12. WATER AND SEWER INFRASTRUCTURE

12.1. INTRODUCTION

This chapter assesses the potential effects of the Proposed Action on the City's water supply, wastewater treatment, and stormwater management infrastructure in order to assure that these systems have adequate capacity to accommodate land use or density changes. According to *City Environmental Quality Review (CEQR) Technical Manual*, only projects that increase density or change drainage conditions on a large site require an infrastructure analysis. The Proposed Action would create a Special Permit for self-storage facilities in Designated Areas. The Proposed Action is not in-and-of-itself expected to induce development where it would not have occurred absent the Proposed Action. However, it may result in a change in the geographic distribution of where self-storage development could site in the city. These changes warrant an assessment on determining the likelihood of impacts on water and sewer infrastructure.

12.2. PRINCIPAL CONCLUSIONS

The Proposed Action would not result in significant adverse impacts on water and sewer infrastructure. In accordance with the *CEQR Technical Manual,* a screening analysis was conducted. Since the Proposed Action is a, "generic action," and there are no specific development sites, to produce a reasonable analysis of likely effect of the Proposed Action, four representative development prototypes have been identified and used for analysis, as described in Chapter 2, "Analytical Framework."

12.2.1. Water Supply

The Proposed Action would not result in significant adverse impacts on water supply. The screening analysis concluded that the effects of the Proposed Action would not be great enough to warrant a preliminary analysis of water supply, and therefore would not result in significant adverse impacts to water supply.

12.2.2. Wastewater and Stormwater Conveyance and Treatment

The Proposed Action would not result in significant adverse impacts on wastewater and stormwater conveyance and treatment. The preliminary assessment shows that the incremental development that may occur at any one prototypical development site would fall below the CEQR thresholds, and therefore would not result in significant adverse impacts to water supply.

12.1. SCREENING ANALYSIS

The Proposed Action is a, "generic action," and there are no known developments at this time. To produce a reasonable analysis of the likely effects of the Proposed Action, four prototypes were established as described in Chapter 2, "Analytical Framework." In accordance with the methodology outlined in the *CEQR Technical Manual,* a screening analysis of the potential for the Proposed Action to affect the adequacy of the City's infrastructure systems has been performed.

12.1.1. Water Supply

A preliminary water supply assessment would be required if a project results in an exceptionally large demand of more than one million gallons of water per day, including power plants, large cooling systems, or large developments. A preliminary water supply assessment would also be necessary if the project is located in an area that experiences low water pressure.

The Proposed Action is not expected to result in an exceptionally large demand of more than one million gallons of water per day and does not involve the development of a power plant, large cooling system, or large developments. As discussed in the description of the Proposed Action, most components of this proposal are not expected to induce development on a lot where development would not also be expected to occur as part of the No Action scenario.

While the Proposed Action would apply throughout the city's five boroughs, and may potentially include areas that experience low water pressure, the Proposed Action is not anticipated to induce development and thus, any changes are expected to fall well below the threshold. Therefore, the Proposed Action would not result in significant adverse impacts of water supply, and a preliminary assessment is not warranted. Therefore, the Proposed Action would not result in significant adverse impacts of water supply, and a preliminary assessment is not warranted.

12.1.2. Wastewater and Stormwater Conveyance and Treatment

Although most projects would not require a preliminary assessment on wastewater and stormwater conveyance and treatment, the *CEQR Technical Manual* indicates that a preliminary assessment would be needed if a project is located in a combined sewer area and would exceed the following incremental development of residential units or commercial space above the predicted No-Action condition:

(a) 1,000 residential units or 250,000 sf of commercial space or more in Manhattan; or

(b) 400 residential units or 150,000 sf of commercial space or more in the Bronx, Brooklyn, Staten Island, or Queens.

A preliminary assessment would also be needed if a project located in a separately sewered area and would exceed:

(a) 25 residential units or 50,000 sq. ft. of commercial public and institution/community facility use in R1, R2, or R3 Zoning Districts;

(b) 50 residential units or 100,000 sq. ft. of commercial public and institution/community facility use in R4, and R5 Zoning Districts; and

(c) 100 residential units or 100,000 sq. ft. of commercial public and institution/community facility use in all remaining zoning designations, including C, M, and Mixed-use districts.

Analysis may also be warranted if a project is located is partially sewered or currently unsewered; or involves development on a site five acres or larger where the amount of impervious surface would increase; or involve development on a site one acre or larger where the amount of impervious surface would increase, and located in either Jamaica Bay watershed, or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek; or involves construction of a new stormwater outfall that requires federal and/or state permits.

As mentioned above, the Proposed Action is a "generic action," and there are no known potential or projected as of right development sites and, due to the Proposed Action's broad applicability, it is difficult to predict the sites where development would be facilitated. To produce a reasonable analysis of likely effect of the Proposed Action, four representative development prototypes have been identified for analysis. Prototypical analysis shows that the development that may occur at any one prototypical development site would fall well below the thresholds described above.

12.1.2.1. Prototype 1

Prototype 1 is an approximately 44,000 gsf self-storage building located in a C8 zoning district in the Midwood neighborhood of Brooklyn. In the No-Action scenario, the site would instead be redeveloped with an approximately 16,880 gsf auto repair shop. As such, the increment for analysis is 27,120 gsf of manufacturing floor area.

- *Water Supply* - Prototype 1 is not anticipated to have an exceptionally large demand for water (e.g. those that are projected to use more than one million gallons per day such as power plants, very large cooling systems or large developments) and is not located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as Rockaway Peninsula and Coney Island), thus per CEQR guidelines, no further analysis of water supply is needed.
- *Wastewater and Stormwater Conveyance and Treatment*- Prototype 1 is located in a combined sewer area and would not facilitate the incremental development of 400 residential units or 150,000 sq. ft. of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens above the No-Action scenario. The prototype does not involve development on a site of more than five acres where the amount of impervious surface would increase, nor would it involve development on a site of one acre or larger where the amount of impervious surface would increase, located within the Jamaica Bay

watershed or in certain specific drainage areas, including the Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek. Furthermore, the prototype does not involve construction of a new stormwater outfall that requires federal and/or state permits. As such, no further analysis of wastewater and stormwater conveyance and treatment is needed.

12.1.2.2. Prototype 2

Prototype 2 is an approximately 168,000 gsf self-storage building located in a M1-5 zoning district in the Long Island City neighborhood of Queens. In the No-Action scenario, the site would instead be redeveloped with a approximately 148,650 gsf specialized storage facility, such as an art storage facility. As such, the increment for analysis is 19,350 gsf of manufacturing floor area.

- *Water Supply* - Prototype 2 is not anticipated to have an exceptionally large demand for water (e.g. those that are projected to use more than one million gallons per day such as power plants, very large cooling systems or large developments) and is not located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as Rockaway Peninsula and Coney Island), thus per CEQR guidelines, no further analysis of water supply is needed.
- *Wastewater and Stormwater Conveyance and Treatment*- Prototype 2 is located in a combined sewer area and would not facilitate the incremental development of 400 residential units or 150,000 sq. ft. of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens above the No-Action scenario. The prototype does not involve development on a site of more than five acres where the amount of impervious surface would increase, nor would it involve development on a site of one acre or larger where the amount of impervious surface would increase, located within the Jamaica Bay watershed or in certain specific drainage areas, including the Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek. Furthermore, the prototype does not involve construction of a new stormwater outfall that requires federal and/or state permits. As such, no further analysis of wastewater and stormwater conveyance and treatment is needed.

12.1.2.3. Prototype 3

Prototype 3 is an approximately 72,800 self-storage building located in a M1-1 zoning district in the Soundview neighborhood of the Bronx. In the No-Action scenario, the existing conditions on the site—the operation of a 44,000 gsf wholesale warehouse—would continue. As such, the increment for analysis is 28,800 gsf of manufacturing floor area.

- *Water Supply* - Prototype 3 is not anticipated to have an exceptionally large demand for water (e.g. those that are projected to use more than one million gallons per day such as power plants, very large cooling systems or large developments) and is not located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as Rockaway Peninsula and Coney Island), thus per CEQR guidelines, no further analysis of water supply is needed.
- *Wastewater and Stormwater Conveyance and Treatment*- Prototype 3 is located in a combined sewer area and would not facilitate the incremental development of 400 residential units or 150,000 sq. ft. of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens above the No-Action scenario. The prototype does not involve development on a site of more than five acres where the amount of impervious surface would increase, nor would it involve development on a site of one acre or larger where the amount of impervious surface would increase, located within the Jamaica Bay watershed or in certain specific drainage areas, including the Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek. Furthermore, the prototype does not involve construction of a new stormwater outfall that requires federal and/or state permits. As such, no further analysis of wastewater and stormwater conveyance and treatment is needed.

12.1.2.4. Prototype 4

Prototype 4 is an approximately 100,000 gsf self-storage building located in a M1-1 zoning district in the Bedford-Stuyvesant neighborhood of Brooklyn. In the No-Action scenario, the existing conditions on the site—the operation of a 100,000 gsf loft building--would continue. The size of the facilities is projected to be the same, although with differing uses in the No-Action and With-Action scenarios. As such, there is no increment of analysis for manufacturing floor area.

- *Water Supply* - Prototype 4 is not anticipated to have an exceptionally large demand for water (e.g. those that are projected to use more than one million gallons per day such as power plants, very large cooling systems or large developments) and is not located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as Rockaway Peninsula and Coney Island), thus per CEQR guidelines, no further analysis of water supply is needed.
- *Wastewater and Stormwater Conveyance and Treatment*- Prototype 4 is located in a combined sewer area and would not facilitate the incremental development of 400 residential units or 150,000 sq. ft. of commercial, public facility, and institution and/or community facility space or more in the Bronx, Brooklyn, Staten Island, or Queens above the No-Action scenario. The prototype does not involve development on a site of more than five acres where the amount of impervious surface would increase, nor would it involve development on a site of one acre or larger where the amount of impervious surface would increase, located within the Jamaica Bay watershed or in certain specific drainage areas, including the Bronx River, Coney Island Creek,

Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek. Furthermore, the prototype does not involve construction of a new stormwater outfall that requires federal and/or state permits. As such, no further analysis of wastewater and stormwater conveyance and treatment is needed.

Based on the above analysis, the Proposed Action does not have the potential for significant adverse impacts on water supply or wastewater and stormwater conveyance and treatment and no further analysis is necessary.