



# Bay Park Conveyance Project

## Eminent Domain Procedure Law

### Public Hearing

February 25, 2020



Department of  
Environmental  
Conservation



# Agenda

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## 1. Purpose and Need

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## 2. Project Overview

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## 3. Environmental Impacts

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## 4. Public & Stakeholder Outreach

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# Purpose and Need





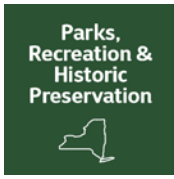
The Bay Park Conveyance Project will improve water quality in the Western Bays providing a multitude of benefits to Long Island's south shore communities such as enhanced storm protection and improved ecosystem and marine life habitat, along with improved recreation opportunities and quality of life.

This will be accomplished by eliminating nearly all nitrogen loading caused by sewage treatment plants in the Western Bays.

# Team Partnership



In Communication with Towns, Villages, and State and Federal Agencies



FEMA

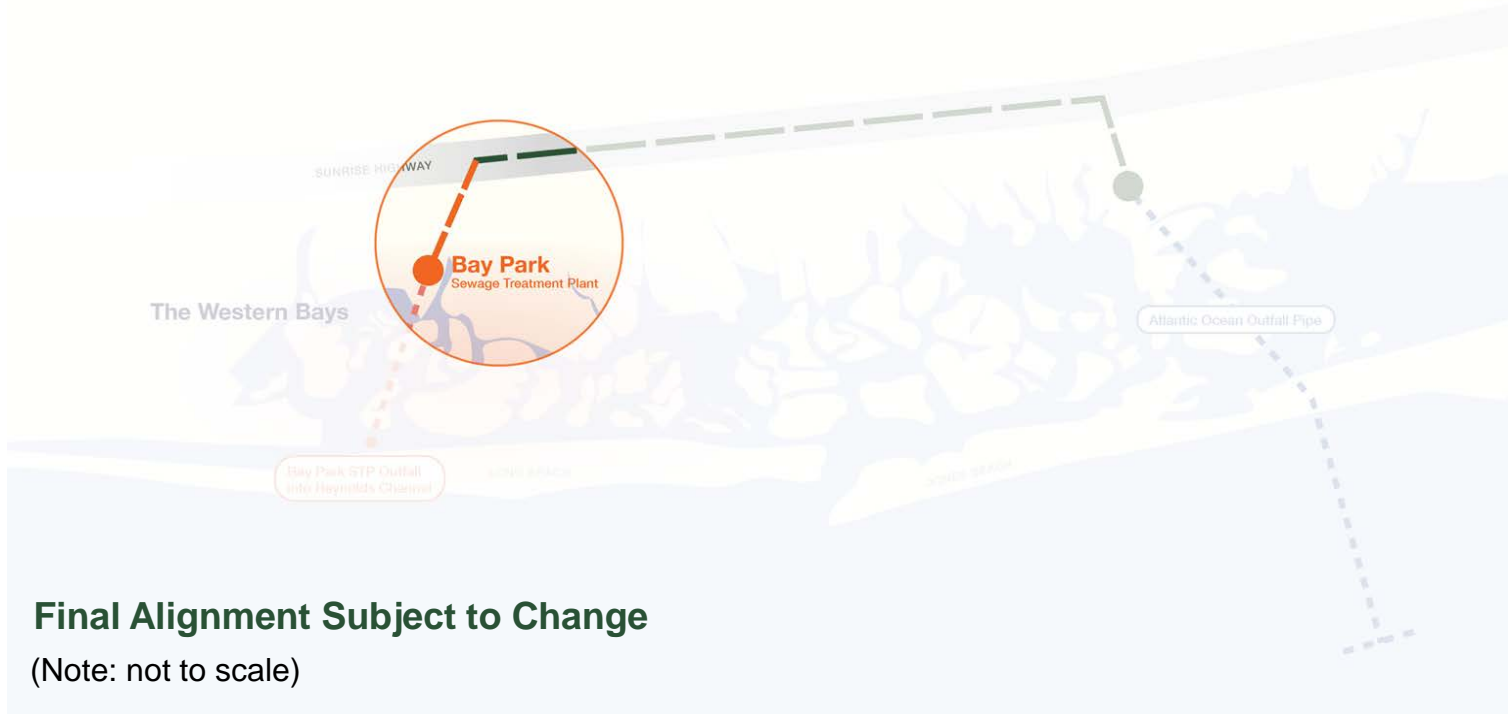
# Project Overview



(Note: not to scale)



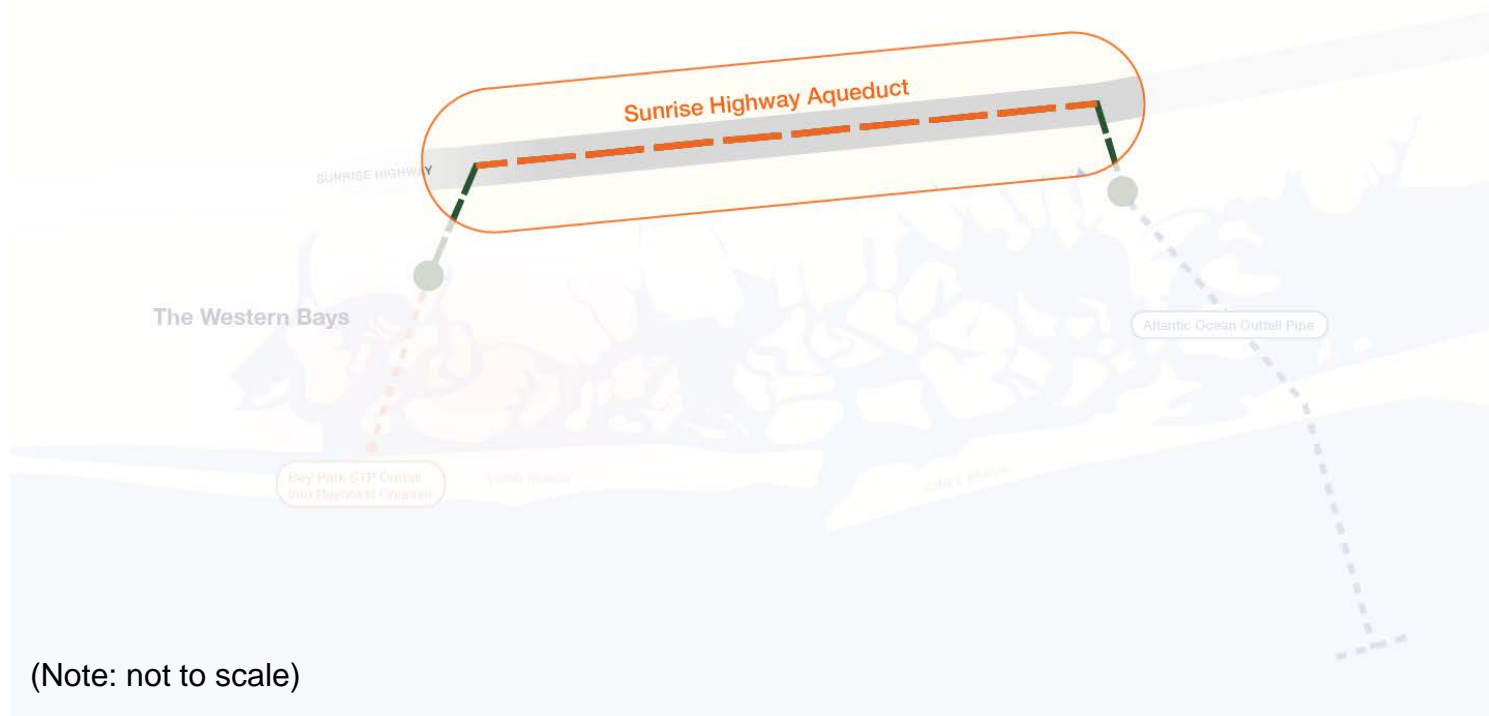
# Project Overview – Bay Park to Sunrise Highway Microtunnel



**Final Alignment Subject to Change**

(Note: not to scale)

# Project Overview – Sunrise Highway Aqueduct



(Note: not to scale)



# Project Overview – Cedar Creek to Sunrise Highway Microtunnel



**Final Alignment Subject to Change**

(Note: not to scale)

# Project Scope Overview

- **Purpose**

To convey treated water from the Bay Park STP to Cedar Creek WPCP ocean outfall

- **Main Project Elements**

- At Bay Park – construction of a new pump station
- Bay Park to Sunrise Highway – 2-mile force main
- Sunrise Highway – repurposing of 7.3-mile aqueduct
- Sunrise Highway to Cedar Creek – 1.6-mile force main
- At Cedar Creek – upgrade tide pumps, connect force main to outfall
- Cedar Creek to Ocean Outfall – discharge treated water seven miles (of which three miles are offshore) from Cedar Creek to ocean outfall structure
- Outreach and communication throughout project life

# Benefits



## Storm Protection

These efforts will spur the rapid ecological recovery of the Western Bays marshlands which will protect coastal communities from storm surge and sea level rise.



## Quality of Life Factors

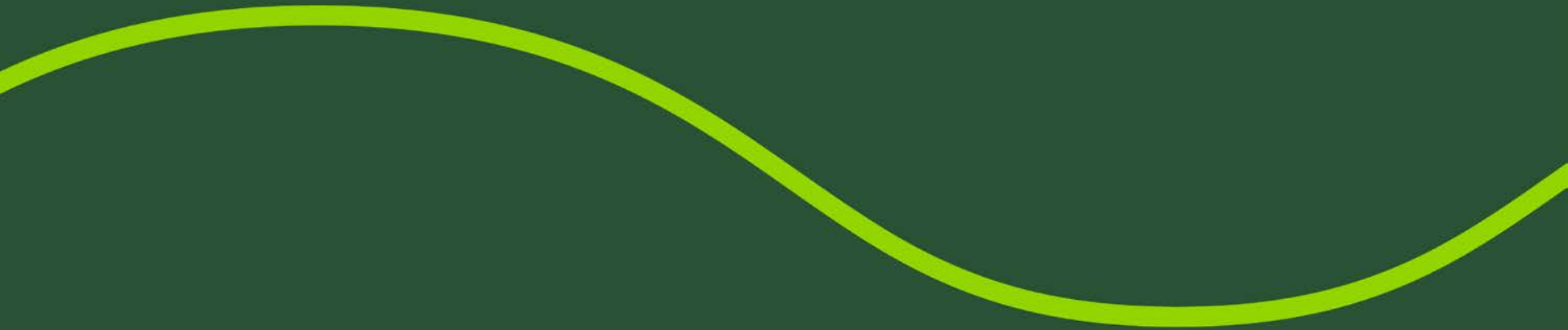
Maximize quality of life by providing residents a place to work and play.



## Economic Benefits

The project will allow for the ecological recovery of the Western Bays by improving water quality, which will in turn enhance and expand water-based recreational and commercial opportunities.

# Project Overview



# Conveyance Project Will Utilize Design-Build Delivery Method

- Governor Andrew M. Cuomo recognized Design-Build (D-B) as the fastest most cost-efficient manner to build this Project
- Two-step process with a Request for Qualifications (RFQ) and a Request for Proposals (RFP)
- Design-Build Teams generally consist of a design engineering firm and a contractor or multiple contractors
- Designer works closely with the contractor to optimize the design
- DEC will negotiate a contract with the selected D-B Team using Best Value Process

# Where Are We Now?

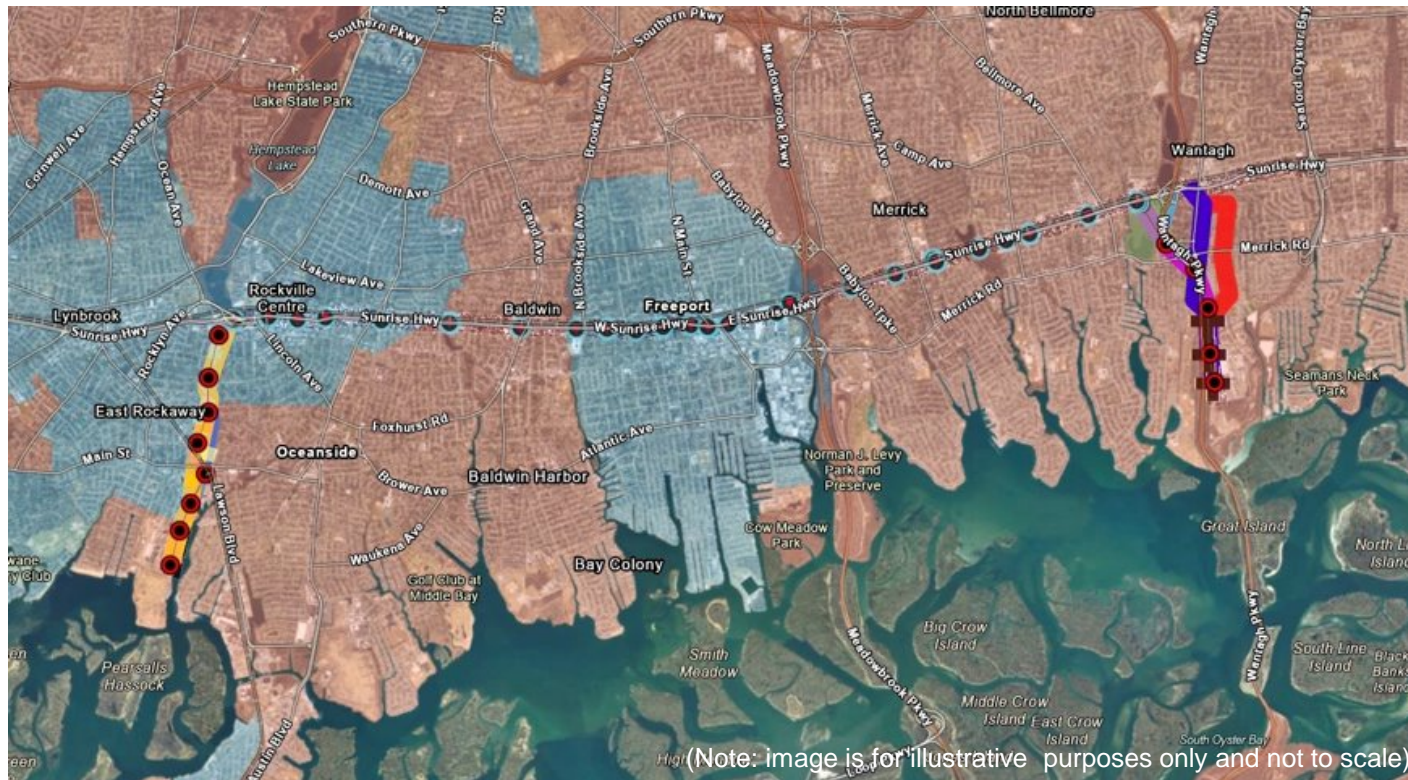
- **Preliminary (~30%) Design**

- Various microtunnel alignments have been identified and we will seek to minimize impacts to residential homes and commercial properties.
- Routing along road right-of-way and public parcels as much as possible
- Environmental consultations with State and federal agencies

- **Public and Stakeholder Outreach – robust outreach throughout project life**

- EDPL Public Hearing on Tuesday, February 25, 2020
- General public meetings (target – late March 2020)

# Overall Project Infrastructure



# Force Main Alignment Approach

## Evaluation of potential force main alignments considered methods to:

- Minimize tunneling under structures and private property;
- Minimize tunneling under sensitive structures;
- Minimize tunneling under structures with deep piles;
- Avoid poor ground conditions.

## In addition, locations of jacking and receiving shafts were considered to:

- Avoid demolition of any structures;
- Provide sufficient laydown space for launch and reception shafts;
- Avoid major utilities (e.g., interceptor sewers);
- Avoid private property;
- Avoid residential areas (or minimize altering access to residences);
- Avoid roads with heavy traffic.



# What is Microtunneling?



(Video)

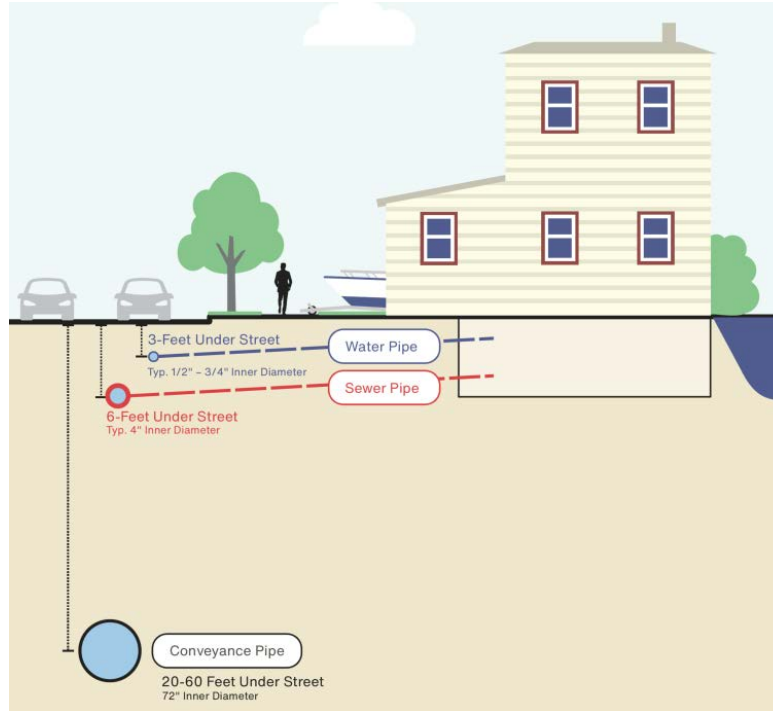
# What is Microtunneling?



Example of tunneling in progress



Example of Microtunnel Boring Machine



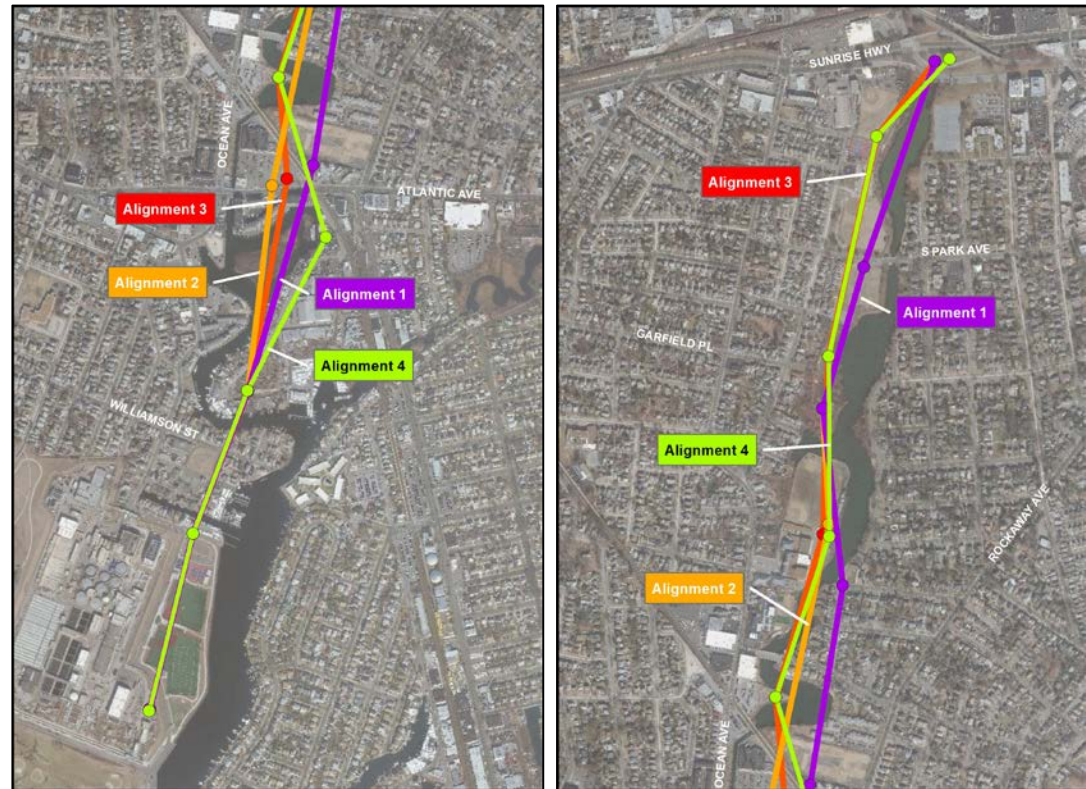
Conveyance Pipe Diagram

# Force Main Alignment Approach

## In considering a preferred force main alignment additional criteria were considered:

- Minimization of the overall length of the alignment route;
- Maintaining maximum run length between shaft sites to between 1,300 feet to 2,000 feet;
- Minimization of the number of shaft sites;
- Minimization of length of Sunrise Highway Aqueduct rehabilitation;
- Avoid the aqueduct siphon under the Wantagh State Parkway;
- Avoid 90-degree turns to optimize hydraulic flow;
- Avoid community disruption (work in residential neighborhoods and along local streets);
- Avoid and minimize impacts to wetlands.

# Bay Park Force Main Alignment Options



# Bay Park Force Main Alignments Evaluation Matrix

Issue	Alignment 1	Alignment 2	Alignment 3	Alignment 4
Number of Shafts	8	8	9	9
Overall Length	10,333 ft	10,357 ft	10,394 ft	10,665 ft
Longest tunnel drive	1,847 ft	2,263 ft	1,770 ft	1,770 ft
Minimizes Tunneling Under Water	2,295 ft	2,830 ft	2,111 ft	1,275 ft
Shafts in Residential Area	2	2	3	2
Total Surface Easements (private property)	2	2	2	2
Total Subsurface Easements (private property)	28	25	21	25
Easements on Single Family Residential Properties	13	14	11	7

## Risks and Impact

Negligible	Low	Medium
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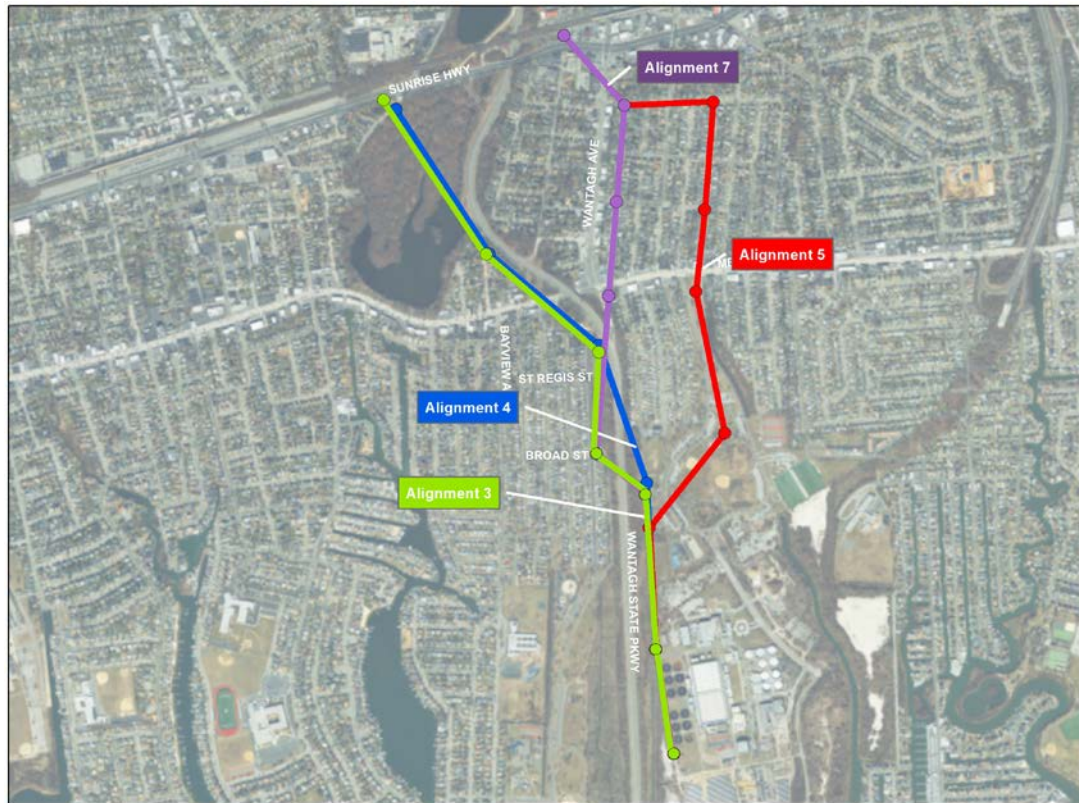
# Bay Park Force Main Preliminary Preferred Alignment



## Alignment 4:

- Aligns along local streets where possible;
- Favors easements under public properties to private properties;
- Minimizes tunneling under residential properties;
- Minimizes tunneling under open water or poor ground conditions;
- Minimizes length of any one tunnel run.

# Cedar Creek Force Main Alignment Options



# Cedar Creek Force Main Alignments Evaluation Matrix

Issue	Alignment 3	Alignment 4	Alignment 5	Alignment 7
Number of Shafts	7	6	9	8
Overall Length	8,475 ft	8,289 ft	9,691 ft	8,596 ft
Longest tunnel drive	2,015 ft	1,927 ft	1,602 ft	1,762 ft
Tunnel under Mill Pond wetland	Yes	Yes	No	No
Crossings of Wantagh St Pkwy	1 (direct)	1 (angled)	0	2
Additional Rehab of aqueduct	0 ft	0 ft	2,000 ft	2,000 ft
Hydraulics / 90° Bends	0	0	1	0
Shafts in Residential Street	0	0	3	2
Total Surface Easements (private property)	0	0	0	0
Total Subsurface Easements (private property)	3	0	10	6
Easements on Single Family Residential Properties	3	0	5	1

## Risks and Impact

Negligible	Low	Medium
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# Cedar Creek Force Main Preliminary Preferred Alignment



## Alignment 4:

- Uses County or State property;
- Minimizes disturbance to residential neighborhoods;
- Minimizes overall length of force main.

# What is Sliplining?

Sliplining is a method used to “insert” a new pipe into an existing pipe.

- Existing 7.3-mile, 72-inch aqueduct pipe
- Install new 60-inch diameter pipe
- The existing pipe will act as the host pipe for the carrier pipe



Example of sliplining in progress

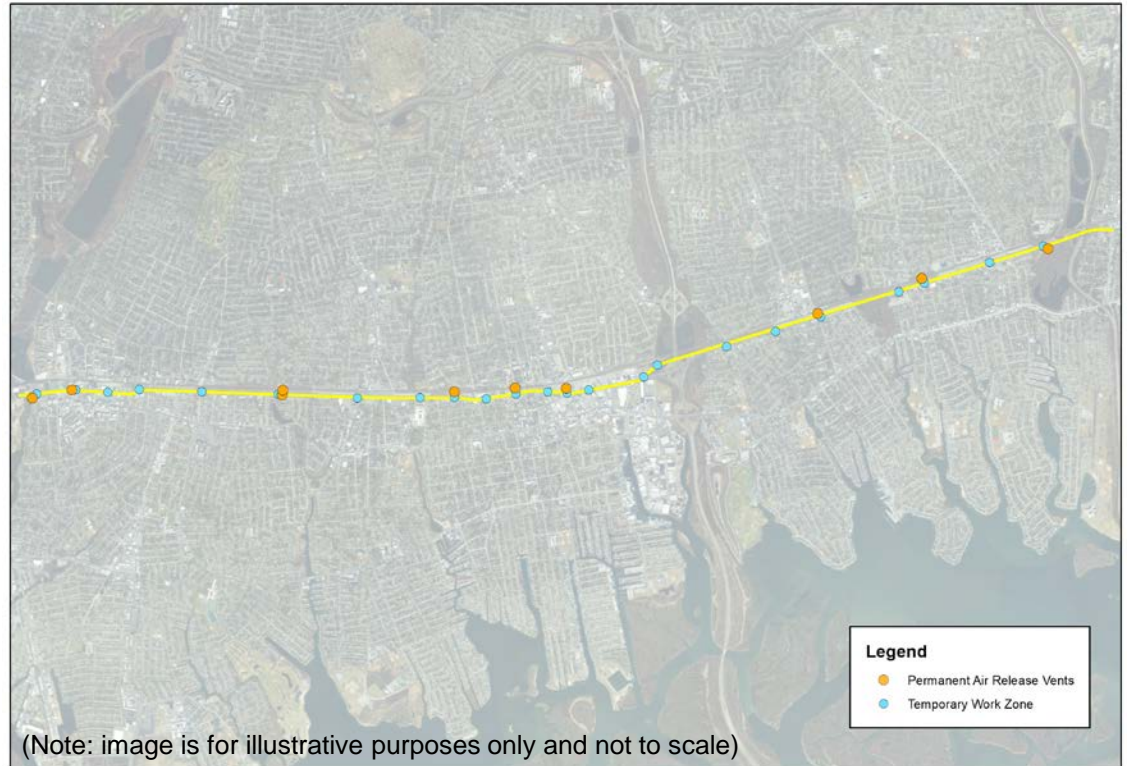
# What is Sliplining?



(Video)

# Construction along Sunrise Highway

- Traffic management on Sunrise Highway will minimize disruption to traffic, businesses and residents, while ensuring the safety of road users and construction workers
- State anticipated:
  - Number of work zones in area is 23 over 7 miles
  - Approximately 5 work zones open at any one time
- Meeting with fire districts and all emergency response agencies





# Environmental Impact Assessment

## Preparing a National Environmental Policy Act (NEPA) Environmental Assessment

- Federal Emergency Management Agency (FEMA)
- NYS Department of Homeland Security & Emergency Services (DHSES)

## Consulting with:

- United States Fish & Wildlife Service – Threatened & Endangered Species
- United States National Marine Fisheries Service – Essential Fish Habitat
- United States Army Corps of Engineers – Wetlands
- State Historic Preservation Officer (SHPO) – Historic & Archaeological Resources
- NYS Department of State – Coastal Zone Consistency
- NYS Department of Environmental Conservation – Threatened & Endangered Species, Wetlands, Water Quality
- NYS Department of Transportation – Traffic

# Environmental Impact Assessment

## Key areas of concern:

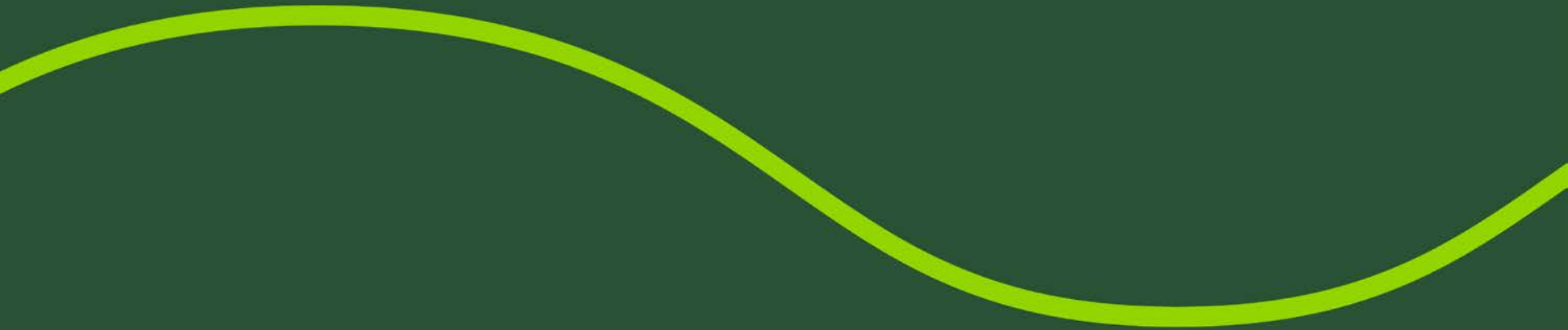
- Water quality
- Wetlands
- Threatened & endangered species
- Historic resources
- Construction dust & noise
- Construction traffic

# Managing Construction Impacts

## Using neighborhood-friendly and innovative methods to minimize disruptions:

- Providing regular construction updates
- Providing advance notification of any disruptive work or road closures
- Maintaining a 24/7 hotline for the community to communicate with the Design-Builder
- Implementing Work Zone Traffic Control Plans
- Maintaining access to existing businesses
- Creating and implementing dust management plan, and a community noise and vibration monitoring program

# Protecting Our Community for the Future





# Public and Stakeholders Outreach

## Public Outreach and Communication are Cornerstones of the Bay Park Conveyance Project.

- Today, EDPL Public Hearing
- Upcoming Meetings
  - General public meetings (target - late March 2020)
- Communication Tools / Goals
  - Website – **[www.bayparkconveyance.org](http://www.bayparkconveyance.org)**
  - Business outreach is planned
  - Routine stakeholder meetings to take place throughout project life

# Easements

- Easements will be needed on public and private property for construction.
- There are four types of easements which will be necessary for this project— temporary surface, permanent surface, temporary subsurface, and permanent subsurface.
- Homeowners will only be asked for subsurface easements, which are far underground, 30 feet or more below the surface.
- Surface easements are on the surface of land and will primarily be located on public land.

## The Bay Park Conveyance Project Easement and Acquisition FAQs

**Q: What is an easement?**

A: An easement is an interest in real property owned by another which entitles its holder to a specific limited use on the property. Easements exist where public utilities, sidewalks, and other publicly owned lands cross private property. It is anticipated that the State will need to acquire easements on the public and private land in order to complete construction of this Project.

**Q: How does the State acquire property?**

A: The State will acquire only that real property determined necessary for the project after a thorough planning and design phase that includes public comment. The public will be invited to attend one or more meetings that form a part of the overall process.

If it is determined that an easement will need to be acquired on your property, the State will send you a letter notifying you of its intent to acquire an easement. In addition, you will be contacted to schedule an individual meeting with County of Nassau staff, who are a Project partner on the Bay Park Conveyance Project, to discuss the acquisition. Shortly after receiving notice, an acquisition map will be prepared which shows in detail the extent of the easement needed on your property. An appraisal will also be prepared which will form the basis of an offer of settlement. If you do not accept the offer, the State will file the acquisition map, and you will still have the right to contest the amount of compensation in an appropriate Court.

**Q: Will you need access to my property before construction begins?**

A: Upon the finalization of the construction route, the State will need to take steps to accurately identify and confirm properties that will require an easement. The State will hire a licensed land surveyor to put together a boundary survey map. During this time,

the State will also have an appraiser enter the property to determine the fair market value of any easement being acquired on the property.

**Q: Do I have to allow the surveyor and appraiser onto my property?**

A: Once a determination has been made after public hearing that a particular property interest needs to be acquired for a project, New York State Eminent Domain Procedure Law allows all licensed surveyors and appraisers a right-of-entry onto private land. The State and County will work with property owners and provide advance notice by mail of any upcoming survey and appraisal work.

**Q: What are the different types of easements needed for the Bay Park Project?**

A: There are four types of easements which will be necessary for this project— temporary surface, permanent surface, temporary subsurface, and permanent subsurface. Homeowners will only be asked for subsurface easements, which are far underground, 30 feet or more below the surface. Surface easements are on the surface of land and will primarily be located on public land. Temporary easements will grant the State use of land for specified periods of time, while permanent easements will exist in perpetuity or until such time as they no longer serve a public purpose.

**Q: If an easement is needed on my property will it limit my ability to enjoy my property now or in the future?**

A: Subsurface easements will be located far beneath your property. As such, we do not anticipate any impact before, during, or after installing the pipe underground. However, you will need to be careful if you take any action on your property that requires you to do any subsurface work at the depth of the subsurface easement.

**Q: Can you move the pipe or structures somewhere else?**

A: The final construction route selected will be the one that is the most effective way to achieve the project goals and objectives, with the least impacts to the environment, public and property owner. For this project, permanent surface structures will only be located on public and County property. In addition, the locations of temporary surface structures will be designed to minimize impact on private property owners.

**Q: When the pipe is being installed underground, does the construction company have the right to walk across my property?**

A: No. During the construction phase, the Design-Build contractor will be tunneling deep underneath the surface and will not need to access the surface of your property. The work area that the contractors need to use for building shafts and staging machinery is on temporary surface easements, away from private properties.

**Q: How do you determine what I will receive for the easement on my property?**

A: The law requires that each property owner receive compensation based on the Fair Market Value of the property acquired. Before the offer is prepared, the County will hire a New York State Certified Real Estate Appraiser, who will conduct an appraisal of your property and determine the loss in value of your property after the imposition of the easement being placed on the property. This valuation will be the basis upon which the State will make you an offer of compensation.

**Q: What if I disagree with the value the State is offering for the easement?**

A: Property owners have the right to disagree with the appraisal. Offers will be made by the State after approval of the appraisal and prior to the filing of final acquisition maps. If a property owner accepts the initial offer, they will be paid that amount by the State. If a property owner rejects the offer, they will have an opportunity to negotiate or file a claim for compensation during the applicable statute of limitations, which is three years from the date of filing the final acquisition map.

**Q: Can I receive any part of the value of my property if I disagree with the offer and wish to go to Court?**

A: Yes. If you do not agree with the amount of compensation offered, you may accept the initial offer amount as an advanced payment. In this case, you will receive the amount of the offer around the time the acquisition maps are filed with the County Clerk. You may thereafter file a claim in the appropriate court during the applicable statute of limitations, which is three years from the date of filing the final acquisition map.

**Q: Will I incur any costs related to the acquisition of my property?**

A: No. The State will pay for all costs related to the acquisition. In addition, the State will incur all costs related to the preparation of documents necessary for payment of the claim at no expense to you.

**Q: May I have someone represent me during the acquisition process?**

A: Yes. If property owners would like to have an attorney or anyone else represent them during any part of the acquisition process, they should inform the County and the State in writing. Property owners are responsible for the cost of their legal counsel.

**Q: Can the someone show me where the easement on my property will be located?**

A: Yes. Once it has been determined that an easement will need to be acquired on your property, a real estate specialist will reach out to you to schedule an individual meeting regarding the acquisition process. During this meeting you will be shown where the easements will be located on your property. Prior to filing of the final acquisition maps, residents can also contact Jane Houdsek, Attorney, Department of Public Works, Nassau County regarding any specific easement questions.

**Q: Who can I contact for further questions regarding the project or acquisition process?**

A: Your first point of contact for the project should be your local community leaders, such as County Legislators. Alternatively, the contacts for questions concerning legal matters or about the State's easement process for the project are: Jane Houdsek, Attorney, Department of Public Works, Nassau County, [jhoudsek@nassaucountyny.gov](mailto:jhoudsek@nassaucountyny.gov) and Bradford D. Burns, Department of Environmental Conservation, [bradford.burns@dec.ny.gov](mailto:bradford.burns@dec.ny.gov).

# Easements

- Upon the finalization of the construction route, the State will take steps to accurately identify and confirm properties that will need an easement and be acquired under EDPL.
- This public hearing is the beginning of the EDPL process as it begins the process of selecting the final route for the project.
- The final route will not be selected until the close of the public comment period which starts at the conclusion of this presentation.
- If your property is located on the selected route, our goal is to have one on one productive discussions with property owners to facilitate project construction.
- If you have specific questions today about EDPL, please visit the EDPL table in the lobby.

# Public Information Brochure

## Project Benefits



### Storm Protection

The nitrogen loading in the Western Bays over the years has caused a reduction in coastal resiliency and a loss of coastline.

This Project will spur the rapid ecological recovery of the Western Bays marshlands, which will protect coastal communities from storm surge and sea level rise.



### Quality of Life Factors

Poor water quality has resulted in harmful algae growth and low oxygen levels in the water, which have caused odor issues.

With higher nitrogen levels no longer discharged into the Western Bays, the community will experience the benefits of cleaner water. It will maximize quality of life by providing residents a place to work and play.



### Economic Benefit

The nitrogen loading in the Western Bays has resulted in habitat loss which has largely resulted in the decline of the shellfishing industry in the Bays.

The Project will allow for the ecological recovery of the Western Bays, which will in turn enhance and expand water-based recreational and commercial opportunities.

**The Bay Park Conveyance Project will make Nassau County an even better place to live, work, and play!**

"New York's innovative efforts to improve our infrastructure will be instrumental in protecting water quality and will support stronger, more resilient communities that are prepared to withstand extreme weather."

Governor Andrew M. Cuomo

"I am pleased that we are steadily moving along with the crucial Bay Park [Conveyance] Project, which upon completion will result in cleaner water, a healthier environment, and more resilient coastal communities on Nassau's south shore."

Laura Curran  
Nassau County Executive

"This Project represents a truly comprehensive and innovative regional wastewater management approach that will service close to one million New Yorkers."

Stuart F. Gruskin  
Chief Conservation & External Affairs Office at The Nature Conservancy

"The Project is critical to making Nassau County more sustainable by restoring the Western Bay ecosystem."

Adrienne Esposito  
Executive Director of Citizens Campaign for the Environment

## Western Bays Resiliency Initiative

The Bay Park Conveyance Project | The Long Beach Consolidation Project | The Point Lookout Sewer Feasibility Study

To improve water quality of the Western Bays and improve storm resiliency, Nassau County is pursuing the following Projects under the Western Bays Resiliency Initiative — the Bay Park Conveyance Project, the Long Beach Consolidation Project, and Point Lookout Sewer Feasibility Study.

## The Bay Park Conveyance Project

A Western Bays Resiliency Initiative

# Protecting Our Community for the Future



## The Bay Park Conveyance Project

The Bay Park Conveyance Project is a partnership between the New York State Department of Environmental Conservation (NYSDEC) and the Nassau County Department of Public Works (NCDPW). Together NYSDEC and NCDPW are improving water quality and storm resiliency in Long Island's Western Bays by upgrading its existing wastewater management infrastructure.

The Western Bays are the waters between the neighborhoods of East Rockaway, Oceanside, Island Park, Baldwin, Rockville Centre, Freeport and Long Beach Barrier Island. The Western Bays were once a productive fishing area. Much of the excess nitrogen in the Bay is attributed to wastewater treatment facilities that discharge directly into the Bays. Together with the low mixing capabilities of the Bays, this discharge over time has led to loss of fishing capacity and degradation of the water quality and the marsh ecosystem. Due to the degraded marshlands, storm resiliency diminished as experienced during Hurricane Sandy.

### Design-Build Process

The method of delivery for this Project is called design-build. Under the design-build process, there is one contract where the designer and contractor will work together as a team. This process shortens the procurement phase and allows for innovative approaches that will save time leading to a successful conclusion of the Project.

### Sponsors

New York State Department of Environmental  
Conservation in partnership with Nassau County  
Department of Public Works



Department of  
Environmental  
Conservation





# Public Information Brochure

Through the Projects in the Western Bays Resiliency Initiative, Nassau County will reduce the nitrogen in the Western Bays, which will restore these vital marshlands that protect these communities from wave action and coastal surge. In addition to increasing the resiliency of areas along the Western Bays to coastal flooding, this Project will give the local ecosystem a chance to regenerate, bringing back cleaner, healthier bays for wildlife, shellfish, fish, visitors, and local residents alike.

This innovative Project will convey treated water from the Bay Park Sewage Treatment Plant (STP) located in Nassau County, New York, which currently discharges an average of 50 million gallons per day (MGD) of treated water into Reynolds Channel, to the Cedar Creek Water Pollution Control Plant.

Treated water will be conveyed via the construction of a two-mile long force main from the Bay Park facility to an existing aqueduct under the Sunrise Highway, rehabilitation of an eight-mile stretch of the aqueduct, and construction of a two-mile long force main to connect the rehabilitated aqueduct to the existing Cedar Creek Water Pollution Control Plant (WPCP) outfall, which discharges and diffuses treated water three miles offshore in the Atlantic Ocean.

### Proposed Method of Construction

The Bay Park Sewage Treatment Plant and Cedar Creek Water Pollution Control Plant force mains are to be constructed using microtunneling (see 2, 4) and slipling (see 3). Microtunneling is a process that uses a microtunnel boring machine to construct a tunnel 20 to 60 feet below the surface. Slipling is the process of installing a smaller pipe inside the larger existing pipe, a method to be used to rehabilitate the existing unused aqueduct pipe under Sunrise Highway.

### Bay Park STP Pumping Station

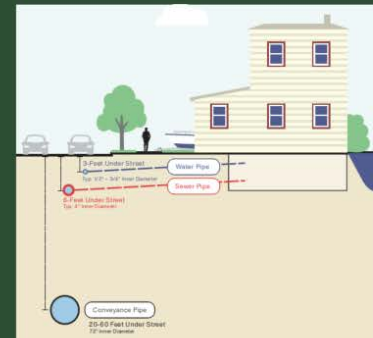
This Project will maximize the amount of treated water to be conveyed to Cedar Creek Water Pollution Control Plant for discharge through its existing Ocean Outfall in the Atlantic Ocean (see 1 - 4).

### Cedar Creek WPCP Outfall Pipe

The Cedar Creek Water Pollution Control Plant discharges treated water through an 84-inch diameter concrete outfall pipe to 120 diffuser ports located approximately 3 miles offshore in the Atlantic Ocean (see 5 - 6).

### Conveyance Pipe Depth

The pipe carrying treated water will be approximately 20-60 feet below the surface.



### Construction Elements

- 1** Construct a dedicated effluent diversion pump station at the Bay Park STP
- 2** Construct approximately 2 miles of new underground force main between the Bay Park STP and Sunrise Highway
- 3** Reline and repurpose approximately 8 miles of the existing 72 inch aqueduct under Sunrise Highway
- 4** Construct approximately 1.5 miles of new underground force main between Sunrise Highway and the Cedar Creek WPCP
- 5** Construct a receiving connection at the Cedar Creek WPCP, comprised of a receiving tank and a direct connection to the existing outfall pipe
- 6** Replacement of pumps and associated controls in the existing Cedar Creek WPCP pumping station

Perspective rendering of a new pump station

Example of a microtunnel boring machine

Example of slipling in progress

Example of tunneling in progress

Perspective rendering of a new receiving tank

Existing Cedar Creek WPCP Pumping Station

Note: This design depicts a generic project profile for illustrative purposes.

### Contacts

**New York State Department of Environmental Conservation**  
Susan McCormick, P.E.  
Project Director  
825 Broadway  
Albany, NY 12233-1010

**Nassau County Department of Public Works**  
Elsa Picca  
Chief Deputy Commissioner  
1194 Prospect Ave  
Westbury, NY 11590-2723

For additional information, please contact:  
✉ DesignBuild@dec.ny.gov  
🌐 bayparkconveyance.org

### Schedule

An RFQ for design-build services was issued in February 2020. The Project is estimated to take 3 years to construct using design-build with construction start anticipated for Q1 2021.

### Current Teams

**New York State**  
Project Management by AECOM.

**Nassau County**  
Program Management by the Joint Venture of Habert and Sawyer and Arcadis. Design Criteria and Environmental Review/Permitting by WSP and AKRF.



(Photos source: NC press office)





(Western Bays time lapse video)



# Public Comment Period

- At the conclusion of this presentation, the public comment period will begin.
- You can make verbal comments to be put on the record at this hearing.
- You can also put your comments in writing by visiting the EDPL table in the lobby. There are comment cards and pens available on the table.
- Comments on the proposed Project may also be sent in writing to the to New York State Department of Environmental Conservation, c/o Bradford D. Burns, 625 Broadway, Albany, NY 12233-1500.
- Maps, drawings and other pertinent information developed by the State and County will be available for public inspection and copying at the Nassau County Department of Public Works, 1194 Prospect Avenue, Westbury, New York 11590.
- All documents presented tonight are available electronically at **[bayparkconveyance.org](https://bayparkconveyance.org)**
- **All comments must be received no later than March 17, 2020.**



Thank You!



Department of  
Environmental  
Conservation

