# Draft Scope of Work for a Draft Environmental Impact Statement

# Newtown Creek Combined Sewer Overflow Storage Tunnel Project CEQR No. 24DEP053Y

**February 5, 2025** 

# A. INTRODUCTION

This Draft Scope of Work (Draft Scope) provides the methodology and framework for analysis of a Draft Environmental Impact Statement (DEIS). The New York City Department of Environmental Protection (DEP) is undertaking the design and construction of a combined sewer overflow (CSO) storage tunnel and related infrastructure to reduce the volume of combined sewer overflows¹ entering Newtown Creek, under the Newtown Creek CSO Storage Tunnel project (the "Proposed Project"). Newtown Creek, located on the border of Brooklyn and Queens, is a tidal creek that flows into the East River (see **Figure 1**). Under typical wet weather conditions, there are 20 CSO outfalls that discharge to Newtown Creek. More than 90 percent of the total CSO discharge to Newtown Creek, however, is from the four largest CSO outfalls: Bowery Bay (BB)-026, Newtown Creek Brooklyn (NCB)-015, NCB-083, and Newtown Creek Queens (NCQ)-077 (see **Figure 2**).

As part of an Order on Consent to reduce CSOs, DEP prepared the Newtown Creek CSO Long-Term Control Plan (LTCP), which the New York State Department of Environmental Conservation (NYSDEC) approved in June 2018. Pursuant to the CSO Order on Consent and the LTCP (and recently approved modifications to the LTCP-recommended project), DEP is proposing a 3.26-mile-long tunnel with a storage volume of 50 million gallons (MG) to divert overflows at the four largest CSO outfalls. The Proposed Project includes the construction of diversion facilities for the four outfalls to convey wet-weather flows to the tunnel, a gravity diversion sewer to connect the diversion facility at outfall BB-026 to the tunnel, and a tunnel dewatering pump station (TDPS) and discharge pipe to convey stored sewer overflows to the Newtown Creek Wastewater Resource Recovery Facility (WRRF), located in the Greenpoint neighborhood of Brooklyn.

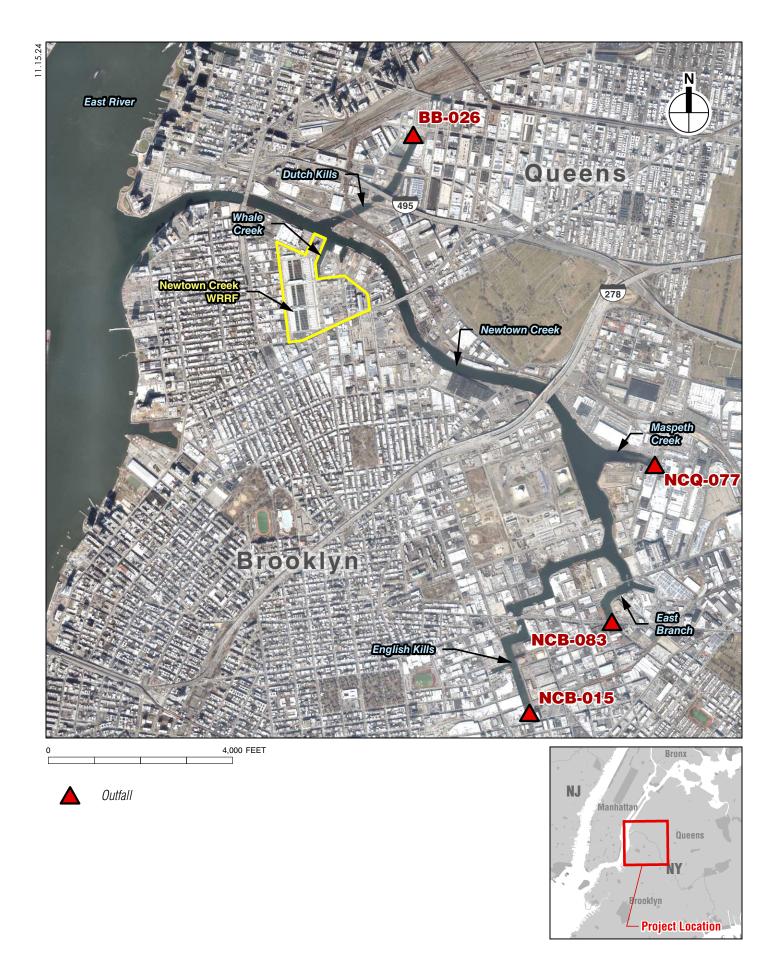
The Proposed Project is a major capital project that requires site selection and acquisition of real property approvals. Construction of the above- and below-grade structures, conveyance sewers, and the tunnel would require acquisition, lease, or establishment of temporary or permanent subsurface or surface easements on several parcels.<sup>2</sup> Surface easements would also be required for certain diversion facilities and conveyance infrastructure.

<sup>&</sup>lt;sup>1</sup> CSOs occur when wet weather flows exceed the capacity of the dry weather flow regulators and untreated combined sewage enters a receiving waterbody.

<sup>&</sup>lt;sup>2</sup> The tunnel is planned to have a depth ranging from 80 to 130 feet below existing ground surface.



NJ
Manhattan
Queens
Project Location



The Proposed Project will be reviewed for potential impacts on the surrounding environment, in accordance with the New York State Environmental Quality Review Act (SEQRA), City Environmental Quality Review (CEQR), and the Uniform Land Use Review Procedure (ULURP). As lead agency for the Proposed Project, DEP has determined that the Proposed Project may result in one or more significant adverse environmental impacts. Accordingly, DEP will prepare a DEIS for public review and comment, and for consideration by other involved and interested agencies.

A virtual public meeting on this Draft Scope of Work has been scheduled on March 12, 2025, at 7 PM. To register for this virtual meeting and receive the Zoom link, please go to: <a href="http://bit.ly/42gpuz0">http://bit.ly/42gpuz0</a>

Written comments on the Draft Scope of Work will also be accepted until April 11, 2025.

# B. PURPOSE AND NEED FOR THE PROPOSED PROJECT

The Proposed Project would reduce CSO discharges to Newtown Creek in furtherance of the goals of the Newtown Creek LTCP and the CSO Consent Order. Specifically, the Proposed Project would result in a significant reduction in CSOs from four outfalls—BB-026, NCB-015, NCB-083, and NCQ-077—which contribute the majority of the CSO discharges to Newtown Creek. As outlined in the LTCP, the proposed CSO storage tunnel and related infrastructure would provide the appropriate CSO controls necessary to reduce the volume and frequency of overflow events and achieve the applicable waterbody-specific water quality standard (WQS), consistent with the federal CSO Control Policy and related guidance and would therefore fulfill the requirements of the Order of Consent to address CSOs entered into by New York City and NYSDEC (discussed further below). By improving water quality, the Proposed Project would also meet some of the goals of the Superfund remediation of Newtown Creek, as outlined in the U.S. Environmental Protection Agency (EPA) Record of Decision (ROD) related to CSO discharges.

To facilitate the Proposed Project, DEP must lease or acquire several parcels located near the four outfalls to construct the diversion facilities that would convey flow to the proposed CSO storage tunnel; each diversion facility would include a diversion chamber, outfall structure, conveyance conduits, approach channel, and drop shaft.<sup>3</sup> DEP must record permanent surface and subsurface easements on parcels along the proposed tunnel alignment for security concerns and long-term maintenance. Temporary surface easements are also necessary to facilitate construction staging areas on select diversion facility properties. The properties needed for acquisition and the mapping of permanent and temporary easements are provided in **Appendix A**.

# C. ORGANIZATION OF THE DRAFT SCOPE

Per the guidelines of the City of New York's *CEQR Technical Manual*, this Draft Scope describes the Proposed Project's background and context, provides a description of the Proposed Project, and

\_

<sup>&</sup>lt;sup>3</sup> The TDPS, which would convey stored CSOs to the Newtown Creek WRRF, would be located on a Cityowned parcel; therefore, property leasing/acquisition is not required for this facility.

presents the analysis methodologies that will be used in the DEIS to assess the potential environmental effects of the Proposed Project. Specifically, this Draft Scope includes the following sections:

- Section B includes discussion of the Purpose and Need for the Proposed Project;
- Section D provides background information for the Proposed Project, including the major components and current conditions at Newtown Creek;
- Section E provides a description of the Proposed Project and its major elements;
- Section F identifies the major discretionary federal, state, and local permits and approvals that would be required for the Proposed Project;
- Section G provides a brief overview of the environmental review process; and
- Section H summarizes the organization of the DEIS to be prepared, describing the methodologies and scopes of work to be utilized to assess each environmental impact category.

# D. BACKGROUND INFORMATION

# NEWTOWN CREEK AND WATERSHED

The current conditions of Newtown Creek and its drainage area are considerably different than its pre-urbanized condition. Newtown Creek was originally a stream that drained the uplands of western Long Island, and was served by five tributaries: Dutch Kills, Whale Creek, Maspeth Creek, English Kills, and the East Branch (shown on **Figure 1**). As New York City developed, Newtown Creek was dredged, straightened, and bulkheaded as the surrounding area was drained, urbanized, and industrialized. By 1930, Newtown Creek had been transformed to a condition similar to its present configuration and served as a major industrial waterway through which materials were brought to and from area industries, including major oil refineries and terminals, smelting operations, manufactured gas plants, and other heavy industries. During World War II, Newtown Creek was one of the busiest ports in the nation.

By that time, the surrounding area had been fully urbanized and industrialized, sewage and industrial wastes were discharging directly to Newtown Creek without treatment, and natural marshlands and freshwater streams had been filled or damaged. The urbanization of the surrounding drainage area, with natural areas replaced by buildings and pavement, resulted in an estimated five-fold increase in impervious surfaces, and the loss of natural stormwater drainage resulted in a two-fold increase in the annual runoff volume to Newtown Creek. The impact of runoff to Newtown Creek was exacerbated by the loss of marshland and natural freshwater flow, which deprived the Creek of natural response mechanisms that may have absorbed the increased hydraulic and pollutant loads. Newtown Creek's limited circulation and exchange with the East River allowed pollutants to build up, resulting in a significant deterioration of water quality.

Efforts to address water quality in Newtown Creek date back to the 1960s. New York City constructed WRRFs to treat sewage and industrial wastes during dry weather and to capture a portion of the combined sewage generated during wet-weather events. Two WRRFs service the

Newtown Creek drainage area: the Bowery Bay WRRF, which began operating in 1938, and the Newtown Creek WRRF, which began operating in 1967.

The Newtown Creek watershed is comprised of approximately 6,815 acres: The majority of the watershed (5,920 acres) is served by the Newtown Creek WRRF, and a smaller portion (895 acres) on the northern shore is served by the Bowery Bay WRRF (see **Figure 3**). The Newtown Creek WRRF serves a total area of 15,033 acres in the boroughs of Manhattan, Brooklyn, and Queens. Similarly, the Bowery Bay WRRF, which is located in the Astoria neighborhood of northern Queens, serves a total area of approximately 15,203 acres in the northern portion of Queens.

During dry weather, the combined and sanitary sewer systems convey sewage to the Newtown Creek and Bowery Bay WRRFs for treatment. The State Pollutant Discharge Elimination System (SPDES) permit for the Newtown Creek WRRF requires a wet-weather treatment capacity of 700 million gallons per day (mgd). The SPDES permit for the Bowery Bay WRRF requires a wet-weather treatment capacity of 300 mgd. During wet-weather events, combined sewage flow that exceeds the capacity of the WRRFs and the combined sewer system may discharge to Newtown Creek and its tributaries through one or more of the 20 SPDES-permitted CSO outfalls. Approximately 90 percent of the average annual CSO volume to Newtown Creek is attributable to four CSO outfalls: three CSO outfalls providing wet-weather relief to the combined sewer system tributary to the Newtown Creek WRRF (NCB-015, NCB-083, and NCQ-077); and one CSO outfall providing wet-weather relief to the combined sewer system tributary to the Bowery Bay WRRF (BB-026). In addition, 11 stormwater outfalls permitted under New York City's MS4 SPDES permit discharge to Newtown Creek.

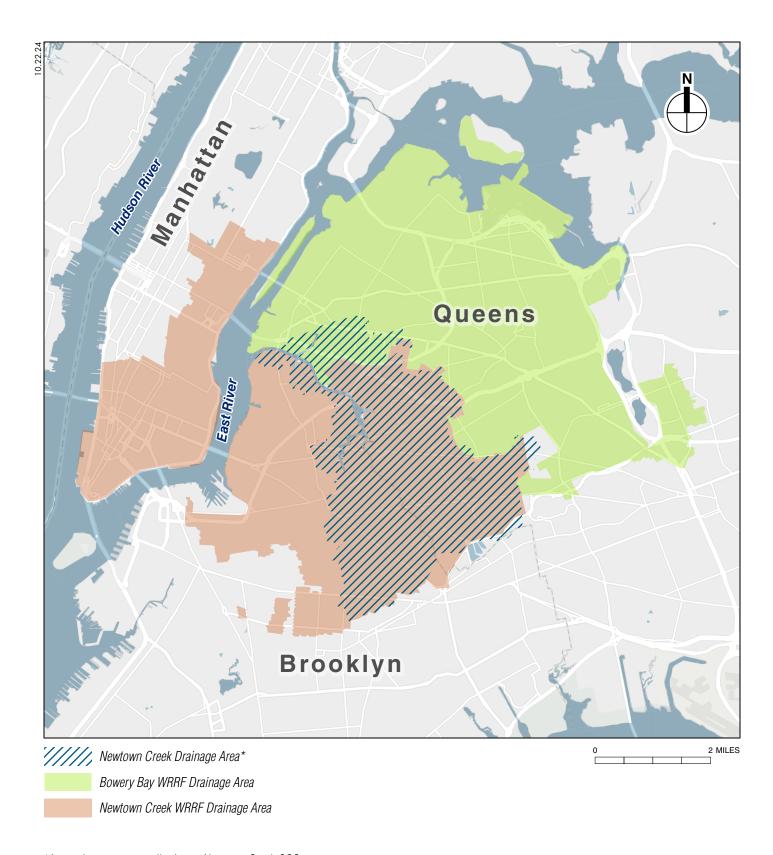
# NYSDEC CONSENT ORDER AND LONG-TERM CONTROL PLAN

In 2005, the City of New York and NYSDEC entered into an Order on Consent<sup>4</sup> to address CSOs in New York City, and over the past 20 years, DEP has implemented several specific projects to improve water quality in Newtown Creek.

These include upgrades to the Newtown Creek WRRF, installation of bending weirs at the four major CSO outfalls, and construction of aeration facilities at several locations along Newtown Creek (including the English Kills and the East Branch). DEP has also included Newtown Creek as a priority watershed for the GI Program, which seeks to install GI to reduce CSO volumes. These GI improvements have included right-of-way (ROW) practices, public property retrofits, and GI implementation on private properties. In connection with these projects, DEP has worked to restore natural resources and provide community benefits along Newtown Creek, including creation of a public waterfront open space (the Newtown Creek Nature Walk) near the Newtown Creek WRRF and Whale Creek, as well as salt marsh plantings. In 2011, NYSDEC and DEP identified numerous modifications to the 2005 Order, including the integration of green infrastructure and substitution of more cost-effective grey infrastructure, which were included in a modified Order on Consent

\_

<sup>&</sup>lt;sup>4</sup> NYSDEC Case No. C02-20000107-8



<sup>\*</sup>Approximate area contributing to Newtown Creek CSOs

Newtown Creek WRRF and Bowery Bay WRRF Drainage Areas issued in 2012.<sup>5</sup> The 2005 and 2012 Orders and subsequent minor modifications are collectively referred to herein as the "CSO Order."

Per the CSO Order, DEP agreed to develop 10 waterbody-specific LTCPs plus one citywide LTCP to reduce CSOs and improve water quality in the City's waterbodies and waterways. Newtown Creek was identified in the CSO Order as one of the 10 waterbodies in New York City requiring an LTCP to identify, with public input, appropriate CSO controls necessary to achieve waterbody-specific WQS consistent with the federal CSO Control Policy and related guidance. The Newtown Creek LTCP was prepared by DEP and submitted to NYSDEC in 2017, and the plan was approved by NYSDEC in 2018.

As part of the development of the LTCP, DEP evaluated several alternative CSO control measures, focusing on the four largest CSOs: BB-026, NCB-015, NCB-083, and NCQ-077. The LTCP considered one set of measures to control CSOs for NCB-015, NCB-083, and NCQ-077, and a separate set of measures to control CSOs at outfall BB-026, which is much closer to the Newtown Creek WRRF and closer to DEP's Borden Avenue Pump Station, a facility that was planned for upgrades.

For outfalls NCB-015, NCB-083, and NCQ-077, the LTCP considered alternatives— individual storage tanks or various tunnel storage options; for outfall BB-026, the LTCP considered alternatives that included diverting overflow from the BB-026 CSO outfall to the Borden Avenue Pump Station and providing additional wet-weather pumping capacity, along with a new wet weather forcemain to convey wet weather flow from the pump station to a location just upstream of the Newtown Creek WRRF. Through a detailed evaluation of the alternatives based on multiple considerations, including public input, environmental and water quality benefits, and costs, the LTCP determined that the preferred alternative should include a 39-MG CSO storage tunnel for NCB-015, NCB-083, and NCQ-077, and that the preferred alternative for BB-026 included a 26 MGD wet weather expansion of the Borden Avenue Pump Station and a new wet-weather forcemain that would run under Newtown Creek and convey wet-weather flow to the Newtown Creek WRRF.

Following the completion of the LTCP, the two projects entered preliminary design and planning, during which a conceptual design was developed to combine the projects by diverting CSOs from outfall BB-026 by gravity into the CSO storage tunnel serving the other three outfalls and increasing the tunnel's storage volume from 39 MG to 50 MG. This change was determined to have several benefits: eliminating the need to expand the Borden Avenue Pump Station, eliminating the need to construct a wet weather forcemain to the Newtown Creek WRRF, and providing a greater overall reduction of CSO discharge volumes. DEP began discussing this proposed modification request with NYSDEC in 2023 and met with both NYSDEC and EPA regarding the modification request. EPA indicated that the proposed modification was consistent with the ROD that required a CSO reduction target and that this modification would exceed that target (discussed below). Afterwards, DEP met with stakeholders and elected officials regarding this proposed modification, and

<sup>&</sup>lt;sup>5</sup> NYSDEC Case No. C02-20110512-25

submitted the official modification request to NYSDEC on July 1, 2024. On October 10, 2024, NYSDEC issued a letter notifying DEP of its concurrence with the proposed modification; following a public noticing period, NYSDEC issued a letter approving the modification on December 23, 2024.

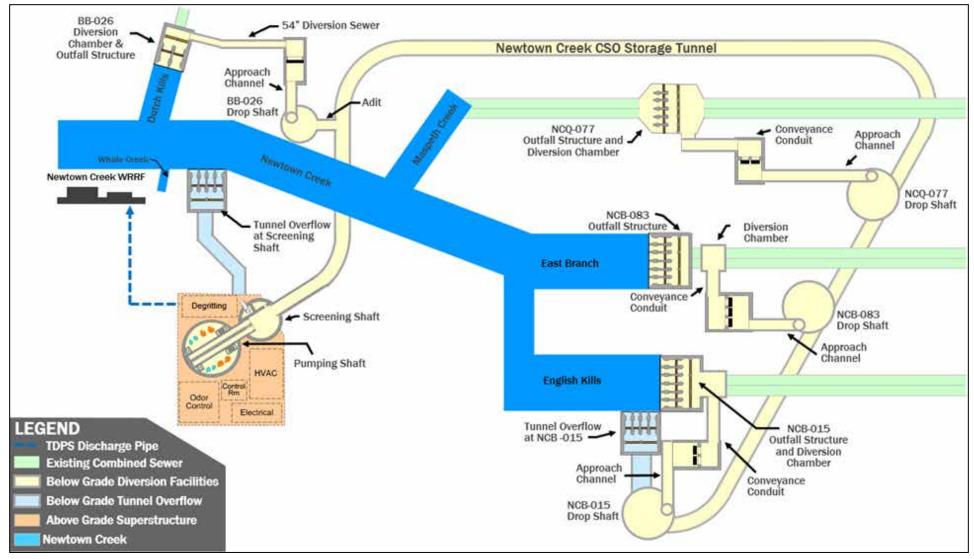
# EPA SUPERFUND REMEDIATION OF NEWTOWN CREEK

In September 2010, Newtown Creek was designated a federal Superfund site by EPA under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund) and placed on the National Priorities List (NPL). In July 2011, EPA issued an Administrative Order to six Potentially Responsible Parties (PRPs) for a remedial investigation and feasibility study of Newtown Creek; the City of New York was identified as one of the PRPs, related to CSO discharges into Newtown Creek. In April 2021, EPA issued a ROD concluding that "the volume reduction set forth in the LTCP will be sufficient for the purposes of a CERCLA response action regarding current and reasonably anticipated future discharges from the CSOs to the Newtown Creek Study Area" and that "to ensure that the assumptions made in reaching this conclusion remain valid, monitoring will be required at least until it is subsumed by the monitoring requirements of a future remedial decision document for the site."

# E. PROJECT DESCRIPTION

The Proposed Project includes the construction of a 50-MG CSO storage tunnel along with the TDPS, diversion chambers, drop shafts, conveyance sewers, outfall structures, and odor control systems to control CSO discharges from outfalls BB-026, NCB-015, NCB-083, and NCQ-077. During wet-weather events, the CSO storage tunnel would divert and store CSOs from the combined sewer system at the four outfall locations, which currently discharge to Newtown Creek. The CSOs stored in the tunnel would be pumped to the Newtown Creek WRRF for treatment after the wet-weather event. A schematic illustration of the Proposed Project is provided in **Figure 4**.

The proposed CSO storage tunnel would be approximately 26 feet in outer diameter and at a depth ranging from 80 to 130 feet below existing ground surface; the tunnel mining operation would start in bedrock at the TDPS site, then transition to a mixed-face condition before ending in soil. The downstream terminus of the tunnel is located at a site located at the end of Kingsland Avenue in Brooklyn (on the southern side of Newtown Creek) near Whale Creek and the Newtown Creek WRRF; this site is controlled by the New York City Department of Sanitation (DSNY). This site would contain a TDPS that would operate to remove the stored combined sewage from the tunnel on an intermittent basis following wet-weather events, as well as to remove inflow and infiltration in the tunnel as needed during dry weather, when the Newtown Creek WRRF has capacity to receive tunnel dewatering flows. The TDPS may also operate at the beginning of a storm to remove flow from the tunnel when the Newtown Creek WRRF has capacity, thereby maximizing the CSOs diverted and stored during a wet-weather event. Wet-weather events requiring TDPS operation are anticipated to occur between three and seven times per month.



NOTE: Schematic design; not to scale

From the TDPS on the south side of Newtown Creek, tunnel construction would follow an alignment east underneath the Creek into the Blissville neighborhood of Queens. At this location north of Newtown Creek, a new gravity diversion sewer would be constructed to connect outfall BB-026 to the tunnel. Beginning at the BB-026 outfall, the new gravity diversion sewer would run along 47th Avenue and 30th Street, to Borden Avenue, where it would run west and south to connect to the Borden Avenue Pump Station. This initial section of the gravity diversion sewer would be constructed prior to the completion of the tunnel, and would allow for diversion of CSO flows from BB-026 in the interim for the period before the tunnel is operational: CSO would be stored in the gravity diversion sewer during a wet-weather event, and then removed from the gravity diversion sewer by the pumping facility and conveyed to the Bowery Bay WRRF. Modifications would be made to the Borden Avenue Pump Station to construct the connection to the gravity diversion sewer. From the Borden Avenue Pump Station, the gravity diversion sewer would run south along Review Avenue and would connect to the tunnel at a drop shaft to be constructed near the Creek at the end of 36th Street. Once the tunnel and drop shaft are complete, CSO flows would be diverted from the Borden Avenue Pump Station and conveyed to the tunnel.

The tunnel alignment would continue south and east along Review Avenue, underneath the Kosciuszko Bridge toward the Maspeth neighborhood of Queens, where it would connect to outfall NCQ-077. From outfall NCQ-077, the tunnel alignment would curve south and then west into Brooklyn, to connect to outfall NCB-083. Finally, the tunnel alignment would continue south and connect to outfall NCB-015, located near the English Kills. The tunnel would be constructed at a constant slope to allow gravity flow from its eastern extent at outfall NCB-015 toward the TDPS site at Whale Creek.

Facilities would be constructed at outfalls BB-026, NCQ-077, NCB-083, and NCB-015 to divert flow from the outfalls to the tunnel. During a wet-weather event, combined sewer flows that exceed the capacity of the existing dry weather regulator would flow into the diversion chamber at each facility, and would then be conveyed from the diversion chamber to the conveyance conduits. The conveyance conduits would deliver wet-weather flow to the approach channel and drop shaft, which would connect to the tunnel. The diversion facilities at NCQ-077, NCB-083, and NCB-015 would include ventilation systems at the drop shafts to manage airflow in the tunnel (this would include odor control systems, except at the facility at BB-026, which would not need odor control since the connection would be via an approach channel and adit, thereby limiting air exchange). The existing outfalls at NCB-015 and BB-026 would be modified by removing the existing bending weirs and flap gates. At all four diversion facilities, new outfall structures, including bending weirs and flap gates, would be constructed downstream of each diversion chamber to allow overflow to discharge to Newtown Creek when the tunnel is full or when flow rates exceed the facilities' maximum design flow rates. In addition, at the TDPS, a discharge pipe would be constructed along Kingsland Avenue and Greenpoint Avenue to connect the TDPS to the Newtown Creek WRRF. Finally, at the TDPS and the NCB-015 site, tunnel overflow structures would be constructed to mitigate risks of flooding associated with surge or a transient wave within the tunnel when it is filling.

The proposed tunnel alignment and location of the proposed diversion facilities are shown on **Figure 5**.



Proposed Project – Tunnel Alignment and Diversion Facilities

# F. PROJECT APPROVALS AND COORDINATION

Implementation of the Proposed Project would require federal, state, and local permits/approvals. DEP would closely coordinate with EPA, the U.S. Army Corps of Engineers (USACE), NYSDEC, New York State Department of State (NYSDOS), New York State Historic Preservation Office (NYSHPO), and New York City agencies, as necessary, for the Proposed Project.

To facilitate the Proposed Project, discretionary land use approvals are required that are subject to review under ULURP, including site selection of a capital project and acquisition of property. The Proposed Project is a major capital project, which involves site selection of all properties affected by the Proposed Project under the New York City Charter. Currently, construction of the Proposed Project is expected to require full acquisition of up to two properties to facilitate construction of the proposed diversion facilities at NCB-015 and NCB-083. Property acquisition may also be required for the diversion facilities at NCQ-077 and BB-026; however, construction of the diversion facilities at these sites could be facilitated by easements. If full acquisition of property is determined to be necessary at NCQ-077 or BB-026, appropriate land use approvals would be sought. Acquisition of the TDPS site would not be required since it is a City-owned property currently being used by DSNY.

In addition, the Proposed Project is expected to require property leasing during various phases of construction. Surface and subsurface easements are also expected to be required at several of the diversion facilities for long-term maintenance and security. Finally, approximately 99 sites are expected to require subsurface easements along the proposed tunnel and gravity diversion sewer alignments. The full acquisition, property leasing, and establishment of subsurface and surface easements would be facilitated by the proposed acquisition action. The properties currently expected to be subject to the proposed site selection and property acquisition approvals are provided in **Appendix A.** 

Table 1 summarizes the major permits and approvals that may be required for the Proposed Project.

Table 1
Potential Major Permits. Approvals and Coordination

Agency/Entity	Permit/Approval/Consultation/Coordination
FEDERAL	ennit/Approvat/constitation/coordination
U.S. Environmental Protection Agency	
(EPA)	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, including Nationwide Permit 7 "Outfall Structures" and Nationwide Permit 3 "Maintenance," as applicable.
United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries)	Consultations under Section 7 of the Endangered Species Act
Advisory Council on Historic Preservation	Consultation under Section 106 of the National Historic Preservation Act of 1966
STATE	
New York State Department of State (NYSDOS)	Coastal Zone Management Consistency
New York State Office of General	Potential easement(s) for tunnel alignment under portions of Newtown Creek
Services (NYSOGS)	that are under State jurisdiction
	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)
	Water Withdrawal Permits for dewatering that may occur during construction of underground infrastructure
New York State Department of	Individual SPDES Permit or Application Form NY-2C for Industrial Facilities (Dewatering activities requiring discharge to surface water)
Environmental Conservation (NYSDEC)	Tidal Wetlands Permit for construction activities in tidal wetlands and their adjacent areas
	Long Island Well Permit for dewatering activities in Queens and Brooklyn
	Protection of Waters Permit Navigable Waters (Excavation or Fill)
	Section 401 Water Quality Certification
	Natural Heritage Program database review to determine potential presence of
	threatened or endangered species listed in New York State
New York State Historic Preservation	Consultation to determine potential archaeological sensitivity and/or the
Office (SHPO)	presence of historic resources and determine project's potential effects
NEW YORK CITY	
New York City Planning Commission	ULURP for property acquisition and site selection
(CPC) / New York City Department of City Planning (DCP)	
New York City Landmarks Preservation	Consultation to determine potential archaeological sensitivity and/or the
Commission (LPC)	presence of historic resources
New York City Public Design Commission	Review of design for above-grade facilities and public amenities, including architecture and landscape architecture.

# G. ENVIRONMENTAL REVIEW PROCESS

The environmental review process provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate and compare reasonable alternatives, and to identify and mitigate, where practicable, any significant adverse environmental impacts. DEP, as lead agency, has determined that the Proposed Project has the potential to result in significant adverse environmental impacts. Therefore, an EIS must be prepared. Any proposed action funded, approved, or directly undertaken by a New York State or local agency must comply with the provisions of SEQRA and its implementing regulations (6)

NYCRR Part 617). DEP has prepared this Draft Scope for the DEIS to describe the proposed content of the DEIS, the methodologies to be used in the impact analyses, and allow for public and stakeholder participation as recommended by 6 NYCRR Part 617.

A copy of the Draft Scope can be obtained online at the website below:

https://www.nyc.gov/site/dep/about/newtown-creek-cso-storage-tunnel-project.page

To solicit comments on the Proposed Project, the alternatives to be assessed in the DEIS, and the Draft Scope, a virtual public meeting has been scheduled for **7:00 PM** on **March 12, 2025**. To register for this virtual hearing and receive the Zoom link, please go to: <a href="http://bit.ly/42gpuz0">http://bit.ly/42gpuz0</a>

Written comments on this Draft Scope will be accepted by DEP until the close of business on **April 11, 2025**. Comments can be submitted in writing, via mail and email, and should be addressed to:

David Lee, Senior 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: nctunneleis@.dep.nyc.gov

DEP will consider comments submitted on the Draft Scope and issue a Final Scope of Work (Final Scope) to respond to those received during the review period and finalize changes to the assessment to be conducted in the DEIS. The Final Scope will include responses to comments submitted on the Draft Scope and any modifications, as necessary, to address those comments.

DEP will then prepare a DEIS based on the Final Scope. As stated above, the DEIS and subsequent Final EIS (FEIS) will serve to fulfill the statutory obligations of SEQRA and CEQR. Once DEP has determined that the DEIS is complete, a Notice of Completion (pursuant to SEQRA/CEQR) will be prepared, distributed, and published in accordance with applicable regulations. The DEIS would then be subject to additional public review, in accordance with SEQRA and CEQR procedures, including a public hearing and a period for public comment. After the DEIS public comment period has closed, an FEIS will be prepared that will include a summary of the comments received on the DEIS, responses to all substantive comments, and any necessary revisions to the DEIS to address those comments. No sooner than 10 days after publishing the FEIS, DEP, as lead agency, will prepare a Statement of Findings that will describe the Proposed Project, its potential environmental impacts, and any required mitigation.

# H. ORGANIZATION AND SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The format of the DEIS and methodologies that will be used to assess the potential environmental impacts of the Proposed Project will follow SEQRA and CEQR guidelines. The 2021 CEQR Technical Manual will be used to evaluate the Proposed Project's impacts.

Each impact analysis will include an inventory of existing conditions establishing a baseline from which future conditions can be projected (Existing Condition). In addition, where relevant, the impact analysis will include a determination of future conditions known to occur or expected to occur in the future regardless of the Proposed Project (the future without the proposed project or No Action condition). Finally, each impact analysis will include an analysis of the Proposed Project's likely effects on its environmental setting (the future with the proposed project or With Action condition) in the expected year of completion (Analysis year). The Proposed Project's expected year of completion is 2039.

# The DEIS will contain the following:

- A description of the Proposed Project and the environmental setting;
- A description of the methodologies utilized for each technical area;
- A discussion of the analysis and the results;
- A statement of the potential significant adverse environmental impacts of the Proposed Project;
- An identification of any potential significant adverse impacts that cannot be avoided if the Proposed Project is implemented;
- An identification of irreversible and irretrievable commitments of resources that would be involved if the Proposed Project is built; and
- A description of measures proposed to minimize or fully mitigate any potential significant adverse environmental impacts.

The proposed scope of work for each of the technical areas to be analyzed in the DEIS is described below. Each technical analysis will include detailed consideration of impacts that could occur from construction of the Proposed Project (construction of the new tunnel and related infrastructure) as well as consideration of the impacts once the construction is complete and the proposed CSO tunnel and diversion facilities are operational. Since construction barges may be used to supplement truck deliveries of materials/equipment and the exporting of excavated materials from tunnel construction, where relevant, the DEIS will describe the barging operations and the potential effects from these activities on the surrounding communities. Where relevant, the potential cumulative effects of construction at the various Proposed Project sites, along with the construction activities associated with other planned projects in the area near the Proposed Project, will also be discussed.

Where applicable, a comparative analysis of feasible alternatives will be performed and presented in an Alternatives chapter of the DEIS. The methodologies utilized for each analysis will be presented in each respective chapter in the DEIS.

# **EXECUTIVE SUMMARY**

The DEIS will include an Executive Summary that will provide the reader with a clear and concise understanding of the information provided within the main sections of the DEIS. The Executive Summary will highlight relevant material from the DEIS to provide a synopsis of the Proposed Project, potential environmental impacts associated with the Proposed Project's construction and/or

operation, measures to mitigate potential impacts of the Proposed Project, and alternatives to the Proposed Project.

The DEIS Executive Summary will consist of:

- A brief description of the Proposed Project, including background leading to its development and anticipated analysis years.
- A list of involved and interested agencies and required approvals/permits.
- A concise list of the anticipated significant adverse impacts and proposed mitigation measures.
- A description of the alternatives to the Proposed Project considered in the DEIS. A tabular summary comparing the alternatives will be included, as applicable.

# PROJECT DESCRIPTION

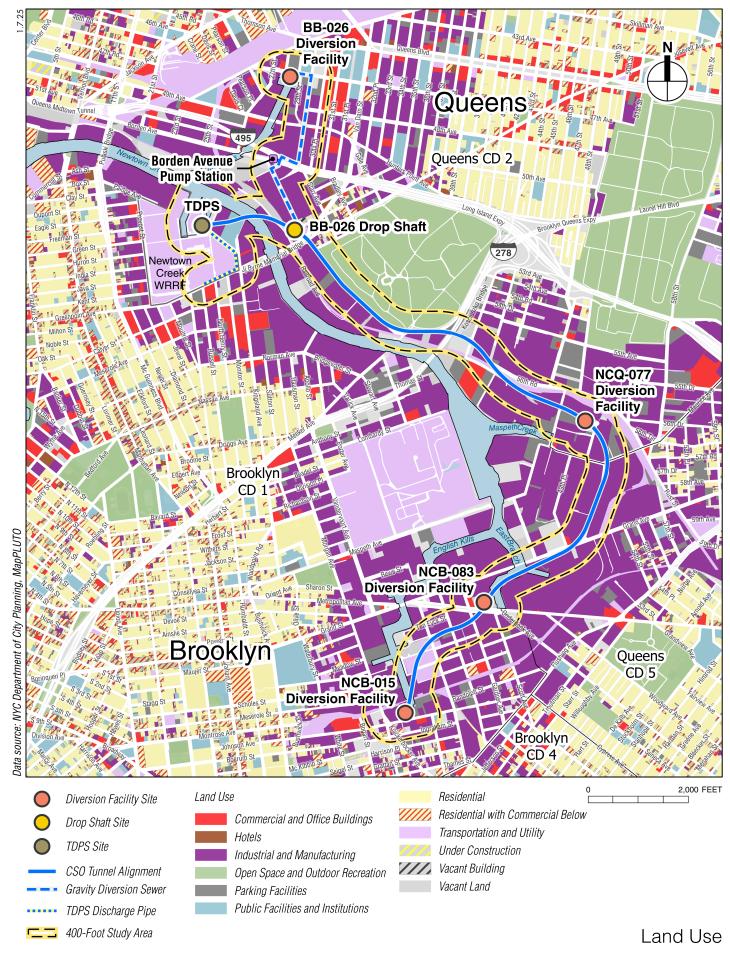
The first chapter of the DEIS introduces the Proposed Project and sets the context in which to assess impacts. The chapter will contain a detailed description of the Proposed Project; the background and history of the Proposed Project, including a summary of the legal framework; previous investigations and actions; and a statement of purpose and need and anticipated benefits of the Proposed Project. The chapter will also include a discussion of the approvals required for the Proposed Project, including other discretionary actions, as well as procedures to be followed and the role of the DEIS in the process. In addition, the Project Description will include a discussion of the Proposed Project's key elements, such as the proposed tunnel alignment(s) and diversion facilities.

# CONSTRUCTION MEANS AND METHODS

The DEIS will include a chapter describing the construction schedule and logistics for the construction of the Proposed Project. This chapter will provide a summary that will discuss anticipated on-site construction activities at each of the Proposed Project Sites and estimates of construction workers and truck deliveries for the Proposed Project.

# LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project and determines whether a proposed project is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the Proposed Project's compliance with, and effect on, the area's zoning and other applicable public policies. Following *CEQR Technical Manual* guidelines, the land use, zoning, and public policy analysis will be conducted within a study area extending 400 feet from the CSO storage tunnel and its associated infrastructure improvements (including diversion facilities and the TDPS site; see **Figure 6**). The boundaries include those communities and uses that could potentially be affected by the Proposed Project. Key issues include the compatibility of the proposed use with existing patterns of development, nearby industrial and commercial facilities; the Proposed Project's consistency with underlying zoning, and officially approved or adopted future plans and programs, such as potential



future zoning changes affecting the Proposed Project and the study area; and the Proposed Project's potential effects on sensitive uses and neighborhood activity patterns.

The land use analysis will characterize the uses and development trends in the area that may be affected by the Proposed Project, describe the public policies that guide development, and determine whether the Proposed Project is compatible with those conditions and policies or whether it may affect them. In addition to considering the Proposed Project's effects in terms of land use compatibility and trends in zoning and public policy, this chapter will also provide a baseline for other analyses. The land use chapter will provide the following:

- A brief development history of the sites and the study area. The study area will include the CSO storage tunnel, the tunnel's associated infrastructure improvements (including diversion facilities and the TDPS), staging areas, and a radius of approximately 400 feet around these areas;
- Describe conditions in the study area, including existing uses and the underlying zoning;
- Describe land use patterns in the study area, including recent development trends;
- Describe existing zoning and recent zoning actions, if any, in the study areas;
- Describe other public policies that may apply to the study area including any formal neighborhood or community plans;
- Identify other future projects in the study area that would be completed by the analysis year. Describe how these projects would affect land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area, including plans for public improvement; and
- Assess the impacts of the Proposed Project on land use and land use trends, zoning, and public
  policy. Proposed Project impacts related to issues of compatibility with surrounding land use,
  consistency with zoning and other public policies, and the effect of construction and operation
  of the Proposed Project on development trends and conditions in the area will be assessed.

The Proposed Project is located in the Coastal Zone; therefore, an assessment of the Proposed Project's consistency with the Waterfront Revitalization Program (WRP) will be prepared.

# SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on a specific industry. The DEIS will include a preliminary screening assessment of the Proposed Project's potential to affect any of these issues of concern during construction and operation of the facilities. Based on the preliminary screening assessment, if it is determined that the Proposed Project would exceed any of

the thresholds warranting further analysis, a preliminary assessment will be prepared. If a preliminary assessment cannot rule out the potential for significant adverse impacts, a detailed analysis will be prepared following *CEQR Technical Manual* guidance.

# **COMMUNITY FACILITIES AND SERVICES**

Under CEQR Technical Manual guidelines, a project can affect community facility and services when it physically displaces or alters a community facility (direct effects) or causes a change in population that may affect the services delivered by a community facility (indirect effects). With regard to indirect effects, the demand for community facilities and services is directly related to the type and size of the new population generated by any proposed development. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. The DEIS will include a preliminary screening assessment of the Proposed Project's potential to affect community facilities during construction and operation of the facilities. As the Proposed Project would not displace or alter a community facility, and would not introduce a new residential population, a detailed analysis of the Proposed Project's potential direct and indirect effect on community facilities—including schools, childcare facilities, libraries, police/fire protection services, and health care facilities—is not expected to be warranted.

#### **OPEN SPACE**

The CEQR Technical Manual recommends performing an open space assessment if a project would have a direct or indirect effect on an area open space. The Proposed Project would not introduce a new residential or non-residential population warranting an analysis of indirect effects. Publicly accessible open spaces in the vicinity of the Proposed Project include the FF Michael Brennan Memorial LIC Roots Community Garden, the Smiling Hogs Head Ranch garden, the Newtown Creek WRRF nature walk, a New York City Greenstreet seating area at Van Dam Street and Greenpoint Avenue, the Calvary Cemetery, Under the K-Bridge Park, Walter Reed Public School 9 Schoolyard, and Gilbert Ramirez Park. An assessment of the Proposed Project's direct effects on area open spaces resulting from construction and operation of the facilities will be provided (i.e., if relevant, potential increases in noise, air pollutants, or shadows from the Proposed Project on adjacent public open spaces will be assessed).

#### **SHADOWS**

The CEQR Technical Manual requires a shadows assessment for projects that would result in new structures (or additions to existing structures) greater than 50 feet in height or structures located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include publicly accessible open spaces, sunlight-sensitive natural features, or historic resources with sun-sensitive features.

The Proposed Project would result in new above-grade structures (e.g., the TDPS) adjacent to Newtown Creek, which is considered a sunlight-sensitive natural resource, since altering the shadows on the Creek may alter its condition or microclimate. The TDPS is also located adjacent to the Newtown Creek Nature Walk, a public open space resource. A shadows assessment is therefore

required to determine how shadows generated by the Proposed Project might affect these resources. The shadows assessment will follow the methodology described in the *CEQR Technical Manual*, and will include the following tasks:

- Develop base maps illustrating the project sites in relationship to natural features in the area, and any publicly accessible open spaces or historic resources with sunlight-dependent features;
- Determine the longest possible shadow that could result from the Proposed Project to determine whether it could reach any sunlight-sensitive resources at any time of year;
- Develop a three-dimensional computer model of the elements of the base maps developed in the preliminary assessment;
- Develop three-dimensional representations of the proposed facilities;
- Using three-dimensional computer modeling software, determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Project on four representative days of the year;
- Document the analysis with graphics comparing shadows resulting from future conditions with
  the Proposed Project with shadows resulting from the proposed facilities, with incremental
  shadow highlighted in a contrasting color. Include a summary table listing the entry and exit
  times and total duration of incremental shadow on each applicable representative day for each
  affected resource; and
- Assess the significance of any shadow impacts on sunlight-sensitive resources. If any significant adverse shadow impacts are identified, describe and assess potential mitigation strategies.

# HISTORIC AND CULTURAL RESOURCES

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is required if a project has the potential to affect either archaeological or architectural resources. The Proposed Project is expected to require subsurface disturbance at the "facility sites," which includes the diversion facilities, TDPS site, and CSO storage tunnel and gravity sewer alignments (see **Figure 5**).

The Proposed Project would require city, state, and federal permits and would therefore be subject to environmental review pursuant to CEQR; SEQRA; the New York State Historic Preservation Act (SHPA) of 1980, as set forth in Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law; and Section 106 of the National Historic Preservation Act of 1966 (NHPA). These laws require that state and federal agencies, respectively, consider the effects of their actions on any cultural resources listed on or determined eligible for listing on the State and National Registers of Historic Places (S/NR). Pursuant to Section 106, federal agency preservation officers, in consultation with the State Historic Preservation Officer (SHPO), must determine whether a proposed action would have any effects on the characteristics of a site that qualify it for the S/NR. Compliance under Section 106 fulfills the requirements of Section 14.09 of NHPA. In addition, because the Proposed Project would involve city actions, the historic and cultural resources analysis will be prepared in consultation with both SHPO and LPC, as appropriate.

As described below, consultation will be initiated with both LPC and SHPO regarding the potential for archaeological sensitivity of the facility sites. The archaeological resources study area will include all areas where the Proposed Project would result in subsurface disturbance. The facility sites do not contain any previously identified known or potential architectural resources; however, known and potential architectural resources may be located within the study area. The architectural resources study area will be approximately 90 feet beyond the border of the project sites where no above-grade structures would be built; the study area would extend to approximately 400 feet beyond the border of the project sites where above-ground structures are proposed.

A submission for each facility site will be prepared and submitted to SHPO through the online Cultural Resource Information System (CRIS) to initiate consultation with SHPO for the environmental assessment. The CRIS submission will include: a project description (including identification of all involved city, state, and federal agencies and actions); maps locating proposed facility sites; and relevant project drawings, as appropriate; and photographs and descriptions of existing structures/built resources on each facility site.

The historic and cultural resources analysis includes the following tasks:

# ARCHAEOLOGICAL RESOURCES

- Initiate consultation with LPC for its preliminary determination of the potential archaeological sensitivity of each facility site. The CRIS submission described above also will serve to initiate SHPO's preliminary determination of each facility site's potential for archaeological sensitivity;
- Assess the potential for archaeological resources within the archaeological study area in consultation with LPC and SHPO. If necessary, a Phase 1A Archaeological Documentary Study (Phase 1A Study) of any sites identified as potentially archaeologically significant would be prepared and submitted to LPC and SHPO for review and comment. The conclusions and recommendations of the Phase 1A Study would be summarized in the DEIS. If any additional archaeological analyses are determined to be necessary (e.g., a Phase 1B Archaeological Investigation, Phase 2 Archaeological Survey/Evaluation, and/or Phase 3 Data Recovery/Mitigation) and are completed during the environmental review, the conclusions and recommendations of these investigations would be summarized in the DEIS; if work cannot be completed until after the environmental review, the commitments to undertake necessary steps would be submitted to LPC and SHPO for review and comment and all agency comment letters would be included in an appendix to the DEIS.

#### ARCHITECTURAL RESOURCES

The architectural resources analysis will consider whether construction and operation of the Proposed Project would be likely to affect any historic architectural resources either directly through construction activities or indirectly through alteration of the context or visual environment of these resources.

Map and briefly describe known architectural resources within the study area surrounding each
facility site. Consistent with the guidance of the CEQR Technical Manual, known architectural

resources include New York City Landmarks (NYCLs) and Historic Districts; properties calendared for consideration as NYCLs by LPC or determined eligible for NYCL designation (NYCL-eligible); S/NR-listed properties or formally determined eligible for S/NR listing (S/NR-eligible), or properties contained within a S/NR-listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; and National Historic Landmarks (NHLs);

- Consistent with the CEQR Technical Manual, an architectural historian would conduct a field survey of the study area, as described above, to identify any potential architectural resources that could be affected by the Proposed Project. Potential architectural resources are properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements. The field survey will be supplemented with research at relevant repositories, online sources, and current sources prepared by LPC and SHPO;
- Seek determinations of eligibility from LPC and SHPO for any potential architectural resources. Map and describe any identified architectural resources;
- Assess potential impacts—including visual and contextual changes and any direct physical
  impacts—of the Proposed Project on archaeological resources or on any known or potential
  architectural resources on the project sites or in the study area that are expected in the future
  without the Proposed Project and the future with the Proposed Project;
- If warranted, the analysis would identify any measures necessary to mitigate and/or reduce any potential significant adverse impacts on historic and cultural resources to be undertaken in consultation with LPC and SHPO; and
- Implement the Section 106 process in coordination with involved federal agencies and any appropriate outreach with the public and consulting parties.

The results of the consultation undertaken with LPC and SHPO will be summarized in the DEIS.

# URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project would result in physical changes that could be observed by a pedestrian from street level and could potentially change or restrict significant views of visual resources, a preliminary screening assessment of urban design and visual resources should be prepared. Only projects that result in physical alterations beyond that allowed by zoning (i.e., projects that include modifications to zoning requirements relating to yard, height and setback, or built floor area) require an assessment. The DEIS will include a preliminary screening assessment of the Proposed Project's potential to affect the urban design and visual resources of the study area (e.g., the TDPS would be located adjacent to the Newtown Creek Nature Walk). A detailed analysis will be prepared, if warranted, based on the preliminary assessment.

# NATURAL RESOURCES

An assessment of natural resources is conducted when a natural resource is present on or near a development site and the project may involve the direct or indirect disturbance of that resource. The CEQR Technical Manual defines natural resources as water resources, including surface water

bodies and groundwater; wetlands, including freshwater and tidal wetlands; terrestrial resources, such as grasslands and thickets; shoreline resources, such as beaches, dunes, and bluffs; gardens and other ornamental landscaping; and natural resources that may be associated with built resources, such as old piers and other waterfront structures. The Proposed Project would result in upland disturbance of existing impervious surfaces comprising surface parking, and the demolition of existing buildings, including the existing DSNY structures at the TDPS site, which feature limited natural resources. The proposed outfall structures at the TDPS site, and the diversion facilities at outfalls NCB-015, NCB-083, NCQ-077, and BB-026 would result in temporary disturbance to Newtown Creek during construction and permanent loss of bottom and water column habitat. The Proposed Project would also result in long-term benefits to aquatic resources through improved water quality.

A screening evaluation will be performed to characterize existing terrestrial and aquatic natural resources on the sites based on site reconnaissance, review of existing information, and consultation with responsible agencies, including NYSDEC, USFWS, and NOAA Fisheries. Potential impacts, including those to ecological communities and wildlife due to removal of any limited existing vegetation, and potential impacts to aquatic resources due to construction (e.g., temporary sediment resuspension, shading due to construction barges, increases in underwater noise) and operation of the proposed diversion facilities and pump station outfalls, including beneficial effects to water quality of Newtown Creek, will be assessed, and any requirements for replacement of resources will be described. If warranted based on further design of the facilities and in consultation with the responsible agencies, a detailed analysis of the Proposed Project's impacts on natural resources during construction and operation of the facilities will be prepared, and measures that would be developed, as necessary, to mitigate and/or reduce any of the Proposed Project's potential significant adverse impacts on natural resources will be described.

# HAZARDOUS MATERIALS

According to the *CEQR Technical Manual*, a hazardous materials assessment should be conducted when elevated levels of hazardous materials exist on a site, when a project would increase pathways to their exposures, either human or environmental, or when an action would introduce new activities or processes using hazardous materials, thereby increasing the risk of human or environmental exposure. The potential for significant impacts related to hazardous materials can occur when:

- Elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposures;
- A project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or
- The project would introduce a population to potential human or environmental exposure from off-site sources.

The proposed CSO tunnel alignment would travel beneath Newtown Creek and its tributary English Kills. The alignment would generally follow Newtown Creek, running from the TDPS site to the east across the Creek into Queens, then east and south into Northern Brooklyn, and would traverse

historically industrial neighborhoods, including Long Island City and Maspeth (Queens), and Bushwick and East Williamsburg (Brooklyn). Newtown Creek and numerous adjoining industrial properties served as a major waterway and industrial hub through which materials were brought to and from area industries, including major oil refineries and terminals, smelting operations, manufactured gas plants and other heavy industries. Due to discharges and contamination from these heavy industrial uses, Newtown Creek itself was designated as a Superfund site by EPA in 2010 under CERCLA. In addition, many industrial parcels surrounding Newtown Creek have resulted in site-specific subsurface contamination from on-site operations, including several easement parcels, which are currently in regulated programs including, but not limited to, NYSDEC State Superfund, Brownfield Cleanup Program (BCP), as well as registered chemical or petroleum bulk or major oil storage facilities. Given the potential for contaminants to be present in soil, groundwater and surface water within the proposed tunnel alignment, an assessment of hazardous materials relating to the rights-of-ways, easement parcels and proposed acquisition parcels is warranted to determine what regulatory procedures would be followed to remain in conformance with requirements of any parcelspecific remedial programs as well as an evaluation of potential contaminants within the public rights-of-way and easement and/or acquisition parcels that are not currently involved in regulatory programs.

To evaluate potential for impacts relating to hazardous materials during construction and operation of the Proposed Project, the hazardous materials chapter of the DEIS will include:

- A review of existing information such as Sanborn Fire Insurance maps, city directories and other
  historical resources to develop a profile of the historical uses of the existing rights-of-way as
  well as the easement and acquisition parcels for the tunnel alignment. The aforementioned uses
  will also be utilized to determine if any adjacent or surrounding properties or uses have the
  potential to have adversely impacted subsurface conditions within the proposed tunnel
  alignment;
- A review of local, state, and federal regulatory database listings to understand documented conditions that may have adversely impacted subsurface environmental conditions within the proposed tunnel alignment areas; and
- A review of available online resources maintained by EPA and NYSDEC to further understand existing conditions relating to contamination in the tunnel alignment area. If necessary, public records may be obtained for further evaluation via Freedom of Information Law (FOIL).

The hazardous materials chapter of the DEIS will summarize the findings of existing historical land use studies and subsurface investigations already undertaken for the Proposed Project and will describe the procedures by which the soil and groundwater disturbance for the Proposed Project would be undertaken. The analysis will identify the need for additional subsurface site investigation (e.g., collection and laboratory analysis of soil, groundwater and/or soil vapor samples) and procedures required to reduce the potential for significant adverse impacts due to hazardous materials, including procedures during construction to manage and dispose of excavated material and procedures to protect the health of local residents, construction workers, and future users of the rights-of-way, easement, existing structures and acquisition parcels.

#### WATER AND SEWER INFRASTRUCTURE

A water and sewer infrastructure assessment analyzes whether a project may adversely affect the City's water distribution or sewer system and, if so, assesses the effects of such projects to determine whether their impact is significant and presents potential mitigation strategies and alternatives. According to the *CEQR Technical Manual*, only projects that increase density or change drainage conditions on a large site (generally five acres or larger) require a water and sewer infrastructure analysis. The Proposed Project would not result in development exceeding the *CEQR Technical Manual* thresholds requiring a detailed analysis but would introduce a CSO storage tunnel and related facilities that are intended to reduce the frequency of CSOs. Therefore, a description of the facilities and the potential effects to stormwater management, discharges of CSO solids, and treatment capacity at the Newtown Creek and Bowery Bay WRRFs will be provided. A description of any infrastructure upgrades or system rerouting that is required as part of the Proposed Project, including upgrades to redirect flow to the tunnel from nearby CSOs, relocation of existing infrastructure, or construction of new pumping stations, will be provided.

# SOLID WASTE AND SANITATION SERVICES

A solid waste assessment determines whether a project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City's Solid Waste Management Plan or with state policy related to the City's integrated solid waste management system. According to the CEQR Technical Manual, a solid waste assessment is appropriate if a project has the potential to generate 50 tons per week or more of solid waste, compared to the future without the Proposed Project, or No Action condition. The DEIS will include a preliminary screening assessment of the Proposed Project's potential to affect solid waste and sanitation services. The DEIS will provide an estimate of the additional solid waste expected to be generated by the Proposed Project using Table 14-1 of the CEQR Technical Manual, and assess its effects on the City's solid waste and sanitation services. If the Proposed Project would introduce facilities generating a large amount of solid waste, a detailed assessment of solid waste and sanitation services will be provided. The assessment will:

- Describe existing and future New York City solid waste disposal practices.
- Estimate solid waste generation by the project sites for existing, No Action and With Action conditions.
- Assess the impacts of the Proposed Project's solid waste generation on the City's collection needs and disposal capacity. The Proposed Project's consistency with the City's Solid Waste Management Plan (SWMP) will also be assessed.

# **ENERGY**

Analysis of energy focuses on a project's consumption of energy and, where relevant, potential effects on the transmission of energy that may result from a project. According to the *CEQR Technical Manual*, a detailed assessment of energy impacts would be limited to actions that could significantly affect the transmission or generation of energy or that generate substantial indirect

consumption of energy (such as a new roadway). The DEIS will include a preliminary screening assessment of the Proposed Project's potential energy effects, including estimates of the Proposed Project's energy consumption.

# TRANSPORTATION

In accordance with criteria established in the *CEQR Technical Manual*, a quantified traffic and parking analysis is warranted if a project would result in more than 50 vehicle-trips through any one intersection during a given peak hour. A quantified transit and pedestrian analysis is warranted if a project would result in more than 200 transit or pedestrian trips during a given peak hour. Operation of the Proposed Project is not expected to exceed the 50 peak hour vehicle trips or 200 peak hour transit/pedestrian trip thresholds in the *CEQR Technical Manual*; therefore, a quantified operational transportation assessment is not warranted.

However, based on the Proposed Project's projected construction needs, an analysis of construction-related transportation impacts is warranted. This assessment will consider construction logistics and construction vehicle trips from workers and deliveries in determining potential transportation-related impacts. In accordance with the *CEQR Technical Manual*, a detailed traffic analysis will be performed for intersections expected to incur 50 or more incremental construction trips in passenger car equivalents (PCEs) to identify the potential for significant adverse traffic impacts during peak construction activity (worker travel and truck deliveries). Based on anticipated construction logistics, which may include the temporary closure and/or narrowing of public rights-of-way (ROWs), including roadways and pedestrian facilities (i.e., sidewalks, corner reservoirs, and crosswalks), preliminary Maintenance and Protection of Traffic (MPT) strategies will be developed to inform analysis needs for typical peak travel hours on a representative weekday (i.e., AM, midday, and PM) and a representative weekend day (i.e., Saturday midday/afternoon). More extensive disruptions and/or roadway detours that may be required during off-peak and late-night hours to accommodate project construction needs will also be assessed as warranted.

Data will be collected to establish the baseline traffic and pedestrian volumes to evaluate existing operating conditions at study area locations during the prescribed analysis peak hours. The potential future construction effects resulting from construction activities and public ROW disruptions will be evaluated pursuant to the procedures outlined in the *CEQR Technical Manual* to determine the potential for significant adverse traffic and pedestrian impacts. Where potential impacts are identified, improvements would be explored to mitigate those impacts to the extent practicable. The construction transportation analysis will also provide estimates on the number of parking spaces that may be needed during peak construction at each construction site and describe how such parking demand may be accommodated on-site and/or by the parking resources in the surrounding neighborhoods.

# **AIR QUALITY**

Under CEQR, an air quality analysis determines whether a project would result in stationary or mobile sources of pollutant emissions that could have a significant adverse impact on ambient air quality. The Proposed Project, once completed, would generate a negligible amount of emissions from mobile sources, such as cars and trucks; therefore, a mobile source analysis is not warranted.

# OPERATIONAL AIR QUALITY ANALYSIS

The operational air quality analysis will focus on emissions from stationary sources, including the potential ventilation of odors from the proposed facilities and any proposed heating, ventilating, and air conditioning (HVAC) equipment. The primary pollutant of concern for odors is hydrogen sulfide (H<sub>2</sub>S). The primary pollutants of concern for air quality from the natural gas-fired HVAC systems are NO<sub>2</sub> and PM<sub>2.5</sub>.

EPA models and screening procedures outlined in the *CEQR Technical Manual* will be used to evaluate potential impacts associated with each facility's sources.

The analysis will include the following tasks:

- Existing ambient air quality data from representative NYSDEC monitoring stations will be summarized for the study areas;
- Criteria pollutant emissions from the natural gas-fired HVAC systems will be estimated and dispersion modeling analyses will be performed. Emissions rates for each of the boiler systems will be calculated based on the heat input capacity and applying emission factors for natural gas-fired boilers from EPA's compilation of emission factors, AP-42. Emissions of NO2 and PM2.5 from the boilers will be modeled. A comprehensive receptor network (i.e., locations with continuous public access) will be developed for the modeling analyses. Sensitive receptors will be placed in the model at elevated operable windows, balconies, air intakes, and publicly accessible ground-level locations. Sensitive receptors in the study area are mainly publicly accessible sidewalks, the Newtown Creek Nature Walk, the Newtown Creek itself, and any operable windows from nearby residences. It is assumed that one boiler will be located at each of the NCB-015, NCB-083, and NCQ-077 facilities and one boiler will be located at the TDPS. Maximum pollutant concentrations would be estimated and compared with National Ambient Air Quality Standards (NAAQS) and other de minimis thresholds;
- A dispersion modeling analysis of potential odors exhausting from the diversion facilities and TDPS will be performed. Receptors for the odor analysis will be identical to the receptor network used for the HVAC analysis. Odors will be assessed in terms of H<sub>2</sub>S since it is the most prevalent malodorous gas associated with domestic wastewater collection. H<sub>2</sub>S emissions will be calculated and determined using data the Basis of Design Report and proposed control device specifications. Potential H<sub>2</sub>S concentrations from each facility's odor control system, as well as the BB-026 drop shaft, will be compared to the City's CEQR Technical Manual screening level odor threshold of 1 parts per billion (ppb) for H<sub>2</sub>S at sensitive receptors. Modeled H<sub>2</sub>S concentrations will be compared to the New York State Ambient Air Quality Standard (NYSAAQS) of 10 ppb H<sub>2</sub>S in ambient air (i.e., at all off-site locations); and
- As necessary, measures to minimize any predicted significant adverse impacts from each facility's stationary source airborne emissions will be provided.

# CONSTRUCTION AIR QUALITY ANALYSIS

Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust generating construction activities, have the potential to affect air quality. This assessment will include a quantitative air quality analysis of construction equipment sources and construction-related vehicles using the EPA Motor Vehicle Emission Simulator (MOVES4) emission model and EPA/American Meteorological Society (AMS) AERMOD dispersion model to determine the potential for air quality impacts on nearby sensitive receptor locations.

Because the level of construction activities would vary throughout the construction period, the approach to formulate the reasonable worst-case scenarios for analysis will be based on an estimated monthly construction work schedule, equipment employed, equipment emission rates, and usage factors. The periods of highest emissions at each of the Proposed Project sites nearest to sensitive receptor locations will be identified for modeling since they are expected to be the periods of greatest impacts. Other less intensive construction periods will either be modeled or presented as a qualitative discussion, based on the reasonable worst-case period results. The pollutants of concern include carbon monoxide (CO), particulate matter (PM), and nitrogen dioxide (NO<sub>2</sub>). The potential for significant adverse impacts will be determined by a comparison of the model predicted concentrations to the NAAQS, or by comparison of the predicted increase in concentrations to applicable interim guidance thresholds.

The construction air quality section would also include an analysis of the potential concentrations from the on-site groundwater treatment systems. Predicted concentrations from the groundwater treatment system exhaust will be compared to the NYSDEC Division of Air Resources (DAR) DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants Under 6NYCRR Part 212 short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs).

# GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

In accordance with the *CEQR Technical Manual*, a greenhouse gas (GHG) emissions analysis discloses the GHG emissions that could result from a large-scale project, and assesses the consistency of the project with the City's and State's goals to reduce GHG emissions as established within the PlaNYC and Climate Leadership and Community Protection Act (CLCPA). The Proposed Project's generated GHG emissions will be quantified and the consistency of the Proposed Project with the City's established GHG reduction goal will be assessed. Operational GHG emissions will be estimated for the Analysis year and reported as carbon dioxide equivalent (CO<sub>2</sub>e) metric tons per year. GHG emissions other than carbon dioxide (CO<sub>2</sub>) would be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential.

Due to the anticipated construction activities and duration, a quantified analysis of GHG emissions during the construction phase will also be provided. GHG emissions from on-site fuel usage and the extraction/production of materials or fuels needed to construct the Proposed Project will be included as part of the Proposed Project's total emissions. Features of the Proposed Project that demonstrate consistency with the City's GHG reduction goal will also be described.

As the Proposed Project is located in a flood hazard zone, the potential impacts of climate change on the Proposed Project will be evaluated. The discussion will focus on sea level rise, changes in storm frequency and intensity projected to result from global climate change, increased precipitation, and change in heat impacts and the potential future impact of those changes on the Proposed Project's infrastructure and uses.

# **NOISE**

# OPERATIONAL NOISE ANALYSIS

The CEQR Technical Manual requires that the noise analysis address whether a project would result in a significant increase in noise levels (particularly at sensitive land uses such as residences and open spaces). As the Proposed Project may potentially include the use of noise-producing equipment located outdoors, the noise analysis will focus on the addition of unenclosed equipment. Specifically, the noise impact assessment for outdoor noise-producing equipment will consist of the following subtasks:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the existing noise
  environment will be selected. The L<sub>eq</sub> and L<sub>10</sub> levels will be the primary noise descriptors used
  for the analysis;
- Select noise receptor locations. The receptor locations (i.e., residences, open spaces, houses of
  worship, schools, etc.) will be adjacent to proposed new equipment associated with the Proposed
  Project sites;
- Determine existing noise levels. Existing noise levels will be measured adjacent to the Proposed Project sites. These measurements will include both 24-hour continuous noise level measurements and simultaneous 20-minute spot measurements and will be conducted using Type I instrumentation;
- Based upon projected outdoor equipment specifications and the future site layouts, noise levels
  at locations on the project site boundaries and at other nearby sensitive receptor locations will
  be estimated using computerized models and spreadsheets;
- The resulting noise levels will be compared to CEQR noise impact criteria; and
- If predicted noise levels are not in compliance with the above-mentioned criteria, measures that could be implemented to reduce noise levels and achieve compliance—e.g., shielding options (such as the use of sound barriers or berms), use of silencers or mufflers, use of quieter equipment, and placement of equipment—would be examined.

#### CONSTRUCTION NOISE ANALYSIS

A detailed analysis of noise from construction of the Proposed Project will be provided. Noise receptors will be located at sensitive receptors (i.e., residences, open spaces, houses of worship, schools, etc.) near the Proposed Project sites, including Proposed Project construction work areas and potential staging sites. Existing noise levels at the selected receptors will be determined by taking noise measurements, including either 24-hour continuous noise level measurements or 20-

minute spot measurements. The measurements will be conducted using Type I instrumentation. Representative worst-case time periods throughout the construction schedule will be selected for analysis. Noise levels due to construction (including operation of on-site equipment, construction vehicles, and construction barge operations) will be predicted at each sensitive receptor for each analysis time period. Noise associated with construction blasting activities will be discussed qualitatively. If necessary, based on the results of the construction noise analysis, the feasibility, practicability, and effectiveness of implementing measures to mitigate any significant construction noise impacts will be examined.

# CONSTRUCTION VIBRATION ANALYSIS

Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. A construction vibration assessment will be performed. This assessment will determine critical distances at which various pieces of equipment may cause damage or annoyance to nearby buildings based on the type of equipment, the building construction, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a building than its critical distance, vibration mitigation options will be proposed.

# **PUBLIC HEALTH**

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any one of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

# NEIGHBORHOOD CHARACTER

Neighborhood character is determined by several factors, including land use, socioeconomic conditions, community facilities, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. According to the guidelines of the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a project has the potential to result in significant adverse impacts in one of the technical areas presented above, or when a project may have moderate effects on several of the elements that define a neighborhood's character. Based on an evaluation of the Proposed Project's impacts, an assessment of neighborhood character during construction and operation of the facilities will be prepared following the methodologies outlined in the *CEQR Technical Manual*. The analysis will begin with a preliminary assessment, which will involve identifying the defining features of the area that contribute to its character. If the preliminary assessment establishes that the Proposed Project would affect a contributing element of neighborhood character, a detailed assessment would be prepared to examine the potential neighborhood character-related effects of the Proposed Project through a comparison of future conditions with and without the Proposed Project.

#### ENVIRONMENTAL JUSTICE

An environmental justice (EJ) analysis will be prepared to comply with New York State Environmental Conservation Law § 8-0109 and any relevant regulations or guidance in effect at the time of DEIS preparation. The EJ analysis will address any potential adverse impacts on Disadvantaged Communities that could result from the Proposed Project, as defined in ECL § 75-0101(5). The EJ analysis will establish the study area, identify Disadvantaged Communities in the study area, identify potential significant adverse environmental impacts, and determine whether potential significant adverse environmental impacts (as identified in the other chapters of the DEIS) are likely to affect a Disadvantaged Community, recognizing that impacts may be different than impacts to the general population. The existing environmental burden on the potential EJ area will be described and the additional burden of any significant adverse environmental impact will be evaluated. Measures to avoid or minimize potential significant adverse impacts will also be described. The analysis will be consistent with the intent of NYSDEC's existing Commissioner Policy 29 (CP-29), *Environmental Justice and Permitting*, including the public participation process as described therein.

#### **MITIGATION**

Where significant adverse impacts have been identified for the Proposed Project, measures to mitigate those impacts will be identified and described. The mitigation chapter will address the anticipated impacts requiring mitigation, likely mitigation measures, and the timing of the mitigation measures. Where impacts cannot be practicably mitigated, they will be disclosed as unavoidable adverse impacts.

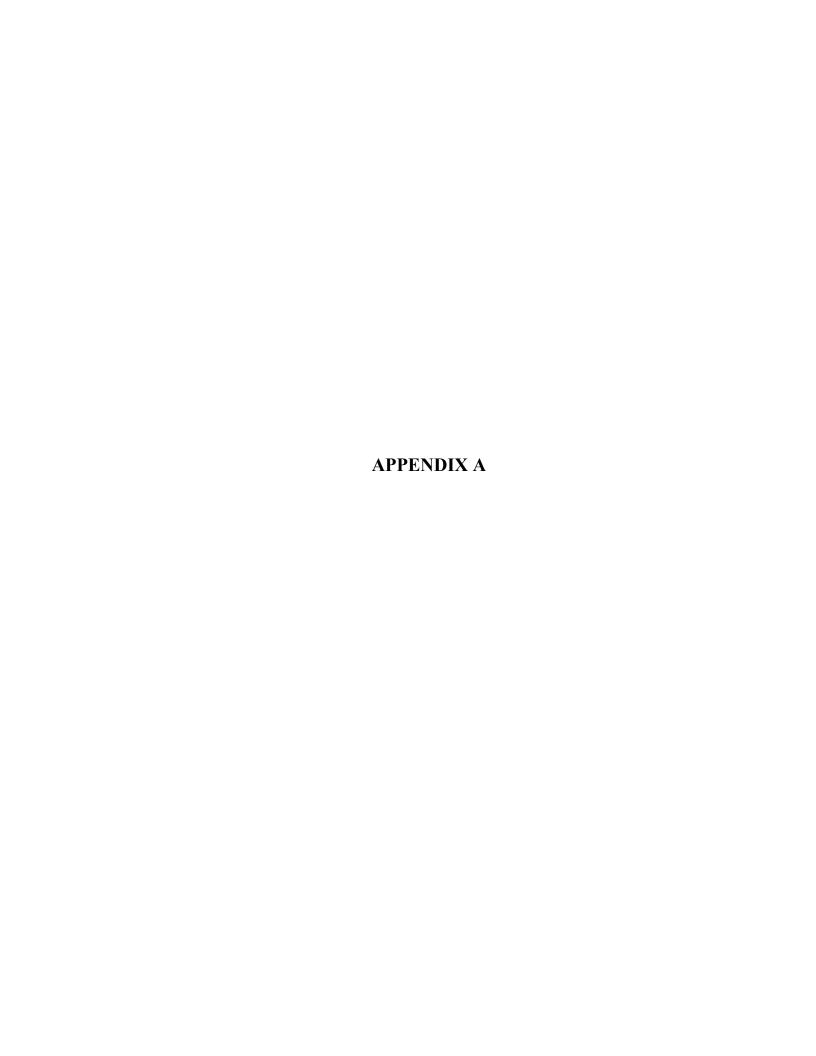
# **ALTERNATIVES**

The purpose of an alternatives analysis is to examine reasonable and feasible options that avoid or reduce project-related significant adverse impacts while still achieving the stated goals and objectives of the Proposed Project. The alternatives are usually defined once the full extent of the Proposed Project's impacts have been identified. However, the alternatives analyzed must include a No Action Alternative, as required by CEQR. The chapter may also include an alternative(s) that reduces any significant adverse impacts identified in the EIS analyses; if impacts are identified, alternatives will be analyzed at that time. If the Proposed Project would result in unmitigated significant adverse impacts, the EIS would also include a No Unmitigated Impacts Alternative. The alternatives analyses will be qualitative, except where significant adverse impacts of the Proposed Project have been identified, or if an alternative with fewer overall impacts would nevertheless have new significant adverse impacts.

# **DEIS SUMMARY CHAPTERS**

In accordance with *CEQR Technical Manual* guidelines, the DEIS will include the following summary chapters, where appropriate to the Proposed Project:

- Unavoidable Adverse Impacts—will summarize any significant adverse impacts that are unavoidable if the Proposed Project is implemented regardless of the mitigation employed (or if mitigation is impossible);
- Growth-Inducing Aspects of the Proposed Project—will discuss the "secondary" impacts of the Proposed Project that could trigger further development; and
- Irreversible and Irretrievable Commitments of Resources—will summarize the Proposed Project's impacts in terms of the loss of environmental resources (e.g., use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.



	Potential Surface									
Potential	Easement/Full									
Subsurface	Property									
Easement <sup>1</sup>	Acquisition <sup>1</sup>	Borough	Block	Lot	Address	Owner	Owner Type			
UNNEL ALIGNMENT/DIVERSION FACILITIES										
X	X	BK	2508		1 KINGSLAND AVENUE	NYC DEPARTMENT OF SANITATION	City			
X		BK	2517		520 KINGSLAND AVENUE	500 KINGSLAND ASSOC., LLC	Private			
X X	W/	BK	2517 2948		540 KINGSLAND AVENUE	ALLOCCO REALTY & ASSOC. CO. LLC	Private			
	X	BK	2948		1356 GRAND STREET 1301 METROPOLITAN AVENUE	FELDMAN METROPOLITAN REALTY, LLC	Private			
X X	X	BK BK	2948		1250 METROPOLITAN AVENUE	1301 METRO-255, LLC 1250 METROPOLITAN AVENUE LLC	Private Private			
X		BK	2953	-	1300 METROPOLITAN AVENUE	DZH REAL ESTATE LLC	Private			
X		BK	2953		158 GARDNER AVENUE	PRIME PACKAGING CORP	Private			
X		BK	2957		182 VARICK AVENUE	MDO PROPERTY MANAGEMENT	Private			
X		BK	2957		188 VARICK AVENUE	MDO PROPERTY MANAGEMENT	Private			
X		BK	2957		194 MEADOW STREET	MDO PROPERTY MANAGEMENT	Private			
X		BK	2957		200 MEADOW STREET	MDO PROPERTY MANAGEMENT	Private			
X		BK	2957		204 MEADOW STREET	MDO PROPERTY MANAGEMENT	Private			
X		BK	2962		SCHOLES STREET	NYC DEPARTMENT OF SANITATION	City			
X		BK	2962		175 VARICK AVENUE	MEYER FINE	Private			
X		BK	2962		VARICK AVENUE	NYC DEPARTMENT OF SANITATION	City			
X		BK	2974		103 VARICK AVENUE	123 VARICK AVENUE LLC	Private			
X		BK	2974		MORGAN AVENUE	MTA - LIRR	State			
X	X <sup>2</sup>	BK	2974		JOHNSON AVENUE	MTA - LIRR	State			
X	X	BK	2974		100 KNICKERBOCKER AVENUE	BERRYBRIDGE INC	Private			
X	Λ	ON	294		GREENPOINT AVENUE	NYS DEPARTMENT OF TRANSPORTATION	State			
X		QN	294		30-60 REVIEW AVENUE	ROM REALTY LLC	Private			
X		ON	294		30-39 GREENPOINT AVENUE	ROM REALTY LLC	Private			
X		QN	294		30-21 GREENPOINT AVENUE	3023 GPT LLC	Private			
X		ON	2508		34-02 GREENPOINT AVENUE	TR-ST PATRICKS CATHEDRAL	Private			
X		QN	2519		55-54 56 ROAD	NEWFOUND LLC	Private			
X		ON	2519		35-18 LAUREL HILL BLVD	NYS DEPARTMENT OF TRANSPORTATION	State			
X		QN	2520		34-02 LAUREL HILL BLVD	34-02 LHB REALTY LLC	Private			
X		ON	2520		34-40 LAUREL HILL BLVD	PAPAGIORGIO ENTERTAINMENT LLC	Private			
X		QN	2520		34-52 LAUREL HILL BLVD	RLF III LAUREL HILL SPE, LLC	Private			
X		QN	2520		42-02 56 ROAD	ANISKA REALTY I, LLC	Private			
X		QN	2526		44 STREET	56TH ROAD & 43RD STREET LLC	Private			
X		QN	2527		57 AVENUE	57-43 LLC	Private			
X		QN	2527	-	43 STREET	57-43 LLC	Private			
X		QN	2527	5	43-01 56 DRIVE	PARCEL 3 MASPETH LLC	Private			
X		QN	2528	1	57 AVENUE	MTA - LIRR	State			
X		QN	2529		46-06 57 AVENUE	FIFTY SEVEN AVENUE INVESTMENTS, LLC	Private			
X		QN	2552		57-02 48 STREET	57-02 48TH STREET LLC	Private			
X		QN	2552	45	-000 57 AVENUE	FIFTY SEVEN AVENUE INVESTMENTS, LLC	Private			
X		QN	2552	69	56 ROAD	57-22 49TH STREET LLC	Private			
X		QN	2552	124	49 STREET	57-02 48TH STREET LLC	Private			
X	X	QN	2575	26	49 STREET	NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION	City			
X		QN	2575	36	56-85 49 STREET	TERRENO 14605 MILLER AVE LLC	Private			
X		QN	2575	40	56-75 49 PLACE	MARTOS REALTY LLC	Private			
X		QN	2575		MASPETH AVENUE	NYC TRANSIT AUTHORITY	State			
X		QN	2575		49-29 MASPETH AVENUE	VARIOUS SHAREHOLDERS OF CBS OUTDOOR AMER ICAS, INC	Private			
X	X	QN	2575		3 49 LANE	PATRIOT(2010)MASPETH GP,LLC	Private			
X	X	QN	2575	-	49 LANE	PATRIOT(2010)MASPETH GP,LLC	Private			
X		QN	2603		58-60 PAGE PLACE	A. DUIE PYLE, INC.	Private			
X		QN	2610	-	55-04 MASPETH AVENUE	NYC TRANSIT AUTHORITY	State			
X		QN	2610		MASPETH AVENUE	NYC DEPARTMENT OF TRANSPORTATION	City			
X		QN	2611	-	47-03 METROPOLITAN AVENUE	CACTUS 47-05 METROPLITAN LLC	Private			
X		QN	2611		GRAND AVENUE	CACTUS 47-05 METROPLITAN LLC	Private			
X		QN	2611		47-06 GRAND AVENUE	NYC INDUSTRIAL DEVELOPMENT AGENCY	State			
X		QN	2611		47-08 GRAND AVENUE	GRAND METRO BUILDING COMPANY, LLC	Private			
X		QN	2611	110	48-00 GRAND AVENUE	48-00 GRAND AVENUE PE LLC	Private			

	Potential Surface						
Potential	Easement/Full						
Subsurface	Property						
Easement <sup>1</sup>	Acquisition <sup>1</sup>	Borough	Block	Lot	Address	Owner	Owner Type
X	1	QN	2611	121	49-00 GRAND AVENUE	FTZ CORP	Private
X		QN	2611		GRAND AVENUE	CRISTINA, ANTOINETTE	Private
X		BK	2958	1	200 STEWART AVENUE	STEVE REALTY CORP	Private
X		BK	2958	14	238 MEADOW STREET	Y & H REALTY CORP OFBROOKLYN	Private
X		BK	2958		169 GARDNER AVENUE	C & R OF KINGS COUNTY INC	Private
X		QN	2519	100	56 ROAD	TRIPLE J LAUREL HILL II, LLC	Private
X		QN	2552	99	56 ROAD	MTA - LIRR	State
X		QN	2603	150	58-38 PAGE PLACE	NYM LTL, LLC	Private
X		BK	2517	14	498 KINGSLAND AVENUE	United Metro Corp	Private
X		QN	2520	1	LAUREL HILL BLVD	LIRR	State
X		BK	2957	1	180 VARICK AVENUE	MDO Management	Private
X		BK	2974	112	469 JOHNSON AVENUE	Unavailable Owner (Likely Waste Management of New York, L.L.C.)	Private
X		BK	2948	12	232 GARDNER AVENUE	FELDMAN METROPOLITAN REALTY, LLC	Private
X		BK	2950	1	221 VARICK AVENUE	WASTE MANAGEMENT	Private
X		BK	2950	7	197 VARICK AVENUE	WASTE MANAGEMENT	Private
X		BK	2951	1	190 VARICK AVENUE	VARICK MEADOW HOLDINGS LLC	Private
X		BK	2951		213 MEADOW STREET	VARICK MEADOW HOLDINGS LLC	Private
X		BK	2967	1	154 MORGAN AVENUE	TERRENO MORGAN AVE, LLC	Private
X		BK	2967	50	MESEROLE STREET	TERRENO MORGAN AVE, LLC	Private
X		BK	2974	1	134 MORGAN AVENUE	TERRENO MORGAN AVE, LLC	Private
X		QN	312	17	LAUREL HILL BLVD	NYC DEPARTMENT OF CITYWIDE ADMINISTRATIVE SERVICES	City
X		QN	312		39-32 REVIEW AVENUE	LH VENTURES LLC	Private
X		QN	312		39-30 REVIEW AVENUE	WINING LIC REALTY LLC	Private
X		QN	312		38-98 REVIEW AVENUE	DG PROPERTIES LLC	Private
X		QN	2520		56 ROAD	NYS DEPARTMENT OF TRANSPORTATION	State
X		QN	2521		57 AVENUE	MTA - LIRR	State
X		QN	2521		57 AVENUE	NYS DEPARTMENT OF TRANSPORTATION	State
X		QN	2521		57 AVENUE	LH VENTURES LLC	Private
X		QN	2529		44-02 57 AVENUE	JMDH REAL ESTATE OF MASPETH PARKING, LLC	Private
X		QN	2529		56 DRIVE	JMDH REAL ESTATE OF MASPETH PARKING, LLC	Private
X		QN	2529		43-40 57 AVENUE	JMDH REAL ESTATE OF MASPETH WAREHOUSE, L LC	Private
X		QN	2529		56 DRIVE	PATRIOT (2010) LLC	Private
X		QN	2529		56 DRIVE	PATRIOT 2010 LLC	Private
X		QN	2529		56 DRIVE	PDRC LAUREL HILL 9, LLC	Private
X		QN	2529		56 DRIVE	JMDH REAL ESTATE OF MASPETH PARKING, LLC	Private
X		QN QN	2552 2554		56 ROAD 57-22 57 AVENUE	NYC DEPARTMENT OF CITYWIDE ADMINISTRATIVE SERVICES 57-22 49TH STREET LLC	City Private
X		QN ON	2575		57-22 57 AVENUE 57-27 49 PLACE	PATRIOT(2010)MASPETH GP,LLC	Private
X	-	QN ON	2575		49-25 MASPETH AVENUE	PATRIOT (2010) MASPETH GP, LLC PATRIOT (2010) LLC	Private Private
X		QN ON	2603		57-54 PAGE PLACE	MORRIS MASPETH ASSOCIATES, LLC	Private
		`	2003	130	J /-JT I AGE I LACE	MORRIS MASI ETH ASSOCIATES, LLC	riivate
BB-026 GRAVITY	DIVERSION SEWER	RALIGNMENT					
	X	QN	115	56	47-17 27 STREET	CHAVES DEVELOPMENT LLC	Private
	X	QN	115	86	29 STREET	MTA - LIRR	State
	X	QN	115	150	47 AVENUE	MTA - LIRR	State
	X <sup>3</sup>	QN	294		30-60 REVIEW AVENUE	ROM REALTY LLC	Private
	X <sup>3</sup>	ON	294		30-39 GREENPOINT AVENUE	ROM REALTY LLC	Private
	X <sup>*</sup>	ŲΝ	294	251	30-33 GREENPUINT AVENUE	KOW KEALT LLC	riivate

#### NOTES:

<sup>1.</sup> Site Selection approval is required at all affected properties; listed properties include all properties where subsurface easement is potentially needed for CSO tunnel based on tunnel alignment alternatives currently under consideration.

<sup>2.</sup> Modification to an existing easement is required at this site.

<sup>3.</sup> Depending on drop shaft design, site selection and full property acquisition of these parcels may not be required; drop shaft located in ROW.