The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION

59-17 Junction Boulevard
Flushing, New York 11373

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Bureau of Environmental Planning & Analysis

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LEAD AGENCY DECLARATION AND NOTICE OF INTENT TO CONDUCT AN ENVIRONMENTAL REVIEW

Project: Transshipment of Tallman Island Sludge and Bowery Bay Centrate, New York, New York

CEQR No. 09DEP028K May 28, 2009

The New York City Department of Environmental Protection (NYCDEP), assuming lead agency status, has prepared an Environmental Assessment Statement (EAS) in accordance with the requirements of the City Environmental Quality Review (CEQR) process as set forth in Executive Order 91 of 1977 and its amendments, Article 8 of the Environmental Conservation Law establishing the State Environmental Quality Review Act (SEQRA) and its regulations as set forth in 6NYCRR Part 617. Attached for your review is a copy of the EAS for the abovementioned project.

The proposed action would temporarily ship thickened digested sludge from NYCDEP's Tallman Island Water Pollution Control Plant (WPCP), Queens Borough, to its Hunts Point and Wards Island WPCPs, Bronx Borough and Manhattan Borough respectively, for a period of up to 30 months. In addition, centrate from DEP's Bowery Bay WPCP, Queens Borough, will be shipped to its North River WPCP, Manhattan Borough, for a period of up to 30 months for processing. The temporary shipment of the sludge and centrate would occur while biological nitrogen removal (BNR) facilities are being constructed at the Tallman Island and Bowery Bay WPCPs as part of the Nitrogen Consent Judgment with the New York State Department of Environmental Conservation. The requirement to ship the sludge from Tallman Island to Hunts Point or Wards Island WPCPs will cease when the BNR technology is installed at Tallman Island. The requirement to ship centrate from Bowery Bay to the North River WPCP will cease upon the installation of BNR technology at Bowery Bay. The project is being undertaken to reduce nitrogen discharges into the upper East River.

When the transshipment program commences, dewatering activities at Tallman Island WPCP will temporarily cease. Tallman Island WPCP produces an average of 0.405 million gallon/per day (mgd) of thickened digested sludge, which would be shipped to the Hunts Point or the Wards Island WPCPs, depending on capacity constraints for treatment and dewatering at these facilities. The dewatered sludge will be hauled away by trucks for ultimate disposal. Also during transshipment, the sludge dewatering activities at Bowery Bay WPCP are expected to remain operational during the installation of the BNR equipment. However, the centrate produced at Bowery Bay WPCP from the dewatering would be shipped to North River WPCP in order to reduce the nitrogen load in the upper East River. Bowery Bay produces an averages 0.625 mgd of centrate.

The activities described for the proposed action will not require upgrading the dewatering facilities at the Hunts Point or Wards Island WPCPs, nor will there be any change in the processing of the centrate at the North River WPCP; the additional flows can be treated well within the design capacity of these facilities. The proposed action would not cause any violation or change of the State Pollutant Discharge Elimination System permit conditions for the aforementioned WPCPs. The proposed action would require minor centrate pipe modifications and replacement in-kind of equipment within the Bowery Bay WPCP and installation of a new 20-inch valve on the sludge loading line at North River WPCP, which has already been completed.

If you have any objections to the New York City Department of Environmental Protection assuming lead agency status for this environmental review, or if you have any questions or comments, please contact Gary C. Heath at (718) 595-4433 within 30 days of the date of this notice. Written comments on the attached materials should be addressed to Mr. Heath, Director of Bureau Operations and Environmental Analysis, at the NYC Department of Environmental Protection, Bureau of Environmental Planning and Analysis 11th Floor, 59-17 Junction Boulevard, Flushing, New York 11373 or by e-mail to gheath@dep.nyc.gov.

Angela Licata
Deputy Commissioner
New York City Department of Environmental Protection

Enclosures:

cc: Ruben Diaz, Jr., Bronx Borough President
Helen Marshall, Queens Borough President
Scott Stringer, Manhattan Borough President
Bronx Community Board 2 Chairperson
Queens Community Board 1 Chairperson
Queens Community Board 7 Chairperson
Manhattan Community Board 9 Chairperson
Manhattan Community Board 11 Chairperson
Bronx Community Board 2 District Manager
Queens Community Board 1 District Manager
Queens Community Board 7 District Manager
Manhattan Community Board 9 District Manager
Manhattan Community Board 11 District Manager
John Cryan, NYSDEC
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Vincent Sapienza, NYCDEP
Sue F Liu, NYCDEP

Keith Mahoney, NYCDEP
Gary Heath, NYCDEP
Terrell Estesen, NYCDEP
Farah Mahjabeen, NYCDEP

ADVANCED WASTEWATER TREATMENT
Transshipment of Tallman Island Sludge and Bowery Bay Centrate

City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT

09DEP028K

May 2009

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ENVIRONMENTAL ASSESSMENT STATEMENT FORM

City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT

PART I, GENERAL INFORMATION

Reference Numbers

1. 09DEP028K
CEQR REFERENCE NUMBER (TO BE ASSIGNED BY LEAD AGENCY)

BSA REFERENCE NO. IF APPLICABLE

ULURP REFERENCE NO. IF APPLICABLE

OTHER REFERENCE NO.(S) IF APPLICABLE (e.g. Legislative Intro, CAPA, etc)

Lead Agency & Applicant Information
PROVIDE APPLICABLE INFORMATION

2a. Lead Agency

New York City Department of Environmental Protection
NAME OF LEAD AGENCY

Angela Licata, Deputy Commissioner
NAME OF LEAD AGENCY CONTACT PERSON

59-17 Junction Blvd., 11th Floor
ADDRESS

Flushing NY 11373
CITY STATE ZIP

718 595-4398 718 595-4479
TELEPHONE FAX

alicata@dep.nyc.gov
EMAIL ADDRESS

2b. Applicant Information

NYCDEP Bureau of Engineering Design and Construction
NAME OF APPLICANT

Keith Mahoney, P.E.
NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON

96-05 Horace Harding Expressway, 4th Floor
ADDRESS

Flushing NY 11368-5107
CITY STATE ZIP

718 595-5972 718 595-6966
TELEPHONE FAX

kmahoney@dep.nyc.gov
EMAIL ADDRESS

Action Description
SEE CEQR MANUAL SECTIONS 2A & 2B

3a. NAME OF PROPOSAL: Transshipment of Tallman Island Sludge and Bowery Bay Centrate

3b. DESCRIBE THE ACTION(S) AND APPROVAL(S) BEING SOUGHT FROM OR UNDERTAKEN BY CITY (AND IF APPLICABLE, STATE AND FEDERAL AGENCIES) AND, BRIEFLY, DESCRIBE THE DEVELOPMENT OR PROJECT THAT WOULD RESULT FROM THE PROPOSED ACTION(S) AND APPROVAL(S):

SEE ATTACHED DESCRIPTION: ATTACHMENT A – PROJECT DESCRIPTION

3c. DESCRIBE THE PURPOSE OF AND NEED FOR THE ACTION(S) AND APPROVAL(S):

SEE ATTACHED PROJECT DESCRIPTION – PURPOSE AND NEED

Required Action or Approvals

4. CITY PLANNING COMMISSION ☐ Yes ☒ No

☐ Change in City Map ☐ Zoning Certification ☐ Site Selection - Public Facility
☐ Zoning Map Amendment ☐ Zoning Authorization ☐ Disposition - Real Property ☐ Franchise
☐ Zoning Text Amendment ☐ Housing Plan & Project ☐ UDAAP ☐ Revocable Consent ☐ Concession
☐ Charter 197-a Plan
☐ Zoning Special Permit, specify type:
☐ Modification of
☐ Renewal of
☐ Other

5. UNIFORM LAND USE PROCEDURE (ULURP) ☐ Yes ☒ No

6. BOARD OF STANDARDS AND APPEALS ☐ Yes ☒ No
☐ Special Permit ☐ New ☐ Renewal ☐ Expiration Date
☐ Variance ☐ Use ☐ Bulk
Specify affected section(s) of Zoning Resolution

7. DEPARTMENT OF ENVIRONMENTAL PROTECTION ☐ Yes ☒ No
☐ Title V Facility ☐ Power Generation Facility ☐ Medical Waste Treatment Facility

PLEASE NOTE THAT MANY ACTIONS ARE NOT SUBJECT TO CEQR. SEE SECTION 110 OF TECHNICAL MANUAL

8. OTHER CITY APPROVALS ☐ Yes ☒ No
☐ Legislation ☐ Rulemaking; specify agency
☐ Construction of Public Facilities ☐ Funding of Construction, Specify ☐ Funding of Programs, Specify
☐ Policy or plan ☐ Permits, Specify:
Other; explain: _____

9. STATE ACTIONS/APPROVALS/FUNDING ☐ Yes ☒ No
If "Yes," identify _____

10. FEDERAL ACTIONS/APPROVALS/FUNDING ☐ Yes ☒ No
If "Yes," identify _____

Action Type

11a. Unlisted; or ☐ Type I; specify category (see 6 NYCRR 617 4 and NYC Executive Order 91 OF 1977, as amended).
Unlisted

11b. ☒ Localized action, site specific ☐ Localized action, change in regulatory control for small area ☐ Generic action

Analysis Year

12. Identify the analysis year (or build year) for the proposed action: 2009
Would the proposal be implemented in a single phase? ☒ Yes ☐ No ☐ NA.
Anticipated period of construction: July 2009 to December 2011 (Tallman Island), July 2009 to December 2011 (Bowery Bay) – 30 months
Anticipated completion date: December 2011 (Tallman Island) ; December 2011 (Bowery Bay)
Would the proposal be implemented in multiple phases? ☐ Yes ☒ No ☐ NA.
Number of phases: 1
Describe phases and construction schedule: See Attached Description: Attachment A

Directly Affected Area

INDICATE LOCATION OF PROJECT SITE FOR ACTIONS INVOLVING A SINGLE SITE ONLY (PROVIDE ATTACHMENTS AS NECESSARY FOR MULTIPLE SITES)

13a. LOCATION OF PROJECT SITE

SEE ATTACHMENT A & B

STREET ADDRESS

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION IF ANY ZONING SECTIONAL MAP NO

TAX BLOCK AND LOT NUMBERS BOROUGH COMMUNITY DISTRICT NO

13b. PHYSICAL DIMENSIONS AND SCALE OF PROJECT

TOTAL CONTIGUOUS SQUARE FEET OWNED OR CONTROLLED BY PROJECT SPONSOR N/A SQ FT

PROJECT SQUARE FEET TO BE DEVELOPED N/A SQ FT

GROSS FLOOR AREA OF PROJECT N/A SQ FT

IF THE ACTION IS AN EXPANSION, INDICATE PERCENT OF EXPANSION PROPOSED N/A % OF N/A

DIMENSIONS (IN FEET) OF LARGEST PROPOSED STRUCTURE N/A HEIGHT N/A WIDTH N/A LENGTH

LINEAR FEET OF FRONTAGE ALONG A PUBLIC THOROUGHFARE N/A

13c. IF THE ACTION WOULD APPLY TO THE ENTIRE CITY OR TO AREAS THAT ARE SO EXTENSIVE THAT A SITE-SPECIFIC DESCRIPTION IS NOT APPROPRIATE OR PRACTICABLE, DESCRIBE THE AREA LIKELY TO BE AFFECTED BY THE ACTION:

SEE ATTACHMENTS A & B

13d. DOES THE PROPOSED ACTION INVOLVE CHANGES IN REGULATORY CONTROLS THAT WOULD AFFECT ONE OR MORE SITES NOT ASSOCIATED WITH A SPECIFIC DEVELOPMENT? ☐ Yes ☒ No
IF 'YES', IDENTIFY THE LOCATION OF THE SITES PROVIDING THE INFORMATION REQUESTED IN 13a & 13b ABOVE.

Site Description

EXCEPT WHERE OTHERWISE INDICATED, ANSWER THE FOLLOWING QUESTIONS WITH REGARD TO THE DIRECTLY AFFECTED AREA. THE DIRECTLY AFFECTED AREA CONSISTS OF THE PROJECT SITE AND THE AREA SUBJECT TO ANY CHANGE IN REGULATORY CONTROLS.

PART II, SITE AND ACTION DESCRIPTION

1. GRAPHICS Please attach: (1) a Sanborn or other land use map; (2) a zoning map, and (3) a tax map. On each map, clearly show the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. The maps should not exceed 8½ x 14 inches in size. **SEE ATTACHMENT B –MAPS**

2. PHYSICAL SETTING (both developed and undeveloped areas)

Total directly affected area (sq. ft.): N/A Water surface area (sq. ft.): N/A

Roads, building and other paved surfaces (sq. ft.): N/A Other, describe (sq. ft.): N/A

3. PRESENT LAND USE

Residential

Total no. of dwelling units: N/A No. of low-to-moderate income units: N/A

No. of stories: N/A Gross floor area (sq. ft.): N/A

Describe type of residential structures: N/A

Commercial

Retail: No. of bldgs: N/A Gross floor area of each building (sq. ft.): N/A

Office: No. of bldgs: N/A Gross floor area of each building (sq. ft.): N/A

Other: No. of bldgs: N/A Gross floor area of each building (sq. ft.): N/A

Specify type(s): No. of stories and height of each building: N/A

Manufacturing/Industrial

No. of bldgs: N/A Gross floor area of each building (sq. ft.): N/A

No. of stories and height of each building: N/A

Type of use(s): N/A Open storage area (sq. ft.): N/A

If any unenclosed activities, specify: N/A

Community facility

Type of community facility:

No. of bldgs: N/A Gross floor area of each building (sq. ft.): N/A

No. of stories and height of each building: N/A

Vacant land

Is there any vacant land in the directly affected area? ☐ Yes ☒ No

If yes, describe briefly.

Publicly accessible open space

Is there any existing publicly accessible open space in the directly affected area? ☐ Yes ☒ No

If yes, describe briefly:

Does the directly affected area include any mapped City, State or Federal parkland? ☐ Yes ☒ No

If yes, describe briefly:

Does the directly affected area include any mapped or otherwise known wetland? ☐ Yes ☒ No

If yes, describe briefly:

Other land use

No. of stories: N/A Gross floor area (sq. ft.): N/A

Type of use: N/A

4. EXISTING PARKING

Garages

No. of public spaces: N/A No. of accessory spaces: N/A

Operating hours: N/A Attended or non-attended: N/A

Lots

No. of public spaces: N/A No. of accessory spaces: N/A

Operating hours: N/A Attended or non-attended: N/A

Other (including street parking) - please specify and provide same data as for lots and garages, as appropriate.

5. EXISTING STORAGE TANKS

Gas or service stations? ☐ Yes ☒ No Oil storage facility? ☐ Yes ☒ No Other? ☒ Yes ☐ No

If yes, specify SEE ATTACHMENT E – EXISTING STORAGE TANKS

Number and size of tanks: Last NYFD inspection date:

Location and depth of tanks:

6. CURRENT USERS

No. of residents: N/A No. and type of businesses: N/A

No. and type of workers by businesses: N/A No. and type of non-residents who are not workers: N/A

SEE CEQR TECHNICAL MANUAL CHAPTER III F., HISTORIC RESOURCES

7. HISTORIC RESOURCES (ARCHITECTURAL AND ARCHAEOLOGICAL RESOURCES)

Answer the following two questions with regard to the directly affected area, lots abutting that area, lots along the same blockfront or directly across the street from the same blockfront, and, where the directly affected area includes a corner lot, lots which front on the same street intersection.

Do any of the areas listed above contain any improvement, interior landscape feature, aggregate of landscape features, or archaeological resource that. **No**

(a) has been designated (or is calendared for consideration as) a New York City Landmark, Interior Landmark or Scenic Landmark;
(b) is within a designated New York City Historic District;
(c) has been listed on, or determined eligible for, the New York State or National Register of Historic Places;
(d) is within a New York State or National Register Historic District; or
(e) has been recommended by the New York State Board for listing on the New York State or National Register of Historic Places?

Identify any resource.

Do any of the areas listed in the introductory paragraph above contain any historic or archaeological resource, other than those listed in response to the previous question? Identify any resource.

No.

SEE CEQR TECHNICAL MANUAL CHAPTER III K., WATERFRONT REVITALIZATION PROGRAM

8. WATERFRONT REVITALIZATION PROGRAM

Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? ☒ Yes ☐ No

(A map of the boundaries can be obtained at the Department of City Planning bookstore.)

If yes, append a map showing the directly affected area as it relates to such boundaries. A map requested in other parts of this form may be used

All the affected WPCPs are within the WRP boundaries. Attachment B – Maps: Figures L-1 through L-5 show the locations of each.

Project Description

THIS SUBPART SHOULD GENERALLY BE COMPLETED ONLY IF YOUR ACTION INCLUDES A SPECIFIC OR KNOWN DEVELOPMENT AT PARTICULAR LOCATIONS

9. CONSTRUCTION

Will the action result in demolition of or significant physical alteration to any improvement? ☐ Yes ☒ No

If yes, describe briefly:

Will the action involve either above-ground construction resulting in any ground disturbance or in-ground construction?

☐ Yes ☒ No If yes, describe briefly:

10. PROPOSED LAND USE

Residential

Total no. of dwelling units N/A No. of low-to-moderate income units N/A Gross floor area (sq. ft.) N/A

No. of stories N/A Describe type of residential structures: N/A

Commercial

Retail: No. of bldgs N/A Gross floor area of each building (sq. ft.): N/A

Office: No. of bldgs N/A Gross floor area of each building (sq. ft.): N/A

Other: No. of bldgs N/A Gross floor area of each building (sq. ft.): N/A

Specify type(s)

No. of stories and height of each building: N/A

Manufacturing/Industrial

No. of bldgs N/A Gross floor area of each building (sq. ft.): N/A

No. of stories and height of each building: N/A

Type of use(s): N/A Open storage area (sq. ft.) N/A If any unenclosed activities, specify: N/A

Community facility

Type of community facility: N/A

No. of bldgs N/A Gross floor area of each building (sq. ft.): N/A

No. of stories and height of each building: N/A

Vacant land

Is there any vacant land in the directly affected area? N/A ☐ Yes ☒ No

If yes, describe briefly:

Publicly accessible open space
Is there any existing publicly accessible open space to be removed or altered? ☐ Yes ☒ No
If yes, describe briefly:

Is there any existing publicly accessible open space to be added? ☐ Yes ☒ No
If yes, describe briefly:

Other land use N/A
Gross floor area (sq. ft.) _____ No. of stories _____ Type of use:

11. PROPOSED PARKING

Garages N/A
No. of public spaces: _____ No. of accessory spaces: _____
Operating hours: _____ Attended or non-attended? _____

Lots N/A
No. of public spaces: _____ No. of accessory spaces _____
Operating hours: _____ Attended or non-attended? _____

Other (including street parking) - please specify and provide same data as for lots and garages, as appropriate.
No. and location of proposed curb cuts:

12. PROPOSED STORAGE TANKS

Gas or service stations? ☐ Yes ☒ No Oil storage facility? ☐ Yes ☒ No Other? ☐ Yes ☒ No
If yes, specify _____
Size of tanks: Location and depth of tanks:

13. PROPOSED USERS N/A

No. of residents: _____ No. and type of businesses. _____

No. and type of workers by businesses: _____ No. and type of non-residents who are not workers: _____

14. HISTORIC RESOURCES (ARCHITECTURAL AND ARCHAEOLOGICAL RESOURCES)

Will the action affect any architectural or archaeological resource identified in response to either of the two questions at number 7 in the Site Description section of the form? ☐ Yes ☒ No
If yes, describe briefly:

SEE CEQR TECHNICAL MANUAL CHAPTER III B., SOCIO-ECONOMIC CONDITIONS

15. DIRECT DISPLACEMENT

Will the action directly displace specific business or affordable and/or low income residential units? ☐ Yes ☒ No
If yes, describe briefly:

SEE CEQR TECHNICAL MANUAL CHAPTER III C., COMMUNITY FACILITIES & SERVICES

16. COMMUNITY FACILITIES

Will the action directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations? ☐ Yes ☒ No
If yes, describe briefly:

Zoning Information

17. What is the zoning classification(s) of the directly affected area?
Each affected WPCP is within an M zone. Specific zones are discussed in Attachment C – A Land Use, and shown in Attachment B Maps, Figures Z-1 through Z-5.

18. What is the maximum amount of floor area that can be developed in the directly affected area under the present zoning? Describe in terms of bulk for each use.
N/A

19. What is the proposed zoning of the directly affected area?
The project would not require any proposed zoning changes

20. What is the maximum amount of floor area that could be developed in the directly affected area under the proposed zoning? Describe in terms of bulk for each use
The project would not require any proposed zoning changes.

21. What are the predominant land uses and zoning classifications within a 1/4 mile radius of the proposed action?
Land use and zoning is described in Attachment C – A Land Use and shown in Attachment B Maps, Figures LU-1 through LU-5 and Figures Z-1 through Z-5.

Additional Information

22. Attach any additional information as may be needed to describe the action. If your action involves changes in regulatory controls that affect one or more sites not associated with a specific development, it is generally appropriate to include here one or more reasonable development scenarios for such sites and, to the extent possible, to provide information about such scenario(s) similar to that requested in the Project Description questions 9 through 16.

Analyses

23. Attach analyses for each of the impact categories listed below (or indicate where an impact category is not applicable).

a. LAND USE, ZONING, AND PUBLIC POLICY	See Attachment C
b. SOCIOECONOMIC CONDITIONS	See Attachment C
c. COMMUNITY FACILITIES AND SERVICES	See Attachment C
d. OPEN SPACE	See Attachment C
e. SHADOWS	See Attachment C
f. HISTORIC RESOURCES	See Attachment C
g. URBAN DESIGN/VISUAL RESOURCES	See Attachment C
h. NEIGHBORHOOD CHARACTER	See Attachment C
i. NATURAL RESOURCES	See Attachment C
j. HAZARDOUS MATERIALS	See Attachment C
k. WATERFRONT REVITALIZATION PROGRAM	See Attachment C
l. INFRASTRUCTURE	See Attachment C
m. SOLID WASTE AND SANITATION SERVICES	See Attachment C
n. ENERGY	See Attachment C
o. TRAFFIC AND PARKING	See Attachment C
p. TRANSIT AND PEDESTRIANS	See Attachment C
q. AIR QUALITY	See Attachment C
r. NOISE	See Attachment C
s. CONSTRUCTION IMPACTS	See Attachment C
t. PUBLIC HEALTH	See Attachment C

The CEQR Technical Manual sets forth methodologies developed by the City to be used in analyses prepared for the above- listed categories. Other methodologies developed or approved by the lead agency may also be utilized. If a different methodology is contemplated, it may be advisable to consult with the Mayor's Office of Environmental Coordination. You should also attach any other necessary analyses or information relevant to the determination whether the action may have a significant impact on the environment, including, where appropriate, information on combined or cumulative impacts, as might occur. for example, where actions are interdependent or occur within a discrete geographical area or time frame.

Applicant Certification

24.

Keith Mahoney, PE	Steven W. Lawitts
PREPARER NAME	PRINCIPAL
Project Manager	Angela Licata
PREPARER TITLE	NAME OF PRINCIPAL REPRESENTATIVE
Keith Mahoney	Deputy Commissioner
PREPARER SIGNATURE	TITLE OF PRINCIPAL REPRESENTATIVE
5/28/09	
DATE	SIGNATURE OF PRINCIPAL REPRESENTATIVE
	5/28/09
	DATE

NOTE: Any person who knowingly makes a false statement or who knowingly falsifies any statement on this form or allows any such statement to be falsified shall be guilty of an offense punishable by fine or imprisonment or both, pursuant to Section 10-154 of the New York City Administrative Code, and may be liable under applicable laws.

ATTACHMENT A

Project Description

Project Description

The New York City Department of Environmental Protection (NYCDEP or DEP) is proposing a project to temporarily ship thickened digested sludge from its Tallman Island Water Pollution Control Plant (WPCP or Plant) to its Hunts Point and Wards Island WPCPs for a period of up to 30 months. In addition, centrate[1] from DEP's Bowery Bay WPCP will be shipped to its North River WPCP for a period of up to 30 months for processing. The temporary shipment of the sludge and centrate would occur while biological nitrogen removal (BNR) facilities are being constructed at the Tallman Island and Bowery Bay WPCPs[2]. The requirement to ship the sludge from Tallman Island to Hunts Point or Wards Island WPCPs will cease when the BNR technology is installed at Tallman Island. The requirement to ship centrate from Bowery Bay to the North River WPCP will cease upon the installation of the BNR technology at Bowery Bay. The Tallman Island, Bowery Bay, Wards Island, and Hunts Point BNR facilities were subject to earlier environmental reviews[3]. The project is being undertaken as part of the Nitrogen Consent Judgment with the New York State Department of Environmental Conservation (NYSDEC) to reduce nitrogen discharges into the upper East River.

Project Background

Nitrogen is an essential nutrient for a productive ecosystem, and is a common component of all municipal wastewater streams. Typically, it has no adverse impacts to the receiving waters, but in some cases, too much nitrogen can result in eutrophication (excess algae growth). When alga begins to die off, it settles to the bottom of the water column and exerts an oxygen demand, resulting in a hypoxic condition, i.e., "low oxygen." In estuaries, lakes, and coastal waters low oxygen usually means a concentration of less than 2 parts per million of oxygen. In many cases hypoxic waters do not have enough oxygen to support fish and other aquatic animals. The consequences of this enhanced growth are reduced sunlight penetrating the water, a decreased amount of oxygen dissolved in the water, and a loss of habitat for aquatic animals and plants. Conventional wastewater treatment processes were not designed to remove nitrogen and thus the need for the installation of BNR technology at DEP's WPCPs.

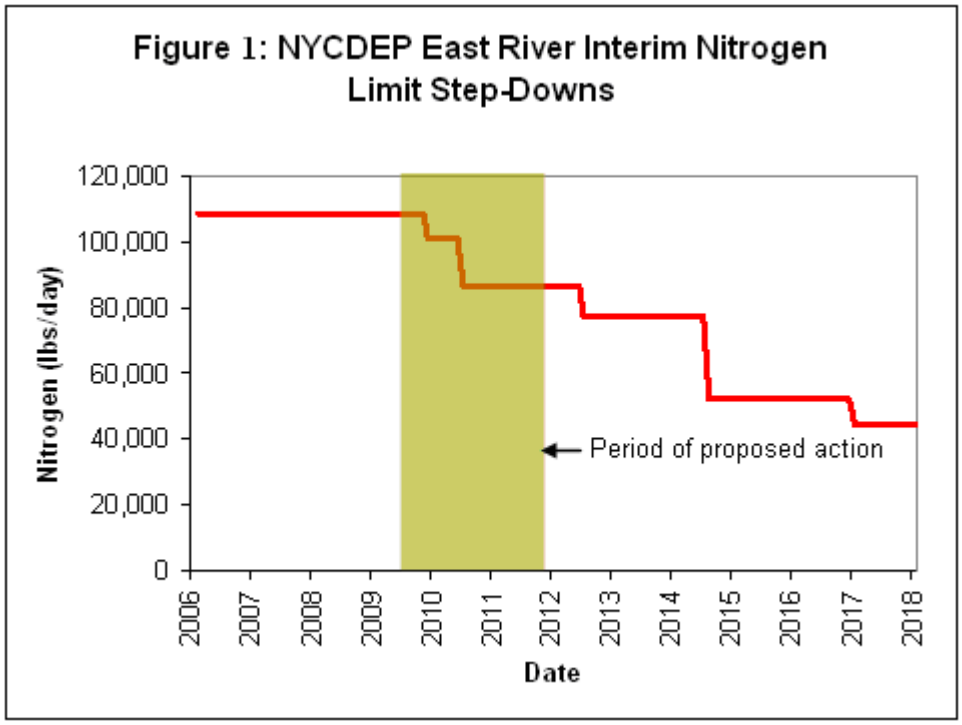
[1] In New York City, there are eight WPCPs which have dewatering facilities that use large centrifuges along with the addition of chemicals such as polymer to further remove liquid from the sludge. The removed fluid, called **centrate**, is typically reintroduced into the wastewater treatment process.

[2] The NYCDEP Nitrogen Program: Phase 1 Modified BNR Facility Plan for the Upper East River and 26th Ward WPCPs was subject to an environmental assessment in January 2006 (CEQR # 98DEP002Y) and addressed the need to temporarily transshipment sludge and centrate from Tallman Island and Bowery Bay during the construction of the BNR units at these facilities.

[3] Tallman Island WPCP – CEQR #06DEP009Q, Bowery Bay WPCP – CEQR #05DEP036Q, Wards Island WPCP – CEQR #01DEP076M, and Hunts Point WPCP – CEQR #05DEP023X.

In the U.S. Environmental Protection Agency's (EPA) Long Island Sound (LIS) Study[4], nitrogen was identified as the nutrient responsible for eutrophic conditions resulting in low dissolved oxygen conditions. The LIS Study concluded that a cost effective nitrogen reduction of 58.5 percent from all human sources of nitrogen to the LIS would significantly reduce these eutrophic conditions and improve dissolved oxygen levels necessary to support the ecosystem.

NYCDEP entered into the Nitrogen Consent Judgment (Index No. 04-402174) with the NYSDEC, which became effective February 1, 2006, to reduce nitrogen discharges to the LIS. Figure 1 shows the East River nitrogen interim limit step-downs for NYCDEP. NYCDEP is endeavoring to meet the mandate by implementing BNR at its four upper East River WPCPs: Hunts Point, Wards Island, Bowery Bay and Tallman Island. Implementation of BNR at these facilities requires the installation of new aeration and mixing equipment in the facilities' existing biological reactor tanks, as well as various upgrades to pumping equipment, froth control equipment, and electrical power supplies. The construction required to install this equipment involves temporarily taking a percentage of a facility's biological reactors and other process equipment out of service, while maintaining treatment of the wastewater entering the facility.



[4], EPA Long Island Sound Office, *Long Island Sound Study, Phase III Actions for Hypoxia Management*, EPA 902-R-98-002, July 1998

In accordance with the Consent Judgment, the proposed transshipment project corresponds to the first interim nitrogen step-down, and is required to be initiated by July 1, 2009 in order to meet the step-down schedule.

It should be noted that NYCDEP operates its WPCPs as an integrated system and routinely transships its sludge from six of its WPCPs to one of the eight WPCPs that have a dewatering capability. The larger of these dewatering facilities are located at Wards Island, Hunts Point, and 26th Ward WPCPs. These larger facilities typically take in sludge from other facilities, also known as "visitor" sludge, that do not have any dewatering capabilities and on occasion from WPCPs whose dewatering facilities may be offline.

Purpose and Need

As part of Nitrogen Consent Judgment, Tallman Island and Bowery Bay WPCPs would install BNR technology to promote nitrogen removal. During the construction of the BNR units, some parts of the biological reactors and other process equipment would temporarily be taken out of service. In order to control the nitrogen discharges into the upper East River during BNR construction, and to comply with the Consent Judgment, DEP is required to initiate an interim transshipment program by July 1, 2009 that will temporarily relocate sludge from Tallman Island and centrate from Bowery Bay. The Consent Judgment milestone of construction completion in accordance with the Phase I plan for Tallman Island is December 31, 2010, and for Bowery Bay December 31, 2011. Due to construction delays however, the completion of the Tallman Island BNR installation is expected to be completed no later than December 31, 2011.

Proposed Action

The proposed action would temporarily ship sludge and centrate from Tallman Island WPCP and Bowery Bay WPCP to other treatment facilities as follows:

- When the transshipment program commences, dewatering activities at Tallman Island WPCP will temporarily cease. It is estimated that Tallman Island produces an average of 0.405 million gallon/per day (mgd) of thickened digested sludge. Sludge produced at Tallman Island would be shipped to the Hunts Point or the Wards Island WPCPs, depending on capacity constraints (Figure 2). The duration of this activity is expected to be 30 months. At these facilities, the thickened digested sludge would be placed into centrifuges for dewatering; centrate generated during the dewatering process will be treated in BNR or separate centrate tanks to optimize the amount of nitrogen removed from this stream. The dewatered sludge will be hauled away by trucks for ultimate disposal. The Hunts Point and Wards Island WPCPs were selected as preferred transshipment endpoints because a) their proximity to Tallman Island WPCP, b) their large dewatering facilities can handle the additional "visitor" sludge flow, and c) both WPCPs have advanced facilities on-line to remove nitrogen from the centrate.

- Sludge dewatering activities at Bowery Bay are expected to remain operational during the installation of the BNR equipment. It is estimated that Bowery Bay produces an average of 0.625 mgd of centrate[5]. Under current operations, the centrate from the dewatering process would be returned to the head of the Plant for further processing. Under the transshipment program, centrate would be shipped to DEP's North River WPCP for a period of 30 months, which takes the nitrogen load out of the sensitive upper East River (Figure 2). At the North River WPCP, the centrate would be added to the wastewater process. The North River WPCP is designed to treat an average daily dry weather flow of 170 mgd. The addition of 0.625 mgd of centrate over a 24-hour period at the North River WPCP will not have a significant adverse impact on the effluent quality at the facility.

Figure 2 shows the routes of proposed action and the contingency plan outlined in the next section.

Contingency Plan

The primary routes of the transshipment program are shown in Figure 2. There are two short-term operational scenarios which could make the shipment of Bowery Bay centrate to North River WPCP infeasible:

1) a short-term unexpected upset at North River WPCP, or
2) a temporary cessation of dewatering activities at the Bowery Bay WPCP.

If either of these events occurs, 0.625 mgd of centrate or sludge from Bowery Bay WPCP would be shipped to Hunts Point WPCP or Wards Island WPCP, depending on their capacity constraints at the time. The primary routes, which are also the preferred routes under the transshipment program, would resume after those short-term, unexpected temporary events are resolved. Table 1 below summarizes the destination for each Plant under the proposed transshipment routes and under the Contingency Plan.

Table 1. Transshipment Route Destinations

	Proposed Transshipment Routes	Contingency Plan Transshipment Routes
Tallman Island	Hunts Point & Wards Island	Hunts Point & Wards Island [a]
Bowery Bay	North River	Hunts Point & Wards Island

[a] No contingency plan is necessary, same as proposed routes

[5] Bowery Bay WPCP actually produces an average of 0.625 mgd of thickened digested sludge per day. It is expected that the volumetric flow rate of centrate is slightly less than 0.625 mgd; however, 0.625 mgd of centrate was taken as the centrate flow rate to produce a more conservative estimate of potential impacts.

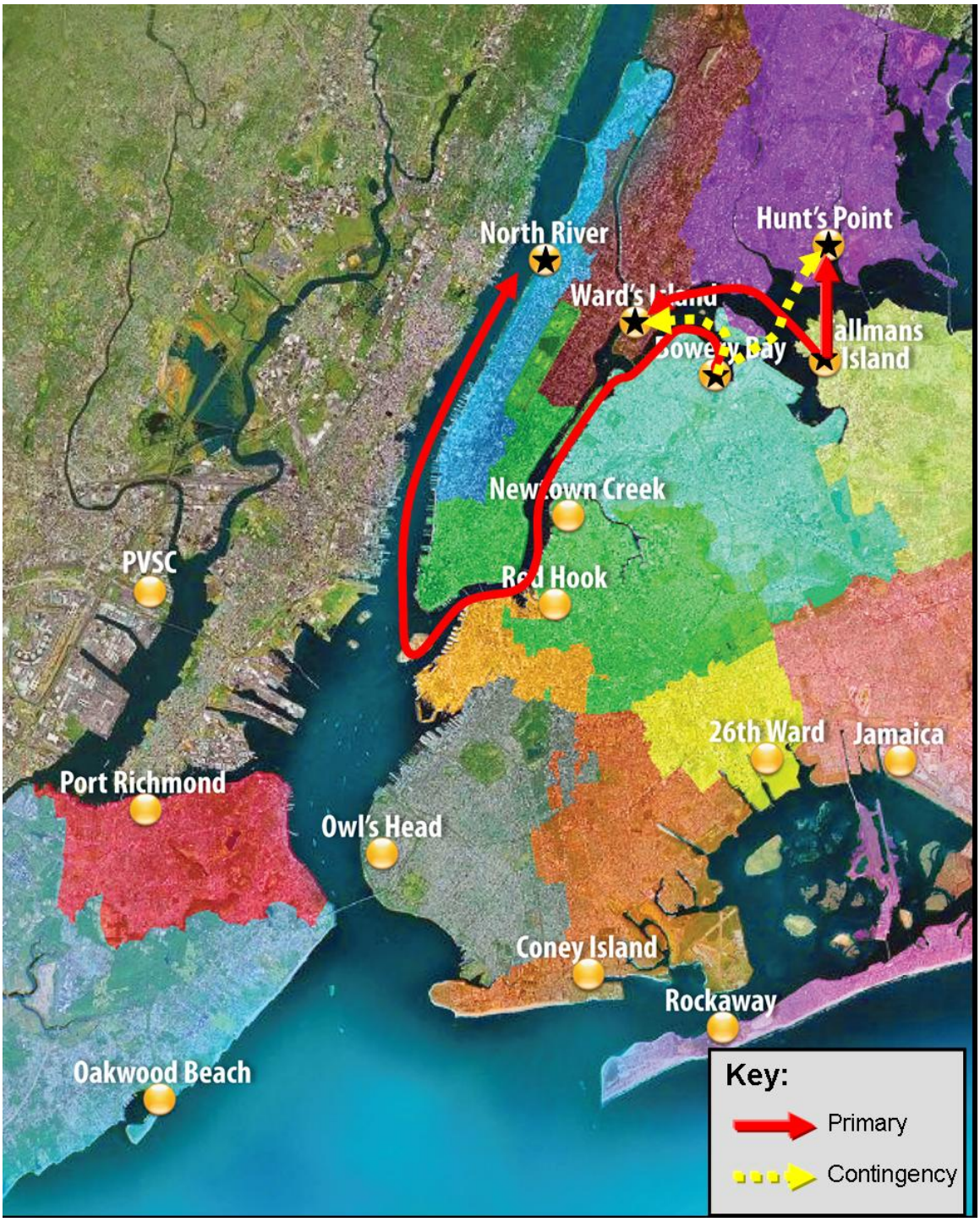


Figure 2. Transshipment Routes for the Proposed Action and for the Contingency Plan

Operational Implications

Dewatering Capacity and Effluent Quality

It is expected that the additional centrate and sludge load resulting from the proposed action would not affect operations at any of the receiving WPCPs. No additional equipment or workers are required as part of the proposed action. Both Hunts Point and Wards Island WPCPs already receive "visitor" sludge from other NYCDEP WPCPs and the increased volume would not impact the Plants' operations. Table 2 shows that, on average, the Hunts Point WPCP produces 0.525 mgd of sludge and receives 1.325 mgd of transshipped "visitor" sludge, dewatering an average of 1.85 mgd. Under a worst-case condition where the Plant would receive the sludge from both Tallman Island and Bowery Bay WPCPs, the resulting sludge volume would be 2.88 mgd; the current capacity of Hunts Point's dewatering facility is 3.75 mgd, which is ample to handle these loads. Similarly, the Wards Island WPCP produces 1.2 mgd of sludge and receives an additional 1.145 mgd of transshipped "visitor" sludge, dewatering a total 2.345 mgd. The addition of Tallman Island and Bowery Bay sludge, under a worst-case condition, would result in 3.375 mgd; the current capacity of Wards Island's dewatering facility is 3.75 mgd, which is also ample to handle these loads.

While North River WPCP does not currently receive centrate from other WPCPs, the additional 0.625 mgd of centrate from the Bower Bay WPCP would not impact the performance of the Plant during the implementation of the proposed centrate transshipment. Currently North River processes approximately 126 mgd of influent and has the capability of processing of 170 mgd.

Table 2. Dewatering Facility Capacities at Hunts Point and Wards Island WPCPs

WPCP	On-site Sludge Produced (mgd)	Current "Visitor" Sludge (mgd)	Sludge from proposed action (mgd)	Total Sludge to Dewatering (mgd)	Existing Dewatering Capacity (mgd)	Exceeds Existing Capacity?
Proposed Action						
Hunts Point	0.525	1.325	0.405 (TI)	2.255	3.75	No
Wards Island	1.2	1.145	0.405 (TI)	2.75	3.75	No
Contingency Plan						
Hunts Point	0.525	1.325	0.405 (TI) and 0.625 (BB)	2.88	3.75	No
Wards Island	1.2	1.145	0.405 (TI) and 0.625 (BB)	3.375	3.75	No

[a] Average volumes shown above are for undewatered thickened, digested sludge. Post-dewatering biosolids yields are as follows:
Wards Island: 230 wet tons dewatered biosolids per million gallons undewatered thickened digested sludge
Hunts Point: 240 wet tons dewatered biosolids per million gallons undewatered thickened digested sludge
These yields are approximate for each site and dependent on the solids concentration of the thickened, digested sludge.

As Table 2 shows, the Hunts Point and the Wards Island WPCPs have the excess capacity to take the additional sludge flows proposed by this action. Neither the proposed action nor contingency plan would cause any violation of the State Pollutant Discharge Elimination System (SPDES) permit conditions. Although the North River WPCP currently does not receive "visitor' centrate the addition of the Bowery Bay centrate to the Plant would result in a *de minimis* change to the effluent quality of the Plant and would not affect nor require changes in the SPDES permit conditions.

Sludge and centrate will be transported between WPCPs using either barges or motor vessels (MV) currently owned and operated by DEP. The barges typically can carry a load of 500,000 gallons and the MVs carry a typical load of 70,000 to 85,000 gallons. Comparisons of potential air and noise impacts between a barge and a MV operational scenario indicated that the MV operational scenario would result in a reasonable worst-case operational condition. For the purpose of this environmental assessment, the smaller MVs are used to conservatively estimate the number of shipments per day. Sludge will be loaded at existing loading docks onto the barge or motor vessels by gravity and unloaded with pump-generator sets that are electrically driven and powered by generators onboard. Using these pumps, it takes approximately ninety minutes to load or unload a MV. Loading and unloading operations currently take place following an operational protocol to avoid any spillage; under the proposed action, these current operational protocols will remain in-place. All hoses and pipelines connecting the facility to the dock are threaded or sealed to prevent spillage or fugitive odor emission. After filling operations are completed, the Plant will clear the hoses and pipelines by flushing the pipeline back to the vessel or applying a vacuum to return the residual sludge or centrate to the Plant. Sludge and centrate are stored in a series of holds. The MVs and barges are equipped with on-board carbon odor control units to treat the odorous air in these holds.

When sludge is offloaded at Wards Island or Hunts Point WPCPs, it is stored in sludge storage tanks. The purpose of the sludge storage tanks is to normalize the facilities' dewatering operations, which allows for continuous controlled operation of dewatering equipment. Under the proposed action, these tanks will continue to operate in the same manner that they are currently operating. From the sludge storage tanks, the sludge is sent to the centrifuges in the dewatering building to thicken the sludge to approximately 20%-30% solids. The dewatering buildings have odor control for all process areas, including the conveyance systems and the truckways, where most fugitive odors are expected to occur.

The dewatered solids are then loaded into trucks which are sent off-site through normal means for disposal per existing contract specifications and in accordance with DEP's Biosolids Management Program (e.g., composting, lime stabilization, land application). Approximately 18 truck loads of sludge cake are removed from Wards Island each day and 16 – 20 truck loads of sludge cake are removed Hunts Point each day.
During transshipment four additional truck loads of sludge cake dewatered sludge will be removed from Hunts Point or Wards Island each day. The added four trucks will be scheduled to leave the facilities at night between 10 PM – 6 AM. DEP has disposal contracts with WeCare Organic; Tully /Hydropress, a Joint Venture; Environmental

Protection & Improvement Company (Epic) - Synagro; New York Organic Fertilizer Company (NYOFCo) – Synagro; and Passaic Valley. The distribution of the sludge cake among the contractors is determined by the Processes to Significantly Reduce Pathogens regulations, or PSRP, guaranteed contract minimums and costs. While some of the sludge cake from Tallman Island could go to NYOFCo, the transshipment project will not result in an increase in the amount of sludge cake going to NYOFCo beyond what they currently get on a daily basis. The contract minimum for NYOFCo is 510 tons/day.

Under the proposed action, centrate will be offloaded at North River in a similar manner as the sludge from the Plant is currently loaded onto the MVs. NYCDEP intends to bring MVs to the Plant filled with centrate; currently they arrive empty and then loaded with North River sludge for processing at another WPCP. This will keep the number of vessels in and out of the Plant the same as current conditions. Once unloaded, the centrate will be directed to the head of the plant and will be treated in the wastewater treatment process. Tallman Island would generate four MV loads per week (or less than one barge load) at annual daily average rates of digested sludge production. Alternatively, for maximum daily digested sludge production, Tallman Island would generate seven vessel loadings per week (or one barge load). Similarly, at annual daily averages, Bowery Bay would generate six MV loadings per week (or less than one barge); or, at maximum daily production, Bowery Bay would generate ten vessel loadings per week (or less than two barges). The primary receiving WPCPs for vessels from Tallman Island will be Hunts Point or Wards Island WPCPs. The primary receiving plant for vessels from the Bowery Bay WPCP will be the North River WPCP. Table 3 shows the additional truck and motor vessel traffic resulting from the proposed action. The temporary addition of MVs trips in the NYC waterways over the 30 months of construction of the BNR units at Tallman Island and Bowery Bay would be insignificant.

Table 3. Additional Truck and Motor Vessel Traffic Resulting from the Proposed Action

Affected Facility	Transshipment Route	Existing Trucks/day	Additional Trucks/day [a]	Existing Motor Vessels/day	Additional Motor Vessels/day [b]
Proposed Transshipment Routes					
Hunt's Point/ Ward's Island	Receive TI sludge	HP = 51 [c] WI = 35 [c]	4	HP = 3 WI = 2	< 1
North River	Receive BB centrate	n/a	0	2	0 [d]
Contingency Plan Transshipment Routes					
Hunt's Point/ Ward's Island	Receive TI & BB sludge	HP = 51 [c] WI = 35 [c]	10	HP = 3 WI = 2	2 - 3
North River	None	n/a	0	2	0

[a] Assuming the same 20 to 25 ton capacity trucks currently in use and maximum monthly conditions.

[b] Assuming the current fleets of 70,000 - 85,000 cu ft capacity motor vessels and maximum daily conditions.

[c] Number of existing trucks per day taken construction activities detailed in CEQR #05DEP023X (Hunts Point) and CEQR #01DEP076M (Wards Island). The construction activities are temporary and the number of construction vehicles will decline as the construction activities wind down.

[d] Offloading of BB centrate and unloading of NR sludge to be accomplished in one return boat trip

Construction Implications

The activities described for the proposed action and for the contingency plan will not require upgrading to the dewatering facilities at the Hunts Point or Wards Island WPCPs; the additional flow can be treated well within the design capacity of its centrifuges. The only modifications to the WPCPs to execute this action are as follows:

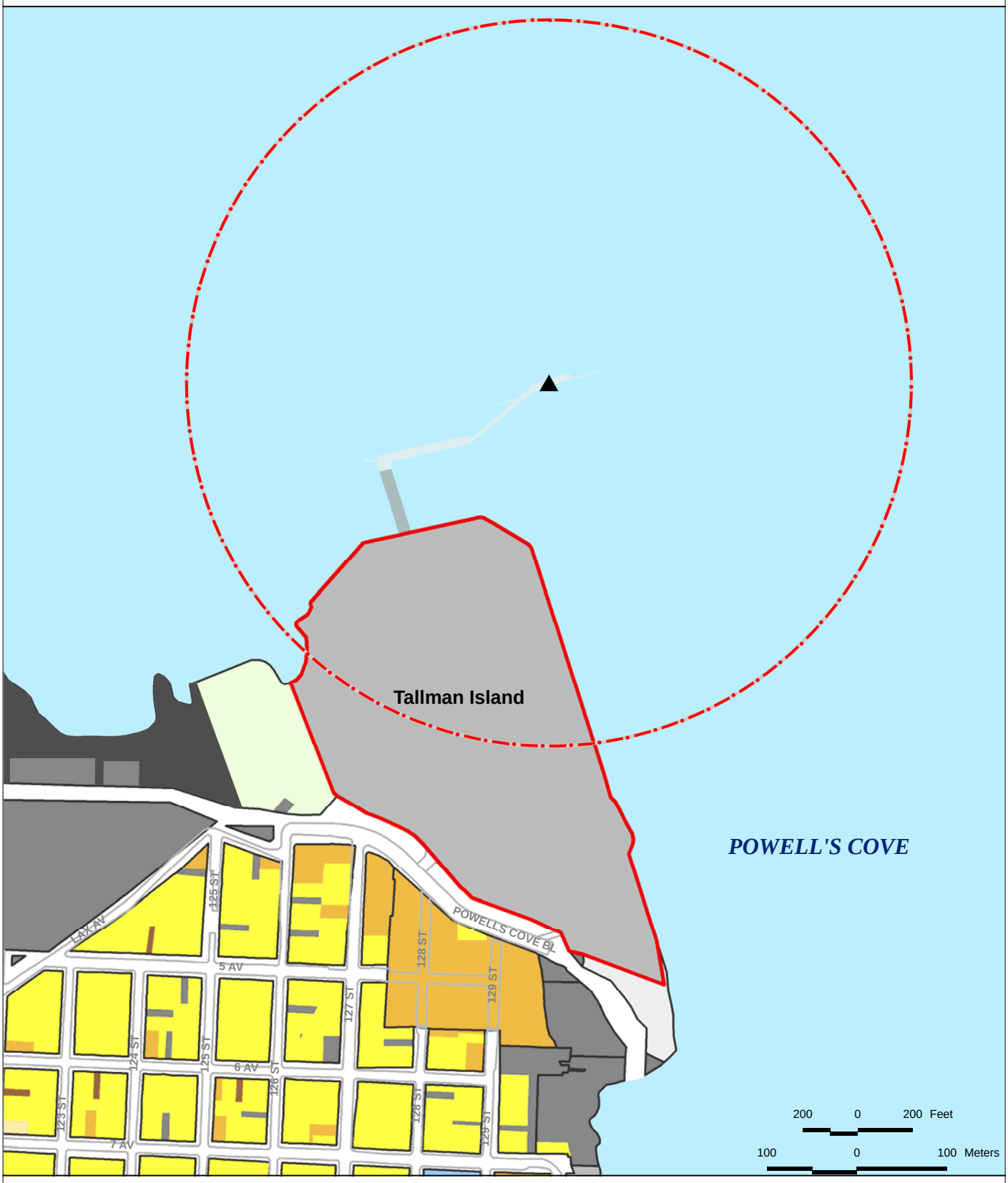
- Minor centrate pipe modifications and replacement in-kind of equipment within the Bowery Bay WPCP. The construction consists of replacing three centrate pumps in the existing dewatering building to pump centrate from the centrate wet well to the loading dock through an existing 8-inch centrate pipeline. New valves and a flow meter will be added to the existing 8-inch centrate lines to allow operational flexibility and measurement of centrate flow. These modifications would be completed by July 2009.

- Installation of a new 20-inch valve on the sludge loading line at North River WPCP. This valve allows the sludge line to be isolated, which is necessary to facilitate offloading of Bowery Bay centrate at the North River WPCP. This installation has already been completed.

ATTACHMENT B

Maps

Tallman Island WPCP Land Use Map

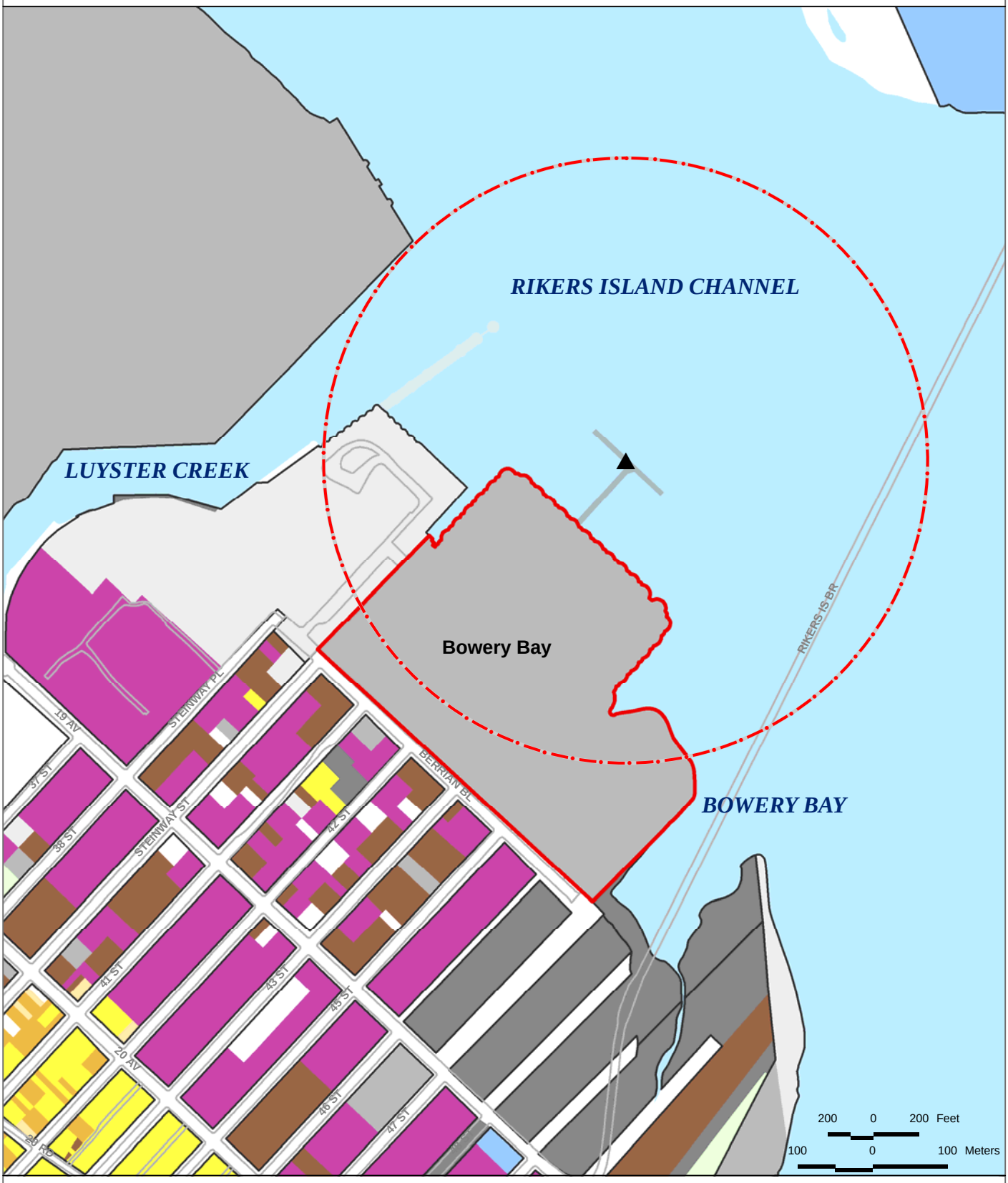


- Loading Dock
- 1/4 Mile Radius
- WPCP Site
- One & Two Family Residences
- Multi-Family Residences
- Mixed Residential and Commercial
- Commercial Uses
- Industrial / Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space and Recreation
- Parking
- Vacant Land
- Not Identified

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure LU-1

Bowery Bay WPCP Land Use Map

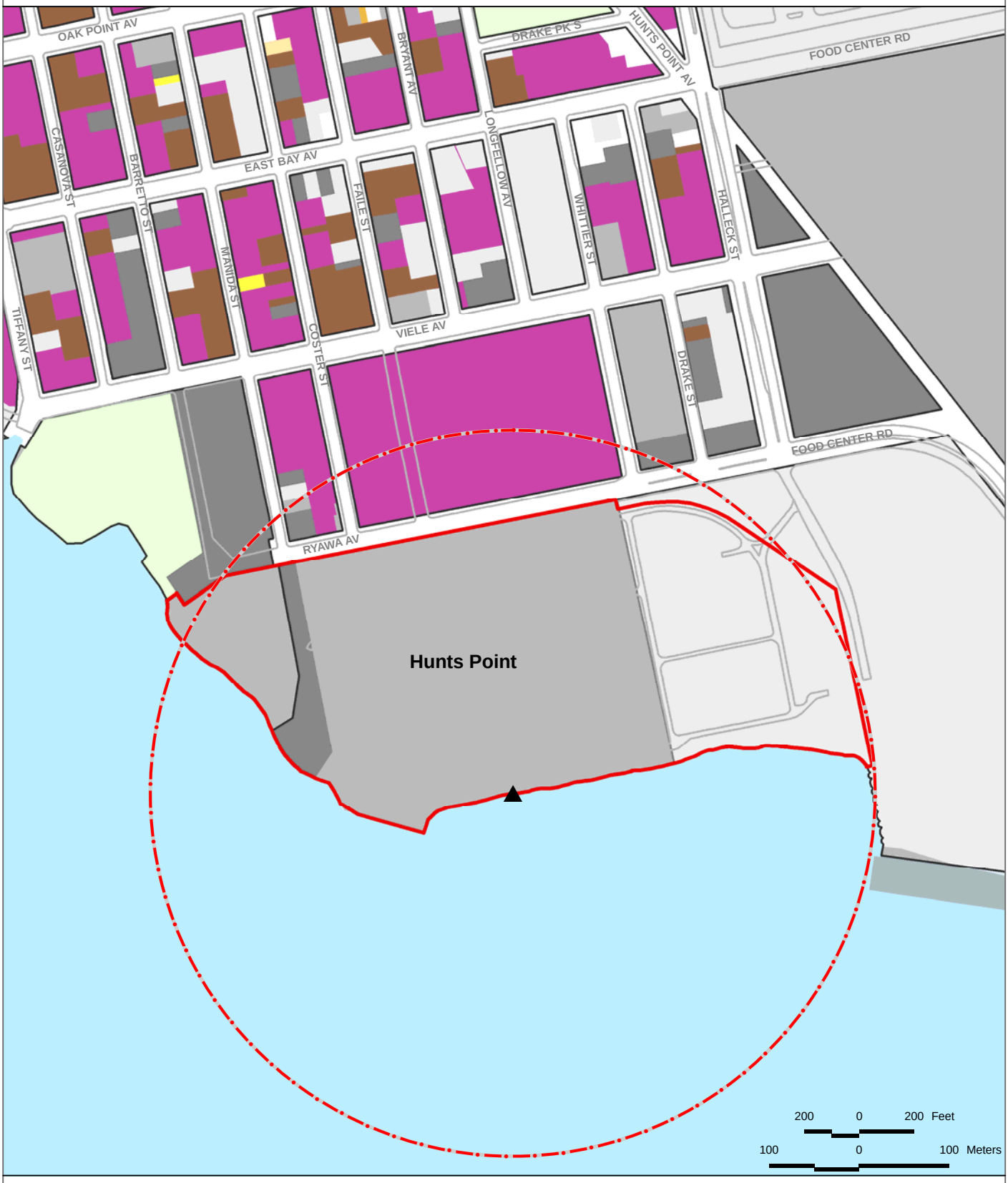


- Loading Dock
- 1/4 Mile Radius
- WPCP Site
- One & Two Family Residences
- Multi-Family Residences
- Mixed Residential and Commercial
- Commercial Uses
- Industrial / Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space and Recreation
- Parking
- Vacant Land
- Not Identified

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure LU-2

Hunts Point WPCP Land Use Map

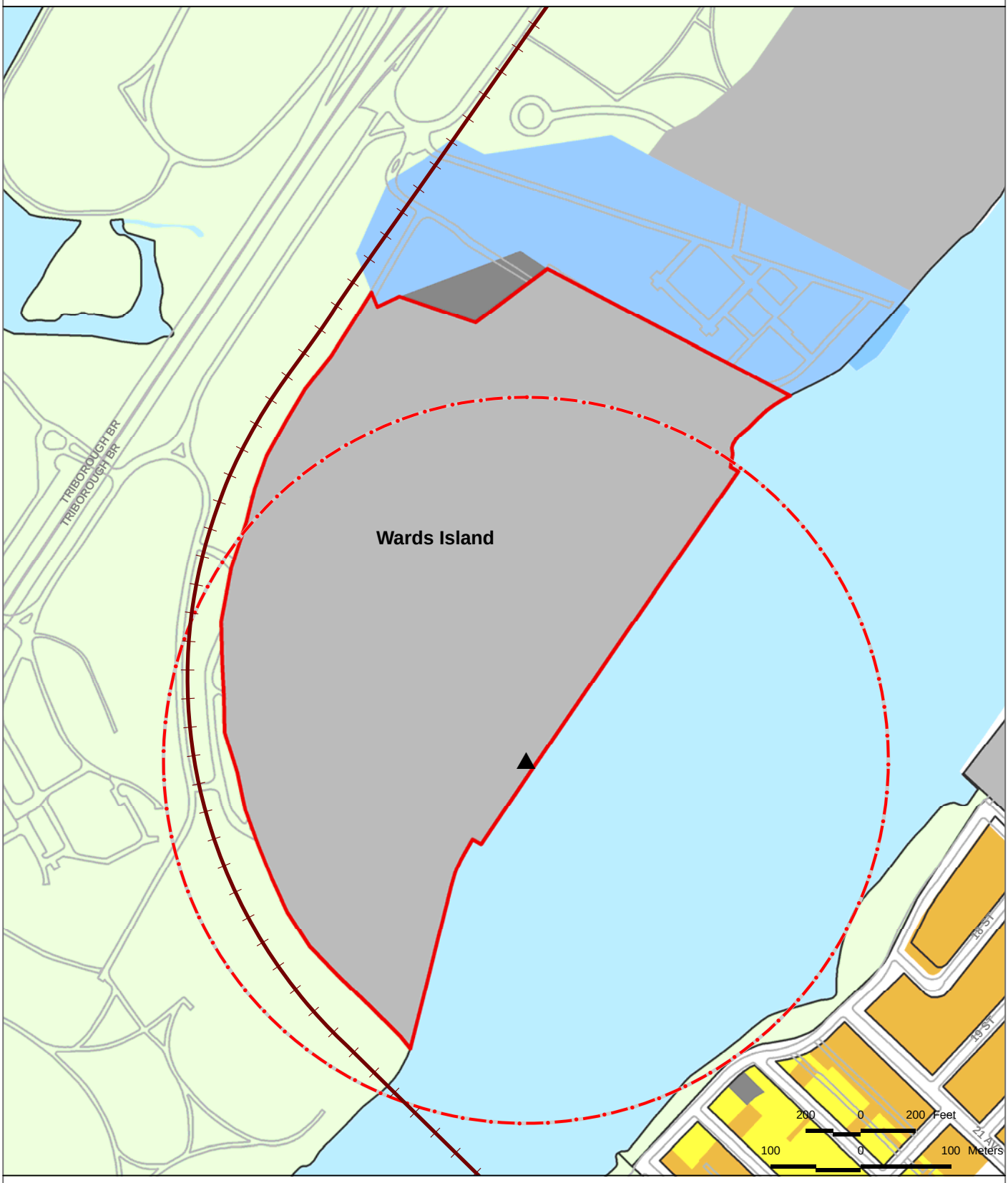


- Loading Dock
- 1/4 Mile Radius
- WPCP Site
- One & Two Family Residences
- Multi-Family Residences
- Mixed Residential and Commercial
- Commercial Uses
- Industrial / Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space and Recreation
- Parking
- Vacant Land
- Not Identified

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure LU-3

Wards Island WPCP Land Use Map



- Loading Dock
- 1/4 Mile Radius
- WPCP Site
- One & Two Family Residences
- Multi-Family Residences
- Mixed Residential and Commercial
- Commercial Uses
- Industrial / Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space and Recreation
- Parking
- Vacant Land
- Not Identified

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure LU-4

North River WPCP Land Use Map

- Loading Dock
- 1/4 Mile Radius
- WPCP Site
- One & Two Family Residences
- Multi-Family Residences
- Mixed Residential and Commercial
- Commercial Uses
- Industrial / Manufacturing
- Transportation / Utility
- Public Facilities and Institutions
- Open Space and Recreation
- Parking
- Vacant Land
- Not Identified

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure LU-5

Tallman Island WPCP Location Map

Loading Dock
1/4 Mile Radius
WPCP Site

100 0 100 Feet
50 0 50 Meters

N

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure L-1

Bowery Bay WPCP Location Map

Loading Dock
1/4 Mile Radius
WPCP Site

100 0 100 Feet
50 0 50 Meters

N

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure L-2

Hunts Point WPCP Location Map

Loading Dock
1/4 Mile Radius
WPCP Site

100 0 100 Feet
50 0 50 Meters

N

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure L-3

Wards Island WPCP Location Map

Loading Dock
1/4 Mile Radius
WPCP Site

100 0 100 Feet
50 0 50 Meters

N

Figure L-4

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

North River WPCP Location Map

Loading Dock
1/4 Mile Radius
WPCP Site

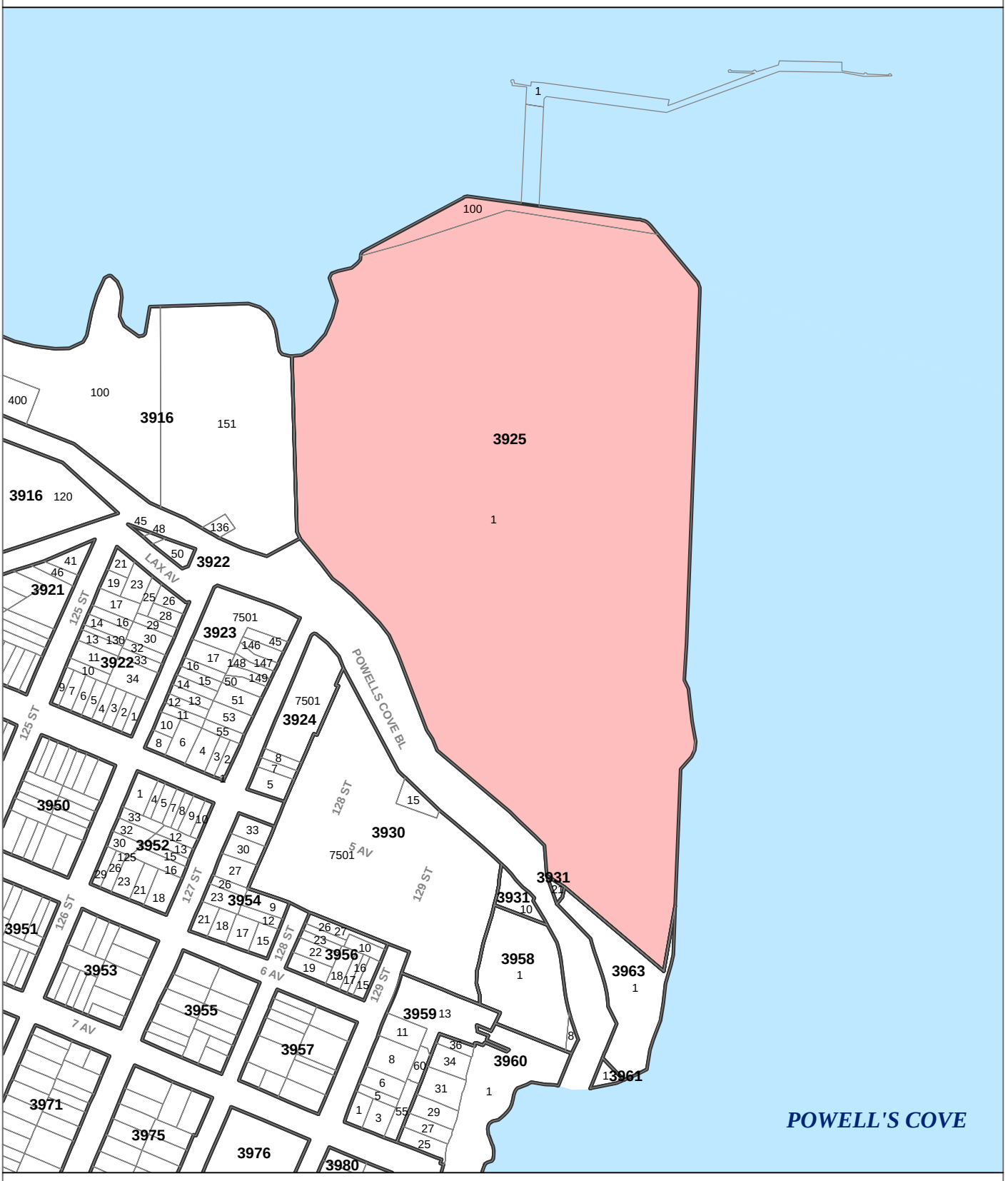
100 0 100 Feet
50 0 50 Meters

N

Figure L-5

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Tallman Island WPCP Tax Block and Lot Map



WPCP Site

3976 Tax Block

13 Tax Lot

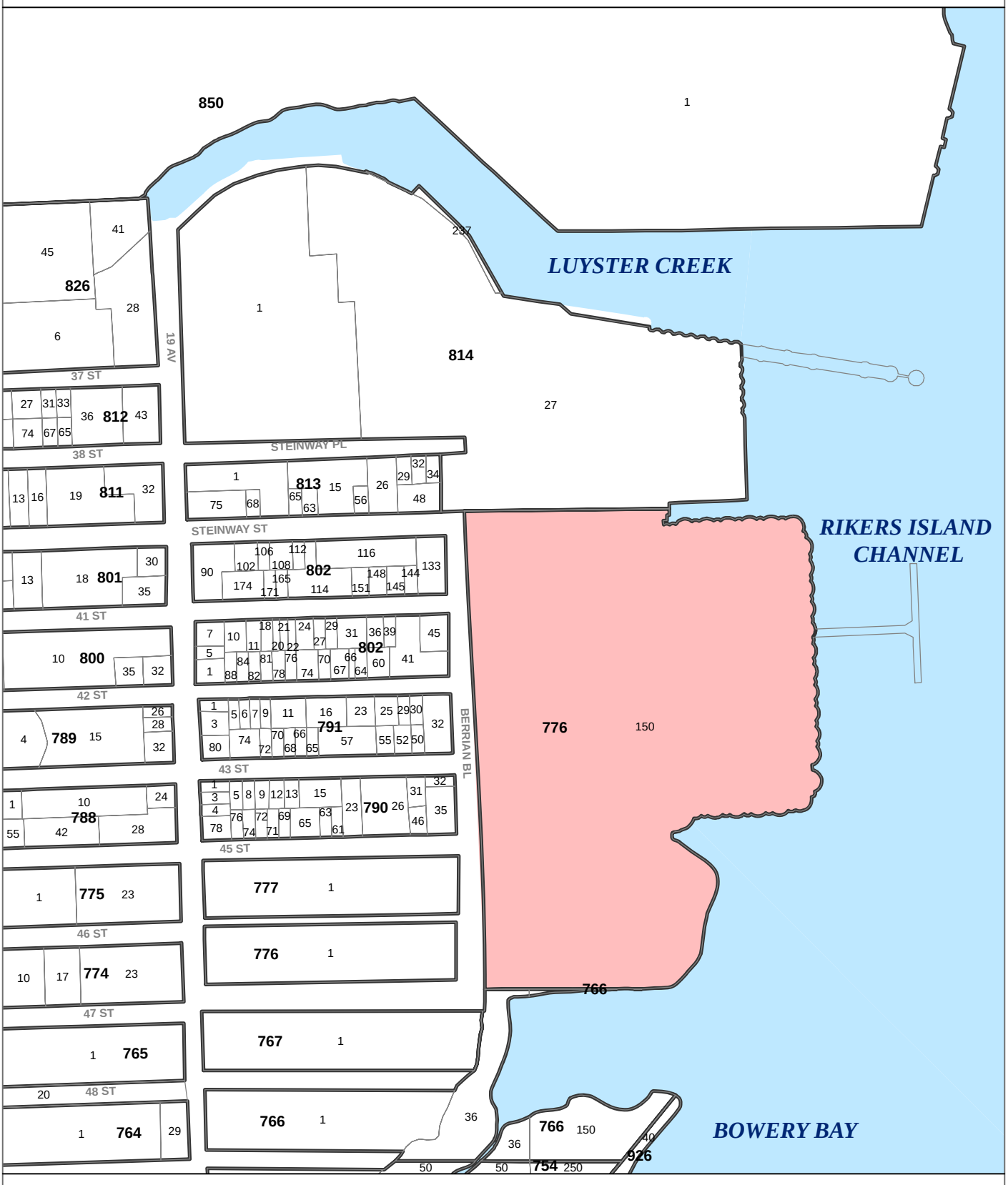
100 0 100 Feet

50 0 50 Meters

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure T-1

Bowery Bay WPCP Tax Block and Lot Map



WPCP Site

766 Tax Block

1 Tax Lot

100 0 100 Feet

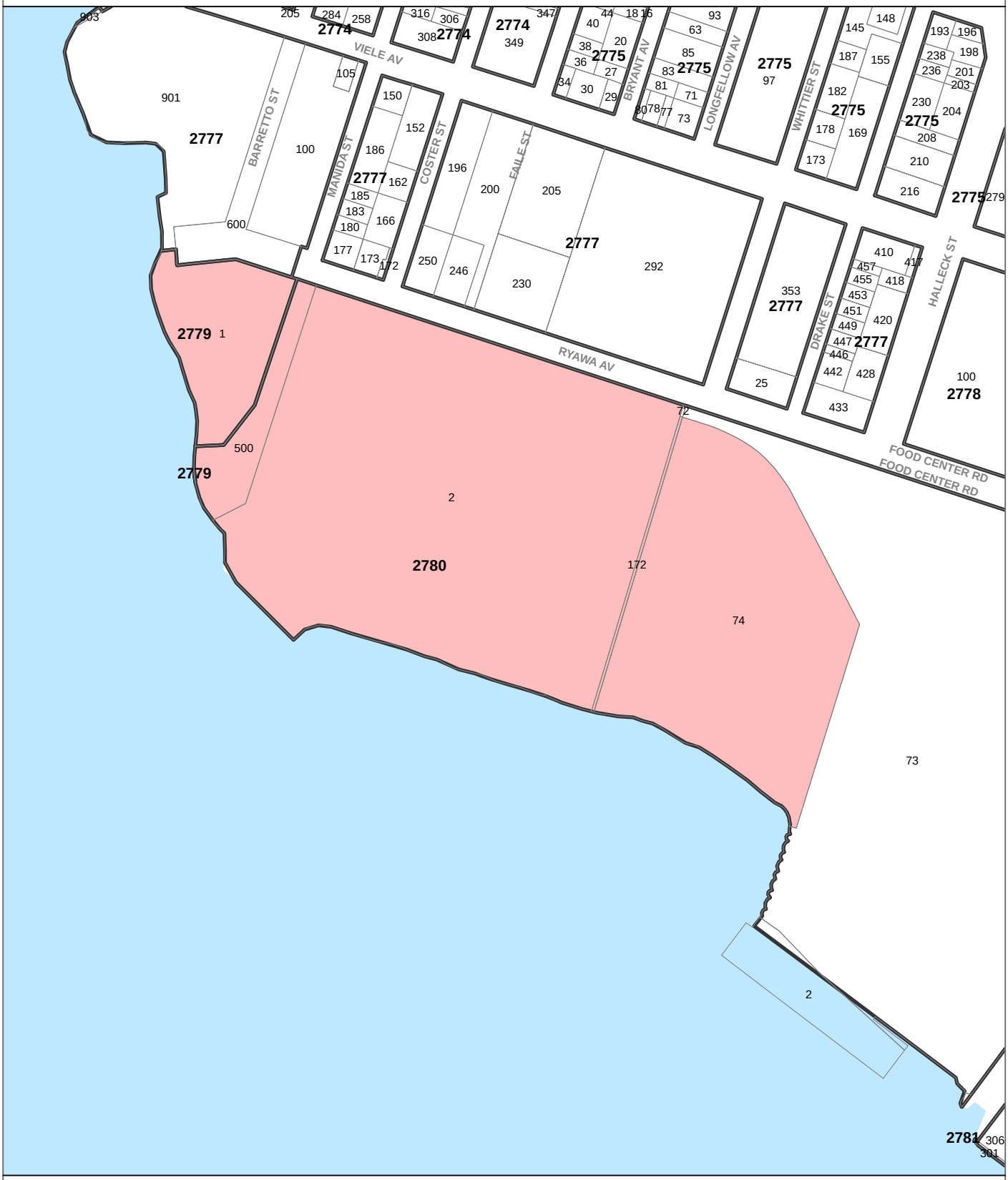
50 0 50 Meters

N

Figure T-2

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

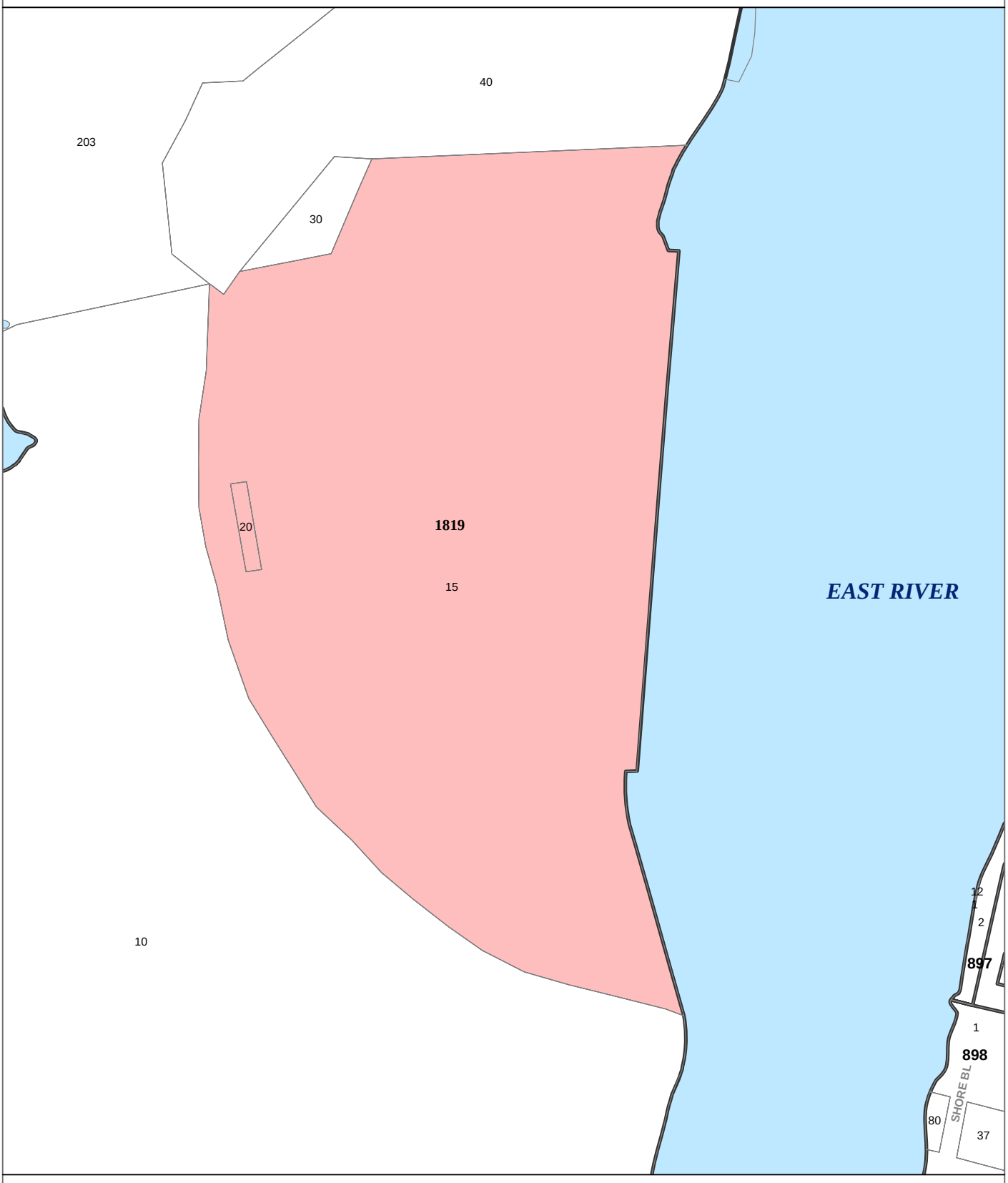
Hunts Point WPCP Tax Block and Lot Map



Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure T-3

Wards Island WPCP Tax Block and Lot Map



WPCP Site

1819 Tax Block

10 Tax Lot

100 0 100 Feet

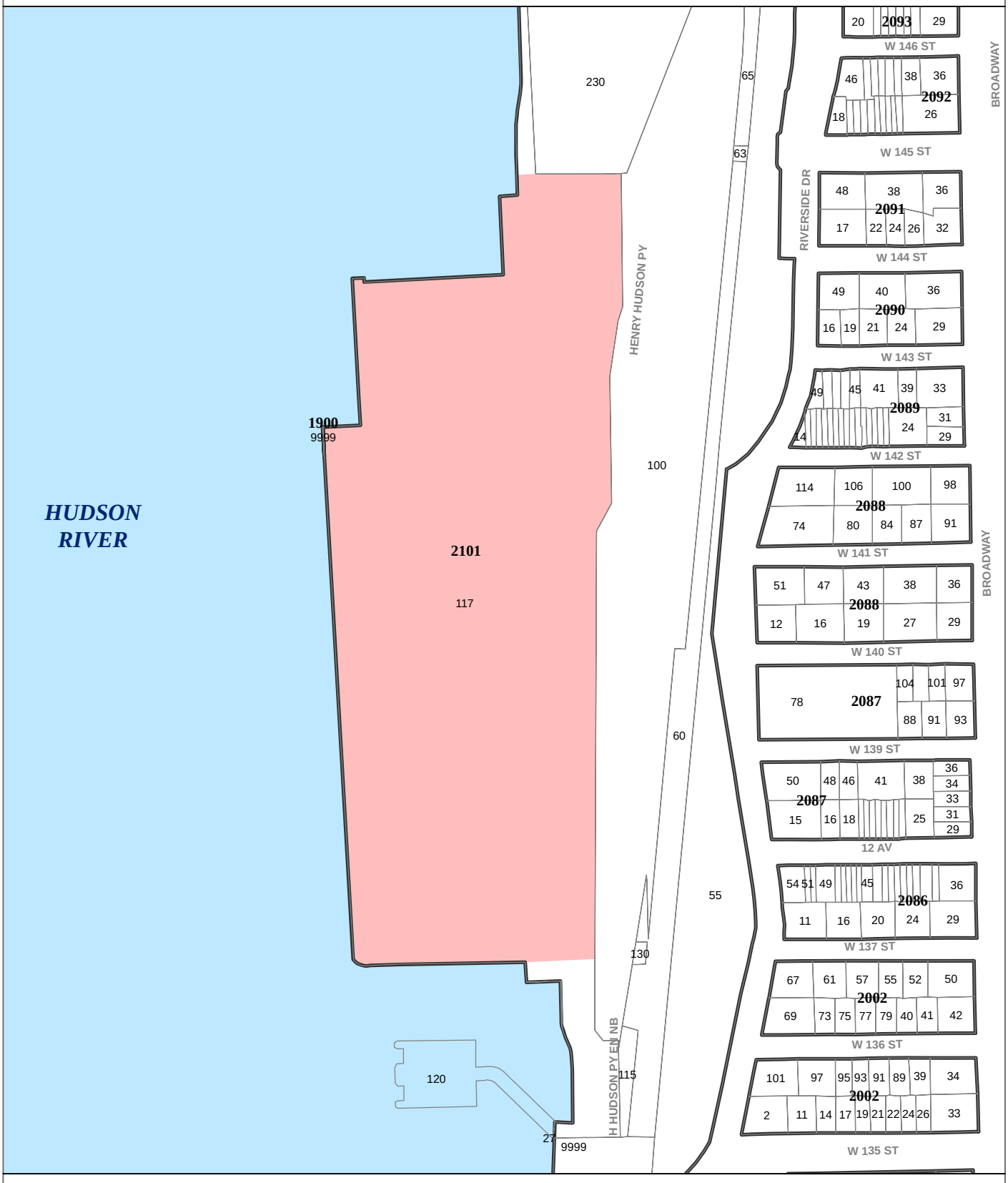
50 0 50 Meters

N

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure T-4

North River WPCP Tax Block and Lot Map



WPCP Site

2101 Tax Block
120 Tax Lot

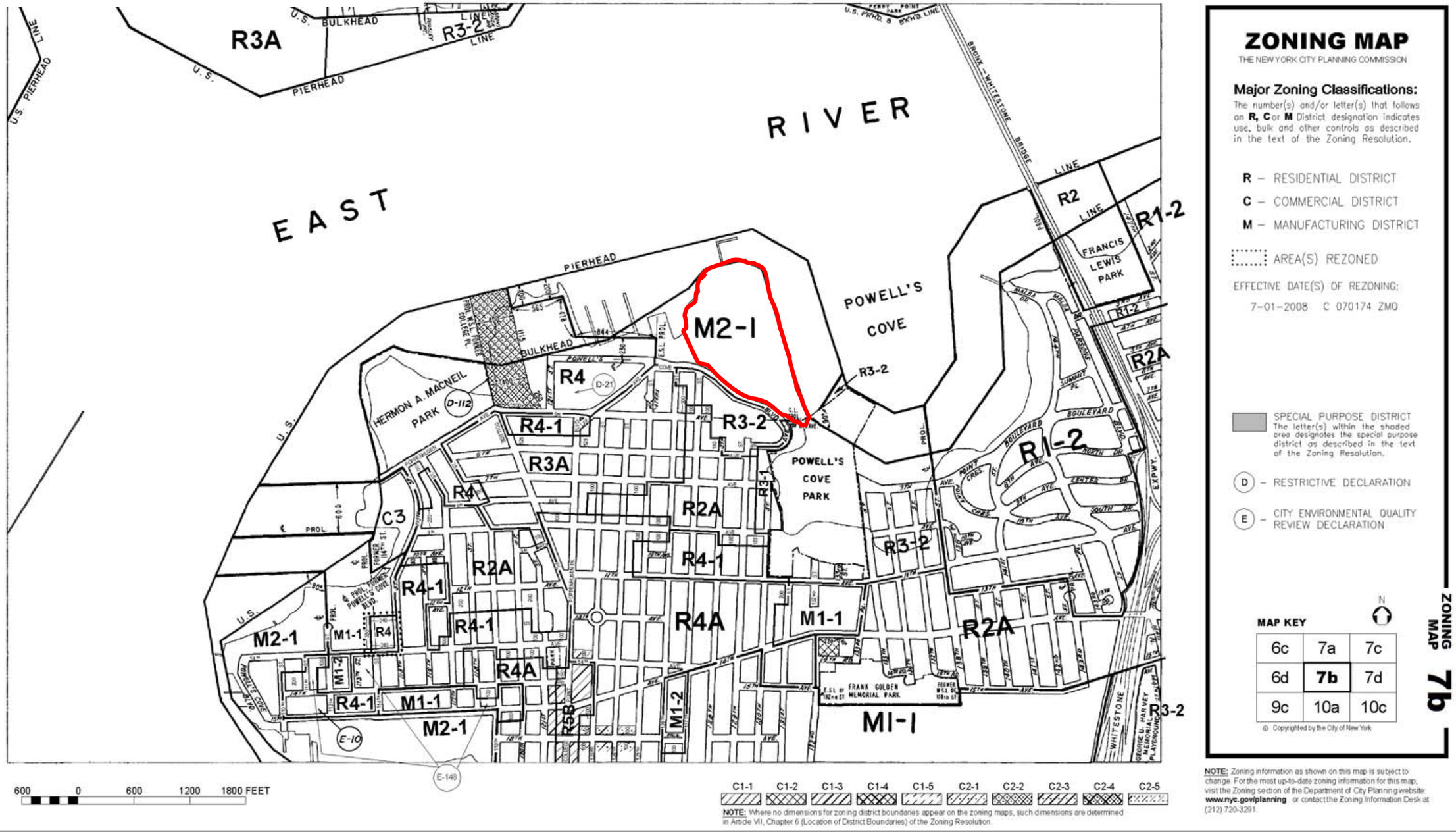
100 0 100 Feet
50 0 50 Meters

N

Source: NYC Department of City Planning MapPluto, 2007 & NYC DOITT NYC Map.

Figure T-5

Tallman Island WPCP New York City Zoning Map 7b

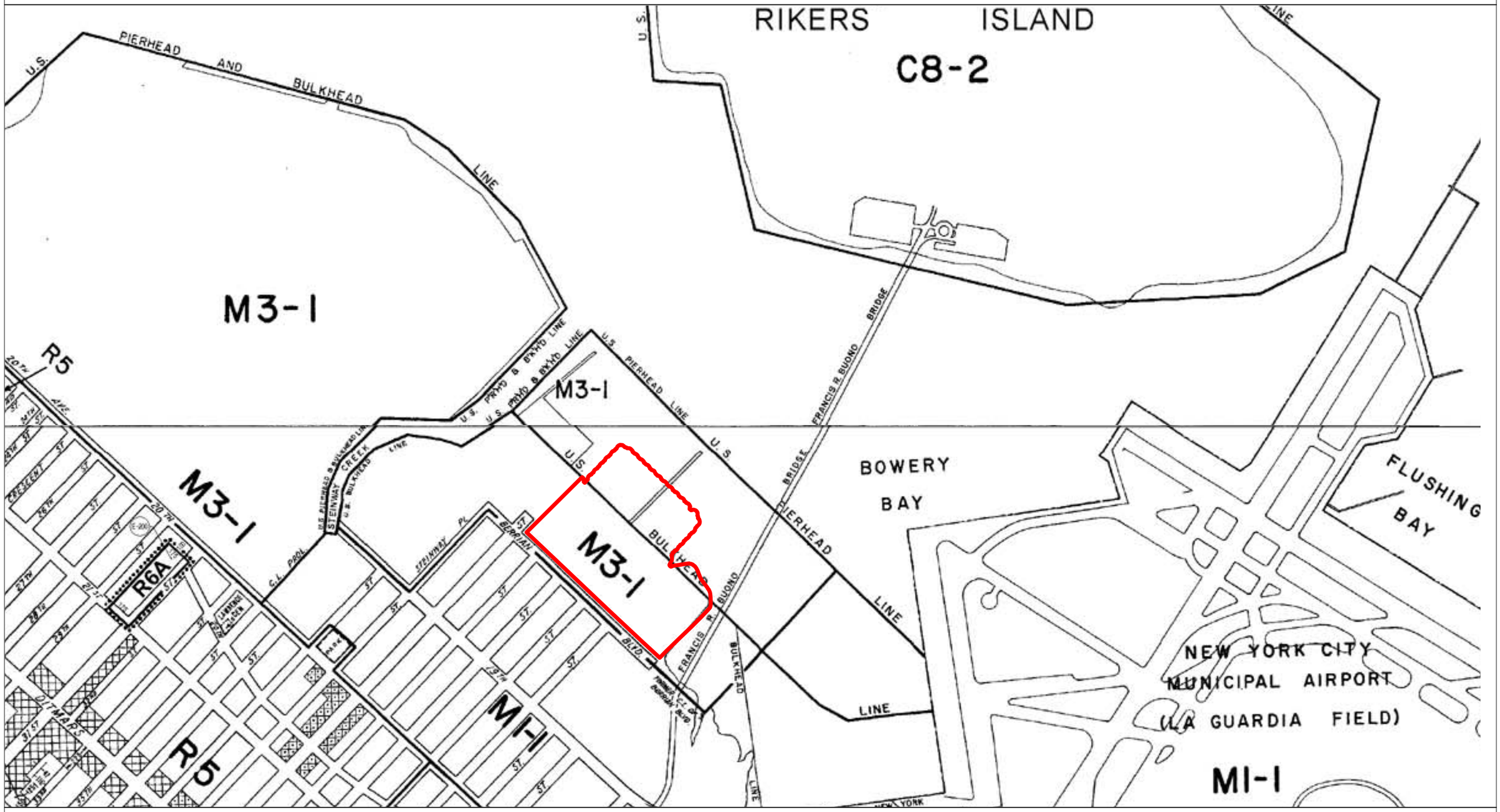


WPCP Site

Source: NYC Planning Zoning Maps

Figure Z-1

Bowery Bay WPCP New York City Zoning Map 6d and 9c

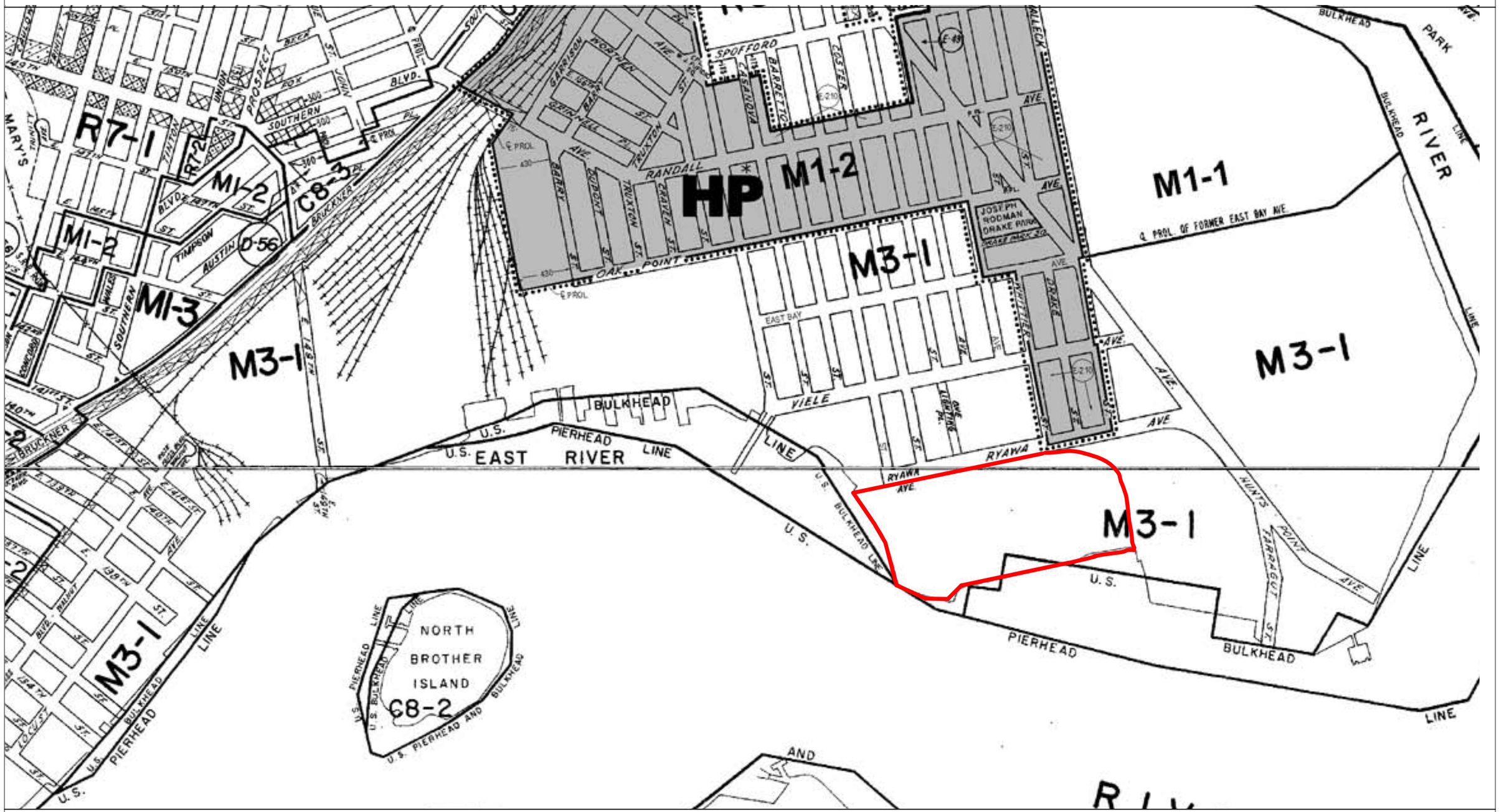


WPCP Site

Source: NYC Planning Zoning Maps

Figure Z-2

Hunts Point WPCP New York City Zoning Map 6c and 6d

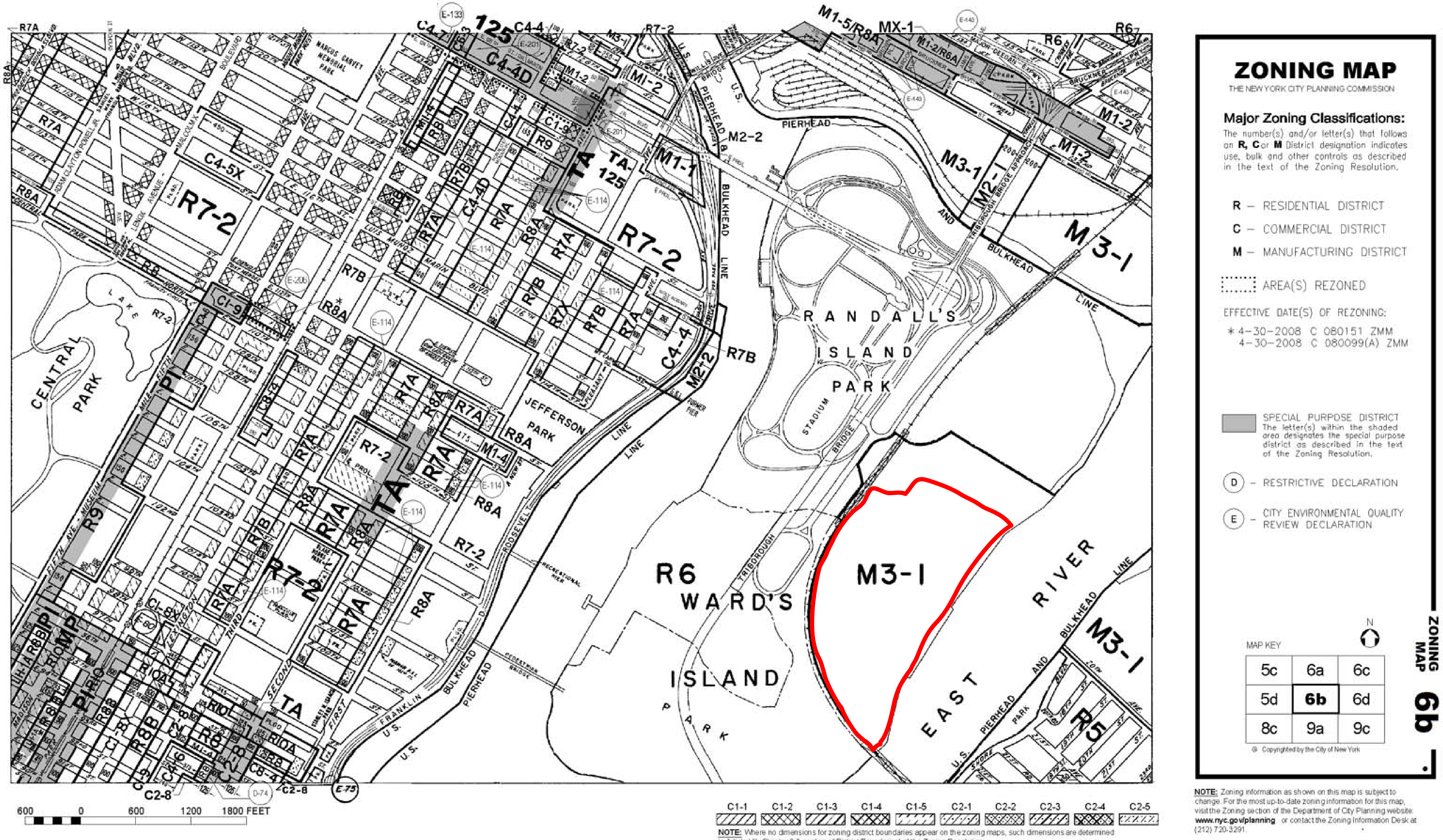


WPCP Site

Source: NYC Planning Zoning Maps

Figure Z-3

Wards Island WPCP New York City Zoning Map 6b

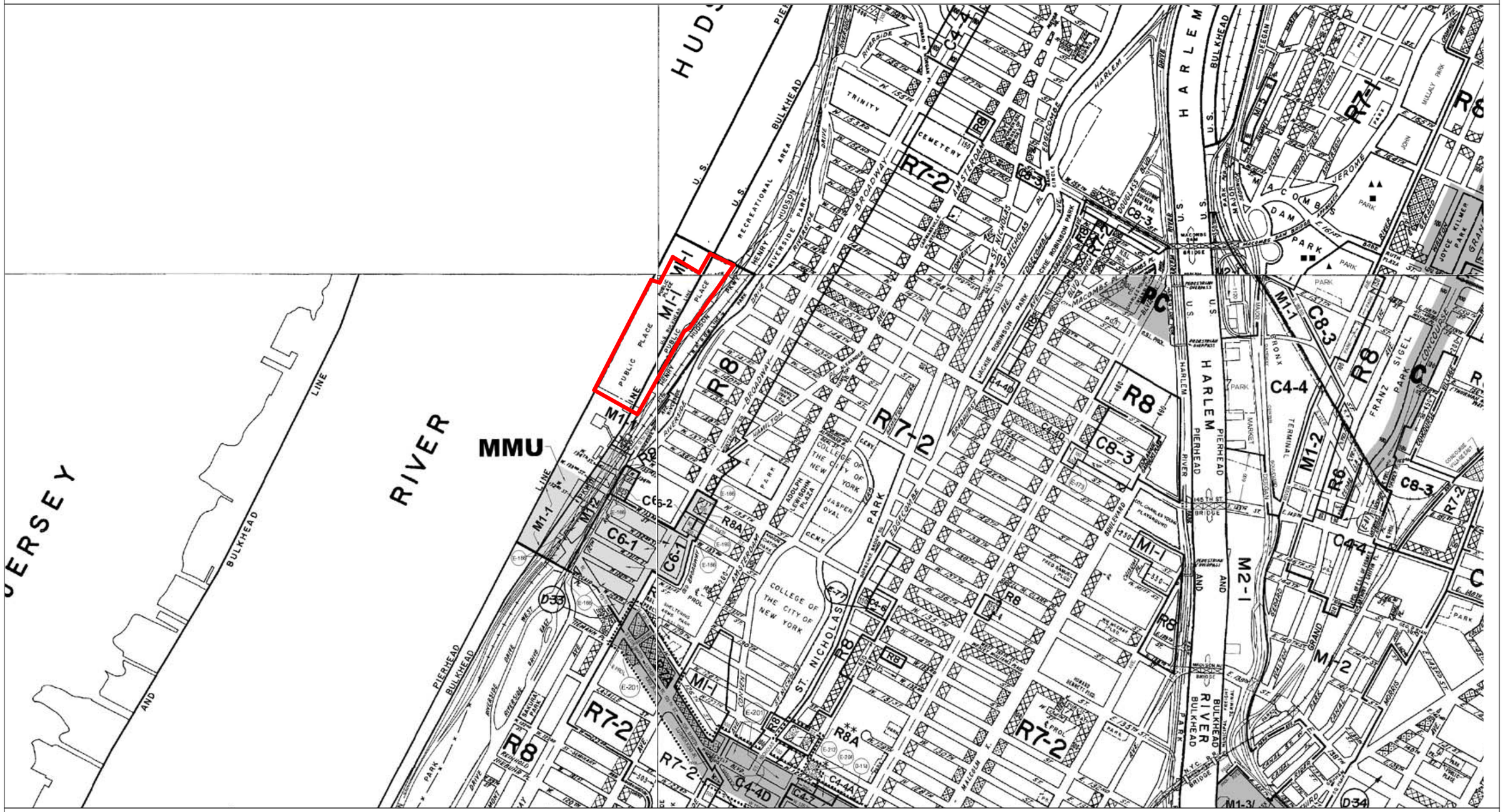


WPCP Site

Source: NYC Planning Zoning Maps

Figure Z-4

North River WPCP New York City Zoning Map 3b, 5c and 6a



WPCP Site

Source: NYC Planning Zoning Maps

Figure Z-5

ATTACHMENT C

Environmental Impact Analysis

A. Land Use, Zoning and Public Policy
B. Socioeconomic Conditions
C. Community Facilities and Services
D. Open Space
E. Shadows
F. Historic Resources
G. Urban Design/Visual Resources
H. Neighborhood Character
I. Natural Resources
J. Hazardous Materials
K. Waterfront Revitalization Program
L. Infrastructure
M. Solid Waste and Sanitation Services
O. Traffic and Parking
P. Transit and Pedestrians
Q. Air Quality
R. Noise
S. Construction Impacts
T. Public Health

Environmental Impact Analysis

This document addresses the technical analysis of the proposed action following the methodology set forth in the *City Environmental Quality Review* (CEQR) *Technical Manual.*

A. Land Use, Zoning, and Public Policy

The proposed project pertains to temporary transshipment of sludge/centrate from NYCDEP's Tallman Island and Bowery Bay WPCPs to its Hunts Point, Wards Island, and North River WPCPs. The areas defined within a ¼ mile radius of each of the above referenced plant sludge loading facilities are referred to as the "study area".

Tallman Island Study Area

The Tallman Island WPCP, approximately 29.2 acres, is located at the northern tip of Powell's Cove in the College Point section of Queens. The site is bordered to the north and east by the East River and Powell's Cove, to the west by the College Point Yacht Club, and to the south by Powell's Cove Boulevard. The Tallman Island WPCP site is zoned for manufacturing (M2-1), and the existing land use (sewage treatment) is permitted as a non-conforming use predating the existing zoning (Figure Z-1). The ¼ mile radius from the dock used for the study area does not extend beyond the WPCP site, and therefore no further discussion of the area's land use is provided.

The College Point area of Queens, immediately pertaining to the WPCP site has little open space remaining for future development. Accordingly, land use conditions are anticipated to follow existing development trends of modest residential in-fill in the various low medium residential districts to the south of the WPCP. Furthermore, the 2005 NYC Department of City Planning rezoning of College Point approved keeping the existing zoning for the WPCP and surrounding area, including the College Point Yacht Club. The area located southeast of the Tallman Island facility along the waterfront is Powell's Cove Park, which is being reestablished as a natural salt marsh by the NYC Department of Parks and Recreation, and is intended for limited public access further suggesting that development trends in the area will remain unchanged.

Bowery Bay Study Area

The Bowery Bay WPCP is located in the Steinway section of Queens, and is bounded by the East River (Rikers Island Channel) to the north, Bowery Bay to the east, Berrian Boulevard to the south, and the Astoria Energy facility to the west. The 37.5-acre WPCP facility is zoned M3-1, and is located within an area whose land use is characterized by manufacturing, and parking uses (Figure LU-2). Adjacent areas are zoned M3-1 or M1-1. A portion of the Astoria Energy facility is included within the ¼ mile radius, and shares the M3-1 zoning designation. Properties located on the south side of Berrian Boulevard, outside the ¼ mile radius are zoned M1-1. (Figure Z-2). On 41st Street, beyond the ¼-

mile radius of the dock but partly within the 400-ft radius of the WPCP boundary, is the historic former Steinway Mansion, a non-conforming residential use in the M1-1 district.

Development in the area surrounding the Bowery Bay WPCP has generally conformed to existing zoning designations. The WPCP is included as part of the Steinway Industrial Business Zone, and as such is located within an area that restricts residential use. Little open space for development remains in the areas located southwest of the facility however, several lots located southeast of the facility are currently vacant. These lots are contained within the New York and New Jersey Harbor Estuary Protection Program, and no development plans for them are in action.

Hunts Point Study Area

The Hunts Point WPCP is located at the southern tip of the Hunts Point peninsula in the Bronx, and is bordered by the East River to the south and west, Ryawa Avenue to the north and Halleck Street to the east. The immediate area surrounding the 46.3-acre project site, and within the ¼ mile radius of the loading dock, is zoned for manufacturing (M3-1 and M1-2, see Figure Z-3). Land uses in the study area conform to the zoning and are dominated by industrial and manufacturing uses. North of the WPCP, these uses, including Gary Plastic Packaging, are generally located along Ryawa Avenue between Manida and Whittier Streets, see figure LU-3. There are a number of vacant lots in the immediate area particularly located along Manida and Whittier Streets within the same block (block number 2777, an industrial "superblock") located between Viele and Ryawa Avenues, (see figure T-3). Several of the undeveloped lots are currently being utilized as junk yards, and at least one is used as a school bus parking lot.

Northwest of the WPCP, located within the ¼ mile radius, is a 5.5 acre parcel extending north along Manida Avenue. This currently vacant, city-owned lot is the site of NYCDEP's Phase III upgrade for the WPCP. Barretto Point Park is located west and immediately adjacent to this city-owned lot but is beyond the ¼ mile study area. Other notable uses beyond the study area include the New Fulton Fish Market and the Vernon C. Bain Correctional Center (Center). The New Fulton Fish Market forms the eastern border of the study area, at Food Center Drive, with a small portion of its parking lot located within the ¼ mile radius. The Center is a New York City Department of Correction reserve facility for detained male adults utilized during inmate fluctuations. The Center is situated on a barge that is located at the southern terminus of Halleck Street in the East River.

Land uses in the ¼ mile radius study area have conformed with the area's land use, zoning and public policy. Hunts Point is relatively built out and no additional changes to zoning and public policy associated with the proposed Hunts Point Special District and Rezoning are anticipated to occur. The study area is included in New York City's Hunts Point Industrial Business Zone, and within the New York Empowerment Zone. Both ventures serve to promote private investment in the area. Another trend towards reinvestment in the area is the South Bronx Greenway, which could begin phased improvements as early as Summer 2009. The Ryawa-Viele Connection improvements,

located within the study area, are not included within the short-term phasing of the project, and are scheduled for implementation no earlier than 2012.[1] The master plan proposes a bikeway and planted buffers on Viele Avenue (between Baretto Point Park and Manida Street); Manida Street (between Viele and Ryawa Avenues); and Ryawa Avenue (from Manida Street approaching Halleck Street).

Wards Island Study Area

Wards Island WPCP is located on Wards Island, part of Randall's Island in the East River between Manhattan, the Bronx and Queens. The 71.1 acre WPCP facility is bounded to the south and west by the Conrail-Amtrak lines (with the Wards Island Park beyond), by the NYC Fire Department (FDNY) Training Academy to the north, and the East River to the east (Figure LU-4). The Wards Island facility is contained within an area that is zoned M3-1, which extends north to include the FDNY Training Academy. The remainder of Wards and Randall's Island is zoned R6 but, as parkland, is not subject to zoning (Figure Z-4). Land use within the ¼ mile radius from the dock includes the WPCP, the rail line and a portion of Wards Island Park to the west. Eastward of the WPCP, across the East River, the radius also extends to include a portion of the Queens waterfront, designated as the R. Demarco Park.

Land use in the area has remained stable since the development of the Wards Island WPCP in 1937, and the Wards Island park acquisitions in 1936 and 1939. Randall's Island Park, located north and west of the WPCP is currently undergoing redevelopment that will include: the redevelopment of sports fields; the SporTime Tennis Center; boardwalk; waterfront pathways; wetland and salt marsh restoration; shoreline and seawall reconstruction; roadway; parking and infrastructure improvements; and possibly a visitors and nature center. Of these proposed improvements, only portions of several proposed soccer fields are included within the ¼ mile radius study area.

North River Study Area

The North River WPCP is located on the Hudson River, west of the Henry Hudson Parkway between 137th and 145th Streets. The bulk of the 30.4 acre site is located on a concrete platform placed over the Hudson River, with the Riverbank State Park on its roof deck and Riverside Park to the east and north. The site is zoned M1-1 for manufacturing and light industrial uses (WPCPs are permitted by special permit of the City Planning Commission in M1 and M2 districts). To the east of the Henry Hudson Parkway, Riverside Drive, and Riverside Park is high density residential (R8) zoning, (Figure Z-5). Land uses in the ¼ mile radius study area conform to the zoning and are characterized by a combination of residential uses, parklands, and public utilities.

Land use trends in West Harlem, near the North River WPCP are not anticipated to change as the area is densely built up with almost no vacant space available for

[1] As per telephone conversation held with Ms. Kate Van Tassel of the New York City Economic Development Corporation on April 14, 2009.

development. Beyond the study area to the south, however, the Columbia University expansion project, as detailed in Empire State Development Corporation's *General Project Plan*, is currently proposed for the area located between Twelfth Avenue and Broadway, between West 125th and West 133rd Streets.

In summary, the land use characteristics of the areas surrounding the five WPCPs would not be adversely affected by the transshipment program. Land uses within the ¼ mile study areas surrounding the loading docks at Tallman Island, Bowery Bay, and Hunts Point WPCPs are all manufacturing with no sensitive uses. Wards Island and North River WPCPs, have adjacent parkland, and North River also has residential uses east of the Henry Hudson Parkway. However, the loading and unloading are conducted at the waterfront and would not be visible to, or affect these sensitive land uses. In the longer term, the sensitive land uses near these plants and along the East River would benefit from the objectives of the proposed action through reduced nitrogen discharge in the adjacent waterbodies. Therefore, it is not anticipated that the proposed project would result in significant adverse impacts to land use, zoning and public policy.

B. Socioeconomic Conditions

The proposed transshipment action would not result in any land use changes in the study areas, nor would it change neighborhood characteristics, or affect the socioeconomic viability of the surrounding area. The proposed action would not displace any residential populations, businesses, institutions or employees. The transshipment action is not anticipated to have a noticeable effect on the water and sewer rates for NYC customers. Therefore, no potential significant adverse impacts on socioeconomic conditions are anticipated due to the proposed transshipment action.

C. Community Facilities and Services

Community facilities are considered public or publicly funded facilities, including educational facilities, libraries, hospitals, other health care facilities, day care centers, police station and fire stations. The *CEQR Technical Manual* specifies that actions that would add fewer than 100 residential units to an area generally do not need to consider community facilities unless the proposed action would have direct effect on a community facility. The proposed action would not result in an increase in residential units nor would it directly or indirectly affect any community facilities. Therefore, no significant direct or indirect impacts to community facilities are anticipated as a result of the proposed project.

D. Open Space

Open space generally includes areas such as parkland designated by the City, State or federal government, schoolyards and playgrounds that are accessible to the general public. Since the transshipment action would not introduce additional residences, would not eliminate any existing open spaces or alter their condition and use, no significant

adverse impacts on open space are anticipated to result from implementation of the transshipment action.

E. Shadows

None of the proposed transshipment activities would result in shadows that extend to publicly accessible areas, therefore, the proposed action presents no potential significant adverse impacts on shadows in the study areas, and no analysis of shadows is necessary.

F. Historic Resources

The proposed project sites do not contain any historical or archaeological resources and no further analysis would be necessary. As a result, no potential significant adverse impacts to historic or archaeological resources are anticipated from the proposed project.

G. Urban Design and Visual Resources

The proposed action would not result in any above-ground new structures or alterations of existing structures and it is consistent with all adjacent land uses, zoning classifications and existing public policies. Therefore, the proposed action presents no potential significant adverse impacts on urban design and visual resources.

H. Neighborhood Character

The *CEQR Technical Manual* defines a neighborhood character assessment as an evaluation of various elements that give neighborhoods their distinct "personality". These elements include land use, urban design and visual resources, socioeconomic conditions, traffic, air quality and noise. As described elsewhere in this document, the proposed action would not result in any significant adverse impacts to any of these elements. Therefore, the proposed action is not anticipated to result in any potential significant adverse impacts on neighborhood character of the five affected WPCPs.

I. Natural Resources

The *CEQR Technical Manual* states that a natural resources assessment should be conducted when a natural resource is present on or near the site of the action, and the action involves disturbance of that resource. The proposed transshipment action would not involve any dredging or filling activities and the movement and docking of vessels would not affect the physical environment near any of the WPCPs. The purpose of the project would be to facilitate installation of BNR technology at Tallman Island and Bower Bay WPCPs in order to reduce total nitrogen discharges to the upper East River and the Long Island Sound, thereby improving conditions for aquatic life.

Under the proposed temporary transshipment program, the North River WPCP, would generate a net increase of nitrogen conveyed into the Hudson River. This increase of

nitrogen, however, would have minimal impacts to the ecology of the Hudson River near the North River WPCP because the deep waters and swift currents present in the Hudson River would disperse the nitrogen reducing any chance for eutrophication. In the upper East River area, where the Tallman Island and Bower Bay WPCPs are located, there would be a net decrease of nitrogen conveyed to the East River, a waterbody the New York State Department of Environmental Conservation (NYSDEC) has identified as an impaired waterbody for dissolved oxygen and oxygen demand. Thus, the decrease of nitrogen conveyed to the River would improve its water quality.

I-1. Existing Conditions

Aquatic Environment

Tallman Island: The Tallman Island WPCP is bordered to the north by the East River and to the east by Powell's Cove. Powell's Cove is a small bay that is approximately 0.4 mile (mi) in width and opens to meet the East River. A review of the National Oceanic and Atmospheric Administration (NOAA) nautical chart (NOAA, 2008a) for the project area shows that the water depths waterward of Tallman Island's loading dock at mean lower low levels are 9 ft. In the vicinity of the WPCP, the East River and Powell Cove shorelines adjacent to the WPCP have previously been extensively filled and bulkheaded. Tidal mudflats are exposed nearer the bulkheads and are also present in Powell's Cove during lower portions of the tidal cycle (NOAA, 2008). Based on data obtained from the National Ocean Service's (NOS) tidal benchmark located in Willets Point (NOAA, 2008) and the NOAA nautical chart, the mean tidal range for this area of the East River is approximately 7.1 feet (ft). Depths within Powell's Cove range between 0-5 ft.

Bowery Bay: The Bowery Bay WPCP is located in northern Queens along the west shoreline of Bowery Bay. The shoreline adjacent to the WPCP is bulkheaded and rip-rapped. A review of the NOAA nautical chart (NOAA, 2008a) for the project area shows that immediately waterward of the Bowery Bay WPCP pier, the water depths are over 20 ft in depth. Based on data obtained from the NOS's tidal benchmark located in Willets Point (NOAA, 2008) and the NOAA nautical chart, the mean tidal range for this area of the East River is approximately 7.1 ft.

Hunts Point: The Hunts Point WPCP is located in the Bronx on the northern shoreline of the East River. A review of the NOAA nautical chart (NOAA, 2008a) for the project area shows that the water depths adjacent to the dock are in excess of 24 ft. On either side of the docking facilities, shoals occur with water depths between 1 and 18 ft. Based on data obtained from the NOS's tidal benchmark located in Willets Point (NOAA, 2008) and the NOAA nautical chart, the mean tidal range for this area of the East River is approximately 7.1 ft.

Wards Island: Wards Island lies near the confluence of the Harlem River and the East River. The Wards Island WPCP is located on the Island's east coast. Water depths adjacent to the WPCP are approximately 40 ft. Based on data obtained from the NOS's tidal benchmark located in Port Morris (NOAA, 2008) and the NOAA nautical chart

(NOAA, 2008a), the mean tidal range for this area of the East River is approximately 5.5 ft.

North River: The North Ward WPCP is located on the west side of Manhattan near 140th Street. The WPCP represents a small peninsula that extends into the Hudson River. Water depths on the westside of the plant are over 40 ft in depth. Water depths on the north and south side are approximately 20 ft in depth. Based on data obtained from the NOS's tidal benchmark located in Alpine, New Jersey (NOAA, 2008) and the NOAA nautical chart (NOAA, 2008a), the mean tidal range for this area of the Hudson River along the shoreline of northern Manhattan Island is approximately 3.5 ft.

Water Quality

Since 1909, the NYCDEP has been performing water quality studies throughout New York Harbor. Currently, the NYCDEP publishes the *New York City Water Quality Report* every two years. The report presents the findings of bi-annual water quality studies. As per the most current report dated 2006, each of the above affected WPCPs is classified as "I" - suitable for boating and fishing, but not swimming and shellfishing.

The 2006 report presented data from as early as 1970, and the data showed that water quality of New York Harbor has been steadily improving. The concentration of fecal coliform has decreased since 1970 and the amount of dissolved oxygen (DO) has continued to increase. Relevant to the Tallman Island, Bowery Bay, Hunts Point and Wards Island WPCPs, the report also indicated that "In the Western Long Island Sound in particular, conditions symptomatic of eutrophic waters have been observed since the late 1980s. These conditions include extremely high surface water DO (often associated with algae blooms) and sporadic, but extremely low, bottom DO. This decline in water quality is being addressed by the Long Island Sound Study, under which NYCDEP is upgrading four sewage treatment plants to reduce nitrogen loads to upper East River-Western Long Island Sound (NYCDEP, 2006)."

Threatened and Endangered Species

The waterbodies of New York Harbor are home to hundreds of species of benthic invertebrates, birds, and fish including some endangered and threatened species. Several species of marine mammals utilize the waters of New York Harbor. Wildlife species in the harbor are found throughout the various aquatic habitats from deep water environments with swift currents to shallow, sluggish, tidal creeks.

There are known threatened and endangered species that utilize the waters and wetlands of New York Harbor. However, due to the highly disturbed nature of the WPCPs and their operations, there is no known federal or state listed threatened or endangered species utilizing WPCP property as a habitat resource.

Wetlands

Tidal wetlands are classified by the amount of water covering the area at high and low tides and the type of vegetation. NYSDEC uses categories and codes to describe and represent different types of coastal, tidal, and fresh water wetlands. These codes (noted below) are used to identify wetlands on Tidal Wetlands Inventory Maps and help in administering programs for their protection (NYSDEC, 2008). The NYSDEC's description of mapped tidal wetland polygons in the project area is as follows:

- ***SM. Coastal Shoals, Bars and Mudflats*:** The tidal wetland zone that at high tide is covered by saline or fresh tidal waters, at low tide is exposed or is covered by water to a maximum depth of approximately one foot, and is not vegetated.
- ***LZ. Littoral Zone*:** The tidal wetland zone that includes all lands under tidal waters which are not included in any other category. There shall be no LZ under waters deeper than six feet at mean low water.
- ***FC. Formerly Connected*:** The tidal wetlands zone in which normal tidal flow is restricted by man-made causes. *Phragmites* sp. is the dominant vegetation.
- ***IM. Intertidal Marsh*:** The vegetated tidal wetland zone lying generally between average high and low tidal elevations in saline waters. The predominant vegetation in this zone is low marsh cordgrass, *Spartina alterniflora*.

Bowery Bay: Review of the United States Fish and Wildlife Service (USFWS) Wetland Mapping Web site shows that no mapped vegetated wetlands are located adjacent to the WPCP. The waters of the Bowery Bay adjacent to the WPCP are classified as E1UBL (Estuarine, Subtidal, Unconsolidated, Subtidal) (USFWS, 2008). No freshwater wetlands were mapped within the WPCP. Review of the NYSDEC tidal wetland maps indicate that the waters around the WPCP are classified as LZ. Adjacent to the extreme southeast portion of the WPCP, a small polygon identified as SM is present within a small cove.

Tallman Island: Powell's Cove has natural shorelines with small pockets of tidal wetlands. Review of the USFWS Wetland Mapping Web site shows that a mapped wetland is located at the southern end of Powell's Cove, approximately 0.3 mi (0.5 km) south of the WPCP (USFWS, 2008). The wetland is labeled as E2FLN (Estuarine, Intertidal, Flat, regular). No freshwater wetlands were mapped within the WPCP. The waters of the East River around Tallman Island and within Powell's Cove are classified as E1UBL (Estuarine, Subtidal, Unconsolidated, Subtidal) (USFWS, 2005).

Hunts Point: Review of the USFWS Wetland Mapping web site shows that no mapped vegetated wetlands are located adjacent to the WPCP. The waters of the Bowery Bay adjacent to the WPCP are classified as E1UBL (Estuarine, Subtidal, Unconsolidated, Subtidal) (USFWS, 2008). No freshwater wetlands were mapped within the WPCP. Review of the NYSDEC tidal wetland maps indicate that the waters around the WPCP are classified as LZ. In the extreme eastern portion or the WPCP, the NYSDEC mapped a small polygon identified as SM along the shoreline.

North River: The USFWS Wetland Mapping Web site shows that the waters of the Hudson River around the North Ward WPCP are classified as E1UBL (Estuarine, Subtidal, Unconsolidated, Subtidal) (USFWS, 2008). No freshwater wetlands were mapped within the WPCP. The NYSDEC tidal wetland map classifies the Hudson River adjacent to the WPCP as LZ.

Wards Island: The waters of the East River around the WPCP are classified as E1UBL (Estuarine, Subtidal, Unconsolidated, Subtidal) (USFWS, 2008). No freshwater wetlands were mapped within the WPCP. Review of the NYSDEC tidal wetland maps indicate that the waters around the WPCP are classified as LZ.

Terrestrial Environment

Within the WPCPs, terrestrial natural resources are limited and consist of maintained lawns with ornamental trees and shrubs. These areas are often located along interior roadways and around buildings. These habitats would be utilized by fauna typically found in urban environments (e.g., sparrows, squirrels, etc.).

I-2. Future Without the Proposed Action

Without the proposed action, the Consent Judgment would be violated and would potentially inhibit the ability of NYCDEP to meet the applicable water quality standard based on NYSDEC's State Pollutant Discharge Elimination System (SPDES) discharge limitations for sewage pollutants treated.

I-3. Future With the Proposed Action

Aquatic Environment

The data presented in Table I-1 show that the total amount of effluent nitrogen discharged to East River would be reduced under both the proposed action and the contingency plan. The reduction of nitrogen in the water column would protect and restore the aquatic ecology.

At the North River WPCP under the proposed action, there would be a net increase of nitrogen conveyed into the Hudson River. The increase of nitrogen would have minimal impacts to the ecology of the Hudson River near the North River WPCP because the deep waters and swift currents present in the Hudson River would disperse the nitrogen reducing any chance for eutrophication. Also, the lower Hudson River is not identified by the NYSDEC as a being an impaired waterbody due to nitrogen loading. At upper East River WPCPs, under the proposed action, there would be a net decrease of nitrogen conveyed to the East River, a waterbody the NYSDEC has identified as an impaired waterbody for dissolved oxygen and oxygen demand. Thus, the decrease of nitrogen conveyed to the river would improve the water quality of the East River.

Table I-1 Comparison of Effluent Nitrogen at Proposed Project Sites

Parameter	Unit	Tallman Island (TI)	Bowery Bay (BB)	Hunts Point (HP)*	Wards Island (WI)	Upper East River Totals	North River (NR)
Flow Capacity	mgd	80	150	200	275	705	170
Effluent Flow	mgd	57	118	128	222	525	142
Current Effluent Nitrogen (Total Nitrogen [TN])	lb/day	8,243	18,472	21,169	30,994	78,878	20,725
Proposed Action		Sludge sent to WI or HP	Centrate sent to NR	Receive TI Sludge	Receive TI Sludge		Receive BB Centrate
Effluent Nitrogen (TN)	lb/day	5,211	18,105	16,949	29,997	70,262	23,910
Contingency Plan		Sludge sent to WI or HP	Sludge sent to HP or WI	Receive TI & BB Sludge	Receive TI & BB Sludge		n/a
Effluent Nitrogen (TN)	lb/day	5,211	18,105	18,626	32,550	74,492	-

Source: adapted from AWT-PA, 2009.
* The effluent TN for existing conditions is taken from actual historical data with Hunts Point's activated sludge system operating for conventional BOD removal only. The future case assumes implementation of BNR at Hunts Point, which will increase the amount of TN removed by the process, thereby reducing effluent TN.

As presented in the Table I-1, additional nitrogen loads occurring at the Hunts Point, Wards Island and North River WPCPs under the proposed action would meet SPDES nitrogen discharge limitation requirements, which are the upper and lower East River WPCPs Combined Zone Total Nitrogen Interim and Final Effluent Limits. (Table 1 in Attachment A, Project Description, shows the interim Nitrogen Limit "step downs" for the East River)**.**

Threatened and Endangered Species

The fish and wildlife of New York Harbor are well adapted to the presence of vessel traffic. All of the docks used by the WPCPs are along heavily trafficked waterways. The temporary increase of a few additional vessels at any WPCP location would not impact fish or wildlife habitat or impede migration. No dredging would be required for this project.

The shorelines adjacent to the WPCPs are included within the New York City Comprehensive Waterfront Revitalization Program. Refer to Section K for additional details.

Wetlands

No wetland impacts would occur as a result of the proposed project. No filling, dredging, or other alterations to wetlands or wetland adjacent areas would occur as part of this project. Also, no mapped vegetated tidal wetlands are located within and/or immediately adjacent to docking facilities and/or offloading piers for any of the WPCPs. As such, it is anticipated that the additional docking time of barges and ships would not result in impacts from shading.

Terrestrial Environment

All of the docks used by the WPCPs are along heavily trafficked waterways. The increase of a few additional vessels at any WPCP location would not disturb terrestrial resources. Therefore, no impacts to terrestrial ecological resources are anticipated.

Ultimately, the proposed action would be directly beneficial to the water quality of the East River and associated flora and fauna. Thus, under both the proposed action and contingency plan, there is no potential for significant adverse natural resources impacts.

J. Hazardous Materials

During the proposed transshipment program, there would be no changes in the types of chemicals employed at the WPCPs, and existing NYCDEP protocols for the management of hazardous materials would continue to be implemented at all project plants. The proposed transshipment would not lead to increased exposure of people or the environment to hazardous materials. Therefore no potential significant adverse hazardous materials impacts would occur as a result of the proposed project.

K. Waterfront Revitalization Program

The New York City Waterfront Revitalization Program (WRP) identifies coastal-related issues and policies that are crucial to the revitalization, preservation, and enhancement of the New York City waterfront. The proposed transshipment action involves the sending of digested sludge and centrate from Tallman Island and Bowery Bay to other WPCPs, namely Hunts Point, Wards Island, and North River WPCPs. All the WPCPs are situated within the City's coastal zone boundary. This would facilitate upgrades at Tallman Island and Bowery Bay in order to reduce total nitrogen discharges to the upper East River and the Long Island Sound. Once completed, it would result in a net improvement to East River and Long Island Sound water quality, which in turn will protect the living aquatic resources. Therefore, there is no anticipated significant adverse impact with regard to the policies outlined in the City's Waterfront Revitalization Program. Attachment D presents the detailed New York City Waterfront Revitalization Program Consistency Assessment Form.

L. Infrastructure

The purpose of the *CEQR* water-related infrastructure review is to identify the potential for the proposed action to directly or indirectly affect existing infrastructure facilities including wastewater treatment, water supply, and stormwater management systems.

The proposed action is one of the measures required to implement the Nitrogen Consent Judgment to reduce nitrogen discharge to the East River during the installation of BNR technology at Tallman Island and Bowery Bay. It is anticipated that this action would not result in increased demands on the city water supply or wastewater treatment systems. To the extent that wastewater treatment requires the use of potable water at WPCPs, the transshipment action would only relocate where the use occurs, without affecting total demand. The transshipment action also does not alter the quantity or geographic source location of inputs to the WPCPs; as such, there are no impacts to the City's sanitary, combined or stormwater sewerage systems.

According to the *CEQR Technical Manual* actions that are consistent with and enacted to serve the Consent Orders and programs would not result in significant adverse impacts. Therefore, the proposed action presents no potential for significant adverse impacts to the City's infrastructure systems.

M. Solid Waste and Sanitation Services

The proposed project will require only minor centrate pipe modifications at Bowery Bay WPCP, it would not generate large amounts of construction solid waste. Any waste generated would be disposed of in a manner consistent with the State policy, City Solid Waste Management Plan and other City laws and regulations relating to solid waste.

The overall volume of solid waste from wastewater treatment processes at the Plants would not increase as a result of the transshipment program. In addition, there would be no increase of staff at the WPCPs, and no change in solid waste volumes generated on the site. Therefore, it is not anticipated that the proposed project would have potential significant adverse impacts to solid waste and sanitation services.

N. Energy

The proposed transshipment action would not result in an overall electrical energy requirement increase, although the amount of total power consumed by individual WPCPs would change. In addition, there would be a slight increase in diesel fuel consumption.

Transshipped sludge will require dewatering at the receiving plant, shifting the energy demand for this operation from the source plant to the receiving plant. The electrical energy consumed at the receiving plants would increase proportionally to the additional volume of sludge, while there would be a corresponding decrease at the source plants.

Therefore, it is not expected that there will be an impact to the city's existing electricity supply.

The transshipment action will require increased consumption of diesel fuel in order to transport sludge between WPCPs. It is estimated that approximately 195,500 gallons of additional diesel fuel will be consumed on an annual basis by the MV fleet for transport of the sludge, and an additional 25,000 gallons of diesel fuel would be consumed by the pump generator sets for unloading of the vessels. The total additional consumption would be 220,500 gallons per year in the peak year of 2010, when both Tallman Island and Bowery Bay WPCPs are sending sludge or centrate to other WPCPs.

Of the diesel fuel consumption by MV trips, 11.3 percent is attributed to Tallman Island WPCP and 88.7 percent attributed to the longer trips from Bowery Bay WPCP to North River WPCP. However, a major caveat with this estimate is that MVs presently arrive at North River WPCP empty and depart full. Under the proposed action, the MVs arriving and departing from North River would be full in both directions. Consequently, actual fuel consumption for the North River trips may be significantly less than estimated. For the on site pumping consumption, 39.5 percent would occur at Hunts Point or Wards Island WPCP and 60.5 percent at North River WPCP. Other years of the 30 month total transshipment period will require less fuel. The peak year would represent a 1.4 percent increase in New York City's total municipal transportation fleet diesel consumption[2], and no impact to the overall city diesel fuel supply is expected. Therefore, the proposed project would have no potential significant adverse impact on energy.

O. Traffic and Parking

There is an anticipated increase in truck traffic due to the transportation of sludge cake from the receiving WPCPs. Under existing contracts trucks depart the City to destinations in Florida, Colorado and Alabama. Approximately 18 truck loads of sludge cake are removed from Wards Island each day and 16 – 20 truck loads of sludge cake are removed from Hunts Point each day. Dewatered sludge from Tallman Island WPCP, under maximum monthly conditions would generate four additional trucks from either Hunts Point or Wards Island WPCPs. Centrate from Bowery Bay WPCP shipped to the North River WPCP would generate no additional truck movements because North River does not have dewatering facilities and, therefore, has no ability to create the sludge cake to be shipped off-site. If an unexpected and temporary upset of condition at North River WPCP, or a temporary cessation of dewatering facilities at Bowery Bay WPCP occurs, Bowery Bay centrate or sludge will be shipped to either Hunts Point or Wards Island WPCPs. Sludges from both Tallman Island and Bowery Bay WPCPs, under maximum daily conditions would generate 10 trucks from either Hunts Point or Wards Island.

[2] The total municipal fleet diesel fuel consumption in FY 2006 was 15.4 million gallons. "Inventory of New York City Greenhouse Gas Emissions," New York City Mayor's Office of Operations, Office of Long-term Planning and Sustainability. April 2007.

Existing construction and sludge cake removal activities at Hunts Point generates an average daily total of 67 -71 trucks; and at Wards Island 53 trucks.[3] With the addition of four truck loads of sludge cake from transshipment, Hunts Point would generate 71-75 truck trips and Wards Island 57 truck trips. Existing construction truck movements and sludge cake removal are distributed throughout the day. The added four trucks for sludge cake removal would be scheduled to leave the facilities at night between 10 PM – 6 AM.

According to the *CEQR Technical Manual* a detailed analysis of traffic and parking is not warranted if the proposed action would generate fewer than 50 peak hour vehicle trip ends. Therefore, the proposed project does not warrant a detailed traffic analysis, and would not create potential significant adverse impacts on traffic and parking.

P. Transit and Pedestrians

The proposed action would not affect public transportation infrastructure or pedestrian walkways at any time. Therefore, the proposed project would not create potential significant adverse impacts to transit and pedestrians in the surrounding area.

Q. Air Quality

There would be a potential effect on ambient air quality from the proposed project due to the operation of barge or motor vessels traveling from Tallman Island and Bowery Bay to their respective receiving facilities; pumping generators; and additional trucks at the receiving WPCPs. The air quality analysis was conducted following the *CEQR Technical Manual* to determine the effect.

Criteria Pollutants

Based on comparisons of potential worst-case emissions rates between a barge operational scenario and a motor vessel (MV) operational scenario, it was determined that the MV operational scenario would result in the worst-case condition for both short-term and long-term emissions and concentrations. Therefore the impact analysis described herein was conducted for the conservative MV scenario.

As previously discussed, (Attachment A, Project Description, Table 3) the proposed project would generate 4 trucks daily under the proposed action and 10 trucks daily under the contingency plan from either Hunts Point or Wards Island WPCPs under maximum daily conditions. This is well below the NYCDEP *CEQR* thresholds of 100 peak hour auto trips, and below the incremental 12 truck trips per hour threshold for $PM_{2.5}$ analysis. According to the *CEQR Technical Manual* and the NYCDEP's $PM_{2.5}$ Interim Guidance (NYCDEP, March 3, 2008), the proposed action would not result in any potential significant impacts from mobile sources, and a detailed mobile source analysis is not warranted.

[3] It should be noted that over time the number of construction vehicles will decline as the construction winds down at these facilities.

The air quality analysis with respect to the criteria pollutants was performed for a reasonable worst-case condition (RWCC). The RWCC consists of the following:

- Pump generator was assumed to run continuously over 90 minutes for unloading process for MVs; and,

- Vessel emissions were accounted for traveling emissions within 400-meter (m) radius of each loading dock.

The emission rate estimates and dispersion modeling performed for the assessment indicate that no exceedances of the National Ambient Air Quality Standard are predicted for each criteria pollutant with the proposed action. The maximum 24-hour and annual average effects of $PM_{2.5}$ were well below the NYCDEP's 24-hour $PM_{2.5}$ Interim significance levels. The maximum annual $PM_{2.5}$ concentration level was below 0.1 $\mu g/m^3$; therefore, the NYCDEP $PM_{2.5}$ neighborhood impact analysis criterion was also met.

Odors

NYSDEC has published a one-hour nuisance standard of 10 parts per billion (ppb) (14 $\mu g/m^3$) for hydrogen sulfide (H_2S). Additionally, NYCDEP considers a 1 ppb increase of H_2S at the nearest receptor an indicator of significant odor impacts from wastewater related processes. This 1 ppb guidance level uses H_2S as a surrogate for malodorous compounds at sensitive receptors (e.g., residences, playgrounds, etc.).

Under the proposed action, North River, Wards Island and Hunts Point WPCPs would receive additional sludge/centrate. At North River WPCP, the centrate would be directed to the head of the plant and process through the primary and secondary treatments. The existing odor control system could easily be adjusted for the additional centrate loading, and no noticeable changes in the odor levels are expected.

While both Plants have the excess capacity to process the project sludge, the current practice is to keep the sludge loads balanced between the Wards Island and Hunts Point WPCPs, and the Plant with the lower sludge load would generally receive the sludge. The sludge from the proposed project would be stored in tanks which are already used for on-site sludge or for "visitor" sludge from other facilities, and most of the storage tanks are enclosed, sealed and odor controlled. Therefore, the proposed project is not anticipated to result in any new significant source of odor. Furthermore, the existing odor control system for the dewatering facilities could easily be adjusted for the additional loading. Therefore, no noticeable changes in the odor levels are expected from processing the project sludge.

The barge and mobile vessels are outfitted with carbon filtered odor control systems and will therefore produce minimal potential for odors. After pumping is completed and before the hose is disconnected, the possibility of residual odors from the hose is

minimized by purging the hose, either by introducing air pressure for blow-back to the vessel, or vacuum to draw the sludge/centrate to the plant.

Based upon the analyses conducted above, the proposed action would not result in any potential significant adverse air quality impacts.

R. Noise

According to the noise impact assessment guidelines outlined in the *CEQR Technical Manual*, a three (3) dBA increase over the no action condition, although just noticeable to most listeners, is considered an indicator of noise impact significance when the daytime levels are at or above 62 dBA, and for all nighttime levels as well. This criterion was used in the noise analysis. Moreover, the *CEQR Technical Manual* also defines a maximum noise analysis radius, 1,500 ft, beyond which a stationary source would unlikely generate significant noise impact even if there is no noise shield structure between a source and a receptor.

Mobile Sources

The proposed action would generate four trucks per day at either Hunts Point or Wards Island WPCPs, and none at the North River WPCP. Under the worst-case contingency plan, a maximum of 10 trucks per day would be required at either Hunts Point or Wards Island WPCPs; and none at North River WPCP. Noise effects from these mobile sources are not anticipated since there will be no doubling of Passenger Car Equivalents (PCEs) to generate a 3 dBA increase. As indicated in Attachment A, Project Description, Table 3, construction at Hunts Point and Wards Island WPCPs currently generate 51 and 35 daily truck trips, respectively. The potential cumulative daily truck trips, including the average daily load of sludge cake that is removed from these two WPCPs, would result in 71- 75 truck trips at Hunts Point and 57 truck trips at Wards Island. Since the noise effect is evaluated on an hourly basis, the cumulative daily trips under the proposed action or as part of the contingency plan would not be considered significant.

Stationary Sources

Stationary sources of noise during the proposed operations consist of generators and pumps from either the barge or MV. Since the noise impact criterion is established on an hourly noise level basis, the potential noise impact discussed is applicable for the operation of either a barge or MV. The receiving WPCPs all contain noise generating equipment, and the additional operation of equipment such as pumps or generators on the vessels will only represent a very small overall noise impact from the facilities.

Noise sensitive receptors located within proximity of the affected WPCPs are as follows:

- Tallman Island WPCP: the nearest sensitive receptors would be residences south of Powell's Cove Boulevard approximately 1,900 ft. from the loading dock (Figure LU-1).

- Bowery Bay WPCP: the nearest sensitive receptors would be non-conforming residences located in an M1-1 zone south of Berrian Boulevard, approximately 1,600 ft. from the loading dock (Figure LU-2).

- Hunts Point WPCP: the nearest sensitive receptor would be Barretto Park on the waterfront, approximately 1,500 ft to the northwest of the loading dock (Figure LU-3). Additional receptor would be the proposed South Bronx Greenway along the Ryawa Avenue, which is a proposed bicycle/pedestrian greenway that would provide open space and waterfront access within the Hunts Point peninsula (and Port Morris to the west). However the Greenway is not scheduled to be completed by the end of year 2011.

- Wards Island WPCP: the nearest sensitive receptors would be a) Wards Island Park, adjacent to the WPCP and approximately 1,200 ft. from the loading dock, and b) R. Demarco Park on the Queens waterfront approximately 1,300 ft. from the loading dock (Figure LU-4).

- North River WPCP: the nearest sensitive receptor would be Riverbank State Park, which is located on the roof deck of the WPCP. Additional receptors would be the residences east of the Henry Hudson Parkway and Riverside Drive, approximately 1,100 ft. from the loading dock.

Based on the distance between the loading dock and the closest noise sensitive receptor summarized above, it is unlikely for the proposed project to have potential significant noise impact at Tallman Island, Bowery Bay, and Hunts Point WPCPs.

At the Wards Island WPCP, the distance between the loading dock and the closest receptor is over 1,000 feet. In addition, since the facility already receives "visitor" sludge from various other NYCDEP facilities, it is anticipated that the operational noise from the proposed action would be similar to the noise from processing other "visitor" sludge. Therefore the proposed action would not result in a significant noise impact at the Wards Island WPCP.

At the North River WPCP, the same two MVs currently arriving empty to take away North River's sludge will be filled with centrate under the proposed action. Therefore no new MV trips would occur as the result of the proposed action. In the neighborhood of the North River WPCP, due to the noise shielding effect provided by the facility building, the closest residences approximately 1,100 ft from the source are anticipated to receive minimal noise from the proposed but shielded generator and pump operation at the loading dock with negligible noise impacts. Riverbank State Park is a public park located

on the roof deck of the North River WPCP. Within the park, there are many recreational facilities including an open swimming pool, which is approximately 120 feet in a slant distance from the loading dock. However, the proposed transshipment action is a short-term action that only lasts for approximately 30 months. Therefore, temporary potential noise increases would not be considered significant. The April 15, 2009 technical memorandum presents the detailed noise impact analysis.

Based upon the analysis conducted, the proposed action would not result in any potential significant adverse noise impacts.

S. Construction Impacts

The transshipment action will require no more than minor centrate pipe modifications and replacement of equipment within the Bowery Bay WPCP. The construction consists of replacing three centrate pumps in the existing dewatering building to pump centrate from the centrate wet well to the loading dock through an existing 8-inch centrate pipeline. New valves and a flow meter will be added to the existing 8-inch centrate lines to allow operational flexibility and measurement of centrate flow. These modifications would be completed by June 2009. Best management practices would be utilized to minimize any construction impacts and construction would comply with the New York City Local Law 77, which requires the use of ultra-low sulfur diesel fuel and Best Available Technology, to reduce emissions from non-road construction equipment operating on-site. Further, construction would comply with the Construction Noise Mitigation Rule and prepare and implement a Construction Noise Mitigation Plan in accordance with the Local Law 113.

The installation of a new valve on the sludge loading line has already been completed at the North River WPCP.

The proposed construction activities would be temporary and short in duration. Therefore the proposed project is not anticipated to result in any potential significant adverse construction impacts, and a detailed analysis is not needed.

T. Public Health

According to the *CEQR Technical Manual*, a proposed project could impact public health due to impacts resulting from air quality, traffic, noise, hazardous materials, or other actions that exceed City, State or Federal Standards. As described in other sections, the proposed project would not cause any such potential impacts. Therefore, no potential significant adverse impacts on Public Health would result as a consequence of this proposed action.

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ATTACHMENT D

Waterfront Revitalization Program

New York City Waterfront Revitalization Program

The New York City Waterfront Revitalization Program (WRP) identifies coastal-related issues and policies that are crucial to the revitalization, preservation, and enhancement of the New York City waterfront. The proposed transshipment project involves the temporary shipment of digested sludge from the Tallman Island Water Pollution Control Plant (WPCP) to the Hunts Point and Wards Island WPCPs. In addition, centrate from the Bowery Bay WPCP, will be temporarily shipped to the North River WPCP. The temporary shipment of the sludge and centrate would occur while nitrogen removal facilities are being constructed at the Tallman Island and Bowery Bay WPCPs. All the WPCPs are owned and operated by the New York City Department of Environmental Protection and are situated within the City's coastal zone boundary. As such, this work is subject to review under the WRP program.

The following is a review and assessment of the proposed action with the ten New York City program policies of the WRP.

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Public Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The project sites are zoned M. This policy is not applicable.

Public Policy 1.2: Encourage non-industrial development that enlivens the waterfront and attracts the public.

This policy is not applicable (refer to 1.1 above).

Public Policy 1.3: Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or would be developed.

This policy is not applicable (refer to 1.1 above).

Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

Public Policy 2.1: Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.

Of the project sites, only the Hunts Point WPCP is within a designated Significant Maritime and Industrial Area (SMIA) of New York City. The Hunts Point WPCP is in

the South Bronx SMIA. The transshipment action is a water-dependent industrial use and would not alter nor significantly adversely affect these facilities. Therefore, this policy is not applicable.

Public Policy 2.2: Encourage working waterfront uses at appropriate sites outside the SMIAs.

As discussed in Public Policy 2.1, WPCP are water-dependent uses. The project would not discourage working waterfront uses outside SMIAs.

Public Policy 2.3: Provide infrastructure improvements necessary to support working waterfront uses.

The proposed transshipment project would utilize the existing infrastructure associated with the WPCPs and not result in a net increase in demand for waterfront infrastructure; therefore, this policy does not apply.

Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

Public Policy 3.1: Support and encourage recreational and commercial boating in New York City's maritime centers.

The proposed action would facilitate the construction of the nitrogen removal facilities at the Tallman Island and Bowery Bay WPCPs, with the purpose of reducing nitrogen levels, thus improving water quality and indirectly promoting waterway use for commercial and recreational boating.

Public Policy 3.2: Minimize conflicts between recreational, commercial, and ocean-going freight vessels.

This policy does not apply.

Public Policy 3.3: Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.

This policy does not apply.

Policy 4: Protect and restore the quality and function of ecological systems within the New York coastal area.

Public Policy 4.1: Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes, and Significant Coastal Fish and Wildlife Habitats.

The proposed action would facilitate the reduction of the total nitrogen discharge to the East River and Long Island Sound. This, in turn, would protect and restore ecological quality.

Public Policy 4.2: Protect and restore tidal and freshwater wetlands.

The WPCPs, including their docks and piers, are not located within any of these wetland areas; therefore, the policy does not apply.

Public Policy 4.3: Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.

There are no vulnerable plants, fish and wildlife species, or rare ecological communities on these WPCP sites. This policy does not apply.

Public Policy 4.4: Maintain and protect living aquatic resources.

The proposed transshipment action is to facilitate upgrades at Tallman Island and Bowery Bay in order to reduce total nitrogen discharges to the upper East River and the Long Island Sound. Once completed, it would result in a net improvement to East River and Long Island Sound water quality, which in turn will protect the living aquatic resources.

Policy 5: Protect and improve water quality in the New York City coastal area.

Public Policy 5.1: Manage direct or indirect discharges to water bodies.

The proposed action would increase the reliability of effective wastewater treatment resulting in the improvement of East River and Long Island Sound water quality. The project would not result in stormwater runoff or combined sewer overflow into coastal waters. Stormwater originating in the plant would be collected and treated within the WPCPs, as under existing practices.

Public Policy 5.2: Protect the quality of New York City's waters by managing activities that generate non-point source pollution.

Refer to Policy 5.1 response.

Public Policy 5.3: Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.

The proposed project would not include excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands. This policy does not apply.

Public Policy 5.4: Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.

Refer to Policy 5.1 response. In addition, Best Management Practices are incorporated to protect existing runoff. These practices would prevent uncontrolled runoff; therefore, the proposed project would be consistent with this policy.

Policy 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

Public Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

The WPCPs are not built within the 100-year flood plain; therefore, the proposed transshipment action does not present a flood hazard. The program would not interfere with any erosion protection structures. No flooding of the Plant sites is anticipated during a 100-year flood. Therefore, the proposed project would be consistent with this policy.

Public Policy 6.2: Direct public funding for flood prevention or erosion control measures to those locations where the investment would yield significant public benefit.

The WPCPs do not lie within the 100-year flood plain and no structures are proposed to be constructed that would compromise existing flooding or erosion protections; therefore, this policy does not apply.

Public Policy 6.3: Protect and preserve non-renewable sources of sand for beach nourishment.

No renewable sources of sand would be affected by the proposed project; therefore, this policy does not apply.

Policy 7: Minimize environmental degradation from solid waste and hazardous substances.

Public Policy 7.1: Manage solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution and prevent degradation of coastal ecosystems.

No hazardous wastes would be generated by the proposed transshipment action nor would the existing treatment or storage of residuals on-site at the WPCPs be altered. Therefore, the proposed action is consistent with this policy.

Public Policy 7.2: Prevent and remediate discharge of petroleum products.
Fuels and other petroleum materials brought to project sites during the transportation process would be handled and stored in accordance with applicable regulations.

Public Policy 7.3: Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

All applicable City, State and Federal requirements will be followed, to ensure a safe transportation, delivery and storage of digested sludge and/or centrate to prevent spills. Therefore the proposed action is not expected to result in degradation of coastal resources.

Policy 8: Provide public access to and along New York City's coastal waters.

Public Policy 8.1: Preserve, protect and maintain existing physical, visual and recreational access to the waterfront.

The proposed action would not affect public access to the waterfront.

Public Policy 8.2: Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

The proposed action would not affect public access into new public or private development.

Public Policy 8.3: Provide visual access to coastal lands, waters and open space where physically possible.

The proposed action would not affect visual access to coastal lands, waters and open space.

Public Policy 8.4: Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.

The proposed action would not adversely impact waterfront open space or publicly owned land in the vicinity.

Public Policy 8.5: Preserve the public interest in and use of lands and water held in public trust by the state and city.

The proposed action would not affect lands and waters held in public trust by the state and city.

Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

Public Policy 9.1: Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

The proposed transshipment action would be visually compatible with the existing conditions at the affected WPCPs. Therefore, the proposed project would be consistent with this policy.

Public Policy 9.2: Protect scenic values associated with natural resources.

Three of the WPCPs (Tallman Island, Bowery Bay, and Hunts Point) involved in the proposed transshipment project are located within the Long Island Sound Special Natural Waterfront Area. However, these are all existing WPCPs and would not further impair any scenic values associated with natural resources in these areas. Moreover, the purpose of the transshipment project is to improve the water quality of the East River and Long Island Sound, as directed under the Consent Order from NYS Department of Environmental Conservation, and would thus improve water quality in the Special Natural Waterfront Area (see Attachment A, Project Description).

Policy 10: Protect, preserve and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

Public Policy 10.1: Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.

The proposed project sites do not contain any historic resources. This policy is not applicable.

Public Policy 10.2: Protect and preserve archaeological resources and artifacts.

There are no archaeological resources or artifacts located within the proposed project sites; therefore, this policy does not apply.

For Internal Use Only:
Date Received: _____

WRP no._____
DOS no._____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)*. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A. APPLICANT

1. Name: Keith Mahoney, P. E. - New York City Department of Environmental Protection
2. Address: 96-05 Horace Harding Expressway, Flushing, NY 11368
3. Telephone: 718 595-5972 Fax: 718 595-6966 E-mail: kmahoney@dep.nyc.gov
4. Project site owner: New York City Department of Environmental Protection

B. PROPOSED ACTIVITY

1. Brief description of activity:

   See Attachment A - Project Description

2. Purpose of activity:

   See Attachment A - Project Description

3. Location of activity: (street address/borough or site description):

   Tallman Island WPCP is on the waterfront in College Point, Queens;
   Bowery Bay WPCP is on the waterfront in Astoria, Queens;
   Hunts Point WPCP is on the waterfront in Hunts Point, Bronx;
   Wards Island WPCP is on the waterfront of Wards Island, Manhattan; and
   North River WPCP is on the waterfront in West Harlem, Manhattan.

Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

   No

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

   No

6. Will the proposed project require the preparation of an environmental impact statement?
   Yes _____ No ____✔____ If yes, identify Lead Agency:

7. Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.

   None

C. COASTAL ASSESSMENT

Location Questions:	**Yes**	**No**
1. Is the project site on the waterfront or at the water's edge?	✔	
2. Does the proposed project require a waterfront site?	✔	
3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?		✔

Policy Questions	**Yes**	**No**

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)		✔
5. Is the project site appropriate for residential or commercial redevelopment? (1.1)		✔
6. Will the action result in a change in scale or character of a neighborhood? (1.2)		✔

Policy Questions cont'd	Yes	No
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		✔
8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)	✔	
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)	✔	
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		✔
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		✔
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		✔
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		✔
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		✔
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		✔
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		✔
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		✔
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)	✔	
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		✔
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)		✔
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)		✔
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		✔
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		✔
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		✔
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)	✔	
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		✔
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		✔
28. Would the action cause violations of the National or State air quality standards? (5.2)		✔

Policy Questions cont'd	Yes	No
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		✔
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		✔
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		✔
32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)		✔
33. Would the action result in any construction activities that would lead to erosion? (6)		✔
34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)		✔
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		✔
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		✔
37. Would the proposed project affect a non-renewable source of sand ? (6.3)		✔
38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)		✔
39. Would the action affect any sites that have been used as landfills? (7.1)		✔
40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)		✔
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		✔
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		✔
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)	✔	
44. Would the action result in the provision of open space without provision for its maintenance? (8.1)		✔
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		✔
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		✔
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		✔
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)		✔
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		✔
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		✔

Policy Questions cont'd	Yes	No
51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)		✓
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		✓

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: Keith Mahoney, P. E. - New York City Department of Environmental Protection

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Applicant/Agent Signature: Keith Mahoney Date: 5/18/09

ATTACHMENT E

Existing Storage Tanks

Existing Storage Tanks

Data on existing petroleum products storage tanks at the relevant WPCPs are presented as follows.

Tallman Island WPCP:

- Three 25,000-gallon fuel oil underground storage tanks (UST)
- Two 900-gallon, two 800 gallon, and one 50-gallon waste oil aboveground storage tanks (AST)
- One 775-gallon, and one 550-gallon hydraulic oil systems
- Eleven 250-gallon engine oil totes
- Approx. 300 55-gallon containers
- Numerous misc. containers smaller than 10 gallons.

Bowery Bay WPCP:

- Three 10,000-gallon boiler fuel tanks (UST) – Main Building
- Two 10,000-gallon boiler fuel tanks (UST) – Dewatering Building
- One 4,000-gallon diesel vehicle fuel (UST) – east of Service Building
- One 4,000-gallon gasoline vehicle fuel (UST) – east of Service Building

Wards Island WPCP:

- Four 40,000-gallon fuel oil (UST) – Fuel Oil Storage Building
- One 8,000-gallon waste oil (UST) – Fuel Oil Storage Building
- Two 30,000-gallon fuel oil (UST) – Dewatering Building
- Two 1,000-gallon fuel oil (UST) – Adjacent to FDNY Training Center
- One 4,000-gallon gasoline (UST) – Adjacent to FDNY Training Center
- One 4,000-gallon diesel (UST) – Adjacent to FDNY Training Center
- Two 500-gallon unleaded fuel (UST) – Pump and Blower Building
- Two 3,000-gallon transformer oil (UST) – Electrical Building
- One 500-gallon diesel(UST) – Administrative Building
- Four 5,000-gallon fuel oil (UST) – Adjacent to Sludge Storage Tank.

Hunts Point WPCP:

- Two 30,000-gallon #2 fuel oil USTs
- Two 275-gallon diesel fuel ASTs
- One 2,500-gallon diesel fuel UST
- One 120-gallon diesel fuel AST

North River WPCP:

(All tanks are above ground)

- Two 350-gallon fuel oil
- One 550-gallon diesel/gas station
- One 550-gallon gasoline/gas station
- Two 6,000-gallon lube oil
- Two 1,300-gallon lube oil
- Two 1,400-gallon lube oil
- Two 6,000-gallon used oil
- One 1,200-gallon empty
- Ten 20,000-gallon fuel oil
- Twelve 8,000-gallon fuel oil
- Two 275-gallon fuel oil