

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Jerome Park Reservoir

other names/site number _____

2. Location

street & number Goulden, Reservoir, and Sedgwick Avenues [] not for publication

city or town Bronx [] vicinity

state New York code NY county Bronx code _____ zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [x] nomination [] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements as set forth in 36 CFR Part 60. In my opinion, the property [x] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [x] locally. ([] see continuation sheet for additional comments.)

Deputy Commissioner for Historic Preservation

Signature of certifying official/Title

Date

New York State Office of Parks, Recreation & Historic Preservation

State or Federal agency and bureau

In my opinion, the property [] meets [] does not meet the National Register criteria. ([] see continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

[] entered in the National Register

[] see continuation sheet

[] determined eligible for the National Register

[] see continuation sheet

[] determined not eligible for the National Register

[] removed from the National Register

[] other (explain) _____

Signature of the Keeper

date of action

Jerome Park Reservoir
Name of Property

Bronx County, New York
County and State

5. Classification

Ownership of Property
(check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>5</u>	<u>3</u>	buildings
<u>3</u>	<u>1</u>	sites
<u>11</u>	<u>1</u>	structures
<u>0</u>	<u>0</u>	objects
<u>19</u>	<u>5</u>	TOTAL

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

Number of contributing resources previously listed in the National Register

1 (Old Croton Aqueduct)

6. Function or Use

Historic Functions
(enter categories from instructions)

GOVERNMENT: Public Works

RECREATION: Outdoor Recreation

INDUSTRY: Waterworks

LANDSCAPE: Park

7. Description

Architectural Classification
(Enter categories from instructions)

Late Victorian: Civic Roman-inspired design

Modern Movement: Art Deco

Late 19th and Early 20th Century Landscaping:

The Pleasure Ground movement

Current Functions
(Enter categories from instructions)

GOVERNMENT: Public Works

RECREATION: Outdoor Recreation

INDUSTRY: Waterworks

LANDSCAPE: Park

Materials
(Enter categories from instructions)

foundation stone

walls stone, brick

roof asphalt

other earth, water

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

Jerome Park Reservoir
Name of Property

Bronx County, New York
County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all boxes that apply.)

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location
- C** a birthplace or grave
- D** a cemetery
- E** a reconstructed building, object, or structure
- F** a commemorative property
- G** less than 50 years of age or achieved significance within the past 50 years

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by historic American Building Survey

- recorded by Historic American Engineering Record

Areas of Significance:

(Enter categories from instructions)

Engineering, Architecture,

Community Planning and Development,

Landscape Architecture, Recreation

Period of Significance:

1895- 1950

Significant Dates:

1895-1906

Significant Person:

Cultural Affiliation:

Architect/Builder:

A Fteley, F. S. Cook

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal Agency
- Local Government
- University
- Other repository: _____

Jerome Park Reservoir
Name of Property

Bronx County, New York
County and State

10. Geographical Data

Acreeage of Property approx. 125-130 acres

UTM References

(Place additional UTM references on a continuation sheet.)

1 | 1 | 8 | | 5 | 9 | 3 | 6 | 2 | 3 | | 4 | 5 | 2 | 6 | 0 | 8 | 4 |
Zone Easting Northing

3 | 1 | 8 | | 5 | 9 | 2 | 6 | 2 | 2 | | 4 | 5 | 2 | 5 | 1 | 8 | 7 |
Zone Easting Northing

2 | 1 | 8 | | 5 | 9 | 2 | 8 | 6 | 9 | | 4 | 5 | 2 | 4 | 8 | 5 | 5 |

4 | 1 | 8 | | 5 | 9 | 2 | 9 | 7 | 3 | | 4 | 5 | 2 | 6 | 0 | 1 | 4 |

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By (See Continuation Sheet)

name/title Contact: Kathleen Howe, Historic Preservation Specialist

organization NYS OPRHP- Field Services Bureau date March 28, 2000

street & number Peebles Island, P.O. Box 189 telephone (518) 237-8643 ext. 3266

city or town Waterford state NY zip code 12188-0189

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with SHPO or FPO for any additional items)

Property Owner (Complete this item at the request of the SHPO or FPO)

Name New York City

street & number City Hall telephone

city or town New York state NY zip code 10007

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

Estimated Burden Statement: public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, D.C. 20503

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 1

7. Narrative Description

Introduction

The Jerome Park Reservoir is a 125-acre reservoir-park in the northwest Bronx, New York. It is comprised of approximately 94 acres of open water (25-feet deep), surrounded by 30 acres of constructed and landscaped earth. Built from 1895 to 1906 as part of the Croton Aqueduct system, the reservoir contains both the Old and New Aqueducts, which run through the massive east wall of the basin. The Old Croton Aqueduct, a portion of which runs along the Jerome Park Reservoir, was designated a National Historic Landmark in 1992¹. The district is bounded by Sedgwick Avenue and Fort Independence Park on the north and west, Goulden Avenue on the east, and Old Fort No. 4 Park on the south. The nomination consists of 5 contributing buildings (Gate Houses 2, 3, 5, 6, 7); 11 contributing structures (basin, east wall, west wall, core wall dam, conduits of the Old and New Croton Aqueducts, system of stabilizing revetments, Shaft no. 21, waste weir, pipe vault portal, south portal); and 3 contributing sites (Old Fort No. 4 Park, Fort Independence Park, Harris Park Annex). Also within the district are 3 non-contributing buildings (screen building, demonstration water filtration plant, Lehman College reservoir building), one non-contributing structure (mid-1980s dividing wall), and one non-contributing site (Lehman College parking lot).

The massive ancient Roman-inspired basin walls, gate houses and other reservoir features are constructed of stone, with voussoir-arched inlet and outlet openings. The WPA-era gate house superstructures are constructed of brick and stone in the Art Deco style. The north end of the reservoir is a masonry core wall dam with sloped earthen embankments. The original landscaped reservoir grounds include the Jerome Park Reservoir, and the present Harris Park Annex, Lehman College's parking lot, Goulden Avenue, Old Fort No. 4 Park, Reservoir Avenue, Sedgwick Avenue, and Fort Independence Park. Landscaping includes stone retaining walls, 94 acres of water, grass-covered berms, stone gateposts, paths, terraces, iron fences and railings, roadways, specimen plantings, rock outcroppings, and park furniture.

Historic Stone Walls

There are several types of stone walls at the Jerome Park Reservoir. They generally fall into three categories: the east wall of the reservoir basin (original division wall); the basin wall from Gate House No. 6 to Gate House No. 2; and site retaining walls, which were built to accommodate site elevation changes, create boundaries, and provide dignified landscaping.

¹ The Old Croton Aqueduct, constructed between 1837 and 1842, originally consisted of a forty-mile long, enclosed conduit running from a dam on the Croton River, through eastern Westchester and Bronx Counties, and southward to Central Manhattan. The massive gravity-fed, enclosed conduit carried the Croton River's fresh water across undulating terrain. This extraordinary early public works project played an essential role in New York City's growth and development during the nineteenth century. More for the entirety and scope of its design than for any single engineering development, the Old Croton Aqueduct is considered as one of the most significant engineering projects of the early nineteenth century. The portion of the Old Croton Aqueduct that is included in the NHL designation and runs along the Jerome Park Reservoir begins at the northeastern tip of the Reservoir, following along the east side of the Reservoir, along Goulden Avenue, and passing the intersection with Kingsbridge Road.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 2

The East Wall (Original Division Wall)

The east wall along present Goulden Avenue was intended to be the division wall between two reservoir basins. As it turned out only the west basin was completed. The east basin was excavated but work was halted, and it was eventually turned over for other government functions. When the east basin was partially filled in adjacent to the division wall, Goulden Avenue was created.

The east wall is a massive stone structure within which the Old and New Croton Aqueducts run, along with conduits intended to supply the reservoir basins. The Jerome Park Reservoir was designed to straddle the existing Old Croton Aqueduct, which passed through the site as a raised berm. The Old Croton Aqueduct could not reasonably be adapted to be the nucleus of the dividing wall: its original foundation was not large or deep enough to accommodate the excavation of the reservoir, and it could not support the lateral load of a full basin on one side while the other basin was empty. The Old Croton Aqueduct was temporarily removed from the site and then reconstructed in the new wall in its original size, shape and materials. This reconstruction was completed about 1899. The roadway along the east bank of the reservoir is directly over the Old Croton Aqueduct, which is now a National Historic Landmark.

The Jerome Park branch of the New Croton Aqueduct runs alongside the original Old Croton Aqueduct from Gate House No. 1 in Van Cortlandt Park south to Jerome Park. The portion of wall from Gate House No. 7 at the north end of the reservoir to Gate House No. 5 is 30 feet wide and contains the Old Croton Aqueduct side-by-side with the horseshoe-arched New Croton Aqueduct branch (Section F-F of the 1907 reservoir plan).

The portion of the wall south of Gate House No. 5 to the South Portal is 35-feet thick at the base. It contains the Old Croton Aqueduct on top. Two 11 foot diameter brick conduits built side-by-side beneath the aqueduct were intended to supply the east and west basins (Section E-E of the reservoir plan). The conduits end at the west-facing outlet, known as the South Portal, which feeds the reservoir today. The east-facing outlet, which was intended to feed the east basin, is now buried in fill under the Lehman College parking lot along Goulden Avenue.

South of the South Portal, the wall is approximately 16 feet thick, and carries the Old Croton Aqueduct. The wall continues past Gate House No. 6 at the southern end of the reservoir, and runs beneath Reservoir Avenue to Kingsbridge Road where the reconstructed portion of the Old Croton Aqueduct rejoins the original aqueduct (Section D-D of the reservoir plan).

Within the reservoir basin, the lower portion of the east wall is constructed of large blocks and stone excavated at the site, and the upper portion consists of the rock-face granite of the Old Croton Aqueduct, laid with broken range and random range jointing. The coping stones are rough-pointed with a tooled margin.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 3

Basin Wall

The basin wall of the reservoir runs from Gate House No. 6 at the south end along the south and west sides, past Gate House No. 3 and the Waste Weir, and terminates at Gate House No. 2. The basin wall is rubble ashlar masonry with a quarry face, composed of stone quarried at the site. The lower portion of the walls is typically cyclopean blocks of stone, and the upper courses are of somewhat smaller units. The coping stones have a rock face or pointed finish.

The typical height of the stone reservoir walls is twenty-eight feet from the reservoir floor to the top of the wall, with two and a half feet of wall exposed above the high water level. Typically, the water level is lower, exposing more of the stone wall.

The wall varies in thickness. The typical wall construction is about three feet thick at the top, battered out to about sixteen feet thick at its foundation (Section C-C of the reservoir plan). The resistance to the lateral force of the water in the reservoir was provided by the stone walls in conjunction with bedrock, such as at Reservoir Avenue/Old Fort No. 4 Park, and Fort Independence Park. At other areas, the wall was backed up with an embankment of compacted fill, such as the west side of the reservoir along Sedgwick Avenue.

Site Retaining Walls

There are numerous site retaining walls with a range of finishes and jointing, from uncoursed fieldstone to dressed stone elements such as gateposts. The most common type of retaining wall is of quarry face stone laid as squared-stone masonry or coursed rubble. The retaining wall along the south end of the reservoir roadway is of particular interest for its large stones and dry-laid construction. Other notable retaining walls are the toe wall along Sedgwick Avenue on the west side of the reservoir; and the original reservoir boundary wall along the west and north sides of what is now Fort Independence Park.

Core Wall Dam

The northern end of the reservoir, from Gate House No. 2 to Gate House No. 7, is a dam. It is composed of earth embankments reinforced by a masonry core wall (Section A-A). The inner-facing bank is covered with a concrete apron. The Aqueduct Commissioners used this type of dam at other reservoirs during this period, including the East Branch, Titicus and Carmel dams.

Basin

The stone walls and earth embankments form the irregular, picturesque shape of the basin. The basin is approximately 28 feet deep with a concrete slab floor.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 4

Gate Houses

The Gate Houses of the Jerome Park Reservoir were constructed between 1895 and 1905 in a Neo-classical style reminiscent of ancient Roman public works. Most consist of a substructure with a superstructure. Stone voussoir arches span the inlet openings. The walls are built of rock face granite laid with broken range and random range jointing. Portions, such as the intrados of the arches, have a rough pointed finish with a tooled margin. Gate Houses Nos. 2, 3, 5, 6, and 7 are included in the nomination boundaries. Gate Houses Nos. 1 and 4 are off-site elements of the reservoir and are not included in the boundaries.

The tops of the gate houses are set three and a half feet above the top of the reservoir walls. With the reservoir filled they appear about six feet above the water level. They are, in fact, more than thirty feet tall, rising from the reservoir floor. The cast iron valves and cast iron floor plates (over chambers) on top of the gate houses were intended to be protected by stone superstructures. The construction of permanent superstructures was postponed for over three decades after the completion of the gate houses. The brick superstructures of the gate houses were constructed in 1938 by the WPA in the restrained Art Deco style characteristic of public works projects of that era. They are of red brick masonry with limestone and granite trim at sills, copings, string courses, and window and door architraves. There are also carved limestone panels, inset in the brick field or included in the coursing of limestone bands, with inscriptions identifying the reservoir and the gate houses. Of particular interest are the superstructures of Gate Houses Nos. 5 and 7.

Gate House No. 1 is located off-site, approximately one mile north of the reservoir in Van Cortlandt Park, at Shaft No. 20 of the New Croton Aqueduct. This is where the Jerome Park Branch Aqueduct originates. The New Croton Aqueduct proper drops into a pressure tunnel that runs beneath the reservoir, and continues south, crossing under the Harlem River, to the 135th Street Gate House in Manhattan. Gate House No. 1 is below grade. A stone superstructure was designed but never built.

Gate House No. 2 is located at the northwest end of the reservoir. It has arched inlets at three levels to admit water from the reservoir basin into a chamber. Another chamber is supplied by two 48-inch pipes from Gate House No. 5, the main gate house. These chambers supply water into the city mains for local distribution. Gate House No. 2 also has a waste chamber (making the plan L-shaped) with the capacity to drain the reservoir into the city sewer system. The pipes leading from Gate House No. 2 to the street pass through a vaulted brick culvert, which was constructed through the west end of the core wall dam (in order to protect the dam from water damage from leaking pipes).

Gate House No. 3 along the west side of the reservoir, is similar to Gate House No. 2, except that it does not have the additional waste chamber. A stone balcony supported by stone modillions projects from the east facing façade of Gate House No. 3. The balcony is level with the coping of the substructure.

Gate House No. 4 is an off-site element of the unfinished east basin whose remnants are located in the transit yard. This structure is not included in the nomination. Gate House No. 4 was constructed to supply water to the High

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 5

Pumping Station² on Jerome Avenue (National Register listed November 10, 1983) and to the local mains. This Gate House was also similar to Gate House No. 2.

Gate House No. 5 is the main gate house, and is constructed in the East Wall of the reservoir. The Old Croton Aqueduct passes through it, and it is the terminus of the horseshoe-arched, gravity portion of the New Croton Aqueduct (via the Jerome Park Branch). Gate House No. 5 feeds the reservoir through conduits in the East Wall. This structure connected the basins; controlled the pipes feeding Gate Houses Nos. 2, 3 and 4; and could direct water from the reservoir into either the new or old aqueduct, or allow water to bypass the reservoir and continue down either aqueduct. The most dramatic expression of Gate House No. 5 was a bridge of six stone voussoir arches linking the gate house to Shaft No. 21. This bridge was demolished in the 1980's as part of the contract to build the new dividing wall.

The Gate House No. 5 superstructure has a central portal facing east on axis with West 205th Street. The portal combines random range rock face granite with limestone ashlar. The door is framed by a limestone architrave bearing an inscription. The monumental entry stair and portal of Gate House No. 5 are constructed of stone matching the original granite, as a gesture of unifying the old and new construction. Gate House No. 5 is a unifying structure in other ways as well. It is at roughly the center of the reservoir, with the most public face of any of the gate houses, as well as being the juncture of the Old and New Croton Aqueducts, and the central control point for the reservoir.

The original Gate House No. 6 was at the southern tip of the unfinished East Basin, at Kingsbridge Road. It may have been incorporated in the foundation of the Kingsbridge Armory. The current Gate House No. 6 is not one of the gate houses from the 1890's and does not have a stone substructure.

Gate House No. 7, at the north end of the reservoir, was built about 1906. It connected to the Old and New Croton Aqueducts, and anticipated the construction of the Van Cortlandt Siphon of the Catskill Aqueduct. The cast-in-place concrete substructure of Gate House No. 7 has a horseshoe-arched tunnel portal facing the reservoir basin. A mirror-image portal for the east basin is buried under Harris Park Annex. The Gate House No. 7 superstructure has a central portal facing north on axis with the Old and New Croton Aqueducts. The portal covers an open passage through the gate house.

Shaft No. 21

Shaft No. 21 of the New Croton Aqueduct connects the reservoir with the pressure tunnel of the aqueduct, which runs beneath. The shaft rises 30 feet from the reservoir floor, encased in a stone cylinder of 45 feet diameter. A cast iron cover of 8 feet diameter covers the top of the shaft. Shaft No. 21 is connected to Gate House No. 5 by a

² The High Pumping Station is individually listed on the National Register. It is located on Jerome Avenue, south of Mosholu Parkway, adjacent to the unfinished east berm. Although historically associated with the Reservoir, it is outside the boundaries of the Jerome Park Reservoir historic district nomination. This off-site resource, completed in 1906, was constructed simultaneously with the Reservoir. It was constructed in the Romanesque Revival style and is significant as an example of turn-of-the-century utilitarian civic architecture.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 6

pipe beneath the reservoir floor, and was connected by an arched stone bridge until the 1980's when the bridge was demolished to facilitate the construction of a dividing wall across the reservoir basin. The shaft wall is constructed of the same type of stone as the gate houses.

Waste Weir

The Waste Weir is a structure along the West Wall of the reservoir, just south of the new dividing wall. It has no superstructure. It is located behind three rectangular openings in the basin wall that allow water to waste out of the reservoir.

Pipe Vault Portal

The Pipe Vault Portal is an arched opening in the Reservoir Boundary Wall providing access to the Pipe Vault behind Gate House No. 2 along Sedgwick Avenue. It has a semicircular stone voussoir arch with metal-clad double doors, approached by stone stairs. It is of particular interest for its design and workmanship. Behind the portal is a masonry barrel vault that passes through the entire earthen embankment behind Gate House No. 2. It is intended to prevent structural damage to the dam from pipe leaks.

South Portal

The South Portal is an arched opening in the east wall of the reservoir. It terminates the conduit from Gate House No. 5 and feeds the water of the Old or New Croton Aqueducts into the West Basin. It is a projecting element of range squared stone rock face granite, with a beveled rough pointed coping. The inlet opening is a large stone voussoir arch. Buried beneath the Lehman College parking lot is an equivalent opening that would have fed the abandoned East Basin: this opening is circular rather than arched.

Park Landscaping

The reservoir setting is notable for its intact historic park features. Park landscaping exists within both the current and original reservoir grounds, including what is now Old Fort No. 4 Park (1913, 1931, 1934), Harris Park Annex (1940), Fort Independence Park (1915), Reservoir Avenue and Sedgwick Avenue. Landscaping includes stone retaining walls (see above), 94-acres of water, stairways, paths, paved areas, iron fences, benches, rock outcroppings, and specimen plantings. Of particular interest are the rock outcroppings and flagstone-paved overlook in Old Fort No. 4 Park; allees of pin oaks along Reservoir and Sedgwick Avenues; and granite cobble paved overlook in Fort Independence Park. Typical park landscaping consists of asphalt paving, hexagonal pavers, granite cobbles and edging, and New York City standard park benches.

Non-Contributing Buildings/Structures

There are three non-contributing buildings (the screen building, the demonstration water filtration plant, and the Lehman College reservoir building), one non-contributing structure (the reservoir dividing wall), and one non-

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 7 Page 7

contributing site (Lehman College parking lot) within the boundaries of the Jerome Park Reservoir. The screen building is a small cinder block structure dating from the second half of the 20th century, located near Gate House No. 6. The Demonstration Water Filtration Plant is a large prefabricated temporary structure constructed to the south of Gate House No. 5 along the east side of the reservoir. It was constructed in the late 1980's. The Reservoir Building owned by Lehman College is a prefabricated ca. 1970s structure located to the south of the Demonstration Water Filtration Plant along the east side of the reservoir, within the Lehman College parking lot. The parking lot was installed in the 1960s on land that was once part of the Harris Park Annex.

The dividing wall of the reservoir was constructed in the mid-1980's as part of the preparation for construction of a filter plant in the north end of the reservoir. (This project proposed for Jerome Park Reservoir has since been cancelled.) The wall crosses the reservoir east-west in a dog leg shape, spanning from Gate House No. 5 to the West Wall between the Waste Weir and Gate House No. 2. The top of the dividing wall is a roadway that connects the west side of the reservoir with Shaft No. 21 and the east side of the reservoir. The wall divides the reservoir into a North Basin of about 1/3 of the area of the reservoir, and a South Basin of about 2/3 of the area. The top 8 to 10 feet of the Dividing Wall is faced with rock face granite.

Historic Integrity

The Jerome Park Reservoir is a significant example of late nineteenth and early twentieth century civic architecture and engineering in the Bronx which retains a relatively high degree of integrity of location, design, setting, materials, workmanship, feeling, and association. Its historic park-like surroundings further add to the period integrity of the reservoir.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 1

8. Narrative Statement of Significance

Introduction

Jerome Park Reservoir, which was built from 1895 to 1906 in Kingsbridge Heights in Bronx County, New York, is a significant site under Criterion A in the areas of engineering, architecture, community planning and development, landscape architecture, and recreation. As a major component of the Croton Aqueduct System, it exemplifies one of the nation's great engineering masterpieces. The Old and New Croton Aqueducts, both hand-built masonry tunnels, are incorporated in its massive stone walls. The reservoir is also significant under Criterion C as an important architectural resource. The reservoir's walls, gate houses and other structures were constructed by stonemasons in an ancient Roman-inspired design, under the direction of the same team of men that designed and built the rest of the New Croton Aqueduct. Jerome Park Reservoir also played a unique role in the history of New York City and Bronx County. It was planned to meet the City's ever-expanding need for water, and to encourage development of an area that had recently been annexed from Westchester County. The reservoir was set into the Frederick Law Olmsted street plan of 1877, and it became and remains the largest body of water in the Bronx. An outstanding example of a landscaped reservoir-park, it was designed during the "New Parks" movement that led to the creation of the adjacent Mosholu Parkway and Van Cortlandt Park. Parts of the original landscaped reservoir grounds have been incorporated into the city's park system.

The Old Croton Aqueduct was built between 1837 and 1842. It was a unique stone and brick structure that stretched 40 miles, from a dam on the Croton River to a reservoir on 42nd Street, on the site of the current New York Public Library. Within a few years of its completion, however, it could not adequately supply water to the exploding population of the City.

The City's campaign to increase the water supply included the construction of the Central Park Reservoir, the High Bridge Tower and Reservoir, and many storage reservoirs and dams in Westchester and Putnam Counties. It was called the Croton Waterworks Extension.

In 1874 New York City annexed a large portion of southern Westchester County, from the Bronx River west to the Hudson. In response to the renewed threat of water shortages, plus the need for a water supply system for the new district, the Croton Waterworks Extension was expanded in 1875 to include plans for an additional aqueduct and a new distributing reservoir: the New Croton Aqueduct and Jerome Park Reservoir. They were to be interconnected with the Old Croton Aqueduct in the newly acquired territory. The New York City Department of Public Parks selected Frederick Law Olmsted, landscape architect, and J.J.R. Croes, civil and topographical engineer, to prepare a comprehensive design for the new area. Their plan of 1877-1878 was adopted by the city. Portions of the plan were altered to allow denser and more commercial development, but the street plan in some areas, including the area around Jerome Park Reservoir, was constructed as designed.

In 1895 Italian immigrant stonemasons began building the Jerome Park Reservoir. They positioned the two Croton Aqueducts within a thirty-foot thick stone retaining wall that runs down the eastern edge of the reservoir,

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 2

and constructed a number of thirty-foot-high stone gatehouses that are reminiscent of ancient Roman structures. Their work was completed in 1906.

In its original design, the Jerome Park Reservoir was to be over twice as large as it is today, and was to include two islands and a peninsula. It was to serve as a receiving and distributing reservoir, and a final settling-basin for Croton water. The Chief Engineer noted that it would also “add greatly to the attractiveness of the surrounding grounds.” There is some evidence suggesting that Frederick Law Olmsted had a hand in Jerome Park’s design.

The original site was 309 acres. 212 acres were to be water and most of the rest landscaped. It was designed to be the world’s largest distributing reservoir.³

When the Jerome Park Reservoir opened, it was a reservoir-park. Some of the original land that had been part of the reservoir’s landscape became city parks. Old Fort No. 4 Park and Fort Independence Park were created on the sites of Revolutionary War forts, and have retained their picturesque natural topography and spectacular views across the water. Harris Field and Harris Park Annex provided a green border for the eastern edge of the water.

Jerome Park Reservoir is a century-old component of the Croton Aqueduct System, one of America’s oldest and greatest engineering masterpieces. The reservoir is remarkable for its stone structures, its Olmsted-inspired landscaping, its place in the history of the Croton System, and its role in the development of the Bronx.

History of the Jerome Park Community

Early History

There was widespread occupation of the modern Jerome Park area by Native Americans before the arrival of European settlers. However, this site has been so extensively excavated in construction of the reservoir that the mounds adjacent to Fort Independence Park are thought to be the only undisturbed area where Native American artifacts or remains of early European settlements might be found.

The American Revolution

The Kingsbridge Heights neighborhood of the Bronx was an area of great strategic importance in the Revolutionary War era. The area was known in the late eighteenth century as the manor of Fordham. Its heights overlooked and dominated the Harlem River and the plain where the Van Cortlandt House and the King’s Bridge were located, in the valley of the Tibbett’s Brook, between the heights and Riverdale (once known as Cordlands Hill). The King’s Bridge over the Harlem River was Manhattan Island’s overland connection with the mainland.

³ Stephen Jenkins, *The Story of the Bronx*, G.P. Putnam’s Sons, 1912, p. 336.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 3

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

At this point the road from the city divided and led to the three major routes to the north-- the post roads to Albany, White Plains and Boston.

In 1776, General George Washington closely examined the area and a plan was developed for a series of forts along the heights from Fordham to Spuyten Duyvil.⁴ They were to dominate the Harlem River, the King's Bridge, and the post roads. Two of the forts were constructed approximately where Old Fort Four Park and Fort Independence Park are today. General Washington stayed at the nearby Van Cortlandt mansion and made a temporary headquarters there during the Revolutionary War. The New York City area fell to the British in September 1776. To avoid capture, General Washington and his forces slipped away by cover of night, leaving camp fires burning to deceive the British. General Washington also stayed in the Van Cortlandt mansion on the night before his triumphant return to New York City at the end of the war. Revolutionary war relics were found during construction of the Jerome Park Reservoir.

The Nineteenth Century

In the second half of the 19th century, the Kingsbridge Heights area still primarily consisted of large estates and farmland, such as the Augustus Van Cortlandt and John Dickinson Estates, with the beginnings of residential development. The future reservoir site was on the border between the towns of Kingsbridge and West Farms.

In 1866, the James Bathgate Farm was acquired by the Jerome Park Villa Site Improvement Company.⁵ It was soon leased by the American Jockey Club which developed a racetrack in Kingsbridge Heights called Jerome Park, named for Leonard W. Jerome, the Wall Street speculator whose daughter, Jennie Jerome, would later become famous as Winston Churchill's mother. The track was located approximately where Lehman College is today. Jerome, who was head of the New York Jockey Club, had been encouraged by the success of the track at Saratoga Springs, New York. Jerome Park was the first formal, commercial racetrack in New York City, and its high reputation helped lift American horse racing from disrepute. It was the original home of the Belmont Stakes race, named for August Belmont, one of Jerome's friends and backers. The Jerome Park track was closed in 1887.⁶

The Croton Waterworks Extension

On the 4th of July in 1842, first flowed into Manhattan via the Croton Aqueduct. The Croton Aqueduct consisted of a forty-mile long, enclosed conduit running from a dam on the Croton River in Westchester County, south to the Bronx, and central Manhattan. New York's population grew persistently faster than expected in the second half of the 19th century due to the unanticipated rise in immigration, and the flow of Croton water that seemed so abundant in 1842 appeared insufficient only a few years later. In 1849, the year after the High Bridge went into service, the Croton Aqueduct Department was created. It quickly developed a plan, called the Croton Waterworks Extension, to increase the flow of water through the aqueduct, and to

⁴ Valentine's Manual of Old New York, No. 7, New Series, 1923, pp. 254 - 260

⁵ Stephen Jenkins, *The Story of the Bronx*, G.P. Putnam's Sons, 1912, p. 290.

⁶ Ron Hale, "New York Tracks - A Short History", The Mining Company, General Internet Inc. v5.2, December, 1997, p.1

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 4

increase the storage of water by building additional dams and reservoirs to impound water along the Croton River in Westchester and Putnam Counties.

The New Central Park Receiving Reservoir at Yorkhill, built from 1858 to 1863, was the first major project of the Croton Waterworks Extension. It was designed to fit into the new Central Park. The next projects included the installation of larger pipes, storage tower, and expanded landscaping at High Bridge. Other major projects were delayed by the Civil War, but at its cessation work resumed to create the High Bridge Tower and Reservoir and the Boyd's Corners Dam, and to continue expanding service to all parts of the city.

The Croton Aqueduct Department was taken over by the Department of Public Works in 1870. The significance of the water supply system, along with the road paving and sewer operations, was immediately recognized by the first Commissioner of Public Works, William Marcy "Boss" Tweed, who harnessed it for his bold schemes of malfeasance and racketeering. His corruption and its lingering effects shook the faith of the public, and in 1883 control of the design and construction of new works was turned over to the newly appointed Aqueduct Commissioners. Benjamin S. Church, who had been the Resident Engineer of the Old Croton Aqueduct since 1861 (and had a pre-Tweed reputation) was appointed Chief Engineer. He would be the mastermind behind the New Croton Aqueduct, which greatly increased the size and capacity of the city's water supply system. In 1888, Alphonse Fteley, who had been the Consulting Engineer, succeeded Church. Aqueduct Commissioners reports were issued covering the periods from 1883 to 1887, 1887 to 1895, and 1895 to 1907. These reports were lavishly illustrated by the Draughting Bureau, which was headed by Assistant Engineer Frederick S. Cook. Cook was responsible for the architectural appearance of most of the New Croton Aqueduct, dams and reservoirs.

The New Croton Aqueduct, with a receiving and distributing reservoir at Jerome Park, was part of the Aqueduct Commission's original design from 1884. The City decided to build the aqueduct first, and the construction of the Jerome Park Reservoir did not begin until five years after the aqueduct went into service.

Role of Olmsted and Croes

Jerome Park was in the 24th Ward of New York City, a part of the territory annexed from Westchester County in 1874. The Jerome Park Reservoir was first formally recommended in 1875, when Commissioner of Public Works Gen. Fitz John Porter ordered a survey. According to Edward Wegmann, the Aqueduct Commissioners' Assistant Engineer for Construction, "Two routes... were surveyed, commencing a quarter of a mile below the head of Croton Lake and terminating near Jerome Park, where it was proposed to construct a large receiving reservoir. Nothing more was done towards constructing this work."⁷

The 1875 survey occurred at about the same time as the survey work for the comprehensive city plan of the 23rd and 24th Wards. In 1877, the Department of Public Parks issued plans of existing streets and planned streets and parks designed by Frederick Law Olmsted, Landscape Architect and J. J. R. Croes, Civil and Topographical Engineer. This project was intended to develop the newly acquired districts in a way that would preserve the

⁷ Edward Wegmann, *The Water Supply of the City of New York 1658 - 1895*, John Wiley & Sons, 1896, p. 90

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 5

beauty and park-like character of certain areas, such as Riverdale and Kingsbridge Heights. According to Charles E. Beveridge, Editor of the Frederick Law Olmsted Papers, the plan for the 23rd and 24th Wards was Olmsted's, "...largest and most comprehensive city planning project for which he actually prepared plans as well as written reports...the closest thing to a full city plan that Olmsted ever attempted."⁸ Their street plans were adopted by the city in 1877 and 1878, and subsequently constructed in large part as designed.⁹

The area surrounding the Jerome Park Reservoir is a remarkably intact portion of the Olmsted and Croes plan of 1877.¹⁰ According to Daniel J. Donovan, the Topographic Engineer of the Borough of the Bronx:

"To determine the extent to which Olmsted's design was actually followed in the Kingsbridge Heights vicinity, the plan [Adopted Map D No. 23] was compared with the final adopted map: *Section 21 of Final Maps and Profiles of the 23rd and 24th Wards*, dated June 17, 1895, Topographical Bureau, Louis A. Risse Chief Engineer. Comparison of these plans confirms that the Final Map of 1895 is substantially in conformance with the 1877 Olmsted plan, much of it, in fact, in exact conformance. The most significant change in the Kingsbridge Heights vicinity from the 1877 Olmsted design to the Final Map of 1895 is the inclusion of the Jerome Park Reservoir."¹¹

It is clear that Olmsted's intent in providing neighborhoods like Kingsbridge Heights with narrow, curvilinear streets was to assure that they would maintain their residential character, discourage inappropriate development, and preserve their existing natural beauty. The charming character of the residential neighborhoods surrounding the reservoir is due not to chance, but to the intervention of Olmsted, whose influence similarly saved Riverdale from the imposition of a rectilinear street grid.

One of the great distinctions between Olmsted's work in Central Park and in the Riverdale and Kingsbridge Heights areas was that the site on which Central Park was built was not considered attractive: it consisted of empty lots, squatter camps, marshes and even a bone boiling yard. The landscape of the park is almost entirely artificial. Riverdale and Kingsbridge Heights, on the other hand, had a naturally exquisite landscape that had only to be enhanced with the skillful introduction of curved roadways. Commercial areas were limited and were to serve the extensive residential neighborhoods.

It is unfortunate that Olmsted's ambitious and sophisticated design for the Bronx, undertaken just a few years after the opening of Central Park in 1874, is so little known. While his plans for the Bronx were adopted by the city and went into construction, Olmsted fought bitterly against politicians whom, "...he accused of interfering with his

⁸ Charles E. Beveridge, Editor of the Frederick Law Olmsted Papers, Department of History, The American University, Washington, D.C., in a letter to Bronx Borough President Stanley Simon, July 3, 1984

⁹ Adopted Map D No. 23, Dept. Of Public Parks, Plan of Streets, Roads and Avenues Lying West of Jerome Avenue and South of the Road from Mosholu to Williams-Bridge, in the Twenty-fourth Ward, 1877, signed by Frederick Law Olmsted, Landscape Architect, and J. J. R. Croes, Civil and Topographical Engineer.

¹⁰ Adopted Map D No. 23, Dept. Of Public Parks, Plan of Streets, Roads and Avenues Lying West of Jerome Avenue and South of the Road from Mosholu to Williams-Bridge, in the Twenty-fourth Ward, 1877, Topographic Bureau, Office of the Bronx Borough President

¹¹ Daniel J. Donovan, RA, Topographic Engineer, in a letter to Jerome Park Conservancy Preservation Committee Chairman Robert Kornfeld, Jr., February 6, 1998

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 6

designs and according more importance to patronage than to ... proper administration.”¹² Olmsted’s correspondence with Croes reflects their frustration.

Olmsted was dismissed by the Department of Public Parks in 1878. He moved to Brookline, Massachusetts in 1882, but he is known to have, “...continued to concern himself with the fate of public parks in New York City...”¹³

According to the *Encyclopedia of the City of New York*:

“[Olmsted] considered his landscapes both works of art and social experiments that would have a civilizing influence. He denounced the gridiron system of streets as a relic of an earlier stage of urbanization and envisioned instead a compact business district surrounded by more open residential neighborhoods and spacious, naturalistic parks; this vision is most clearly set forth in his proposals for the Bronx and for the Parkways in Brooklyn. Although often frustrated by political maneuvering and competing ideas of what a park should be, Olmsted and his collaborators had a profound influence on New York City.”¹⁴

The editors of the Frederick Law Olmsted Papers have assigned an Olmsted “job number” to Jerome Park. The current contents appear to be limited to proposals related to the clubhouse. It has not yet been determined if Olmsted played a direct role in the design of the reservoir, although the plans of the reservoir prepared by the Aqueduct Commissioners in the 1880’s and 1890’s unmistakably show his influence. There is a reasonable likelihood that they were based on a preliminary design by Olmsted and Croes, which may exist in the numerous sketches and notes from the design of the 23rd and 24th Wards that have not yet been catalogued.

In 1885, as part of the process of designing the Jerome Park Reservoir, the Aqueduct Commissioners passed a resolution requesting the Department of Public Parks and the Department of Public Works to furnish the Commissioners with, “. . . any preliminary surveys, results thereof, and reports thereon . . . for a reservoir to be connected with the New Croton Aqueduct, and located north of the Harlem River.”¹⁵ The reference to the Department of Public Parks apparently refers to the work of Olmsted and Croes, but there is no description of what was furnished. Olmsted and Croes were surely aware that a reservoir would eventually be built on the site. Croes had an extensive engineering career in the Croton Aqueduct Department. He took over preparation of drawings for the New Central Park Receiving Reservoir in 1860,¹⁶ was Resident Engineer for the High Bridge improvements starting in 1862,¹⁷ and was in charge of construction of the Boyd’s Corners Reservoir and dam, which was completed in 1874.¹⁸

¹² Kenneth Jackson ed., *The Encyclopedia of the City of New York*, Yale University Press, 1995, p. 864

¹³ Jackson, p. 864

¹⁴ Jackson, p. 864

¹⁵ Walter H. Sears, Report of Chief Engineer, City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1895-1907*, 1907, p. 122.

¹⁶ Wegmann, p. 71

¹⁷ Wegmann, p. 73

¹⁸ Wegmann, p. 79

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 7

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

The Olmsted and Croes 1877 plan shows the Jerome Park race track but does not indicate the reservoir.¹⁹ Being an adopted plan for construction, it could not indicate proposed or future elements. The City kept a low profile concerning its plans for Jerome Park right up until the land was acquired in order to discourage speculation. The Olmsted and Croes street plan essentially blocks out territory for the reservoir, bounded by Sedgwick Avenue to the west, Kingsbridge Road to the south, Jerome Avenue to the East, and what would become Mosholu Parkway and Van Cortlandt Park to the north. They also removed the existing Old Boston Road from across the site. This open area which contained the race track, service roads and outbuildings, is reflected in the Map of Location and Environs published by the Aqueduct Commissioners in 1895. The detailed design of the reservoir was produced by the Aqueduct Commissioners during the years that the Olmsted and Croes street plan was under construction.

There were other professional contacts that also suggest that Olmsted and Croes would have been aware of the plans for Jerome Park Reservoir. Benjamin Church, Chief Engineer of the Aqueduct Commissioners, was a familiar figure to both Croes and Olmsted from the 1860's when they were all involved with work in Central Park. Olmsted and Church were club-mates at the Union League Club. Croes was a colleague and admirer of Church's: the copy of Church's *Notes and Suggestions on the Croton Water Works and Supply for the Future*, from 1876, in the collection of the New York Public Library, was donated by Croes, with a note, "With the compliments of J. James R. Croes, Civil and Topographical Engineer Department of Public Parks, NYC." Croes would also go on to join several committees of experts to review design issues of the New Croton Aqueduct.

Construction of Jerome Park Reservoir

There was public debate as to whether a new receiving reservoir was necessary or not. The Jerome Park Reservoir was not included in the recommendations for a new aqueduct in the report of Isaac Newton, Chief Engineer of the Croton Aqueduct (under the Department of Public Works) in 1882. Its necessity was supported in the report of W. E. Worthen, C. E., who was subpoenaed by the Aqueduct Commissioners to testify at a public hearing in early 1884. Worthen wrote that, "No provision has been made in the Quaker Bridge plans for additional storage reservoirs within the city limits...This is the fundamental error of the project."²⁰

The decision to build the Jerome Park Reservoir was reached by the Aqueduct Commissioners in early 1884, soon after their appointment. It was not yet known when the site would be obtained or the funding approved.²¹ The first objective was the completion of the New Croton Aqueduct conduit.

The purpose in constructing the Jerome Park Reservoir was to create a storage and distributing reservoir along both the Old and New Aqueducts. It would provide water to the city if either or both of the Aqueducts had to be shut off for repairs. Also, it would provide local supply in the area of the 23rd and 24th Wards. According to Church,

¹⁹ Adopted Map D No. 23, Dept. Of Public Parks, 1877

²⁰ W. E. Worthen, "Report of W. E. Worthen, C. E. on the Projected Reservoir and Aqueduct for 'The Additional Water-Supply of New York City.'" 1884

²¹ Wegmann, p. 209

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 8

“80 to 100 million gallons were reserved for the Twenty-third and Twenty-fourth Wards.”²² An examination and survey for a Receiving and Distributing Reservoir at Jerome Park were performed in 1885.²³

Church pushed for immediate construction of the Jerome Park Reservoir, believing that the city’s water supply was in danger of serious interruption until it was completed. The project was delayed due to the opinion of Newton that it would not be needed for at least ten years.²⁴

The schematic representation of the Jerome Park Reservoir shown in the system map of 1887 shows a curvilinear form reminiscent of the New Central Park Reservoir. The location and environs plan published by the Aqueduct Commissioners in the 1895 report has a similar but revised form, and is completely integrated with the Olmsted and Croes street plan, including two “Proposed New Avenues,” Reservoir Avenue (from Sedgwick Avenue east and south to Kingsbridge Road) and Sedgwick Avenue North (from Van Cortlandt Avenue West northeast to Goulden Avenue).

A more detailed plan published in 1895 reveals a design that had advanced remarkably, and had achieved a level of landscaping sophistication that did not exist previously in the Croton System. It can be seen that rather than being like the New Central Park Reservoir, the 1895 design of the Jerome Park Reservoir actually had more stylistic kinship with the Lake and the Pond in Central Park, smaller bodies of water designed by Olmsted. In scale, it resembled the picturesque artificial lakes of the storage reservoir system in the Croton Watershed.

The 1895 design of the Jerome Park Reservoir called for sloped earth embankments rather than a retaining wall around most of the reservoir. This design also had two islands and a peninsula. Jerome Park Clubhouse Island and Oak Ridge Clubhouse Island, one in each basin, were planned for existing highpoints where existing clubhouses from the race track would be preserved. The peninsula, at the northwest side of the reservoir, was the intended location of Shaft No. 21. The roadway on the dividing wall (the East Basin Wall along the Goulden Avenue side of the as-built Reservoir) jogged to provide access to both islands. The bridge from Gate House No. 5 to Shaft No. 21 would have allowed access to Gate House No. 5 from the peninsula, which projected from the area where Fort Independence Park is today.

Chief Engineer Alphonse Fteley wrote in 1895 that, “...it is expected that the new reservoir will add greatly to the attractiveness of the surrounding grounds.”²⁵ When the Jerome Park Reservoir went into construction, the surrounding streets had single family homes and a few small farms. As the twentieth century progressed, apartment buildings were constructed to take advantage of the view of the reservoir and its grounds. Olmsted’s curvilinear streets were lined with trees, including a mile-long row of pin oaks that runs from the south end of the Jerome Park Reservoir, along Reservoir and Sedgwick Avenues, through Fort Independence Park, to Hillman Avenue.

²² Benjamin S. Church, Report of Chief Engineer, City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, 1883 to 1887*, 1887, p. 43

²³ Benjamin S. Church, Report of Chief Engineer, 1887, pp. 48, 49

²⁴ City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1887 to 1895*, 1895, pp. 37, 38

²⁵ Alphonse Fteley, Report of Chief Engineer, City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1887 to 1895*, 1895, p.80

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 9

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

The designers were instructed in 1895 to revise the plan to allow for more water storage without increasing the footprint of the site, so the islands and peninsula were eliminated to allow for more excavation.²⁶ In the final design, as reflected in the plan from the 1907 Commissioners Report, the jog in the wall remains though the islands have been eliminated, and the bridge from Gate House No. 5 to Shaft No. 21 remains. Also stone face walls were planned all around the reservoir rather than the earthen banks, except for a short strip along the northern side, where a core wall dam with sloped earthen banks was designed.

The construction of the reservoir aroused several controversies. The Merchants' Association demanded a grand jury investigation into poor workmanship at the New Croton Dam and Jerome Park Reservoir. It was reported that the reservoir's walls were not watertight, that, "...the commissioners seldom visit the Jerome Park Reservoir and that the [New Croton] dam was like a sieve with water spouts gushing through cracks with such force to permit a man to walk under the arch of the streams without getting wet..."²⁷

To investigate the allegations concerning the reservoir, a Special Committee of Engineers was set up under William Burr and John Freeman. Their 1903 report, submitted to the Aqueduct Commissioners, contains an evaluation and remedial recommendations for the concrete floor of the reservoir, the workmanship of the stone walls, and the use of "stone dust" from the site as aggregate for mortar. The report did not find major flaws, but called for more careful inspection. The mortar composition was approved.²⁸

According to Walter H. Sears, Chief Engineer in 1907, "Assistant Engineer F. S. Cook had charge of the Draughting Bureau of the Aqueduct Commissioners, where all the important works constructed by the Commissioners were designed, from January 23, 1884, to March 1, 1905, when he was promoted to the position of Division Engineer and placed in charge of the construction of the Jerome Park Reservoir."²⁹

Gate House Superstructures

By the time Cook took charge in the field, much of the reservoir's basin and gate houses had been completed, but designs for the gate house superstructures had not been shown in the 1887 or 1895 reports. Preliminary designs were underway as of 1903 (and probably much earlier). Proposed designs, along with a model of Gate House No. 5 were publicly exhibited by Cook at the 1904 Louisiana Purchase Exposition in St. Louis, Mo., in a joint display of the Aqueduct Commissioners and the Department of Water Supply,³⁰ but they were not published in the 1907 Report to the Aqueduct Commissioners.

²⁶ Aqueduct Commission, 1907

²⁷ Mary Josephine D'Alvia, *The History of the New Croton Dam*, 1976, p.162

²⁸ Prof. Wm. H. Burr and Mr. John Freeman, "Report of the Special Committee of Engineers Upon Certain Details of Construction of the Jerome Park Reservoir, July 27 1903"

²⁹ Walter H. Sears, Report of Chief Engineer, City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1895 - 1907*, 1907, p. 138

³⁰ Cook and Taber, pp. 14, 16

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 10

The substructures of Gate Houses Nos. 1 to 7 were completed in 1905. Trowbridge and Livingston, Architects were retained to prepare plans and specifications for the superstructures, and their design drawings were dated 1906.³¹ Trowbridge and Livingston, Architects were a well known New York firm whose work included the St. Regis Hotel, and the B. Altman Department Store on 34th Street. It is not clear why a consultant was retained for this project, while the other works had been designed in-house by the Aqueduct Commissioners. It may be that the Aqueduct Commissioners' engineers wanted to impress upon a fickle city government the significance of the reservoir at a time when its future was in doubt. It may be that the Draughting Bureau could not produce the work: they were occupied with engineering problems of the reservoirs and the New Croton Dam, and were without Cook, who had directed their architectural designs.

The proposed superstructure designs for the reservoir gate houses were not published in the Report to the Aqueduct Commissioners. This may reflect an ongoing effort by the Department of Water Supply, inherited from the Department of Public Works, to minimize the scope and cost of the reservoir, and to delay or prevent its being built.

The 1907 report states that, "...the construction of the superstructures has been postponed at the request of the Department of Water Supply, Gas and Electricity until it is decided whether a filter plant is to be built in the East Basin of the Jerome Park Reservoir."³² This is a reference to the 1905 Burr-Hering-Freeman Commission recommendation to filter the water of the Croton through a slow sand filter in the East Basin of the Jerome Park Reservoir. Jerome Park had originally been intended to purify water by subsidence, with the idea that most of the water of the new aqueduct would pass through the reservoir to allow settlement. The Burr-Hering-Freeman Commission recommended filtration of the proposed Catskill system as well (land was purchased in Westchester County for the purpose, but the filters never materialized).³³

The Bureau of Water Supply, Gas and Electricity requested the Aqueduct Commissioners to suspend construction of the East Basin of the Jerome Park Reservoir until it was decided whether to build the filter there. In 1907 the Bureau requested permission to, "install an experimental filter station by the National Roche Filtering Company at the Jerome Park Reservoir."³⁴ In 1910 it was decided to add chemicals to the water, particularly chlorine, in the gate houses of the West Basin, and not to filter the water.

There were several structures of the Croton system designed by the Department of Water Supply personnel even after the Aqueduct Commissioners were given general design responsibility. The Amawalk dam and reservoir was designed by the Department of Water Supply.³⁵ The Amawalk dam made visual reference back to the heritage of the Old Croton Aqueduct: the spillway had the sinusoidal curve of Jervis's Old Croton Dam, and the neo-Egyptian portal over the tunnel entrance is reminiscent of the original receiving and distributing reservoirs. Perhaps this reflects a nostalgia for the days before the Aqueduct Commissioners.

³¹ Aqueduct Commission, 1907, p. 15

³² Aqueduct Commission, 1907, p. 15

³³ Charles H. Weidner, *Water for a City*, Rutgers University Press, 1974, p. 104

³⁴ *Minutes of the Aqueduct Commissioners*, 1907, p. 94

³⁵ Cook and Taber, p.12

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 11

The High Pumping Station on Jerome Avenue was also designed by the Department of Water Supply, under George W. Birdsall, Consulting Engineer, and constructed from 1901 to 1906. While contemporary with, and connected to, the Jerome Park Reservoir, the pumping station is stylistically different, being Romanesque Revival, rather than the style of the Aqueduct Commissioner's work. Also, the High Pumping Station is constructed of brick, whereas the Jerome Park Reservoir structures, like all of the works of the Croton system, were of stone.

The High Pumping Station is now listed on the State and National Registers of Historic Places. It was constructed next to the Jerome Park Reservoir Keeper's House, one of the finest of the architectural works designed in Cook's Draughting Bureau. (The Keeper's House, which stood at the intersection of Jerome Avenue and Mosholu Parkway, was demolished in the twentieth century to make way for Tracey Towers, a high-rise housing project.)

The Aqueduct Commissioner's work was descended from the Roman-inspired work of the Old Croton Aqueduct with traces of Renaissance Revival, Italianate and Romanesque. The sub-structures of their work, such as the Jerome Park gate houses, tended to be pure, muscular Roman-inspired architecture. The style of their designs was consistent over the twenty-seven years that their works were under construction, while it also had an eclectic quality that enriched the system. The 135th Street Gatehouse and the New Croton Dam, for example, had a Romanesque flavor while maintaining the essential character of Croton system architecture. This consistency is appealing, because it gives the whole Croton system a coherence, even though it evolved in numerous campaigns in far-flung places over 75 years.

The Aqueduct Commissioners prepared a new set of designs for the Gate House Superstructures at the Jerome Park Reservoir, that superseded the Trowbridge and Livingston designs. The new designs were produced by the Draughting Bureau while Cook had risen to the position of Acting Chief Engineer. They were completed in 1909, and were signed prominently by Cook. Contract Drawings and Specifications were prepared and approved by the Corporation Counsel of the Commissioners for bidding on September 21, 1909 for Gate Houses No's 2, 3, 4, 6 and 7, and on October 13, 1909 for Gate Houses No's 1 (in Van Cortlandt Park) and 5.³⁶ The new design of the Gate House No. 5 superstructure included a tower nearly ninety feet tall with a red terra-cotta tile roof that would have projected a commanding presence across the expanse of the reservoir.

The Aqueduct Commissioners were gearing-up to complete the Jerome Park Reservoir, the gate house superstructures and the unfinished East Basin, as the final masterpiece of the Croton system. But the Aqueduct Commission was abolished on June 1, 1910, and their plans for Jerome Park were indefinitely shelved. In 1911, the Department of Water Supply, Gas and Electricity constructed wooden frame sheds over the gate houses to shelter them until such time as superstructures might be constructed.

Because the Department of Water Supply, Gas and Electricity had decided not to filter the water, they turned over the unfinished East Basin to other city agencies for their use. The additional storage capacity was not needed due

³⁶ Minutes of the Aqueduct Commissioners, 1909, pp. 52, 67, 88, 94

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 12

to the Catskill Aqueduct then under construction. In 1912 construction began on the Eighth Coastal Artillery (Kingsbridge) Armory, in the south end of the East Basin. In the following years, a number of public schools and other city facilities were constructed in the East Basin.

Gate house superstructures were finally constructed at the Jerome Park Reservoir in 1938, after being on hold for forty years. They were built by the Design Unit of the Works Progress Administration, under the direction of T. Hochlerner, Division Engineer, and Patrick Quilty, Acting Chief Engineer of the Bureau of Water Supply. The gate house superstructures at the Jerome Park Reservoir were built a year after construction had begun on the Delaware Aqueduct system, whose buildings are principally made of brick masonry. The Jerome Park Reservoir gate houses were constructed of brick masonry with stone trim in a muted Art Deco style that was integrated with the architecture of the original stone gate houses.

This 1938 work at Jerome Park was about the same time as other works at city reservoirs under the WPA, including the infilling of Williamsbridge Reservoir to make a park/playground, the conversion of High Bridge Reservoir to a public swimming pool, and the demolition of the original Yorkhill Receiving Reservoir in Central Park to create the Great Lawn.

Jerome Park as Parkland

Jerome Park Reservoir was designed during the "New Parks" movement that led to the creation of the nearby Van Cortlandt Park and Mosholu Parkway. This movement, which began in the early 1880s, recognized that large parcels of land in the newly annexed territory could become parkland without incurring a large cost. Van Cortlandt Park and Bronx Park were already filled with natural beauty and were to be connected by Mosholu Parkway, a wide tree-lined boulevard.

Jerome Park Reservoir, which is the largest body of water in the Bronx, was set into a street plan designed by Frederick Law Olmsted. Earlier in the nineteenth century, a large reservoir had been placed within his design for Central Park. This mix of blue water in a green landscape caught the attention of Olmsted's son, who wrote "All reservoirs have, in addition to their essential quality of storing water, an element of landscape effect; namely, that of an expanse of clear sparkling water. This same element forms the chief feature of many landscapes in public parks, where it is created at large cost, and it is clearly a thing of great value to the public when it can be made available. In itself, regardless of its outline or setting, a body of water is beautiful and refreshing, and its value to the public is so well recognized that provision is often made for giving public access to the enclosure about a reservoir, whence its surface may be seen."³⁷

When Jerome Park Reservoir opened in 1906, it was a reservoir-park. As time went on, portions of the property were stripped from the reservoir to create distinct public parks: Fort Independence Park (1915), Old Fort No. 4 Park (1913, 1931, and 1934), and Harris Park (1940, known as Harris Field and Harris Park Annex). Original reservoir landscaping, such as stone walls, gate posts and wrought iron fences, remain at some of these parks.

³⁷ Frederick Law Olmsted, Jr., *The Relation of Reservoirs to Parks*, 1899

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Section 8 Page 13

The walls of Fort Independence Park along Sedgwick Avenue, for example, show how the perimeter of the reservoir was originally landscaped.

Randall Comfort wrote in 1923 that, “To-day the vast Jerome Park Reservoir covers Mr. Bathgate’s pastures with its rippling waters of perfect blue, while seagulls fly in swarms over the site of the Bathgate Mansion of other days.”³⁸

After the reservoir was completed, the land in the proposed east basin was turned over to other City agencies. Goulden Avenue became known as “education mile,” because of the five schools that line its eastern edge: DeWitt Clinton High School, Bronx High School of Science, Hunter College (now Lehman College), Walton High School, and PS 86. The large and historic Kingsbridge Armory was constructed at the southern end of the reservoir.

Unfortunately, Jerome Park Reservoir was fenced off during World War II, and this barrier to public enjoyment and recreation has not been removed. In spite of this, Jerome Park remains an integral part of the fabric of green space that extends from Riverdale to Bronx Park. The Old Croton Aqueduct Trailway, which runs from the New Croton Dam in Westchester County to the Manhattan side of High Bridge, passes along the eastern edge of Jerome Park Reservoir. And the adjacent parks, Old Fort No. 4 Park, Fort Independence Park, and Harris Park, share scenic vistas across the water. Combined with surrounding roads such as the curvilinear, tree-lined Sedgwick and Reservoir Avenues, they are an extension of the greenbelt surrounding the reservoir.

The Jerome Park Reservoir exemplifies Olmsted’s landscape and city planning principles, providing a naturalized setting, and serving to create beauty, serenity and outdoor recreation in the midst of urban residences and institutions. The reservoir, parks, and roadways, combined with their landscape elements of stone walls, paved walks, terraces, seating areas, and stairs, and natural elements of trees and rock outcroppings, evoke the style of other Olmsted landscapes in the city, such as Central and Riverside Parks. Were it not for this reservoir, there would not be a majestic, landscaped body of water in the Bronx.

³⁸ Valentine’s Manual, p. 244

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 9 Page 1

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

9. Bibliography

Adopted Map D No. 23, Dept. Of Public Parks, Plan of Streets, Roads and Avenues Lying West of Jerome Avenue and South of the Road from Mosholu to Williams-Bridge, in the Twenty-fourth Ward, 1877, signed by Frederick Law Olmsted, Landscape Architect, and J. J. R. Croes, Civil and Topographical Engineer.

Annual Report of the Croton Aqueduct Department Made to the Common Council of the City of New York for the Year 1858, January 3, 1859.

Annual Report of the Croton Aqueduct Department Made to the Common Council of the City of New York for the Year 1866, January 7, 1867.

Burr, William H. and Mr. John Freeman. "Report of the Special Committee of Engineers Upon Certain Details of Construction of the Jerome Park Reservoir, July 27 1903."

Butler, George B., Esq. "Croton-Water Supply for the City of New York", New York Municipal Society, 1876.

Church, Benjamin S. and Alphonse Fteley, *Reports on the Quaker Bridge Dam*, 1889.

Church, Benjamin S., C.E. "Notes and Suggestions on the Croton Water Works and Supply for the Future," with Discussions and Transactions of the American Society of Civil Engineers, 1876.

City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, 1883 to 1887*, 1887.

City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1887 to 1895*, 1895.

City of New York Aqueduct Commission, *Report on the New Croton Aqueduct, Reservoirs and Dams, 1895 to 1907*, 1907.

Cook, Frederick S. and George Taber. "The Water Supply of the City of New York, Exhibits at the Louisiana Purchase Exposition," 1904.

Cooper, Linda Gilbert. *A Walker's Guide to the Old Croton Aqueduct*, 1992.

Dolkart, Andrew S. *Guide to New York City Landmarks*. New York City Landmarks Preservation Commission, 1992.

Douglass, D. B. Engineer's Report, *Report of the Commissioners... Relative to Supplying the City of New York with Pure and Wholesome Water*, 1833.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section 9 Page 2

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Galusha, Diane. *Liquid Assets: A History of New York City's Water System*. Purple Press, Ltd., 1999.

Jenkins, Stephen. *The Story of the Bronx*. G.P. Putnam's Sons, 1912.

Jervis, John B. *Description of the Croton Aqueduct*, Slamm and Guion, 1842.

Lange, Robie S. National Register of Historic Places Registration Form on the Old Croton Aqueduct. History Division, National Park Service, October 1991.

Minutes of the Aqueduct Commissioners, 1907, 1909.

Mullaly, John. *The New Parks Beyond the Harlem*. Record and Guide, 1887.

New York City Mayor's Office, *The Catskill Aqueduct and Earlier Water Supplies of the City of New York*, 1917.

Olmsted, Jr., Frederick Law. *The Relation of Reservoirs to Parks*. Rockwell and Churchill Press, 1899.

Rogers, Elizabeth Barlow. *Rebuilding Central Park*. the Central Park Conservancy, MIT Press, 1987.

Schramke, T. *Description of the New York Croton Aqueduct*, 1846.

The Old Croton Aqueduct: Rural Resources Meet Urban Needs. The Hudson River Museum of Westchester, 1992.

Tower, F. B. *Illustrations of the Croton Aqueduct*, 1843.

Tweed, William M. *Annual Report of Commission of Public Works of the City of New York for the Year 1870-71*.

Union League Club, "The Water Supply of New York. The Club Favors a Comprehensive System, and the Construction by a Commission to be Appointed by the Governor and Senate, of such Additional Works as may be needed," January, 1882.

Valentine's Manual of Old New York, No. 7, New Series, 1923.

Wegmann, Edward. *The Water Supply of the City of New York 1658 – 1895*. John Wiley & Sons, 1896.

Weidner, Charles H. *Water for a City*. Rutgers University Press, 1974.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section 10 Page 1

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

10. Geographical Data

Verbal Boundary Description

The boundary of this nomination is outlined on the accompanying land map.

Boundary Justification

The nomination boundary includes the Jerome Park Reservoir and surrounding city parks that are historically associated with this property. The surrounding parkland was developed, in part, from land that was once part of the reservoir. The boundaries incorporate features that are visible above the waterline of the basin (such as the superstructures of the gate houses, stone walls, berms, etc.) and those features that are underwater (such as substructures of the gate houses, stone walls, the conduit of the Old and New Croton Aqueducts, etc.).

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section 11 Page 1

Jerome Park Reservoir

Name of Property

Bronx County, New York

County and State

Form researched and prepared by:

Robert J. Kornfeld, Jr., AIA

Chairman

Preservation Committee of the Jerome Park Conservancy

3965 Sedgwick Avenue, 1C

Bronx, New York 10463