pollutant Discharge Elimination System (SPDES) permitted capacity of the water pollution control plant servicing the project area. In addition, the *CEQR Technical Manual* also states that a detailed analysis of stormwater management is warranted if a Proposed Action involves certain types of industrial activities (e.g., manufacturing, processing, or raw materials storage), actions that would greatly increase the amount of paved area, actions that would be served by a separate storm system and that would involve construction activities, or construction of a new stormwater outfall. As the Proposed Action would entail one or more of the above conditions, an assessment of stormwater management is also provided in this chapter.

It should also be noted that in conjunction with the planned developments to the south of the proposed development site (“Towers at the Hutchinson Metro Center”), which would be constructed with or without the Proposed Action, existing private storm and sanitary sewer connections are being upgraded, as necessary, to serve the new development.

The analysis in subsequent sections concludes that the Proposed Action would not result in any significant adverse impacts to the existing water supply, sewage treatment, and stormwater discharge systems. The existing municipal services have adequate capacity to meet the increases in demands.

B. SITE CONTEXT

The proposed development site and the area affected by the proposed mapping action, combined, create the area defined as the “Project Site.” The Project Site encompasses approximately 13.08 acres, and includes the approximately 8.75 acre proposed development site, which would be acquired by the City, and the approximately 4.33 acre area that would be mapped as a new public street, which would provide access and utility services to the proposed development site along a public right-of-way.

As described previously, the proposed development site is located to the southwest of the interchange of the Pelham and the Hutchinson River Parkways on the eastern edge of Bronx Community District 11. It is a bell-shaped property that comprises of northern portion of the privately owned Hutchinson Metro Center (HMC) commercial office complex. In its entirety, the HMC encompasses approximately 32-acres of land (Block 4226, Lots 35, 40, 55, 70, and 75) directly north of the New York State owned and operated Bronx Psychiatric Center (Block 4226, Lot 30). The suburban-style office park campus contains one large, 4-story office building, as well as a 1-story warehouse, which is leased by New York State, and at grade accessory parking. In addition, the southwestern corner of the office complex is currently undergoing construction, and is anticipated to be developed with two new commercial buildings that would house approximately 602,000 gsf of commercial space, including office space and a hotel, as well as enclosed accessory parking (the “Towers at HMC” development). Construction of the first of the towers (Tower One) was recently completed.

Vehicular access to the HMC is provided from the south via a private access roadway (“Industrial Street”) that extends north of Waters Place from a gated entrance located approximately 700 feet west of the entrance to the Bronx Psychiatric Center. There is also a secondary connection to Industrial Street from an at-grade parking lot located to the west, which is accessible from another private access road (Bassett Road) that extends north of Eastchester Road from a signalized intersection to the west of Calvary Hospital.

As described above, the proposed development site comprises the northern portion of the HMC and is generally bounded by the Pelham Parkway to the north, the Hutchinson River Parkway to the east, the 4-story HMC building to the south, and the Amtrak right-of-way to the west. The proposed development site consists of Bronx Block 4226, Lot 75 (bell-shaped lot) and the northern portions of Lots 40 and 55 on Block 4226. It is entirely privately owned and largely unimproved, and encompasses approximately 8.75 acres of land. The development site is partially occupied by at-grade accessory parking for the HMC on its southern half (Block 4226, part of Lots 40 and 55) and partially occupied by vacant (Block 4226, Lot 75). A narrow asphalt pedestrian walkway also cuts through the center of the northern portion of the development site providing a pedestrian connection between the Pelham Parkway and the HMC. The proposed development site is zoned M1-1.

Vehicular access to the proposed PSAC II site would only be provided from the south via Industrial Street. Industrial Street is a two-way, private access road that extends north of Waters Place from a signalized intersection. In order to ensure permanent access and to provide utility services to the proposed development site, the City Map would be amended to map Industrial Street as a public street (“Marconi Street”) that would extend from Waters Place to the southern boundary of the proposed development site. The area affected by the proposed mapping action comprises approximately 4.33 acres (Block 4226, part of Lots 30, 35 and 40) and is partially zoned M1-1 and R5.

C. EXISTING CONDITIONS

Water System

Water Supply

The New York City water supply system comprises three watersheds north and northwest of the city: the Delaware, Catskill, and Croton. From these watersheds, water is conveyed as far as 125 miles to the City via a system of reservoirs, aqueducts, and tunnels. The system has 19 collecting reservoirs, two balancing reservoirs, aqueducts, and tunnels, with several dams, 3 major aqueducts, 2 large water distribution tunnels, with a third major tunnel under construction and partially in use, and a system of water mains and other facilities. The watersheds of the three systems encompass almost 2,000 square miles, with a storage capacity of about 550 billion gallons. The water flows to the City through aqueducts, reaching most consumers by gravity alone, although some four percent of the City's water must be pumped to its final destination.

Neither the groundwater beneath Bronx nor the waters of the East River are used as a source for potable water or other uses, such as irrigation or industrial processes. The current average daily water consumption for the City as a whole is approximately 1.3 billion gallons per day (gpd) according to the New York City Department of Environmental Protection (NYCDEP), the municipal agency that operates the system.

The City's potable water supply is treated with a variety of chemicals for various reasons, including fluoride added for dental hygiene. The NYCDEP conducts regular water quality monitoring to check the levels of treated water and to document compliance with federal and state water quality regulations. The City does not filter its drinking water supply; however, under a consent decree with the United States Environmental Protection Agency (USEPA) and the New York State Department of Health (NYSDOH), it is constructing a filtration plant in Van Cortlandt Park in the Bronx to filter water from the Croton system. Currently, the City is not required and is not planning to filter water from the Catskill and Delaware systems.¹

The Bronx's water supply comes primarily from the Croton system. Watersheds within the Croton system collect runoff from areas in Westchester, Dutchess, and Putnam Counties and deliver it via open channel streams and rivers to the New Croton Reservoir in Westchester County. From there, water flows to the Jerome Park Reservoir through the Croton Aqueduct, then to the low-lying areas of the Bronx and Manhattan. The remaining two surface water systems, the Delaware and Catskill systems, collect water from watershed areas in the Catskill Mountains and deliver it to the Hillview Reservoir in Yonkers. From there, it is distributed to the City through three tunnels: City Water Tunnel No. 1, which goes through the Bronx and Manhattan; City Water Tunnel No. 2, which goes through the Bronx, Queens, and Brooklyn (and from there through the Richmond Tunnel to Staten Island); and City Water Tunnel No. 3, which currently serves the Bronx, upper Manhattan, and Roosevelt Island. The construction of City Water Tunnel No. 3 was begun in 1970 and is scheduled for completion in 2020. The addition of City Water Tunnel No. 3 is intended to improve the City's water supply while allowing for the inspection and repair of City Water Tunnels Nos. 1 and 2. The next phases of City Water Tunnel No. 3, currently under construction, are intended to provide service to Midtown Manhattan, Lower Manhattan, Brooklyn, and Queens. City Water Tunnel No. 3 is anticipated to be a supplemental water source and to provide redundancy and improve reliability of future water service delivery to these areas.

Within the City, a grid of pipes distributes water to consumers. Large mains—up to 96 inches in diameter—feed smaller mains, such as 8, 12 and 20-inch mains, that distribute water to individual locations. These mains also provide water to fire hydrants along many of the City's streets. Pressure regulators control water pressure throughout the City's water supply system.

The primary water supply to the area surrounding the proposed development site is furnished by 8- to 12-inch diameter water mains, which are standard pipe sizes for local water distribution in New York City. A 48-inch diameter water main runs beneath Eastchester Road in the vicinity of the site. The Pelham Parkway to the north of the proposed development site contains a 20-inch water main; additionally, Waters Place contains a 12-inch water main in the vicinity of the site. Buildings drawing upon the water supply connect into the smaller distribution mains for their water needs.

There is currently no public water service/water easement that services the proposed development site. Within the Hutchison Metro Center, there are various private water lines that are mainly 4- to 12-inches in size. These private lines connect into the city system but are owned privately.

Water Consumption

The New York City water supply system provides approximately 1.3 billion gpd, with consumption reaching upwards to 1.5 billion gpd during the summer months. Average daily water consumption in the Bronx is estimated at about 200 million gallons per day (mgd). Because of the size of the water supply system, little variation in water pressure occurs from hour to hour, except within the local

¹ Ascher, Kate, *The Works: Anatomy of a City*, 2005.

distribution network. The average water pressure in the Bronx is about 38 pounds per square inch (psi). A pressure of 20 psi is considered the minimum acceptable level for uninterrupted service.

Proposed Development Site

As the proposed development site is partially occupied by vacant land and partially by at-grade accessory parking for the Hutchison Metro Center, it is not currently generating any ongoing water demand.

Sanitary Sewage

According to the *CEQR Technical Manual*, for assessment purposes, estimates of an area's daily sanitary sewage generation are typically equivalent to the domestic water usage rates. Wastewater from air conditioning systems is not included in the overall volumes used for analysis, as minimal volumes of wastewater are generated from the recirculation and evaporation processes involved in the air-cooling process.

New York City's sewer system consists of a grid of more than 6,000 miles of sewer pipes beneath the streets that send wastewater flows to 14 different treatment plants, known as "water pollution control plants," or "WPCPs," which have a combined capacity to treat a total of approximately 1.77 billion gallons of sewage per day (gpd). The areas served by each of these plants are called "drainage basins." Most of this system is a "combined" sewer system—it carries both sanitary sewage and site storm water from buildings and stormwater collected in catch basins and storm drains—operated and maintained by the NYCDEP. However, some areas of the City, primarily in Queens and Staten Island, operate with separate systems for sanitary sewage and stormwater. In addition, small areas of Staten Island, Brooklyn, and Queens use septic systems to dispose of sanitary sewage. Also, some developments in Staten Island also use small privately owned and operated sewage treatment plants to treat sanitary sewage.

Sewers beneath the City's streets collect sewage from the buildings along the streets. Collection sewers can be one to two feet in diameter on side streets, and three or four feet in diameter under larger roadways. They connect to trunk sewers, generally five to seven feet in diameter, which bring the sewage to interceptor sewers. These large interceptor sewers (often up to 10 or 12 feet in diameter) bring the wastewater collected from the various smaller mains to the water pollution control plants for treatment.

Combined sewers serve the project area and collect both "dry-weather" wastewater (primarily sanitary sewage as well as wastewater from industries) and stormwater. During dry weather, combined sewers function as sanitary sewers, conveying all flows to the WPCPs for treatment. During wet weather, however, large volumes of rainfall runoff (10 to 50 times the dry-weather flow) can enter the system through catch basins along the City's streets. If this water were conveyed to the treatment plants, it would exceed their design capacity, as the plants are designed to handle only twice their average design dry-weather flow for limited periods. To avoid flooding the plants, "regulators" are built into the combined sewers to act as relief valves. These are chambers generally set to allow two times the average design dry-weather flow into the interceptor. During storms, if a greater amount of wastewater reaches the regulator, the excess is directed to outfalls into the nearest waterways (e.g., the Hudson River, East River, etc.). In the vicinity of the Project Site, there are combined sewer overflow outfalls into the Westchester Creek and the Hutchinson River. During such heavy storm periods, a portion of the sanitary sewage entering or already in the combined sewers discharges into the waterways along with the stormwater and debris washed from the streets. This untreated overflow is known as "combined sewer overflow," or "CSO." Combined sewer overflow is a concern because it contains oil

and gasoline from street traffic, floating debris (also called “floatables,” and usually consisting primarily of street litter), various pollutants from industrial facilities (both pollutants discharged into the sewer system and pollutants in the runoff from these facilities), and untreated sewage.

The Project Site is located in the service area of the Hunts Point Water Pollution Control Plant (WPCP), located on Ryawa Avenue in the Bronx. The Hunts Point WPCP, which is currently undergoing an upgrade, serves a population of approximately 684,569 people in portions of the eastern section of the Bronx. It provides secondary treatment of sanitary sewage, by removing organic materials through biological activity.

The Hunts Point WPCP has a State Pollutant Discharge Elimination System (SPDES) permitted capacity of 200 million gallons per day (mgd). The New York State Department of Environmental Conservation (NYSDEC) issues SPDES permits. The average actual monthly flow rate at the plant for the latest 12 months of records available (May 2007 to April 2008) are shown in Table 9-1. As shown in the table, during the past 12 months the Hunts Point WPCP had an average flow of 132 mgd average dry weather flow, which is below the SPDES permit allowable limit. The plant handles greater volumes during storm events due to stormwater inflows to the plant.

TABLE 9-1
Monthly Average Daily Flows at Hunts Point WPCP

Year	Month	Flow (mgd)
2007	May	123
2007	June	131
2007	July	138
2007	August	136
2007	September	116
2007	October	123
2007	November	124
2007	December	139
2008	January	134
2008	February	146
2008	March	147
2008	April	127
12-Month Average		132
SPDES Permitted Capacity		200

Source: New York City Department of Environmental Protection (NYCDEP)

For the conveyance of sanitary sewage, the proposed development site is currently not served. An extensive network of private sanitary and storm sewer lines serve the HMC property. Sanitary sewage is pumped from the HMC property via an 8-inch diameter private force main south along Industrial Street. At Waters Place, this force main runs west into a combined sewer at Eastchester Road.

No major sewer changes, such as new outfalls, major size increases, and changes in flow direction, etc. are planned for the public infrastructure in the immediate area.

As with demand for potable water, the proposed development site is not currently generating any sanitary wastewater flows.

Stormwater Runoff

Stormwater runoff is collected in catch basins along the streets, and channeled to the storm water sewer system along the Hutchinson River Parkway. The proposed development site is partially covered by a paved, at-grade accessory parking, which is an impervious surface. The remainder of the development site is occupied by vacant land. The proposed development site is not served by public utilities. As such, any stormwater from the proposed development site is either absorbed into pervious surfaces or results in runoff that is captured by the private system and on-site detention systems on the HMC property.

Storm flow to the south of the Project Site generally flows in an easterly direction where it is either directed into on-site detention systems or into the adjacent storm sewer, which runs parallel to the Hutchinson River Parkway. This storm sewer ranges in size from 48-inches in diameter to more than seven feet in diameter. This sewer flows southerly and provides storm sewer collection for the Hutchinson River Parkway, the HMC and the Bronx Psychiatric Center.

Waters Place has a 24-inch storm sewer at the intersection of Industrial Street and Waters Place. This sewer flows easterly toward the Hutchinson River Parkway. At the intersection of Waters Place and Fink Avenue, this storm sewer is 48 inches in diameter and connects to the Hutchinson River Parkway storm sewer, which is seven feet in diameter at this location. This sewer flows southerly from this point and outfalls at the nearby Westchester Creek.

D. FUTURE WITHOUT THE PROPOSED ACTION (NO-BUILD CONDITIONS)

In absence of the Proposed Action in 2012, the southern portion of the proposed development site would continue to serve as at-grade accessory parking for the HMC, and the northern portion would continue to accommodate vacant land. As such, under the future without the Proposed Action, the water consumption and sewage generation would therefore be the same as under existing conditions.

Some infrastructure improvements are expected to the private sewer systems located to south of the proposed development site in the future without the Proposed Action in order to accommodate the ongoing development of the HMC. This work will be done regardless of the Proposed Action.

As noted above, no major water or sewer changes, such as new outfalls, major size increases, changes in flow direction, etc. are planned for the public infrastructure in the immediate area. As described in Chapter 2, "Land Use, Zoning, and Public Policy," Pelham Parkway, including its service roads, will be reconstructed between the Bronx River Parkway and the Hutchinson River Parkway by the Build year of 2012. This work involves some improvements to the sewer and water main lines, street lighting and traffic work.

E. FUTURE WITH THE PROPOSED ACTION (BUILD CONDITIONS)

The Proposed Action would facilitate the construction of a new public facility, PSAC II, which would consist of an approximately 640,000 gsf office building and a 500-space above-grade accessory parking structure ("proposed development"). The proposed PSAC II development would function as a parallel operation to the existing PSAC I in Downtown Brooklyn and would augment and provide

redundancy to the current emergency 911 services in New York City. It would serve as a streamlined emergency call intake and dispatch center for all of the City's first responders, and would also house command control center operations for the Fire Department of New York City (FDNY) and the New York City Police Department (NYPD) to coordinate emergency response throughout the entire city at a centralized location.

As proposed development site, comprising the northern portion of HMC, is relatively isolated from the surrounding area with no linear frontage adjacent to a public street, the Proposed Action would also involve an amendment the City Map to map an existing private access roadway as a public street to ensure permanent vehicular access and utility services to the site along a public right-of-way. The proposed public street (Marconi Street; Block 4226, part of Lots 30, 35 and 40) would extend north of Waters Place from a signalized intersection located approximately 700 feet west of the entrance to the New York State operated Bronx Psychiatric Center for approximately 0.63 miles to the southern boundary of the proposed development site. The proposed street would be mapped at a width of 60 feet for approximately 1,790 feet and 50 feet for approximately 1,550 feet.

When completed in 2012, the proposed PSAC II development would operate continuously 24 hour per day, seven days per week and is expected to have a typical staff size of approximately 850 employees working three eight to ten hour shifts throughout the 24-hour period (approximately 315 employees maximum per shift). As there are expected to be a number of circumstances when the proposed PSAC II development would accommodate emergency communications for the entire City, which would require the temporary transfer of PSAC I personnel to the proposed development, the proposed facility is being designed to accommodate up to 1,700 employees (staffs of both PSAC I and PSAC II) with up to a maximum of approximately 630 employees per shift. For conservative CEQR analysis purposes two staffing level conditions have been analyzed for the proposed development, including typical day-to-day operations ("Typical Operations"), and an event when there are temporary increases of staff levels from combined facilities of PSAC I and PSAC II at the proposed development ("Consolidated Operations").

The Proposed Action would create new water and sewer infrastructure as well as new water consumption demands, sewage and stormwater generation at the proposed development site. Compared to the No-Build condition, the Proposed Action would facilitate the construction of an approximately 640,000 gsf office building with an approximately 41,160 gsf footprint and 14 levels (350 feet) above grade and a 500-space accessory parking garage.

Water System

The *CEQR Technical Manual* has established the general threshold for demand on the City's water supply systems of one million gallons of water per day (mgd). An increase of demand of less than this threshold is not considered to result in a significant adverse impact on the City's water system. If an increase in water demand is projected to exceed this threshold, a detailed analysis of the City's ability to supply water to a project site is required.

The expected water demand for the two staffing levels conditions (i.e., Typical and Consolidated Operations) at the proposed development are provided below, and are based on the type of use that is proposed for the site. As per the *CEQR Technical Manual* guidelines (Table 3L-2 of the *CEQR Technical Manual*, "Water Usage and Sewage Generation Rates for Use in Impact Assessment"), office uses are expected to create a demand for domestic water at a rate of 25 gpd per person. As such, under Consolidated Operations, the proposed development would accommodate up to 1,700 employees (staffs of PSAC I and PSAC II), which would generate a domestic water demand of up to 42,500 gpd. Under Typical Operations, the proposed development would accommodate 850

employees (PSAC II staff only), which would have a demand for approximately 21,250 gpd of water. The proposed development would also create an additional demand of 0.10 gpd per square foot of building area for air conditioning systems according to CEQR guidelines. As such, it is estimated that the proposed 640,000 gsf office building would utilize an addition approximately 64,000 gpd of water for air conditioning. Therefore, under the Consolidated Operations (1,700 staff), the proposed development would generate a total water demand of approximately 106,500 gpd, as compared to the proposed development's total water demand of approximately 82,250 gpd under Typical Operations (850 staff). As the proposed PSAC II development's generated water demand would be below the CEQR impact threshold of one million gpd of water under either staffing level operating condition at the site, the Proposed Action is not expected to adversely affect the City's water supply or local water pressure.

Compared to the average daily water demand in New York City of about 1.3 billion gpd, the maximum increase in water demand resulting from the Proposed Action represents less than 0.01 percent of the City's total daily consumption, which is an insignificant increase. The water supply system has adequate capacity to support the proposed development and would not experience a significant adverse impact.

In addition, the Proposed Action includes various improvements to the water supply, which correlate to the proposed development and subsequent changes to the City Map. These proposed changes are as follows:

- The private "Industrial Street" would be reconstructed and officially mapped (as Marconi Street) as part of the Proposed Action. Existing utilities within the street that service the HMC are expected to remain or would be replaced with new utilities as required by the NYCDEP.
- Construction of a new water main within the newly mapped street, which would be designed in accordance with NYCDEP guidelines, and will be built to meet all NYCDEP requirements.

Sanitary Sewage

As part of the Proposed Action, a new dedicated sanitary sewer would be constructed within the proposed public street ("Marconi Street"). This sewer would pump sanitary waste from the proposed PSAC II development via a new force main down Marconi Street and west along Waters Place to the combined sewer that is located within Eastchester Road.

The estimated sanitary sewer generation for the proposed development would be the same as the estimated domestic water demand (excluding air conditioning demand). Typical day-to-day operations at the proposed development would generate approximately 21,250 gallons of sanitary sewage, whereas under the Consolidated Operations, the proposed development would generate up to approximately 42,500 gallons per day. These generation rates represent less than one tenth of a percent of the SPEDES permitted flow of 200 mgd to the Hunts Point WPCP, and are considered to be insignificant increases. The Proposed Action would not have a significant adverse impact on the Hunts Point WPCP's ability to properly treat and discharge sanitary sewage.

New sewer lines would be designed to meet all applicable NYCDEP requirements. The proposed development would not exceed the capacity of the local sewer system, and is not expected to result in significant adverse impacts on the City's existing sewer system.

Stormwater Runoff

The Proposed Action would increase the amount of paved area on the proposed development site resulting in approximately 341,600 sf (7.84 acres) of building roof area and associated roadways (including Marconi Street) and internal circulation and approximately 224,500 sf (5.2 acres) of pervious area on the proposed development site. It is expected that portions of the areas within the proposed development site that previously discharged stormwater into the HMC's privately owned sewer systems and detention tanks would be designed to discharge into a new, separate public storm sewer to be constructed in the proposed public street, while other portions of the site would discharge into the existing Hutchinson River Parkway storm sewer located along the eastern edge of the proposed development site. This is consistent with the NYCDEP policy to separate storm and sanitary discharges.

The Proposed Action would include construction of a NYCDEP storm sewer within the proposed street in accordance with the City's amended drainage plan for the area. In order to accommodate this sewer the existing Waters Place storm sewer would also need to be reconstructed. The drainage plan would be amended (or a Drainage Proposal would be developed for the project) as part of the mapping action associated with the Proposed Action.

New site storm sewers would be constructed to collect runoff from the buildings, paved areas, and pervious areas within the Project Site. These internal drains would either discharge into a newly constructed NYCDEP storm sewer within proposed street or into the existing Hutchinson River Parkway storm sewer located along the eastern edge of the proposed development site. Detention tanks or retention facilities would be provided on-site to reduce the expected increase in storm water flow due to the creation of additional impermeable surfaces on the site. Where feasible, porous pavement surfaces would be provided on-site, which are permeable pavement surfaces with a stone reservoir underneath, for internal circulation and parking areas, etc. These surfaces would reduce stormwater generation and provide some water quality treatment from new newly created site pathways. It is also proposed to provide a green roof on the proposed accessory garage structure to help reduce site storm water runoff. Furthermore, it is expected that water quality improvement measures would be provided on-site to help improve storm flow exiting the site, including the use of hydrodynamic separators or similar measure for removing suspended solids.

The proposed PSAC II development would be designed in accordance with a Stormwater Pollution Prevention Plan (SWPPP) in order to minimize potential water drainage effects associated with the discharge of stormwater during and after completion of construction activities. The SWPPP will incorporate stormwater management practices (SMP's) consistent with the SPDES General Permit for Construction Activities (GP-02-01) and with the New York State Stormwater Management Design Manual. All runoff will be in accordance with design parameters established for the NYCDEP Amended Drainage Plan or Drainage Proposal for this project.

The Proposed Action would not have a significant adverse impact on water quality in the Westchester Creek.

F. CONCLUSION

The Proposed Action would not result in significant adverse impacts on existing infrastructure systems. The existing city infrastructure has sufficient capacity to accommodate the proposed PSAC II

development under either staffing level condition without having a significant adverse impact on other users.

The proposed PSAC II development is expected to generate a maximum demand of 106,500 gpd of water under Consolidated Operations when it is accommodating the staffs of both PSAC I and PSAC II. As this is well below the CEQR impact threshold of one million gallons of water per day, the Proposed Action is not expected to overburden the city's water supply system under either staffing level condition of the proposed PSAC II development, and would not result in a significant adverse impact to the city's water supply or water pressure.

When the proposed development is accommodating the staffs of PSAC I and PSAC II under its temporary Consolidated Operations, the Hunts Point WPCP would receive up to approximately 42,500 gpd of additional sanitary sewage, which represents less than one tenth of one percent of the plant's treatment capacity. Consequently, there would be adequate treatment capacity at the Hunts Point WPCP to handle the increased sanitary flows from the proposed PSAC II development under either staffing level condition, and the Proposed Action would not result in a significant adverse impact to the city's sanitary sewer system.

Stormwater from the proposed development would either be discharged into a new, separate public storm sewer to be constructed in the proposed public street, or into the existing Hutchinson River Parkway storm sewer located along the eastern edge of the proposed development site. Detention tanks or retention facilities would also be provided on-site to reduce the expected increase in storm water flow due to the creation of additional impermeable surfaces on the site. The stormwater discharges are not expected to have a significant adverse impact on the sewer system or on the water quality of the Westchester Creek. In addition, to reduce stormwater generation and/or provide some water quality treatment from newly created site pathways, a green roof is proposed for on the accessory parking structure, porous pavement surfaces are expected be provided on-site, and water quality improvement measures would be provided on-site such as the use of hydrodynamic separators or similar measures for removing suspended solids.