



STATEMENT OF FINDINGS GOWANUS CANAL COMBINED SEWER OVERFLOW (CSO) FACILITIES

CEQR No. 17DEP040K

Vincent Sapienza, P.E.
Commissioner

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59-17 Junction Blvd.
Flushing, New York 11373

In accordance with New York City's Executive Order 91 of 1977 and its amendments establishing City Environmental Quality Review (CEQR), Article 8 of the Environmental Conservation Law establishing the State Environmental Quality Review Act (SEQRA) and its implementing regulations (6 NYCRR Part 617), the New York City Department of Environmental Protection (DEP), acting as lead agency, issued a Notice of Completion of the Final Environmental Impact Statement (FEIS) for the **Gowanus Canal Combined Sewer Overflow (CSO) Facilities** Project (Project) on February 1, 2018. The Project is mandated by the United States Environmental Protection Agency (USEPA) to satisfy remediation objectives under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, or Superfund). In accordance with 6 NYCRR Section 617.4, the Project is classified as a Type I Action.

DEP issued a Lead Agency Determination, Notice of Positive Declaration and Draft Scope of Work on March 31, 2017 and held a public hearing on the Draft Scope of Work on May 4, 2017 at P.S. 32, 317 Hoyt Street, Brooklyn, NY 11231. The period for submitting written comments remained open until June 16, 2017. DEP issued a Final Scope of Work that responded to the public comments on September 14, 2017. The Draft Environmental Impact Statement (DEIS) was issued on September 14, 2017, and a public hearing on the DEIS was held on January 17, 2018 in Spector Hall at 22 Reade Street, New York, NY 10007. The comment period on the DEIS remained open until January 29, 2018. The Final Environmental Impact Statement (FEIS) issued on February 1, 2018 included a response to public comments on the environmental review.

Project Overview

DEP prepared the environmental review to disclose potential significant adverse significant environmental impacts from the construction and operation of two combined sewer overflow (CSO) facilities in order to inform City of New York (City) decision makers prior to any decision for siting two tanks that are the subject of land use approvals under the Uniform Land Use Review Procedure (ULURP).

This Project is mandated by USEPA to satisfy remediation objectives under CERCLA. On March 2, 2010, the Gowanus Canal (Canal) was designated a federal

Superfund site under CERCLA and placed on the National Priorities List (NPL). The main goal of the CERCLA process is to remediate constituents of concern in the Canal sediments that were deposited over the Canal's long industrial history. On September 27, 2013, the USEPA issued a Record of Decision (ROD) identifying actions to be undertaken by various parties to remediate industrial contamination in the Canal. As part of the ROD, USEPA mandated the design and construction of two CSO facilities.

The first of the two CSO facilities, the "Head End Facility," would include an 8-million-gallon (MG) underground tank that would intercept overflow of CSO solids primarily from CSO outfall RH-034 at the "head end," or northernmost portion of the Canal. Construction of the Head End Facility would require the lease or acquisition of three privately owned parcels adjacent to the Canal and is proposed to be located at 242 Nevins Street (Block 418, Lot 1) and 234 Butler Street (Block 411, Lot 24), with an area for construction staging located at 270 Nevins Street (Block 425, Lot 1).

The second facility, the "Owls Head Facility," would include a 4-MG tank that would intercept overflow of CSO solids primarily from CSO outfall OH-007. The Owls Head Facility would be located at the middle of the Canal (approximately 0.5 miles south of the northernmost portion of the Canal) near the northern terminus of 2nd Avenue near the 4th Street turning basin. Construction of the Owls Head Facility would require the use of one City-owned parcel (Block 977, Lot 3) and the lease or acquisition of up to four privately owned parcels adjacent to the Canal. The Owls Head Facility is proposed to be located at 2 2nd Avenue (Block 977, Lot 3), 110 5th Street (Block 990, Lot 21), 122 5th Street (Block 990, Lot 16), 22 2nd Avenue (Block 990, Lot 1), and 5th Street (Block 977, Lot 1), with portions of this area used for construction staging.

Collectively, the Project includes the lease or acquisition of up to seven properties to support the facilities and construction staging areas.

I. USEPA ROD and CSO Facility Siting Project

As noted above, the Canal was designated a federal Superfund site under CERCLA and placed on the National Priorities List in March, 2010. On September 27, 2013, the USEPA issued a ROD identifying actions to be undertaken by various parties to remediate contamination in the Canal. Unlike the Clean Water Act's regulation of CSOs, which focuses on bacteria contamination and dissolved oxygen, CERCLA focuses on contamination caused by industrial pollutants. Accordingly, the USEPA ROD focuses on hazardous substances located in and beneath the Canal, primarily Non-Aqueous Phase Liquid and associated polycyclic aromatic hydrocarbons, which were primarily discharged to the Canal from three former manufactured gas plants that operated for over a century along the bank of or near the Canal. As part of the USEPA ROD, USEPA also mandated the construction of the Gowanus Canal CSO Facilities.

In February 2014, DEP released a siting and planning study for the two CSO facilities. This effort included: (1) identification and evaluation of CSO facility components and development of facility footprints to be used in the identification of viable sites on which to locate the facilities, including the CSO tanks, conveyance, and associated infrastructure; and (2) identification of potential sites suitable for locating the CSO

facilities, development and evaluation of a shortlist of potential sites, and preparation of conceptual designs associated with those sites.

In May 2014, USEPA issued a unilateral Administrative Order for Remedial Design (RD Order) which established milestones for the City to design the two CSO facilities. DEP evaluated a range of tank sizes and alternatives and assessed their performance against the USEPA ROD goal of 58 to 74 percent solids load reduction. DEP submitted Site Recommendation Reports for the Head End and Owls Head Facilities to USEPA in June 2015, which evaluated potential sites for the two CSO facilities.

A focused site screening effort was conducted to identify potential sites for locating the facilities, based on three critical criteria: size of available property; hydraulic analyses and effective capture of CSO; and current or planned land use in the area. The Site Recommendation Report for the Head End Facility evaluated two potential “shortlisted” sites for the Head End Facility—the Head End Canal-side Property, comprised of two privately owned parcels located at 242 Nevins Street and 234 Butler Street, and the Park Property, comprised of the City-owned Thomas Greene Playground property—and recommended the Head End Canal-side Property as the location for the Facility. This recommendation also included use of the privately owned parcel at 270 Nevins Street for construction staging, referred to as the RH-034 Staging Area Property. The Site Recommendation Report for the Owls Head Facility recommended the use of a City-owned parcel of land located at 5th Street and 2nd Avenue, together with adjoining privately owned parcels along 5th Street, collectively referred to as the Owls Head Site.

On June 9, 2016, USEPA issued a memorandum to file that states that the size of the two storage tanks should be 8-MG at RH-034 and 4-MG at OH-007. Also on June 9, 2016, USEPA issued an Administrative Settlement¹ Agreement and Order for Remedial Design, Removal Action and Cost Recovery (Settlement Agreement) directing DEP to construct the Head End Facility at the recommended location and requiring that DEP issue a DEIS for the Head End Facility by October 1, 2017. However, under the Settlement Agreement, under certain specified circumstances, USEPA retains the discretion to direct the City to construct the Head End Facility at an alternate site—the City-owned Thomas Greene Playground property, referred to as the Park Property. USEPA has also indicated its concurrence with DEP’s recommended site for the Owls Head Facility.

II. Project Approvals and Coordination

Implementation of the Project would require federal, state and local permits/approvals, or their equivalents under CERCLA. DEP would closely coordinate with USEPA, the New York State Department of Environmental Conservation, New York State Department of State, New York State Parks, Recreation and Historic Preservation, and New York City agencies as necessary for the Project.

¹Administrative Settlement Agreement and Order for Remedial Design, Removal Action and Cost Recovery, June 9, 2016, USEPA.

Table 1 includes the major permits, approvals, or their equivalents under CERCLA that may be required for the Project.

Table 1: Potential Major Permits, Approvals or Equivalent, Consultation, and Coordination¹—Gowanus Canal CSO Facilities

Agency/Entity	Permit/Approval/Consultation/Coordination
FEDERAL	
U.S. Environmental Protection Agency (USEPA)	CERCLA coordination and consultation
Coastal Zone Management Act	Projects affecting New York’s coastal zone must be consistent with the Coastal Zone Management Act, through the New York State Department of State’s Coastal Management Program and approved Local Waterfront Revitalization Plans
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
National Marine Fisheries Service (NMFS)	Consultation with NMFS
United States Fish and Wildlife Service (USFWS)	Consultation under Section 7 of the Endangered Species Act; Biological Assessment; Federal Fish and Wildlife Permit
Advisory Council on Historic Preservation	Consultation under Section 106 of the National Historic Preservation Act of 1966
STATE	
New York State Department of State (NYS DOS)	Coastal Zone Management Consistency
New York State Department of Environmental Conservation (NYS DEC)	State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity - GP-0-10-001: erosion and sediment control and post-construction stormwater management in accordance with the stormwater pollution prevention plan (SWPPP)
	Individual SPDES Permit or Application Form NY-2C for Industrial Facilities (Dewatering activities requiring discharge to surface water)
	Modification to a SPDES Permit (Individual Permit) for Discharge of Wastewater from Publicly Owned Treatment Works (NY-2A) to remove inactive outfalls
	Tidal Wetlands Permit
	Long Island Well Permit and Approval of Completed Works
	Protection of Waters Permit Navigable Waters (Excavation or Fill)
	Section 401 Water Quality Certification
New York State Office of Parks, Recreation and Historic Preservation (OPRHP)	Natural Heritage Program Consultation—consultation to determine potential presence of threatened or endangered species listed in New York State
NEW YORK CITY	
New York City Department of City Planning (DCP)	ULURP for site selection, property acquisition, and an amendment to the City Map (street demapping for due diligence – not required to build the Project) New York City Waterfront Revitalization Program—Consistency Assessment
New York City Department of Small Business Services (SBS)	Permitting for waterfront construction
Note: ¹ Includes documentation of regulatory compliance under CERCLA through equivalent review by responsible agencies.	

III. No Potential for Significant Adverse Impacts

Construction and operation of the CSO Facilities is not anticipated to have significant adverse impacts in the areas of: land use, zoning, and public policy; socioeconomic conditions; community facilities and services; open space; shadows; urban design and visual resources; natural resources; hazardous materials, water and sewer infrastructure; solid waste and sanitation services; energy; transportation; air quality; greenhouse gas emissions and climate change; noise; public health; and neighborhood character.

IV. Significant Impacts and Mitigation

The FEIS determined that the Project would result in significant adverse impacts to Historic and Cultural resources and temporary significant adverse noise impacts during the Construction period.

Historic and Cultural Resources

Archaeological Resources

Head End Site

Ground disturbance from the Project would result from excavation associated with construction of the CSO Facility on the Head End Site, as well as excavation in nearby streets associated with related sewer infrastructure. Potential in-street sewer line improvements would be constructed in the vicinity of the Head End Site beginning on Butler Street, north of the site, and continuing southward along Nevins Street to Sackett Street, with some street work on Degraw Street between Nevins Street and the Canal to connect the Head End Facility with the RH-038 outfall. The new sewer would have a diameter of up to 54 inches. Portions of the Head End Site and Nevins Street are sensitive for deeply buried prehistoric and mill-related resources at depths greater than 10 to 15 feet below grade. The Head End Site is also sensitive for the presence of timber cribbing associated with the Canal and archaeological resources of an industrial nature. If these resources are present and retain both integrity and significance, the Project would result in a potential significant adverse impact on archaeological resources. Impacts would be mitigated to the maximum extent practicable through additional analyses, archaeological monitoring, or an alternative method developed in consultation with the New York State Historic Preservation Office (SHPO) and the New York City Landmarks Preservation Commission (LPC) (see below). As the Gowanus Canal bulkheads are State and National Register (S/NR)-eligible, modification of the bulkhead at the Head End Site would result in a potential significant adverse impact. Therefore, consultation with SHPO and LPC is being undertaken to identify measures to avoid, minimize, or mitigate adverse impacts.

Owls Head Site

Ground disturbance from the Project would result from excavation associated with construction of the CSO Facility at the Owls Head Site. Ground disturbance is also expected in nearby streets associated with potential in-street sewer line improvements. The Owls Head Site is sensitive for the presence of timber cribbing associated with the Canal and archaeological resources of an industrial nature. Undisturbed portions of the 7th Street streetbed are sensitive for the presence of human remains associated with the Battle of Brooklyn, also known as the Battle of Long Island, which occurred during the Revolutionary War on August 27, 1776. If human burials or the remains of human burials are present on the Owls Head Site, they would likely be disarticulated and in poor condition as a result of historic disturbance and the construction of the utilities currently present on this site. Any remains are expected to be located below 20th century fill layers and modern disturbances. If archaeological resources are present and retain both integrity and significance, the Project would result in a potential significant adverse impact which would be mitigated to the maximum extent practicable through additional analyses,

archaeological monitoring, or an alternative method developed in consultation with SHPO and LPC.

As the Gowanus Canal bulkheads are S/NR-eligible, removal and replacement of the bulkhead at the Owls Head Site would result in a potential significant adverse impact. Therefore, consultation is being undertaken with SHPO and LPC to identify measures to avoid, minimize, or mitigate adverse impacts.

Mitigation

Portions of the Head End and Owls Head Sites and the surrounding streetbeds are considered to have archaeological sensitivity. If archaeological resources are present in any of the project site locations that retain both integrity and significance, the Project would result in a potential significant adverse impact which would be mitigated to the maximum extent practicable through additional analyses, archaeological monitoring, or an alternative method developed in consultation with USEPA, SHPO and LPC. Prior to the start of construction, an archaeological monitoring plan will be prepared that will identify the horizontal and vertical locations of Project elements that have the potential to impact archaeological resources and will describe monitoring procedures, including an unanticipated discoveries plan. Implementation of this monitoring plan would be sufficient to avoid, minimize, or mitigate adverse impacts of the Project.

Architectural Resources

The Head End and Owls Head Project Sites are both located in the State and National Register (S/NR)-eligible Gowanus Canal Historic District.

Head End Site

The Head End Site currently contains a two-story brick building (234 Butler Street) located at the intersection of Nevins and Butler Streets, with a one-story brick section along Butler Street, and an additional one-story brick structure along Nevins Street. The building is the former Gowanus Station, designed in the Beaux Arts Style and originally built in 1914. The Head Site also contains a factory complex of four buildings (242-244 Nevins Street) built between 1905 and 1955, and a one-story warehouse building (270 Nevins Street) that was built circa 1955. All of the buildings on the Head End Site (excluding a one-story building on the interior of Block 411, Lot 24 that was constructed circa 1990) have been determined by SHPO to be architectural resources that contribute to the significance of the S/NR-eligible Gowanus Canal Historic District. DEP has determined that demolition of these S/NR-eligible properties, which is necessary to complete the Project as mandated by USEPA, would constitute a significant adverse impact to architectural resources on the Head End Site and to the S/NR-eligible Gowanus Canal Historic District pursuant to CEQR. As the Project is mandated by USEPA to satisfy remediation objectives under CERCLA (and would require permits from the U.S. Army Corps of Engineers or equivalencies from USEPA), the Project is subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966. Here, the NHPA requires that USEPA take into account the effects of the Project on historic properties and requires consultation with SHPO. If USEPA, in consultation with SHPO, determines that

the Project will have an adverse effect on historic properties, USEPA, in consultation with SHPO and the City, will seek ways to minimize or mitigate to the extent practicable any adverse effects to such properties through a Memorandum of Agreement.

Accordingly, DEP is evaluating the potential of retaining all or portions of the buildings on the Head End Site to minimize to the extent practicable the adverse impact that would occur through demolition, as described below. LPC has indicated that they do not identify the buildings on the Head End Site as LPC New York City Landmarks (NYCL)-eligible.

Owls Head Site

The buildings on the Owls Head Site are utilitarian structures that are not distinguished architecturally and do not appear to possess any particular historical significance or significant association with the Gowanus Canal. SHPO concurred in their July 3, 2017 letter that the buildings on the Owls Head site are Non-Contributing to the S/NR-eligible Gowanus Canal Historic District. Therefore, demolition of the buildings on the Owls Head Site would have no significant adverse impacts on architectural resources.

Mitigation

As noted above, there would be a potential significant adverse impact to certain architectural resources due to demolition of S/NR-eligible properties on the Head End Site; this demolition is necessary to complete the Project as mandated by USEPA. If USEPA, in consultation with SHPO, determines that the Project will have an adverse effect on historic properties pursuant to Section 106, USEPA in consultation with SHPO and the City, will seek ways to minimize or mitigate to the extent practicable any adverse effects to such properties through a Memorandum of Agreement.

Accordingly, DEP is evaluating the potential of retaining all or portions of the buildings on the Head End Site to minimize to the extent practicable the adverse impact that would occur through demolition, and is performing an engineering analysis to identify challenges and opportunities associated with preserving all or portions of the existing buildings at 242-244 Nevins Street, 270 Nevins Street, and the two-story building and associated one-story extensions at 234 Butler Street. Particular emphasis will be placed on 234 Butler Street, as this two-story building and its one-story extensions, collectively the former Gowanus Station, contributes to the history of the neighborhood and presents historic façades that include Beaux Arts style features and ornament including segmental window openings with scrolled keystones, and a gable that contains a decorative terra cotta panel and the Seal of New York City on the Nevins Street façade. The engineering analysis will assess the stability of the 234 Butler Street building's two- and one-story sections and the condition of the building materials including ornamental features; review building code requirements with respect to modifying existing structures including seismic requirements and how these requirements may affect the need for structural framing upgrades if alterations and repairs would be made to 234 Butler Street; evaluate the relationship/overlap of the two- and one-story building sections and the proposed CSO structures and identify any issues associated with the retention of all or portions of the former Gowanus Station; and explore alternatives including retaining all or portions of the historic two- and one-story sections of the 234 Butler Street building on the site,

temporarily relocating all or portions of the 234 Butler Street building, and exploring the potential for reconstruction of all or portions of the façades.

If feasible, DEP would preserve the buildings or portions of one or more buildings. If not feasible, it is expected that DEP, under USEPA's supervision, would identify and develop mitigation measures which would be anticipated to include documentation of the buildings as per recordation standards determined in consultation with SHPO and USEPA (which would be expected to include historical narratives, photographs, and inclusion of original or current building plans to the extent these drawings are available). In addition, if feasible, DEP would incorporate some salvageable significant architectural features of the buildings for reuse at the Head End Site or at another location. Consultation would continue with SHPO and USEPA regarding the development of such mitigation measures and agreed-upon mitigation measures would be expected to be set forth in a Memorandum of Agreement to be executed among USEPA, SHPO, and DEP.

Construction Noise

The detailed noise analysis concluded that construction of the Project has the potential to result in noise levels that exceed *CEQR Technical Manual* noise impact criteria construction at nearby residences, hotels, and publicly accessible open spaces for an extended period of time during the heaviest durations of construction (CP-2). Construction of the Project would result in comparable or lower noise level increases during the beginning and concluding phases of construction (CP-1 and CP-3), but these increases still result in exceedances of *CEQR Technical Manual* noise impact criteria.

- At the residential receptors at 282 Nevins Street and 285 Nevins Street, located adjacent to and across Nevins Street from the Head End Site staging area respectively, the Project is predicted to result in potential temporary significant adverse construction noise impacts. Construction of the Project would result in noticeable and potentially intrusive increases in noise levels at these receptors intermittently over the course of construction. Throughout the Project, this is primarily as the result of equipment and dump truck activity in the Head End Site staging area and construction traffic along Nevins Street, with additional contributions during conveyance work during CP-3. Interior noise levels during construction would be in the mid 40s dBA (approximately 2 dBA higher than the 45 dBA threshold recommended for residential use according to the *CEQR Technical Manual* noise exposure guidelines). The provision of storm windows or other building façade improvements would not provide substantial improvement in the amount of façade attenuation or reduction in interior noise levels, because the buildings' window air conditioners, which are necessary to maintain the closed-window condition, would remain as a pathway for construction noise to enter the building. Consequently, there would be no feasible or practical mitigation measures to reduce or avoid the predicted potential significant adverse construction noise impacts at these receptors.
- At open space areas in the vicinity of the proposed construction work areas, including Thomas Greene Playground which contains the Douglass and DeGraw Pool, the Whole Foods Market Open Space, and the Gowanus Canal, noise levels during

construction would exceed *CEQR Technical Manual* noise impact criteria and *CEQR Technical Manual* noise exposure guidelines, although existing noise levels at these locations already exceed these noise exposure guidelines. While total construction noise levels at these receptors would be noticeable and potentially intrusive during the most intensive construction activities (i.e., the excavation portion of CP-2), they would be in the typical range for the Gowanus Canal area and would not occur during the evening and weekend time periods that are the primary times of use for these areas. Further, the western portion of Thomas Greene Playground and the Gowanus Canal are primarily used for active recreation, and are consequently not as sensitive to noise as a purely passive open space. Consequently, the predicted levels of construction noise were not determined to rise to the level of a significant adverse effect at any open space receptors in the vicinity of the Project Sites.

- At other receptors near the construction work areas, noise levels resulting from construction during the most intensive construction activities (i.e., the excavation portion of CP-2 and conveyance work during CP-3) would be noticeable and potentially intrusive at times. However, they would be temporary and would generally not exceed typical noise levels for the Gowanus Canal area. The highest construction noise levels are predicted to occur for relatively short periods of time at most receptors, and would occur during daytime hours when residences and hotels are typically least sensitive to noise. Furthermore, the surrounding residences and hotels are constructed with insulated glass windows and appear to have alternate means of ventilation (i.e., central air conditioning), which would allow for the maintenance of a closed window condition and consequently reduced interior noise levels. Similarly, future hotels and residences are expected to be constructed with insulated glass windows and an alternate means of ventilation (i.e., air conditioning). Open spaces near the Project construction work areas would be only partially affected, with portions of the open spaces further from the work areas experiencing less construction noise and remaining available for use. Based on the duration and magnitude of the increases, the absolute noise levels at the receptors, the time period of construction, and the sensitivity of the receptors, noise resulting from construction of the Project was determined not to rise to the level of a significant adverse noise impact.

Construction of the Project would be required to follow the *NYC Noise Control Code* for construction noise control measures. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the *NYC Noise Control Code*. These measures could include a variety of source (i.e., reducing noise levels at the source or during the most sensitive time periods) and path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors). As discussed in Chapter 20 of the FEIS, "Construction," even with these noise control measures, construction of the Project would result in potential temporary significant adverse noise impacts at existing residences at 282 and 285 Nevins Street (see Figure 20-20). Noise levels up to the mid-70s dBA were predicted to result from construction of the Project at these locations, resulting in noise level increases that would exceed *CEQR Technical Manual* impact criteria and absolute noise levels that would exceed *CEQR Technical Manual* noise exposure guidance at times throughout the construction of CP-2. While CP-1 and CP-3 construction would result in noise levels less

than or comparable to those associated with CP-2, noise levels from these construction phases would, at times, exceed the *CEQR Technical Manual* impact criteria but not *CEQR Technical Manual* noise exposure guidance. Because the analysis is based on worst-case construction phases, it does not capture the natural daily and hourly variability of construction noise at each receptor. The level of noise produced by construction fluctuates throughout the days and months of the construction phases, while the construction noise analysis is based on the worst-case time periods only, which is conservative.

The predicted noise exposure for the occupants of the residential buildings where potential significant temporary adverse construction noise impacts were identified would depend on the amount of façade noise attenuation provided by the buildings. The façade noise attenuation is a factor of the building façade construction as well as whether the building's windows are able to remain closed. Buildings that have an alternate means of ventilation (e.g., some form of air conditioning) are assumed to be able to maintain a closed-window condition, which results in a higher level of façade noise attenuation. The existing residential buildings at 282 and 285 Nevins Street appear, based on field observations, to be constructed with standard building façade construction including insulated glass windows along with an alternate means of ventilation (i.e., window air conditioners) allowing for the maintenance of a closed-window condition. This construction would be expected to provide approximately 25 dBA window/wall attenuation². With such measures, the residences at 282 and 285 Nevins Street would be subject to interior noise levels during construction in the mid 40s dBA, up to approximately 2 dBA higher than the 45 dBA threshold recommended for residential use according to the *CEQR Technical Manual* noise exposure guidelines. The provision of storm windows or other building façade improvements would not provide substantial improvement in the amount of façade attenuation or reduction in interior noise levels, because the window air conditioners, which are necessary to maintain the closed-window condition, would remain as a pathway for construction noise to enter the building. Consequently, there would be no feasible or practical mitigation measures to reduce or avoid the predicted potential temporary significant adverse construction noise impacts at these receptors.

V. Alternatives

The purpose of an alternatives analysis is to examine reasonable and feasible options that may avoid or reduce project-related significant adverse impacts while still achieving the stated goals and objectives of the Project. The analysis considered two alternatives as summarized below.

²Interior noise levels would be 25 dBA less than exterior noise levels. Standard façade construction using insulated glass windows typically provides approximately 25-30 dBA window/wall attenuation.

Head End Facility Alternative Site AKA Park Property Alternative

Under the Park Property Alternative, the Head End Facility would be located on a portion of the Thomas Greene Playground. As previously discussed, under the Settlement Agreement issued by USEPA directing DEP to construct the Head End Facility, if the land at the preferred location (the Head End Canal-side Property) could not be acquired within the allotted timeframe, USEPA may direct that the Head End Facility be constructed at the Thomas Greene Playground, located to the east of the Head End Site across Nevins Street (Block 419, Lot 1; referred to as the Park Property). Under this alternative, the Head End Facility would not be constructed at the Head End Canal-side Property, but would instead be constructed on the western portion of the Park Property. As with the Project, to support the construction for the Park Property Alternative, DEP would lease or acquire the property at 270 Nevins Street (Block 425, Lot 1) to use as a construction staging area. There would be no changes to the Owls Head Facility or to the Gowanus Canal sewershed under this alternative.

The Park Property Alternative would result in the construction and operation of a CSO facility similar to the Head End Facility (on the Park Property), which would have similar environmental effects. However, unlike the Project, this alternative would have the potential to result in a significant adverse impact to open space as a result of the displacement of a portion of Thomas Greene Playground. Although some elements of the Thomas Greene Playground would be reconstructed, locating the CSO facility in the park would result in both the temporary, as well as permanent, loss of some of the parkland; this loss of parkland may require legislation for alienation of parkland. Similarly, the displacement of this open space resource would be inconsistent with public policies that aim to increase public open space (in particular the New York City Waterfront Revitalization Program). Construction of the CSO facility's above-grade structure on the Park Property would result in substantial shadows falling on adjacent park areas, which would likely cause potential significant adverse shadows impacts, and the loss of natural features associated with the park (in particular mature street trees) would detract from the pedestrian experience in the area. In addition, during construction of the CSO facility, there would be increased noise levels within the eastern portion of the park (up to approximately 12 dBA higher than construction noise levels resulting from construction of the Project at the Head End Site), which would constitute a significant adverse impact. Overall, this alternative would result in significant negative effects on the Thomas Greene Playground and its usability, and the loss of usable space within this open space resource could alter the neighborhood character of the area to a greater extent than the Project.

As with the Project, this alternative would have a direct impact on architectural resources, since it would similarly require the demolition of the building at 270 Nevins Street, which contributes to the significance of the State/National Register (S/NR)-eligible Gowanus Canal Historic District, although there would be a reduced impact as this alternative would not require the demolition of the other buildings on the Head End Site (242 Nevins Street and 234 Butler Street). Likewise, if archaeological resources are present in the Park Property and retain both integrity and significance, this alternative, as with the Project, would result in a significant adverse impact on archaeological resources,

which would be mitigated to the maximum extent practicable through additional analyses, archaeological monitoring, or an alternative method developed in consultation with SHPO and LPC.

Construction of the Park Property Alternative is also expected to require a longer overall duration, with additional excavation activities, street, and sidewalk closures, as compared to construction of the Head End Facility, in particular because the conveyance conduits would need to be constructed at a longer and greater depth, the tanks would need to be constructed at a greater depth, and additional utility relocation and park reconstruction activities would be required. Although the Park Property Alternative would result in largely similar construction effects as the Project, as noted above, it would result in a significant adverse noise impact on the eastern portion of the Thomas Greene Playground, whereas the Project is not expected to result in a significant adverse construction noise impact in this area.

Owls Head Facility Alternative Site AKA the 6th Street Alternative

Under the 6th Street Alternative, the Owls Head Facility would be located along 6th Street on Block 979, Lots 18 and 23. The City conducted a Siting and Planning Study to examine alternative locations for a CSO tank to satisfy the USEPA ROD mandate. The City's Siting and Planning Study³ recommended that the CSO tank be at the preferred location. The Siting and Planning Study also considered, but rejected, an alternative location for the Owls Head Facility to the east of the Owls Head Site along 6th Street (Block 979, Lots 18 and 23; referred to as the 6th Street Property). There would be no changes to the Head End Facility or the Gowanus Canal sewershed under this alternative.

The 6th Street Alternative would result in the construction and operation of a CSO facility on the 6th Street Property similar to the Owls Head Facility on the 6th Street Property. Although the 6th Street Property may have more extensive contamination as compared with the Owls Head Site due to its historical uses, standard remediation techniques would be employed to address that contamination in a manner similar to the remediation of the Owls Head Facility. This alternative would require the displacement of different businesses than would be displaced for the Owls Head Facility; in particular, this alternative would displace a self-storage facility that is currently under construction on the 6th Street Property. However, given the adequate availability of self-storage options in the socioeconomic study area and the City as a whole, the displacement of this self-storage facility would not affect business conditions in this particular industry sector and its economic viability within or outside the socioeconomic study area, and, as with the Project, this alternative would not result in any significant adverse impacts to socioeconomic conditions.

³ CSO Facility Site Recommendation Report for Owl's Head Outfall OH-007, Gowanus Canal, Brooklyn, New York, DEP, June 2015.

This alternative may result in different adverse effects than those identified for the Project as construction of the facility under this alternative would result in noise levels at the Whole Foods Market open space that are up to approximately 8 dBA higher than the noise resulting from construction of the Project at the Owls Head Site. The noise levels at the Whole Foods Market open space resulting from construction under the 6th Street Alternative would constitute a significant adverse impact not identified for construction of the Project at the Owls Head Site. While this is not desirable, there is no effective practical mitigation that could be implemented to avoid these levels during construction. Noise levels in many parks and open space areas throughout the city, which are located near heavily trafficked roadways and/or near construction sites, experience comparable and sometimes higher noise levels.

VI. Social, Economic, and other Essential Considerations

The Site Recommendation Report for the Head End Facility described above was based on several criteria including property size, land use, hydraulics, and proximity to existing infrastructure. The two highest-ranked sites for the RH-034 facility were the proposed Head End Facility and the Park Property Alternative, which were further evaluated using a side-by-side comparison of engineering requirements, environmental issues, sustainability considerations, constructability, schedule, risk, community impacts and costs. The outcome of the comprehensive analysis of the two shortlisted sites was the recommendation to the Head End Facility. The key engineering considerations behind this recommendation include the significantly greater complexity and risks associated with the hydraulics, controls and conveyance needed to move flow from the RH-034 outfall to the Park Property Alternative site, the greater depth of excavation required for construction, and the complexity of the subsurface utility crossings and relocations associated with siting the facility at the Park Property Alternative. In addition, selecting the Park Property Alternative would result in the loss of existing parkland during construction and permanent loss of a portion of the Park to accommodate the facility. This action would be inconsistent with public policies that aim to increase public open space. Conversely, the Head End Facility allows for a more straightforward design, shorter conveyance, less risk, shorter duration of construction, and opportunity for a net increase to publicly accessible open space - allowing new and expanded public access to the waterfront. Also, based on the current design the projected cost for the project at the Head End Facility (including property acquisition) would be less than the cost to construct the Park Property Alternative.

Based on these factors, the planning and siting study determined the Head End Facility site to be the most cost effective site: the Park Property Alternate would have a higher cost, due primarily to the longer and more complex conveyance infrastructure required to connect to the outfall, as well as the additional cost associated with reconstructing the playground. It would also require a longer construction duration and result in a loss of park space.

The two highest-ranked sites for the OH-007 facility in the Site Recommendation Report for the Owls Head Facility, described above, were the proposed Owls Head Facility site at 5th Street and 2nd Avenue and the 6th Street Alternative. These were evaluated using the same approach described above. The outcome of the analysis was the recommendation to the properties at 5th Street and 2nd Avenue. The sites were similar across many criteria including environmental issues and sustainability considerations. However, the proposed Owls Head Facility site's proximity to the outfall and shorter length of required conveyance allows for more straightforward design and construction. The report also identified significant risk associated with construction adjacent to the existing structures and foundations at the 6th Street Alternative site, making it a higher risk and more complex project.

VII. Conclusions and Findings

Having considered the relevant environmental impacts, facts, and conclusions disclosed in the FEIS, the Commissioner, Vincent Sapienza, on behalf of DEP, concurs with the findings of the FEIS and certifies that:

- The requirements of Article 8 of the New York State Environmental Conservation Law (SEQRA) and its implementing regulations found at 6 NYCRR Part 617 and the requirements of City Environmental Quality Review (CEQR) found at Title 62, Chapter 5, of the Rules of the City of New York and as set forth in Executive Order 91 of 1977, as amended, have been met.
- Consistent with social, economic, and other essential considerations of state and city policy, from among the reasonable alternatives available, the Project is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the approval, those mitigation measures that have been identified as feasible and practicable.

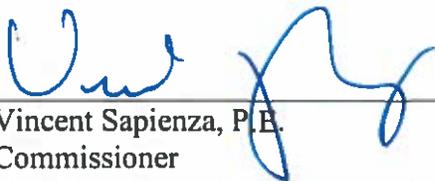
The FEIS and the Notice of Completion of the FEIS constitute the written statement of facts and analysis of the environmental, social, economic, and other factors and standards that form the basis of this decision, pursuant to Section 6.17.11(d) of the SEQRA regulations.

For additional information, please reach out to the contact person listed below:

Contact Person

Rasheed Lucas, Project Manager
New York City Department of Environmental Protection
Bureau of Environmental Planning and Analysis
59-17 Junction Boulevard, 11th Floor
Flushing, New York 11373
Email: rlucas@dep.nyc.gov
Phone: 718-595-6959

Dated: February 22, 2018
Flushing, New York



Vincent Sapienza, P.E.
Commissioner
New York City of Department of Environmental Protection