

The Bay Park Conveyance Project

Protecting Our Community
for the Future

Public Meeting

July 15, 2020



Department of
Environmental
Conservation



Logistics

Virtual Meeting Setup

1



Registration will occur on the project website prior to entering via360 environment

2



Project Presentation and Video

3



The Western Bays Today

4



Using Advanced Construction Technology to Minimize Impacts

5



Environmental Assessment

6



Project Feedback and Material Download

One-on-One Q&A with our Subject Matter Experts!

Also check out bayparkconveyance.org and contact us anytime

Presentation Topics





1. Purpose and Need

The Western Bays

A sub-region of the South Shore Estuary Reserve that includes Hempstead Bay and South Oyster Bay, located on Nassau County's south shore

- Largest concentration of salt marshes
- Critical habitat for birds and marine species
- Recreational opportunities (swimming, boating, fishing)
- Productive fishing and shell fishing grounds



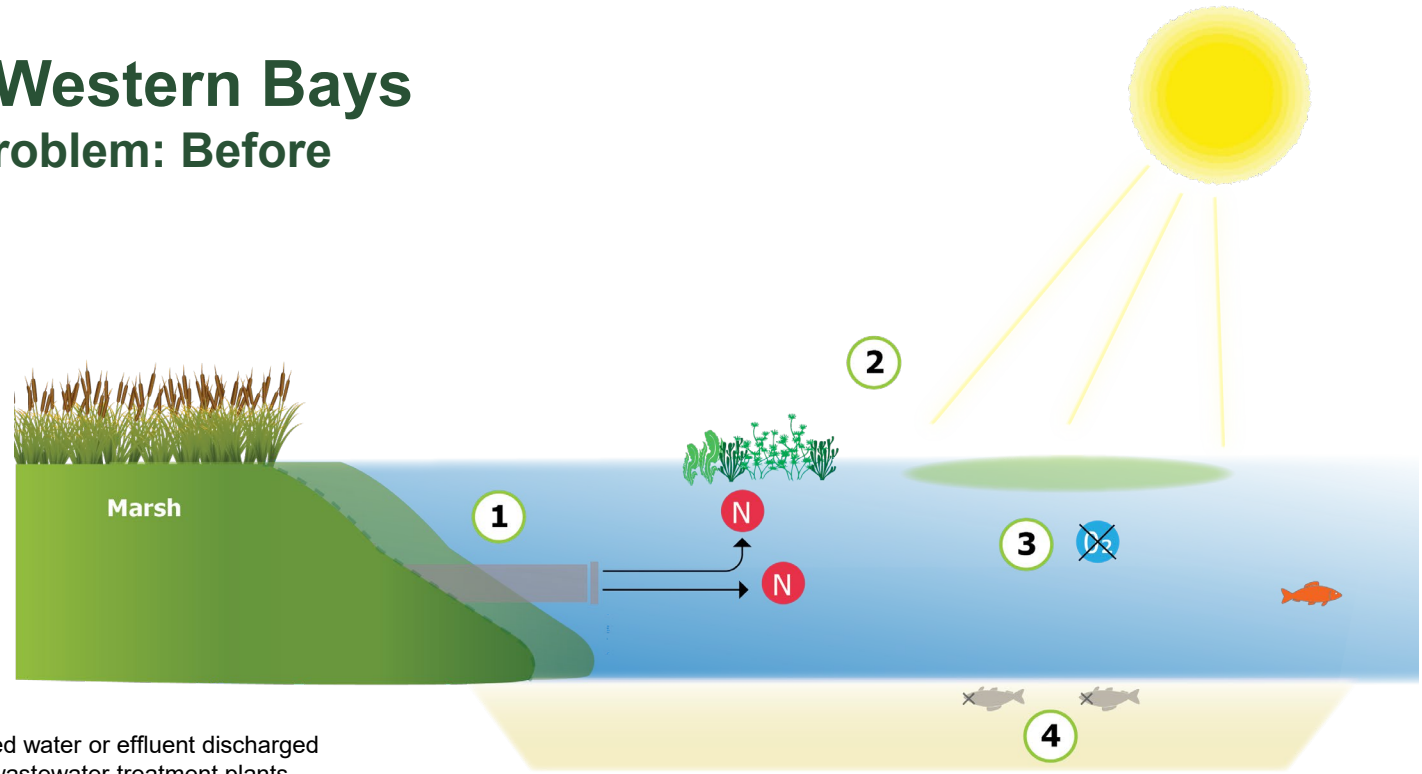
The Western Bays

The Challenge



The Western Bays

The Problem: Before



1

Treated water or effluent discharged from wastewater treatment plants contains nitrogen. Nitrogen builds up over time in the Western Bays and causes an imbalance in the ecological system and leads to marsh collapse.

2

Nitrogen fuels excessive sea lettuce and algae growth. Excess algae growth blocks sunlight.

3

Insufficient dissolved oxygen levels for aquatic life (hypoxia).

4

Decaying animal and plant life.

Impacts of the Problem

The Current condition of the Western Bays have led to the following impacts on Nassau County communities:

1

Fewer marine-based jobs, i.e. shellfish industry



2

Limited enjoyment of natural resources and recreational opportunities



3

Reduced coastal protection to storm surge



The Solution

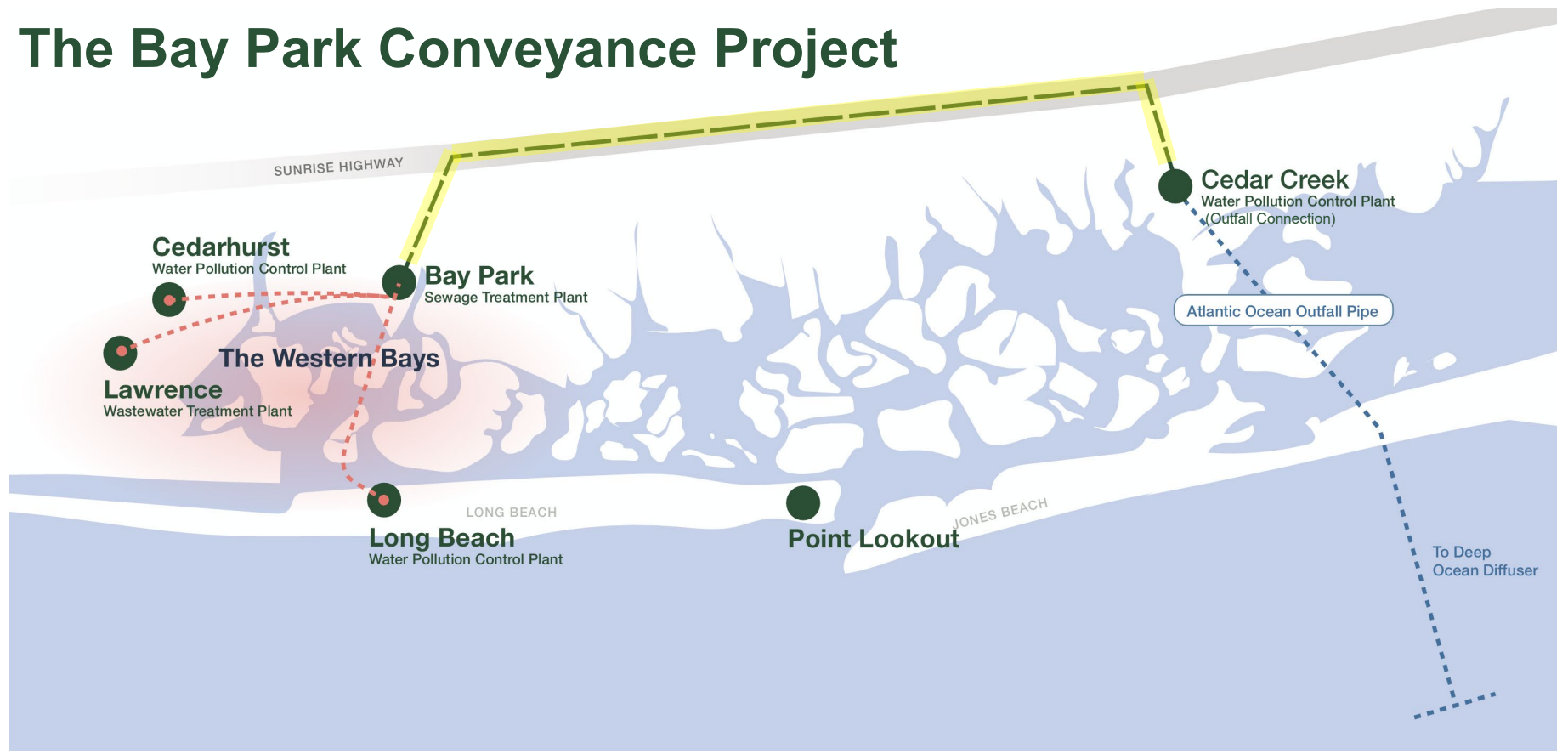
Western Bays Resiliency Initiative

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

The Nassau County Department of Public Works (NCDPW) is leading a series of region-wide resiliency and sustainability projects that will improve the water quality of the degraded Western Bays.

Completed projects include:
Conversion and Consolidation of Cedarhurst Water Pollution Control Plant and Lawrence Water Reclamation Facility to Bay Park STP for treatment.

The Bay Park Conveyance Project



By eliminating nearly all nitrogen loading caused by sewage treatment plants in the Western Bays, the Bay Park Conveyance Project **will improve water quality in the Western Bays** and provide benefits to Long Island's south shore communities like **enhanced storm protection, improved ecosystem and marine life habitat, and improved recreational opportunities and quality of life.**



Benefits



Storm Protection

Spur the rapid ecological recovery of the Western Bays marshlands and 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 ecological recovery of the Western Bays and improved water quality will enhance and expand water-based recreational and commercial opportunities



2. The Bay Park Conveyance Project

Team Partnership



**Department of
Environmental
Conservation**

In partnership
with



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



FEMA



In Communication with Environmental Partners

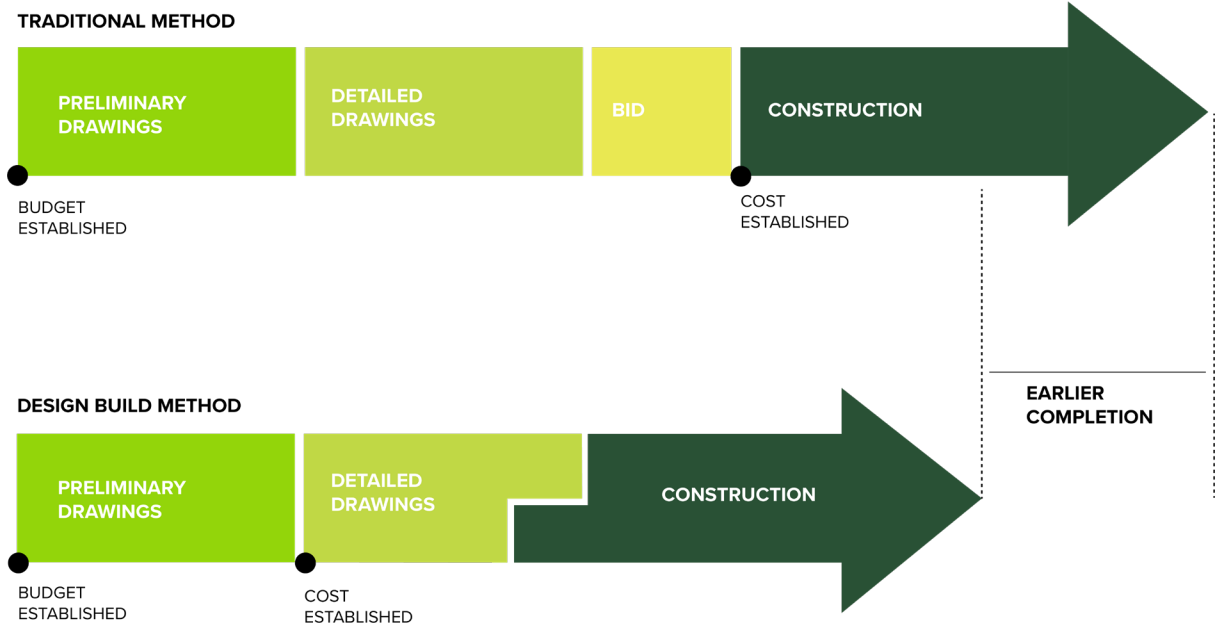


**Sludge Stoppers
Task Force**

Accelerating Construction

Efficiently implement the project by utilizing NYSDEC's design-build authority

- Two-step process with a Request for Qualifications (RFQ) and Request for Proposals (RFP)
- Ensures use of qualified engineers and contractors
- Ensures the selected Design-Builder designs and builds what the County needs



Project Overview

Purpose

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



Project Overview

Bay Park to Sunrise Highway Microtunnel

Main Project Elements

- At Bay Park – Construction of a new pump station
- Bay Park to Sunrise Highway – 2-mile force main via microtunneling

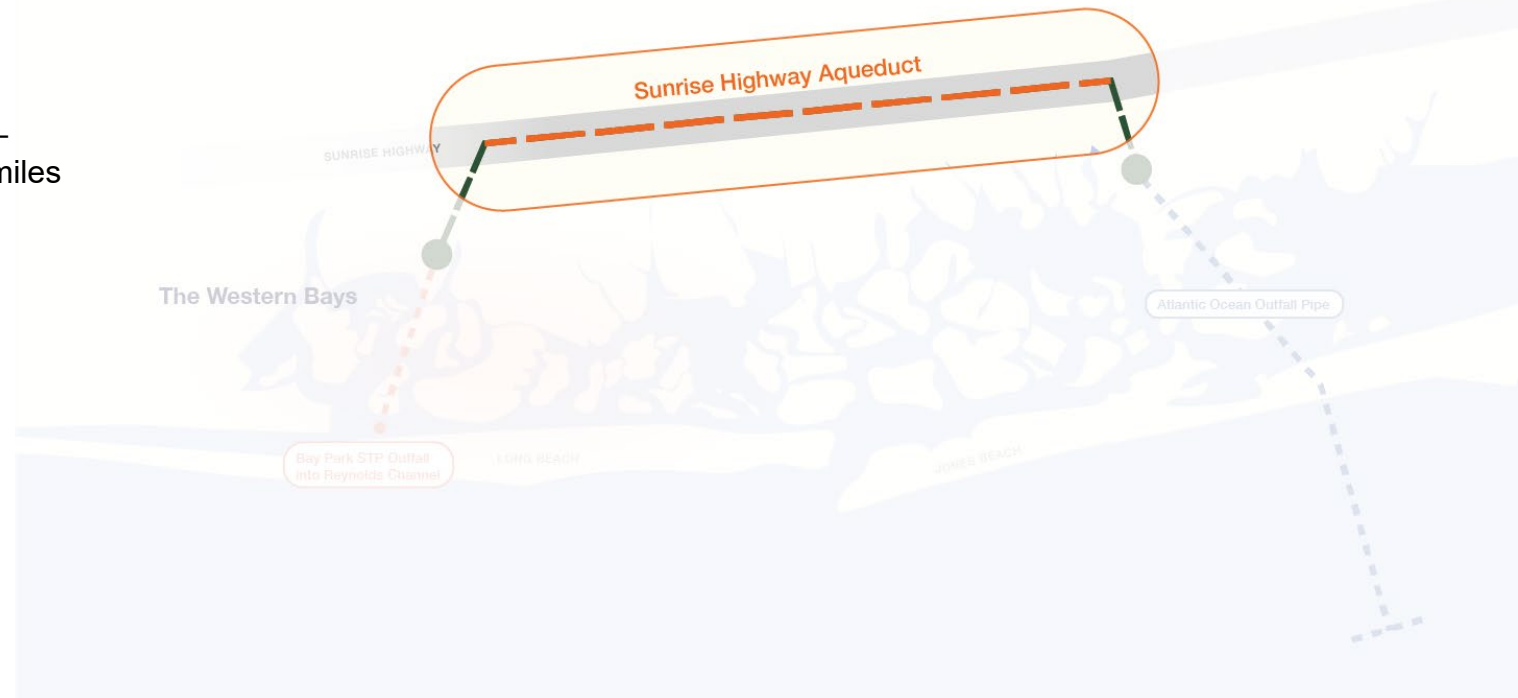


Project Overview

Sunrise Highway Aqueduct

Main Project Elements

- Sunrise Highway – Repurposing 7.3-miles of the existing aqueduct



Project Overview

Cedar Creek to Sunrise Highway Microtunnel

Main Project Elements

- Sunrise Highway to Cedar Creek – 1.6-mile force main via microtunneling
- At Cedar Creek – Upgrade tide pumps, connect force main to ocean outfall
- Cedar Creek to Ocean Outfall – Discharge treated water seven miles (three miles are offshore) from Cedar Creek to ocean outfall diffusion structure



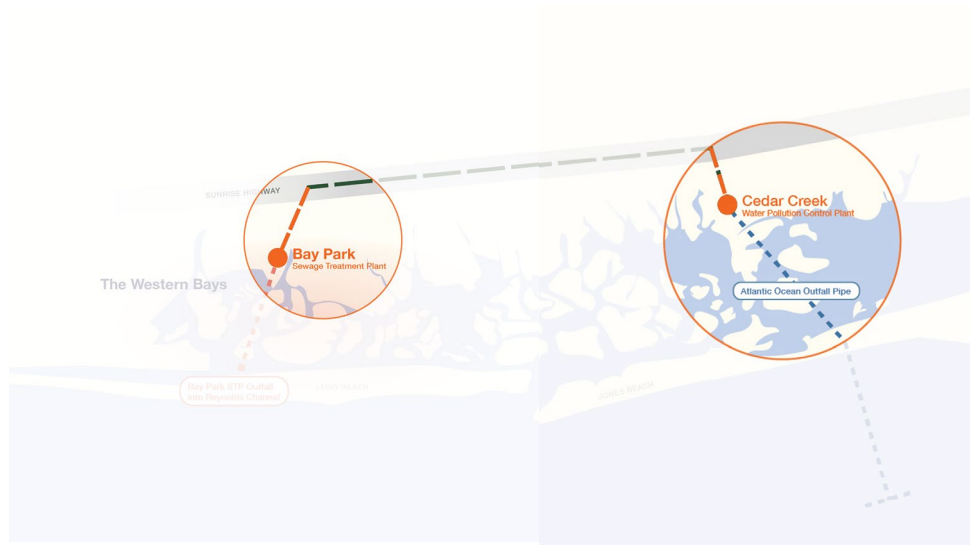
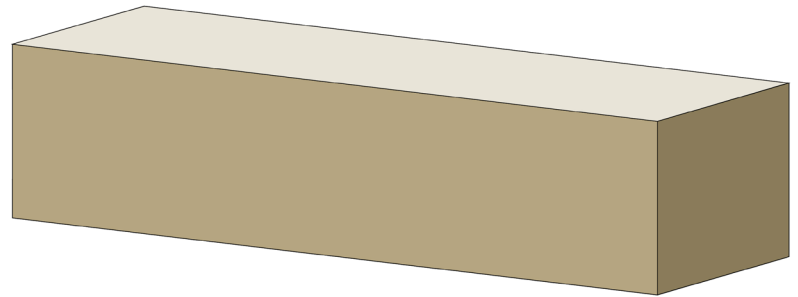
Innovative Approach Sunrise Highway Aqueduct

- Repurpose an existing pipe previously used for water conveyance and abandoned since 1966
- Inspections in 2017 show pipe can be repurposed
- **Minimize disruption to traffic, businesses, and communities**



Innovative Approach Innovative Technology to Minimize Disruption

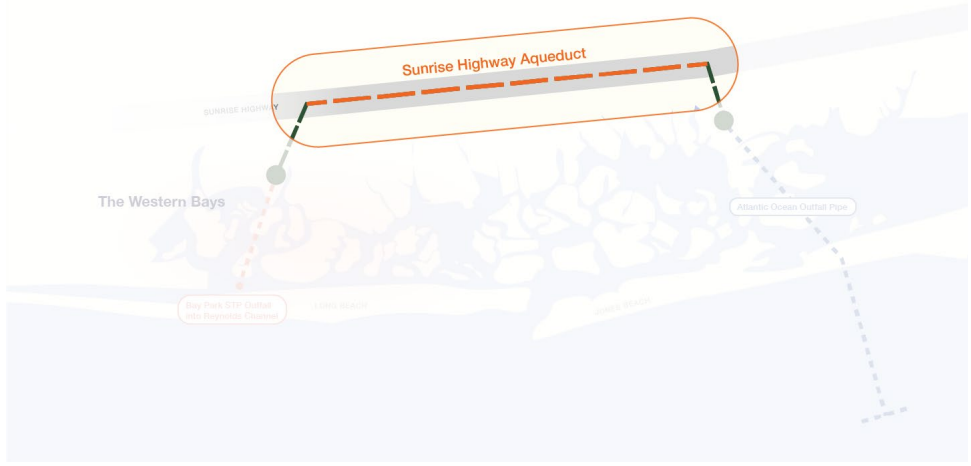
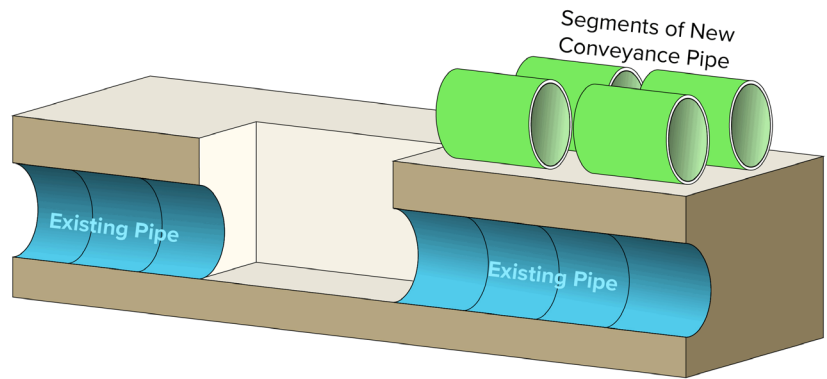
Microtunneling



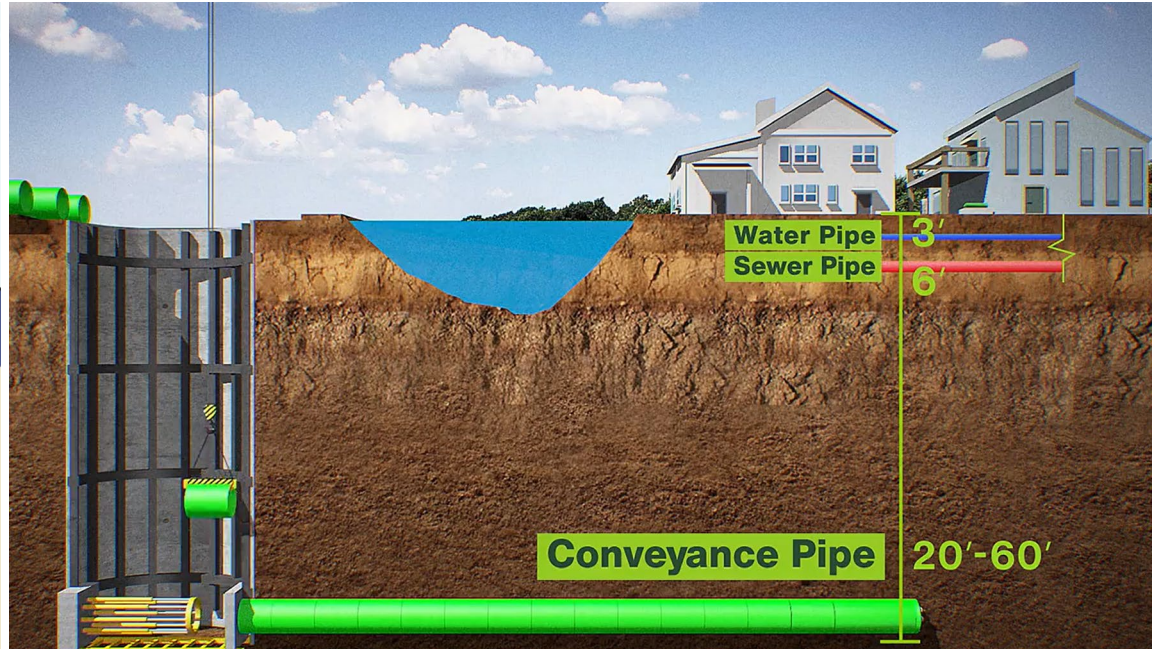
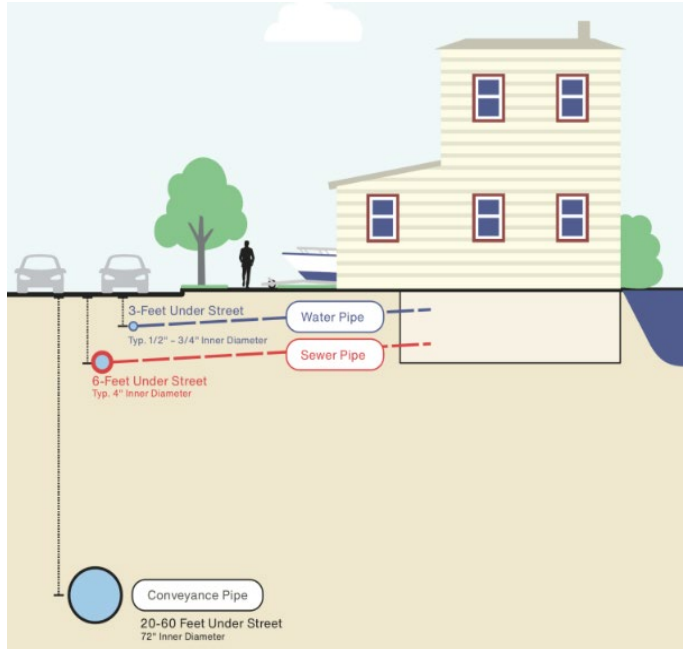
Innovative Approach

Innovative Technology to Minimize Disruption

Sliplining



How Deep is Microtunneling?



Construction Activities - Sliplining



Sliplining



Epoxy Lining



Work Pits constructed along Sunrise Highway

Construction Activities - Microtunneling





3. Public and Stakeholder Outreach

Communicating with the Public

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



EDPL Public Hearing held on February 25, 2020

- DEC is currently having one-on-one conversation with property owners
- Easement FAQ is available for download at bayparkconveyance.org/faq-easement



Communication Tools / Goals

- Website: bayparkconveyance.org
- Public Information brochure available for download at bayparkconveyance.org/about and the project feedback station
- Business outreach planned
- Stakeholder meetings throughout project life

Where We Are Now & Next Steps



Preliminary Design

Preferred microtunnel alignments identified



Environmental Review

Public review period started July 3, 2020



Procurement

RFP released April 29, 2020.

Best Value Proposer to be selected Fall 2020

Notice to Proceed to be issued early Spring 2021



Real Estate (EDPL)

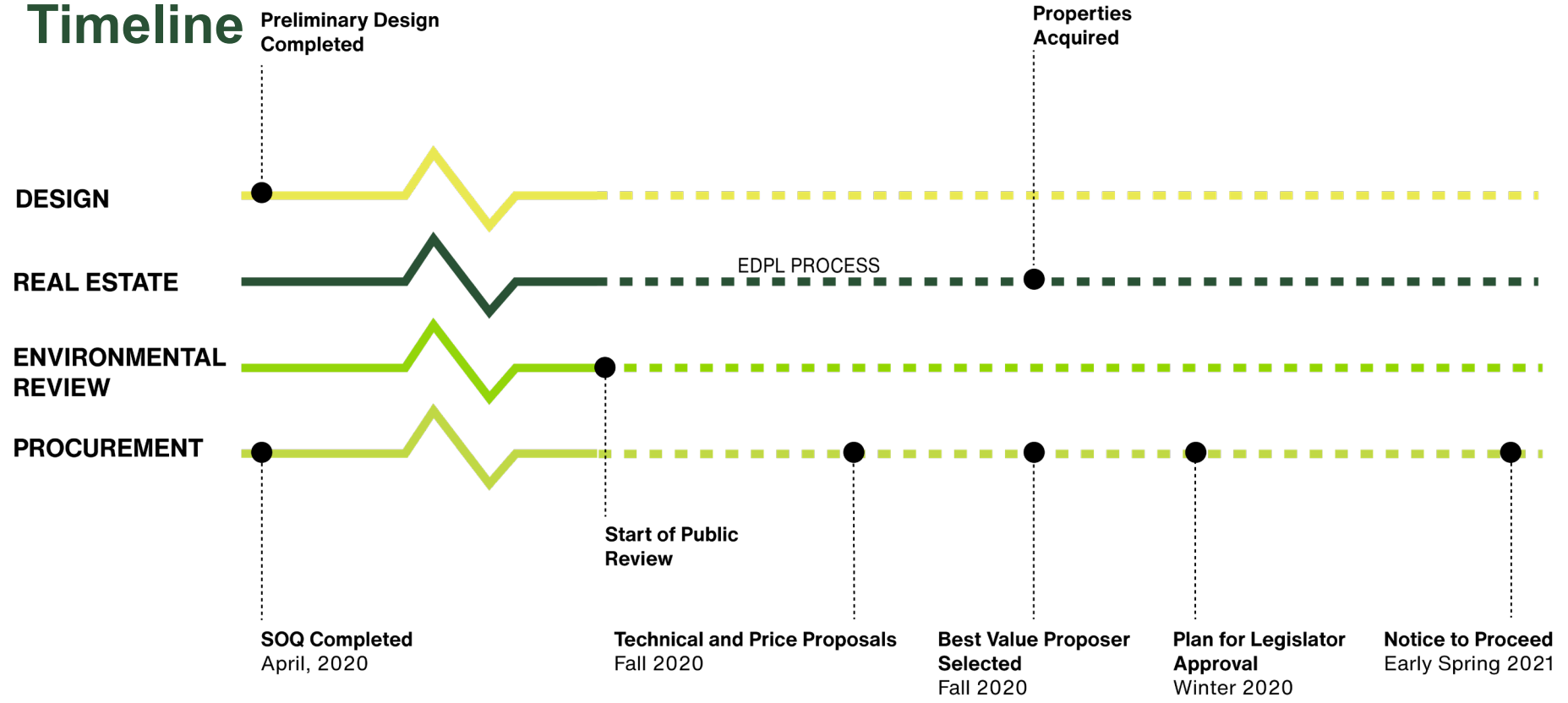
Easements to be acquired by Fall 2020



Public and Stakeholder Outreach

Virtual public meeting today. See Project website for announcements of additional outreach.

Timeline





Department of
Environmental
Conservation



Thank You!

bayparkconveyance.org/contact-us