9

Water and Sewer Infrastructure

This chapter evaluates the potential for the Proposed Actions in connection with the Proposed Project to result in significant adverse impacts on the City's water supply, as well as its wastewater and stormwater conveyance and treatment infrastructure.

Introduction

The Applicants, 760 12th LLC and 801 11th Ave., LLC, are seeking zoning map amendments, zoning text amendments, and zoning special permits (collectively, the Proposed Actions) to facilitate the development of two buildings (collectively, the Proposed Projects): a 44-story, mixed-use residential and commercial building at 629 W 54th Street (Manhattan Block 1102, Lot 11) and a 38-story, mixed-use residential and commercial building at 801 Eleventh Avenue (Manhattan Block 1103, Lot 36). The building at 629 W 54th Street would contain up to approximately 617 dwelling units (DUs) and 113,990 gsf of commercial auto dealership space. The building at 801 Eleventh Avenue would contain 477 DUs and 85,760 gsf of commercial auto dealership space. In total, the Proposed Projects would contain approximately 1,179,321 gsf (892,442 zsf) including approximately 939,934 gsf (743,701 zsf) of residential floor area and 199,750 gsf (148,740.6 zsf) of commercial floor area across the two development sites. The Proposed Actions include zoning changes and special permits to facilitate a transfer of floor area from Chelsea Piers, Piers 81/83, and Pier 98 (the "Granting Sites") within Hudson River Park to the development sites. In addition to the Proposed Actions, the Board of Directors of Hudson River Park Trust must approve the sale of the floor area from the Granting Sites, which requires a Signification Action process pursuant to the Hudson River Park Act.

Additionally, as described in **Chapter 1, Project Description**, two reasonable worst-case development scenarios (RWCDSs) were analyzed to provide a conservative baseline in analyzing the Proposed Actions' potential impacts. One scenario is the Maximum Commercial Scenario which assumes that the commercial space would be developed as office and retail uses instead of auto

dealership use. The second scenario is the Maximum Residential Scenario which would maximize the residential development for the site.

Under the Maximum Commercial Scenario, it is assumed that Development Site 1 would contain 617 DUs, 65,364 gsf of office space and 48,626 gsf of retail space. Development Site 2 would contain 477 DUs, 47,350 gsf of office space, and 38,410 gsf of retail space.

Under the Maximum Residential Scenario, it is assumed that Development Site 1 would contain 701 DUs and 50,118 gsf of auto dealership space. Development Site 2 would contain 541 DUs and 38,441 gsf of auto dealership space.

Absent the Proposed Actions (the No-Action condition), it is assumed that Development Site 1 would continue to operate as an auto dealership, and the existing auto dealership space on Development Site 2 would be leased to new tenants (152,375 gsf for Development Site 1 and 57,805 gsf for Development Site 2).

According to the *2021 City Environmental Quality Review (CEQR) Technical Manual,* discretionary actions that would increase density or change the drainage conditions may warrant a water and sewer infrastructure analysis. Specifically, development that would result in an exceptionally large demand for water (more than a million gallons per day (mgd)) or that is located in an area that experiences low water pressure require an analysis of potential impacts on the water supply system. Additionally, developments located in combined sewered areas exceeding incremental development thresholds (above the predicted No-Action condition) of 1,000 residential units or 250,000 square feet (sf) or more of commercial, public facility, and institution, and/or community facility space in Manhattan would warrant a sewer infrastructure analysis.

Principal Conclusions

The Proposed Actions would not result in any significant adverse water and sewer infrastructure impacts.

The proposed developments are located in a combined sewer system area of New York City. The incremental development threshold exceeds 250,000 square feet, therefore, the *2021 City Environmental Quality Review Technical Manual* warrants a water and sewer infrastructure analysis.

The Proposed Actions would result in a total daily water demand of approximately 0.23 mgd. Since the Proposed Actions would not exceed the threshold of 1 mgd, no further analysis of the water supply system is warranted, and the Proposed Actions would not result in any significant adverse impacts on the water supply.

The total volume of sanitary runoff and stormwater generated by the Proposed Actions as part of the combined sewer system would discharge into the North River Water Resource Recovery Facility (WRRF). This WRRF has a State Pollutant Discharge Elimination System (SPDES)-permitted dry weather flow capacity of 170 mgd. The average monthly flow to North River WRRF over a 12-month period is 115 mgd. As part of the stormwater assessment below, the change in wastewater flow volumes to the combined sewer system during a stormwater event under With-Action conditions is expected to result in a total generation of up to 0.073 MG over the No-Action total volume. This incremental increase in combined sewage flow would represent an estimated 0.04 percent of the North River WRRF's SPDES-permitted capacity. The projected increase in combined sewage would not cause the North River WRRF to exceed its operational capacity or SPDES-permitted capacity.

Therefore, the Proposed Actions would not result in any significant adverse combined sewage impacts.

The Project Area is served by one storm sewer outfall—Combined Sewer Overflow (CSO) Outfall NRS-035. The Proposed Actions would incorporate best management practices (BMPs) that would be required in accordance with the NYCDEP Unified Stormwater Rule (USWR) guidelines, which include requirements for bringing the development sites into compliance with the allowable stormwater release rate. To achieve the release rate, stormwater would be managed by utilizing one or a combination of detention techniques. Green infrastructure technologies and subsurface detention would be implemented to retain or release stormwater with slowed discharge rates to control peak runoff rates. Therefore, the Proposed Actions would not result in any significant adverse stormwater impacts.

Methodology

This analysis follows the *CEQR Technical Manual* guidelines that recommend a preliminary water analysis be completed if a project would result in an exceptionally large demand of water (over one million gpd) or is located in an area that experiences low water pressure (i.e., in an area at the end of the water supply distribution system such as the Rockaway Peninsula or Coney Island).

Existing and future water demand and sanitary sewage generation are calculated based on use rates set by the *CEQR Technical Manual*. The New York City Department of Environmental Protection (NYC DEP) Flow Volume Calculation Matrix is then used to calculate the overall stormwater runoff volume for four rainfall volume scenarios with varying durations. The ability of the City's sewer infrastructure to handle the anticipated demand from the Proposed Actions is assessed by estimating existing sewage generation rates, and then comparing these existing rates with the No-Action and With-Action conditions, per *CEQR Technical Manual* methodology.

For conservative analysis purposes, this assessment considers two RWCDSs: the Maximum Commercial Scenario and the Maximum Residential Scenario. When compared to No-Action conditions:

- The Maximum Commercial Scenario consists of a net decrease of 210,180 gsf of auto dealership space, and a net increase of 1,094 DUs, 112,714 gsf of office space, and 87,036 gsf of retail space compared to the No-Action condition.
- The Maximum Residential Scenario consists of a net decrease of 121,621 gsf of auto dealership space and a net increase of 1,242 DUs compared to the No-Action condition.

An initial screening showed that the Maximum Commercial Scenario would result in a greater water demand and generate more sewage over the Maximum Residential Scenario; therefore, the Maximum Commercial Scenario was used for the With-Action condition analysis to provide for a conservative analysis.

Existing Conditions

The development sites are currently occupied by existing automotive dealerships. Within the Project Area, there are two development sites—(1) the property at 629 W 54th Street (Manhattan Block 1102, Lot 11, a.k.a. 629 W 54th Street) owned by 760 12th LLC (Development Site 1) and (2) the property at

801 Eleventh Avenue (Manhattan Block 1103, Lot 36) owned by 801 11th Ave., LLC (Development Site 2).

Development Site 1 occupies the western portion of Block 1102 and has approximately 201 feet of frontage along Twelfth Avenue and 175 feet of frontage along West 54th and West 55th Streets. Development Site 1 has a total lot area of 35,145.25 sf. It is improved with a six-story, 82-foot-tall commercial auto dealership building with a total built area of approximately 152,375 gross square feet (gsf). The building was constructed in 1930. Development Site 1 is mapped within a M2-4 district within the C2 Subdistrict of the Special Clinton District (CL).

Development Site 2 occupies the eastern portion of Block 1103 and has approximately 201 feet of frontage along Eleventh Avenue, 100 feet of frontage along West 55th Street, and 150 feet of frontage along West 56th Street. Development Site 2 has a total lot area of approximately 26,830 sf, and is occupied by two buildings that have been operated as a single commercial auto dealership, including a two-story, roughly 50-foot-tall building and a three-story, roughly 35-foot-tall building, with a total built area of approximately 57,805 gsf. The buildings were constructed in 1920, and the northern building was enlarged in 2011. Development Site 2 is mapped in a M2-3 district within the C1 Subdistrict of the Special Clinton District (CL).

Water Supply

The New York City water supply system consists of a network of reservoirs, lakes, and aqueducts extending north into the Catskill region, and a grid of underground distribution mains that distributes water within the City. As mentioned earlier, approximately 1.3 billion gpd of water are consumed by New York City through this water supply system.

Most of New York City obtains water from three surface water supply systems operated by NYC DEP – Delaware, Catskill, and Croton. The watersheds of the three systems cover almost 2,000 square miles, with 19 reservoirs and three control lakes, which have a combined storage capacity of approximately 550 billion gallons.

Two of the three 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 Tunnel 1, which runs through the Bronx and Manhattan to Brooklyn; City Tunnel 2, which goes through the Bronx, Queens, and Brooklyn (and from there through the Richmond Tunnel to Staten Island); and City Tunnel 3 (Stage 1), which goes through the Bronx and Manhattan and ends in Queens. Stage 2 of City Tunnel 3 is currently under construction in Queens and Brooklyn.

The third surface water system, the Croton system, collects water from watershed areas in Dutchess, Putnam, and Westchester Counties and delivers it to the Jerome Park Reservoir in the Bronx. From there, it is distributed to the Bronx and Manhattan through the New Croton Aqueduct.

Once in the City, the aqueducts distribute water into a network of water mains. Water mains up to 96 inches in diameter feed smaller mains, such as 20, 12, and 8-inch mains, which deliver water to their destination, including to fire hydrants along many of the City's streets. Nearly all of the water reaches consumers by gravity alone, with roughly four percent (generally located at the outer limits of the system where in-line pressure is lowest, at high elevations, or at pressure extremity such as Far Rockaway) being pumped to its final destination. Water pressure throughout the City's water supply system is monitored and controlled by pressure regulators.

New York City consumes approximately 1.3 billion gallons of water per day from a reservoir system with a total storage capacity of approximately 550 billion gallons.[1, 2] The total water usage anticipated as a result of the Proposed Actions is calculated to equal approximately 0.28 mgd, which is an increment of approximately 0.19 mgd, compared to the No-Action condition's projected demand of approximately 0.09 mgd. As the total water usage would result in less than 1 mgd, the Proposed Actions would not have a significant adverse impact on the City's water supply or system water pressure.

Water consumption and wastewater generation rates were derived from the *CEQR Technical Manual* and are provided in **Table 9-1**. Existing water consumption and sewage generation for the site is shown in **Table 9-2**.

Table 9-1 Water Consumption and Wastewater Generation Rates

	Rate			
Land Use	**Domestic[1]**	**Units**	**Air Conditioning[1]**	**Units**
Residential	100	gpd/person	0.00	gpd/sf
Retail	0.24	gpd/sf	0.17	gpd/sf
Schools	10	gpd/seat	0.17	gpd/sf
Community Facility[2]	0.10	gpd/sf	0.17	gpd/sf
Auto-Dealership[3]	0.10	gpd/sf	0.17	gpd/sf

Notes:

[1] Consumption rates obtained from the *2021 CEQR Technical Manual* Table 13-2 "Water Usage and Sewage Generation Rates for Use in Impact Assessment"

[2] Consistent with the *Stevenson Commons EIS*, the water consumption and wastewater generation rates for Community Facility utilizes the same CEQR rates as office space

[3] Auto-Dealership water consumption and sewer generation rates conservatively utilize the same CEQR rates as office space (i.e., 0.10 gpd/sf for domestic and 0.17 gpf/sf for air conditioning).

Table 9-2 Existing Water Consumption and Sewage Generation

Land Use	**Area (sf)**	**Dwelling Units/Seats**	**Domestic Water/Wastewater Generation (gpd)**	**Air Conditioning (gpd)**
Auto-Dealership	210,180	-	56,749/21,018	35,731
Water Consumption Subtotals			56,749/21,018	35,731
Sewage Generation Subtotal			21,018	
Total Water Consumption			56,749	

Conveyance System

The Project Area is in a part of New York City that is served by combined sewer systems. The sanitary and stormwater runoff is collected by a system of internal pipes, manholes, and catch basins. This

[1] Source: New York City's Wastewater Treatment System, New York City Department of Environmental Protection (NYC DEP); https://www1.nyc.gov/site/dep/water/

[2] Source: *2021 CEQR Technical Manual.*

system connects to the 28" and 36" combined sewers adjacent to the Project Site. These mains then flow North to the North River Water Resource Recovery Facility (WRRF) and overflow at Outfall NR-035 during a combined sewer overflow event.

Table 9-3 North River Average Monthly Flows

	Month	Flow (mgd)
2023	September	131
	October	111
	November	106
	December	117
2024	January	116
	February	105
	March	119
	April	110
	May	110
	June	113
	July	115
	August	121
	Average	**115**

Note:
[1]Average Monthly flows were provided by NYC DEP

Sanitary Flows

Sanitary sewage generated at the Project Area discharges to the WRRF shown on **Figure 9-1**. A State Pollutant Discharge Elimination System (SPDES) permit issued by the New York State Department of Environmental Conservation (NYSDEC), which establishes limits for effluent parameters (i.e., suspended solids, fecal coliform bacteria, and other pollutants), regulates the quality of the treated wastewater (effluent). Since the volume of flow to a WRRF affects the level of treatment a facility can provide, the maximum permitted capacity for the North River WRRF is 170 mgd. The average monthly flow to the North River WRRF over the latest 12-month period for which data are available is 115 mgd,[3] which is well below the maximum permitted capacity.

[3] Average flows provided by NYCDEP from 2020.

Figure 9-1 **Project Site, North River WRRF, Outfall NR-035**



For purposes of analysis, the amount of sanitary sewage is calculated as all water demand generated by the existing uses on the Project Site, except water used by air conditioning, which is typically not discharged to the sewer system. As shown in **Table 9-2**, the amount of sanitary sewage generated under existing conditions is 21,018 gpd.

Stormwater Flows

As described above, the Project Site consists of 1.42 acres with two buildings on two separate lots. **Table 9-4** summarizes the surfaces and surface areas, as well as the weighted runoff coefficient (the fraction of precipitation that becomes surface runoff for each surface type).

The Project Area is served by a combined sewer system. Stormwater runoff flows primarily to the North, collecting in inlets adjacent to the site into 28" and 36" combined sewers and can overflow during a combined sewer overflow event at the Outfall NR-035, as depicted in **Table 9-4**.

Table 9-4 Existing Surface Coverage

Affected Outfall	Surface Type	Roof	Pavement and Walkways	Other	Grass and Soft Scope	Total
NR-035[2]	Area (%)	93%	7%	0%	0%	100%
	Surface Area (sf)	57,533	4429	0	0	61,692
	Runoff Coefficient[1]	1.00	0.85	0.85	0.20	0.99

Notes:
[1] Runoff coefficients for each surface type as per NYC DEP
[2] Source: CSO Locations in New York City's Waterways, CSO Locations in New York City's Waterways (arcgis.com)

The NYCDEP Flow Volume Calculation Matrix was completed for existing conditions. The calculations from the Flow Volume Calculation Matrix provide a baseline to help determine the change in wastewater flow volumes to the system from existing to No-Action and With-Action conditions and include four rainfall volume scenarios with varying durations. A summary of the Existing Flow Volume Calculation Matrix is included in **Table 9-5**.

Table 9-5 NYC DEP Flow Volume Matrix – Existing Conditions

Rainfall (inches)[1]	Duration (hours)	Total Area (acres)[2]	Weighted Runoff Coefficient[3]	Stormwater Runoff (MG)[4]	Sanitary to WRRF (MG)	Total Volume to WRRF (MG)
0.00	3.80	1.42	0.99	0.000	0.014	0.014
0.40	3.80	1.42	0.99	0.020	0.014	0.034
1.20	11.30	1.42	0.99	0.050	0.041	0.091
2.50	19.50	1.42	0.99	0.100	0.072	0.172

Notes:
[1] Storm event rainfalls per NYC DEP Volume Calculation Matrix.
[2] Total surface area onsite for Projected Development sites within subcatchment area.
[3] Runoff coefficients for surface type area as per NYC DEP.
[4] Stormwater runoff derived from NYC DEP Volume Calculation Matrix.
[5] Sanitary volumes derived using methodology and consumption rates per the *2021 CEQR Technical Manual*
MG = million gallons

The Future Without the Proposed Actions

As described in **Chapter 1, Project Description**, absent the Proposed Actions, it is anticipated that Development Site 1 would continue to be occupied by the existing auto dealership use, and the existing auto dealership space on Development Site 2 would be leased to new tenants. No changes would occur on the portion of non-Applicant-owned Block 1103, Lot 23 comprising the balance of the Project Area. In the No-Action scenario, no floor area would be transferred from Hudson River Park.

The Future with the Proposed Actions

In the 2029 future with the Proposed Actions, the proposed zoning map amendments, text amendments, and special permits would be approved and it is anticipated that the development sites would be redeveloped as outlined under Proposed Projects, above. As noted above, the Maximum Commercial Scenario will be analyzed in this section to ensure conservative analyses.

Water Demand

The total water usage anticipated in the With-Action condition is calculated as approximately 0.26 mgd (Table 11-4), an incremental increase of 0.21 mgd compared to the No-Action condition's projected demand of 0.06 mgd. This represents a 0.0004 percent increase in demand on the water supply system compared to the City's average daily water use of approximately 1.3 billion gpd. As the total water usage anticipated of the Proposed Project would result in less than one mgd, the Proposed Project would not have a significant adverse impact on the City's water supply or system water pressure.

Sanitary Flows

As shown in **Table 9-6**, the Proposed Project is expected to have a total water demand of 262,514 gpd, with approximately 228,774 gpd of daily sanitary sewage generated under the With-Action condition.

Table 9-6 With-Action Water Consumption and Sewage Generation

Land Use	Area (sf)	Dwelling Units/Seats	Domestic Water/Wastewater Generation (gpd)	Air Conditioning Rates
Residential	939,934	1,094	196,920/196,920[1]	-
Retail	85,760	-	35,162/20,582	14,579
Office	112,714		30,433/11,271	19,161
Water Consumption Subtotal			262,514	
Sewage Generation Subtotal			228,774	

Notes:
[1] The number of residents is based on an average household size of 1.80

The incremental sanitary sewage generated by the With-Action condition, as compared with the No-Action condition, would be 207,756 gpd. This increase in wastewater generation would be approximately 0.12 percent of the North River WRRF capacity of 170 mgd.

In accordance with the New York City Plumbing Code (Local Law 33 of 2007), the future developments at the Project Area would be required to utilize low-flow plumbing fixtures, which would reduce sanitary flows to the plant. The With-Action condition would not result in a significant adverse impact to the City's sanitary sewage conveyance and treatment system.

Stormwater Flows

The With-Action condition consists of the development of two buildings: a 42-story, mixed-use residential and commercial building at 629 W 54th Street (Manhattan Block 1102, Lot 11) and a 38-story, mixed-use residential and commercial building at 801 Eleventh Avenue (Manhattan Block 1103, Lot 36) **Table 9-7** summarizes the surface areas and weighted runoff coefficient for the With-Action conditions.

Table 9-7 With-Action Surface Coverage

Affected Outfall	Surface Type	Roof	Pavement and Walkways	Other	Grass and Soft Scope	Total
NR-035[2]	Area (%)	100%	0%	0%	0%	100%
	Surface Area (sf)	65,262	0	0	0	65,262
	Runoff Coefficient[1]	1.00	0.85	0.85	0.20	1.00

Source: DCP Building Footprint; aerial photographs
Notes:
[1] Runoff coefficients for each surface type as per NYC DEP
[2] Source: CSO Locations in New York City's Waterways,
CSO Locations in New York City's Waterways (arcgis.com)

The NYC DEP Flow Volume Calculation Matrix was completed for the existing and the With-Action conditions. The calculations from the Flow Volume Calculation Matrix help to determine the change in wastewater flow volumes to the combined sewer system from existing With-Action conditions and include four rainfall volume scenarios with varying durations. A summary table of the With-Action Flow Volume Calculation Matrix is included in **Table 9-8**.

Table 9-8 NYC DEP Flow Volume Matrix – With-Action Conditions

Rainfall (inches)[1]	Duration (hours)	Total Area (acres)[2]	Weighted Runoff Coefficient[3]	Stormwater Runoff (MG)[4]	Sanitary to WRRF (MG)	Total Volume to WRRF (MG)
0.00	3.80	1.50	1.00	0.000	0.022	0.022
0.40	3.80	1.50	1.00	0.020	0.022	0.042
1.20	11.30	1.50	1.00	0.060	0.067	0.127
2.50	19.50	1.50	1.00	0.130	0.115	0.245

Notes:
[1] Storm event rainfalls per NYC DEP Volume Calculation Matrix.
[2] Total surface area onsite for Projected Development sites within subcatchment area.
[3] Runoff coefficients for surface type area as per NYC DEP.
[4] Stormwater runoff derived from NYC DEP Volume Calculation Matrix.
[5] Sanitary volumes derived using methodology and consumption rates per the *2021 CEQR Technical Manual*
MG = million gallons

As shown in **Table 9-5**, depending on the rainfall volume and duration, the total volume to the combined sewer system from the Development Site under the existing conditions would be between approximately 0.00 mgd and 0.10 mgd. As shown in **Table 9-8**, under the With-Action condition, the combined sewer system flow would increase slightly compared to existing conditions, with With-Action flows ranging between 0.00 mgd and 0.13 mgd.

Table 9-9 compares the estimated stormwater flows under existing and With-Action conditions using the NYC DEP Flow Volume Calculation Matrix. As shown in the table, depending on the rainfall volume and duration, the With-Action increment compared to No-Action conditions would be between 0.008 and 0.073 MG (a percent increase ranging between 23.5 percent and 57.1 percent). Typically, an increase of five percent or more at the site over existing conditions would warrant further review by NYC DEP, in which the implementation of BMPs would help mitigate that increase. Although the five percent threshold would be exceeded, these increments represent only a 0.00 to 0.04 percent increase of the North River WRRF capacity of 170 MGD and a 0.00 to 0.06 percent increase of the North River WRRF 12-month rolling average of 115 MGD.[4] As such, the North River WRRF would continue to operate with approximately 55 MGD of available capacity under With-Action conditions.

[4] Based on the latest available data provided in DEP's 'Monthly Operating Efficiency' tables from September 2023 to August 2024.

Table 9-9 Existing and With-Action Comparison Total Volume to North River WRRF

		Total Volume to Combined Sewer System (MG)			
Rainfall (inches)[1]	**Duration (hours)**	**Existing Condition**	**With-Action Condition**	**Increment**	**Percent Change**
0.00	3.80	0.014	0.022	0.008	57.1%
0.40	3.80	0.034	0.042	0.008	23.5%
1.20	11.30	0.091	0.127	0.036	39.6%
2.50	19.50	0.172	0.245	0.073	42.4%

The Flow Volume Matrix calculations do not reflect the use of any stormwater source control BMPs to reduce sanitary flow and stormwater runoff volumes to the combined sewer system.

The Proposed Projects BMPs would be required in accordance with the NYC DEP Unified Stormwater Rule (USWR) guidelines, which includes requirements for bringing the Development Site into compliance with the allowable stormwater release rate.

The USWR increases on-site stormwater detention requirements and updates release rates for developments discharging to combined sewer systems and requires a retention-first approach to stormwater management practice (SMP) design. The water quality requirement (WQv) aims to manage and reduce runoff from small, frequent storms that often trigger the majority of CSO events. The USWR manual defines this event as the 90th percentile rain event. Runoff reduction (RR) criteria aims to maintain a minimum level of RR during small storms, and which is generally always met when treating the entire WQv. If site constraints make it impossible to treat the WQv, then a minimum Runoff Reduction Volume (RRv) for all newly constructed impervious areas must be met. The sewer operations volume (Vv) and maximum release rate (Qdrr) requirements are associated with the 10-year event, and work in tandem to maintain optimal flow rates in the City's combined sewer system to further limit the amount of CSO events. The existing buildings on the Development Site were developed prior to the USWR; however, the construction of a new building is required to meet the new stormwater requirements, for which the calculations are based on the entire tributary area to the existing site connection. Therefore, the entire area tributary to the existing site connection will be brought into compliance as part of the Proposed Project.

Stormwater could be managed by utilizing one or a combination of detention or infiltration techniques identified in the manual. Green technologies, such as green and blue roofs, subsurface detention and infiltration, and permeable pavement, could be implemented to retain or release stormwater with slowed discharge rates to control peak runoff rates. Specific BMP methods will be determined with further refinement of the building and site design and in consultation with NYC DEP.

The incorporation of the appropriate stormwater source control BMPs that would be required as part of the site connection approval process, with the review and approval of NYC DEP, would reduce the overall volume of sanitary sewer discharge and stormwater runoff as well as the peak stormwater runoff rate from the Development Site. Treatment capacity at the North River WRRF is enough to handle wastewater flow resulting from the Proposed Actions.