

## **January 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. Delivery and installation of the carrier pipe began during the week of July 20<sup>th</sup>. Installation and welding of the pipe has been completed, as has grouting of the space between the newly installed pipe and tunnel walls. Testing of the new siphon is scheduled to begin this month, along with work in preparation for abandonment of the two existing siphons in Spring 2016.

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83<sup>rd</sup> Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and was completed in late September. Grouting and welding of the pipe was substantially completed in December 2015, in preparation for inspection and testing of the new siphon, which is scheduled to begin in January 2016.

#### **Work During December 2015**

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn

- Continuation of activities related to installation of pipe in the new siphon, including surveying; grouting the space between the newly installed pipe and tunnel walls; welding; removal of TBM equipment from the Brooklyn and Staten Island sites; installation of the riser pipes (the vertical pipes that connect to the siphon) at the Brooklyn and Staten Island Shaft Sites; backfilling of the shaft sites; and ongoing monitoring and testing
- Continuation of land piping work in Staten Island, including:
  - Installation of monitoring equipment along Van Duzer Street Extension
  - Permanent restoration of Van Duzer Street (from approximately St. Julian Place to Swan Street), Swan Street (from approximately Bay Street to Van Duzer Street), and Van Duzer Street Extension (from approximately Bay Street to Van Duzer Street), including installation of new curbs and sidewalks, demolition of the existing street pavement, placement of new base concrete, and installation of a temporary roadway surface. On December 21<sup>st</sup>, Van Duzer Street was temporarily reopened to traffic. NOTE: Van Duzer Street, Swan Street and Van Duzer Street Extension will be paved in early 2016, weather permitting. Each street will need to be closed briefly to accommodate this work.
  - Preparatory work in support of installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the below-grade walls and installation of piping within the building
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

#### **Work Projected for January 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; installation of the riser pipes in Brooklyn and Staten Island; welding; backfilling the shaft sites; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the below-grade walls and installation of piping within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Resumption of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of 36" sewer and 72" water main on 86<sup>th</sup> Street (vicinity of Shore Road)
  - Removal of existing valve chamber on 86<sup>th</sup> Street (vicinity of Shore Road)

- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

Anita Wright, Community Liaison  
Helen Neuhaus & Associates Inc.  
355 Front Street  
Staten Island, NY 10304  
(516) 712-5864 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of section of riser pipe at Brooklyn Shaft Site



Preparation for installation of piping at new chlorination station at Staten Island Shaft Site



Grouting of riser pipe at Staten Island Shaft Site





Restoration of Swan Street (looking west from Bay Street)



Restoration of Van Duzer Street (looking south from Hannah Street)

## **February 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. Delivery and installation of the carrier pipe began in July 2015. Installation and welding of the pipe has been completed, as has grouting of the space between the newly installed pipe and tunnel walls. Testing of the new siphon began in January 2016, and work in preparation for abandonment of the two existing siphons is under way.

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83<sup>rd</sup> Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and was completed in late September. Grouting and welding of the pipe was substantially completed in December 2015, in preparation for inspection and testing of the new siphon. On January 22, 2016, the pressurization test for the new siphon was successfully completed.

#### **Work During January 2016**

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn

- Continuation of activities related to installation of pipe in the new siphon, including surveying; welding; installation of the riser pipes (the vertical pipes that connect to the siphon) at the Brooklyn and Staten Island Shaft Sites; backfilling of the shaft sites; and ongoing monitoring and testing
- Continuation of land piping work in Staten Island, including:
  - Installation of monitoring equipment along Van Duzer Street Extension
  - Permanent restoration of Van Duzer Street (from approximately St. Julian Place to Swan Street), Swan Street (from approximately Bay Street to Van Duzer Street), and Van Duzer Street Extension (from approximately Bay Street to Van Duzer Street), including installation of new curbs and sidewalks and installation of a temporary roadway surface. NOTE: Van Duzer Street, Swan Street and Van Duzer Street Extension will be paved in early 2016, weather permitting. Each street will need to be closed briefly to accommodate this work.
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the below-grade walls and installation of piping
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

#### **Work Projected for February 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; work related to installation of the riser pipes in Brooklyn and Staten Island; backfilling the shaft sites; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the below-grade walls and installation of piping within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Resumption of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of 8" water main (vicinity of Fort Hamilton High School)
  - Installation of 12" sewer at the Brooklyn Shaft Site
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

Anita Wright, Community Liaison  
Helen Neuhaus & Associates Inc.  
355 Front Street  
Staten Island, NY 10304  
(516) 712-5864 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



## March 2016 Update

### Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; and the new siphon is expected to be operational by late spring.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During February 2016**

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; installation of the riser pipes (the vertical pipes that connect to the siphon) at the Brooklyn and Staten Island Shaft Sites; construction of shaft access chambers; backfilling of the shaft sites; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the below-grade and exterior walls, and installation of piping
- Continuation of land piping work in Staten Island, including:
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Preparation for installation of 8" water main (vicinity of Fort Hamilton High School)
  - Installation of 12" sewer at the Brooklyn Shaft Site
  - Preparation for installation of sewer and water mains at 86<sup>th</sup> Street and Shore Road

- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

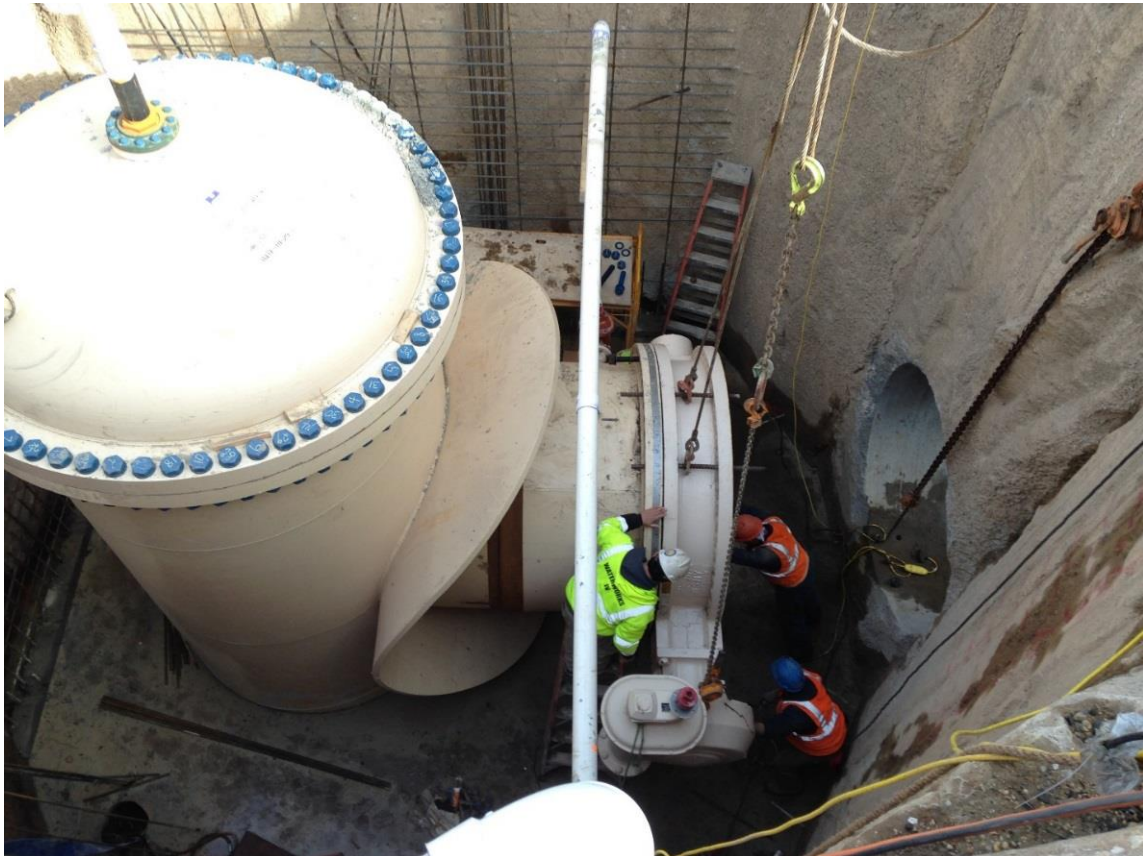
#### **Work Projected for March 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the slab and above-grade walls, and installation of piping within the building
- Closure of the pressure relief wells that were used to control groundwater within the Staten Island Shaft
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of 12" sewer at the Brooklyn Shaft Site
  - Installation of 8" water main (vicinity of Fort Hamilton High School)
  - Installation of sewer and water mains at 86<sup>th</sup> Street and Shore Road
  - Activities related to abandonment of Siphon #2 (86<sup>th</sup> Street and Shore Road)
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of Butterfly Valve Chamber on Riser Pipe in Brooklyn Shaft



Newly formed exterior wall of Chlorination Station at Staten Island Shaft Site





Backfilling of Staten Island Shaft; top of riser pipe is visible in background



## **April 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; and the new siphon is expected to be operational by late spring.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During March 2016**

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the slab and above-grade walls, and installation of piping within the building
- Closure of the pressure relief wells that were used to control groundwater within the Staten Island Shaft
- Continuation of land piping work in Staten Island, including:
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site

- Installation of 12" sewer at the Brooklyn Shaft Site
- Installation of 8" water main (vicinity of Fort Hamilton High School)
- Installation of sewer and water mains at 86<sup>th</sup> Street and Shore Road
- Activities related to abandonment of Siphon #2 (86<sup>th</sup> Street and Shore Road)
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### **Work Projected for April 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the slab and above-grade walls, and installation of piping within the building
- Closure of the pressure relief wells that were used to control groundwater within the Staten Island Shaft
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue) and Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of 12" sewer at the Brooklyn Shaft Site
  - Installation of water mains at 86<sup>th</sup> Street and Shore Road
  - Installation of sewer and water mains at 79<sup>th</sup> Street and Shore Road
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road) [**NOTE:** Abandonment of the Siphon at 79<sup>th</sup> Street will require the temporary closure of the basketball courts for approximately five (5) days. This work is expected to begin no earlier than the week of April 18<sup>th</sup>.]
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

Anita Wright, Community Liaison

Helen Neuhaus & Associates Inc.

355 Front Street

Staten Island, NY 10304

**(646) 823-6588 [cell phone] – please note new phone number effective April 8, 2016**

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Newly formed exterior wall of Chlorination Station  
at Staten Island Shaft Site



Backfilling of Staten Island Shaft nears completion



## **May 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; and the new siphon is expected to be operational by late spring/early summer.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During April 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the slab and above-grade walls, and installation of piping within the building
- Closure of the pressure relief wells that were used to control groundwater within the Staten Island Shaft
- Continuation of land piping work in Staten Island, including:
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue) and Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of water mains at 86<sup>th</sup> Street and Shore Road

- Preparatory work in support of installation of sewer and water mains at 79<sup>th</sup> Street and Shore Road
- Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road)
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### **Work Projected for May 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the roof slab, and installation of piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue) and Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 72" water main at the Brooklyn Shaft Site
  - Installation of 12" sewer at the Brooklyn Shaft Site
  - Installation of sewer and water mains at 79<sup>th</sup> Street and Shore Road
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road) [**NOTE:** Abandonment of the Siphon at 79<sup>th</sup> Street will require the temporary closure of the path west of the basketball courts for approximately two (2) weeks. This work is expected to begin no earlier than the week of May 16<sup>th</sup>.]
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

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(646) 823-6588 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Progress continues on construction of Chlorination Station at Staten Island Shaft Site

## June 2016 Update

### Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; abandonment of the two existing siphons has begun; and the new siphon is expected to be operational by late spring/early summer.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During May 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the roof slab and above-grade walls, and installation of piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Installation of 60" and 72" water mains at the Staten Island Shaft Site
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue) and Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of sewer and water mains at 79<sup>th</sup> Street and Shore Road
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road) [**NOTE:** Work related to the abandonment of the Siphon at 79<sup>th</sup> Street required the temporary closure of the path west of the basketball courts. The work began on May 19<sup>th</sup>, and sporadic closures of the area may continue into June.]



- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

#### **Work Projected for June 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete for the parapet wall (a low wall at the edge of the roof), and installation of piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension [Final paving will be completed in Spring 2016.]
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue) and Siphon #2 (southern end of Front Street)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 12" sewer at the Brooklyn Shaft Site
  - Installation of water main at 79<sup>th</sup> Street and Shore Road
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road)
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

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 Helen Neuhaus & Associates Inc.  
 355 Front Street  
 Staten Island, NY 10304  
 (646) 823-6588 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Walls for Chlorination Station at Staten Island Shaft Site begin to take shape



Work related to abandonment of Siphon #1 (at lower Victory Boulevard and Murray Hulbert Avenue), including cutting of pipe and backfilling



Installation of new water main on 79<sup>th</sup> Street (looking west towards Shore Road)

## **July 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; abandonment of the two existing siphons is nearly complete; and the new siphon is expected to be operational this summer.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During June 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar and piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Activities in preparation for permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension
  - Activities in preparation for sewer installation on Front Street (in the vicinity of the Staten Island Shaft Site)
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue)
- Continuation of land piping work in Brooklyn, including:
  - Installation of 12" sewer at the Brooklyn Shaft Site

- Installation of water main at 79<sup>th</sup> Street and Shore Road, backfilling of trench and temporary street restoration
- Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road) [**NOTE:** Work related to the abandonment of the Siphon at 79<sup>th</sup> Street required the temporary closure of two of the three basketball courts.]
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, Bay Street Landing, the New York City Department of Parks and Recreation and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### **Work Projected for July 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete, and installation of piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension
  - Installation of 18" sewer at the Staten Island Shaft Site and along Front Street
  - Installation of 48" sewer outfall on Front Street in vicinity of Staten Island Shaft Site [**NOTE:** This work will require **full** closure of Front Street, between Wave and Hannah Streets, to vehicular and pedestrian traffic for approximately one (1) week.]
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue)
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of sections of 79<sup>th</sup> Street, Shore Road and 86<sup>th</sup> Street in vicinity of construction
  - Activation of the new siphon
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road), including restoration of the two (2) basketball courts
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School and Bay Street Landing and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies



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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 11 0-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Work on Shaft Access Chamber at Brooklyn Shaft Site





Section of old Siphon Removed from Brooklyn Shaft Site



Installation of new Water Main at 79<sup>th</sup> Street and Shore Road

## **August 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; the Army Corps of Engineers began dredging in late July following abandonment of the two existing siphons; and the new siphon is expected to be operational this summer.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During July 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of rebar, pouring of concrete, and installation of piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension
  - Installation of 18" sewer at the Staten Island Shaft Site and along Front Street (in the vicinity of the Staten Island Shaft Site)
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue), including sealing of siphon, backfilling and temporary street restoration
  - Activities related to abandonment of Siphon #2 (southern end of Homeport on Front Street)

- Continuation of land piping work in Brooklyn, including:
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road) [**NOTE:** Work related to the abandonment of the Siphon at 79<sup>th</sup> Street required the temporary closure of two of the three basketball courts.]
  - Restoration of the two (2) basketball courts at 79<sup>th</sup> Street
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, Bay Street Landing (BSL), the New York City Department of Parks and Recreation (DPR) and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### **Work Projected for August 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of support frames, piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Striping of Van Duzer Street, Swan Street and Van Duzer Street Extension following permanent restoration
  - Installation of 18" sewer at the Staten Island Shaft Site and along Front Street
  - Installation of 48" sewer outfall on Front Street in vicinity of the Staten Island Shaft Site [**NOTE:** This work may require **full** closure of Front Street, between Wave and Hannah Streets, to vehicular and pedestrian traffic for approximately one (1) week pending approval by the New York City Department of Transportation.]
  - Activities related to abandonment of Siphon #1 (intersection of lower Victory Boulevard and Murray Hulbert Avenue), including permanent restoration of the work area
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of sections of 79<sup>th</sup> Street, Shore Road and 86<sup>th</sup> Street impacted by the work
  - Activation of the new siphon
  - Activities related to abandonment of Siphon #1 (79<sup>th</sup> Street and Shore Road) and Siphon #2 (86<sup>th</sup> Street and Shore Road)
  - Reopening of the two (2) basketball courts at 79<sup>th</sup> Street following completion of restoration and striping
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, BSL, DPR and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies



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Van Duzer Street Extension (looking south from Bay and Swan Streets)  
following Street Restoration



Newly Restored 79<sup>th</sup> Street Basketball Courts (on right) in Shore Road Park



Installation of Chlorination Building Support Frames



Installation of 20" Water Main along Front Street, looking south

## **September 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; the Army Corps of Engineers completed dredging in late August following abandonment of the two existing siphons; and the new siphon is expected to be operational this fall.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During August 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of support frames, piping and equipment within the building
- Continuation of land piping work in Staten Island, including:
  - Striping of Van Duzer Street, Swan Street and Van Duzer Street Extension following permanent restoration
  - Pressurization and disinfection of trunk main within the Staten Island Shaft Site
- Continuation of land piping work in Brooklyn, including:
  - Reopening of the two (2) basketball courts at 79<sup>th</sup> Street following completion of restoration and striping
  - Permanent restoration of Shore Road, between 83<sup>rd</sup> Street and Shore Road Lane
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, Bay Street Landing (BSL) and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies



### Work Projected for September 2016

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; backfilling the shaft sites; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of “living wall” brackets, which are being installed as part of the “green building,” piping and equipment within the building
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of sections of 79<sup>th</sup> Street, Shore Road and 86<sup>th</sup> Street impacted by the work
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, BSL, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Newly installed curb and sidewalk along Shore Road  
(in front of Fort Hamilton High School)



## **October 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; the Army Corps of Engineers completed dredging this summer following abandonment of the two existing siphons; and the new siphon is expected to be operational this fall.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During September 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of "living wall" brackets, which are being installed as part of the "green building," piping and equipment within the building
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of Shore Road, between 83<sup>rd</sup> and 86<sup>th</sup> Streets
  - Work in preparation for permanent restoration of sections of 79<sup>th</sup> Street and Shore Road impacted by the work
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### Work Projected for October 2016

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of piping and equipment within the building
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of Shore Road, between 83<sup>rd</sup> and 86<sup>th</sup> Streets
  - Permanent restoration of sections of 79<sup>th</sup> Street and Shore Road impacted by the work
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video illustrating the process by which the 110-ton, 300-foot long TBM drilled a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Frame for “Living Wall” begins to take shape on new Chlorination Building

## **November 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; and the Army Corps of Engineers completed dredging this summer following abandonment of the two existing siphons. The new siphon was activated in October 2016.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During October 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to activation of the new siphon, including flushing; construction of shaft access chambers; and ongoing monitoring and testing
- Continuation of work in support of construction of the new chlorination station, including installation of piping and equipment within the building
- Continuation of land piping work in Brooklyn, including:
  - Permanent restoration of Shore Road, between 83<sup>rd</sup> and 86<sup>th</sup> Streets
  - Permanent restoration of sections of Shore Road and 79<sup>th</sup> Street impacted by the work
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

### Work Projected for November 2016

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to construction of shaft access chambers in Brooklyn and Staten Island
- Continuation of work in support of construction of the new chlorination station, including installation of piping and equipment within the building, the “green” or “living” roof, the irrigation system for the roof and perimeter fencing
- Continuation of land piping work in Staten Island, including:
  - Installation of 18” sewer at the Staten Island Shaft Site and along Front Street in the vicinity of the Staten Island Shaft Site
  - Installation of 48” sewer outfall on Front Street in the vicinity of the Staten Island Shaft Site **[NOTE: This work may require intermittent closure of Front Street, between Wave and Hannah Streets, to vehicular and pedestrian traffic.]**
  - Demolition and abandonment of the venturi chamber on Victory Boulevard in the vicinity of Lyons Pool
- Continuation of land piping work in Brooklyn, including:
  - Striping of Shore Road, between 83<sup>rd</sup> and 86<sup>th</sup> Streets and in vicinity of 79<sup>th</sup> Street, following permanent restoration
  - Demolition and abandonment of two existing venturi chambers on the west side of Shore Road, at 79<sup>th</sup> and 86<sup>th</sup> Streets
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Start of Permanent Restoration at 79<sup>th</sup> Street and Shore Road

## **December 2016 Update**

### **Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"**

**After many years, work on the new Siphon is rapidly approaching completion! The 72" carrier pipe was installed in the new tunnel late last year; pressurization and chlorination testing was successfully completed early this year; and the Army Corps of Engineers completed dredging this summer following abandonment of the two existing siphons. The new siphon was activated in October 2016.**

#### **Background Information**

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

#### **Work During November 2016**

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to construction of shaft access chambers in Brooklyn and Staten Island
- Continuation of work in support of construction of the new chlorination station, including installation of piping and equipment within the building, the green or "living" roof, the irrigation system for the roof and perimeter fencing
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and ongoing liaison with residents, businesses, and other interested stakeholders and constituencies

#### **Work Projected for December 2016**

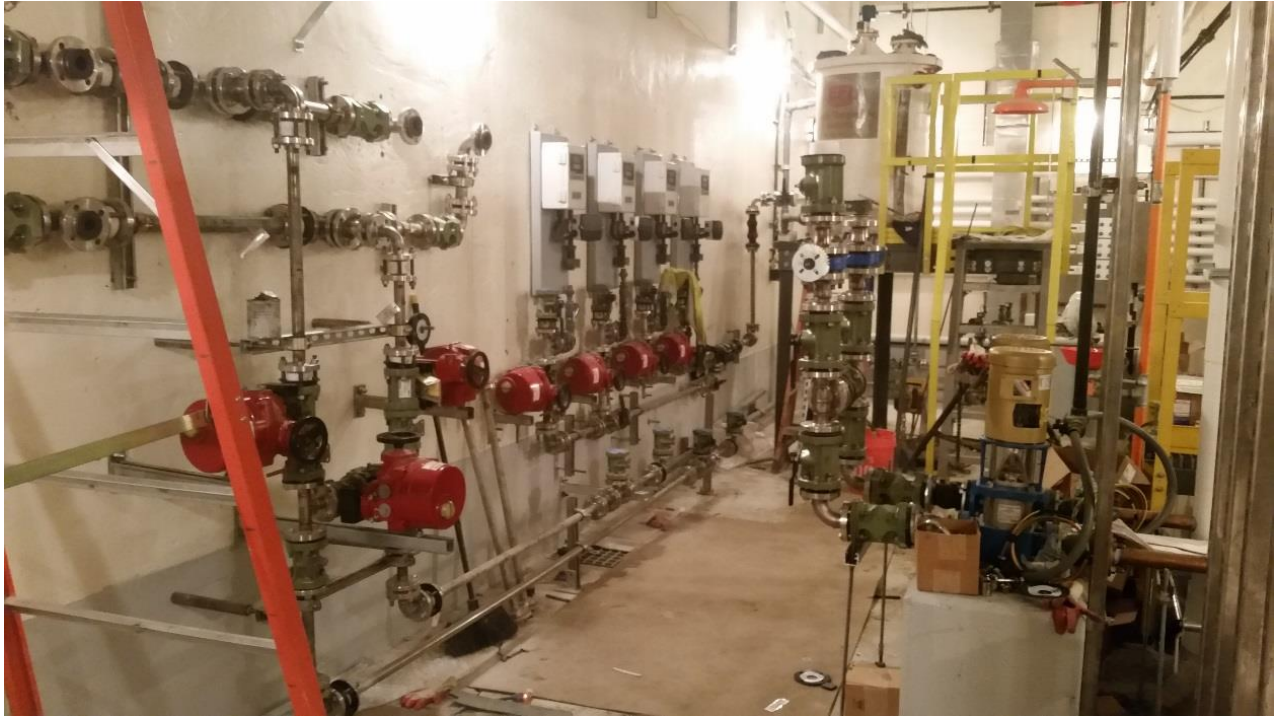
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn

- Continuation of activities related to construction of shaft access chambers in Brooklyn and Staten Island
- Continuation of work in support of construction of the new chlorination station, including installation of piping and equipment within the building, the “green” or “living” roof, the irrigation system for the roof and perimeter fencing
- Continuation of land piping work in Staten Island, including:
  - Installation of 18” sewer at the Staten Island Shaft Site and along Front Street in the vicinity of the Staten Island Shaft Site
  - Installation of sewer piping within the Staten Island Shaft Site
  - Installation of 48” sewer outfall on Front Street in the vicinity of the Staten Island Shaft Site **[NOTE: This work may require intermittent closure of Front Street, between Wave and Hannah Streets, to vehicular and pedestrian traffic.]**
  - Demolition and abandonment of the venturi chamber on Victory Boulevard in the vicinity of Lyons Pool
- Continuation of land piping work in Brooklyn, including:
  - Striping of Shore Road, between 83<sup>rd</sup> and 86<sup>th</sup> Streets and in the vicinity of 79<sup>th</sup> Street, following permanent restoration
  - Demolition and abandonment of two existing venturi chambers on the west side of Shore Road, at 79<sup>th</sup> and 86<sup>th</sup> Streets
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, representatives of Fort Hamilton High School, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, Construction Notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Piping and Instrumentation in Lower Level of new Chlorination Building