



# **City Council Work Session**

## **April 23, 2019**

- Department of Project Implementation Overview
- Interim Waterfront Park Construction
- Waterfront Flood Mitigation Project Implementation
- RiverRenew Update



# **Department of Project Implementation Overview**

Fayette Streetscape

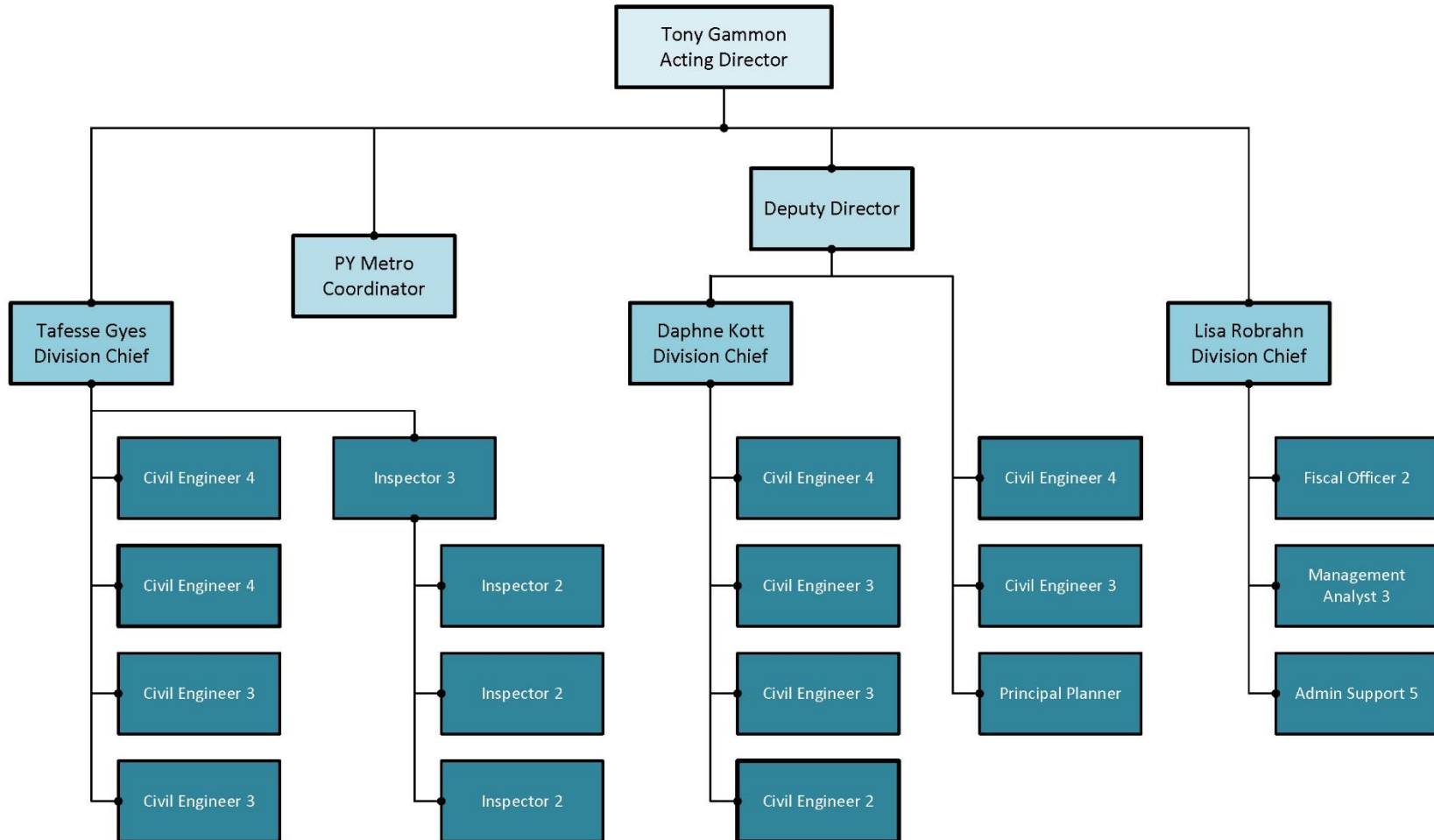


Holmes Run Trail



Warwick Pool







# Primary Responsibilities

- Design and construction management for capital projects.
- Support capital budget development process.
- Implement small area plan improvements (Waterfront).
- Technical support for CSO (RiverRenew).
- City lead for Potomac Yard Metro (WMATA).



# Subject Matter Expertise

- Engineering and design
- Project and program management
- Capital project development and budgeting
- Consultant management
- Construction management
- Procurement process
- Project delivery best practices

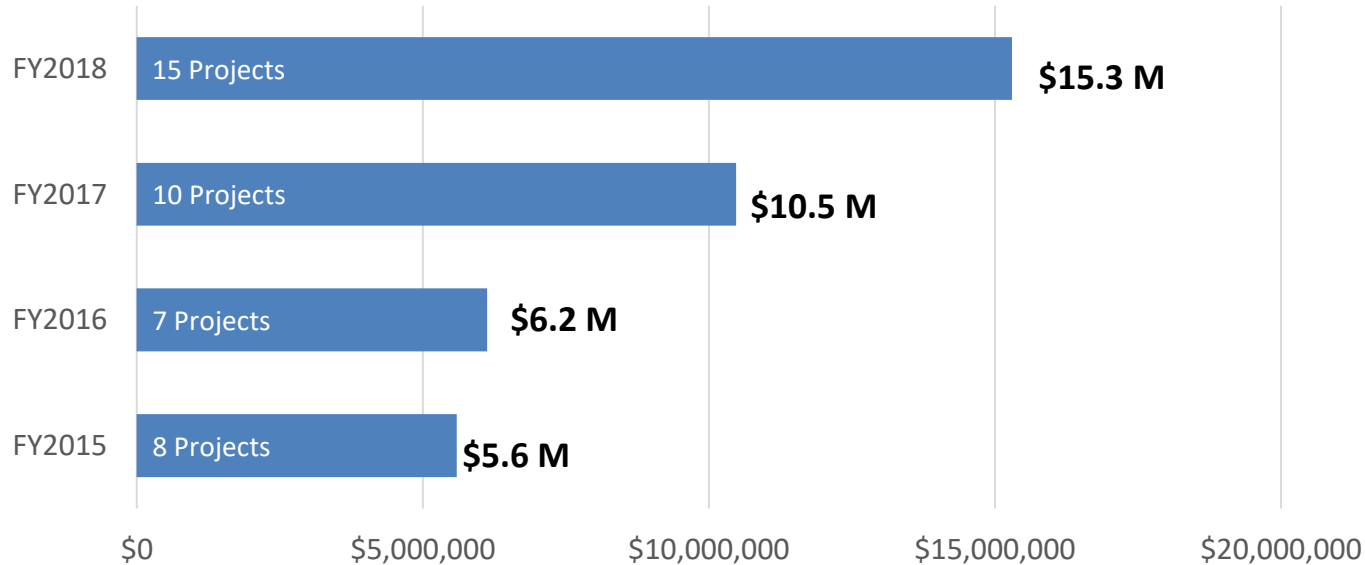


Lake Cook

# Completed Projects



Total Cost of Construction by Fiscal Year  
(CMI Not Included)



# Strategic Work

- Implement projects consistently and predictably.
  - Manage civic expectations.
  - Support capital budget process.
  - Balance demands on City staff.
- Continuous improvement of subject matter expertise in project delivery.
- Maximize impact of budget by leveraging City services and consultant/contractor support.





# Interim Waterfront Park Construction

[www.alexandriava.gov/waterfront](http://www.alexandriava.gov/waterfront)





























# **Waterfront Flood Mitigation Project Implementation**

[www.alexandriava.gov/waterfront](http://www.alexandriava.gov/waterfront)

# Timeline

January 2012 – Waterfront SAP approved by City Council.

June 2014 – Schematic Landscape and Flood Mitigation Design approved by City Council.

January 2015 – Phasing and Funding plan to City Council.

July 2015 – Waterfront priorities funded in FY16 – FY25 CIP at \$61.5M.

July 2016 – Interim park funded in FY 2017 CIP.

February 2019 – City Manager proposed budget accelerating funding.

March 2019 – Interim park construction opening.

# Schematic Landscape Plan - June 2014



[www.alexandriava.gov/78787](http://www.alexandriava.gov/78787)

Schematic design (10%-15% detail) of SAP goals.

Incorporation of flood mitigation system into landscape.







May 2014

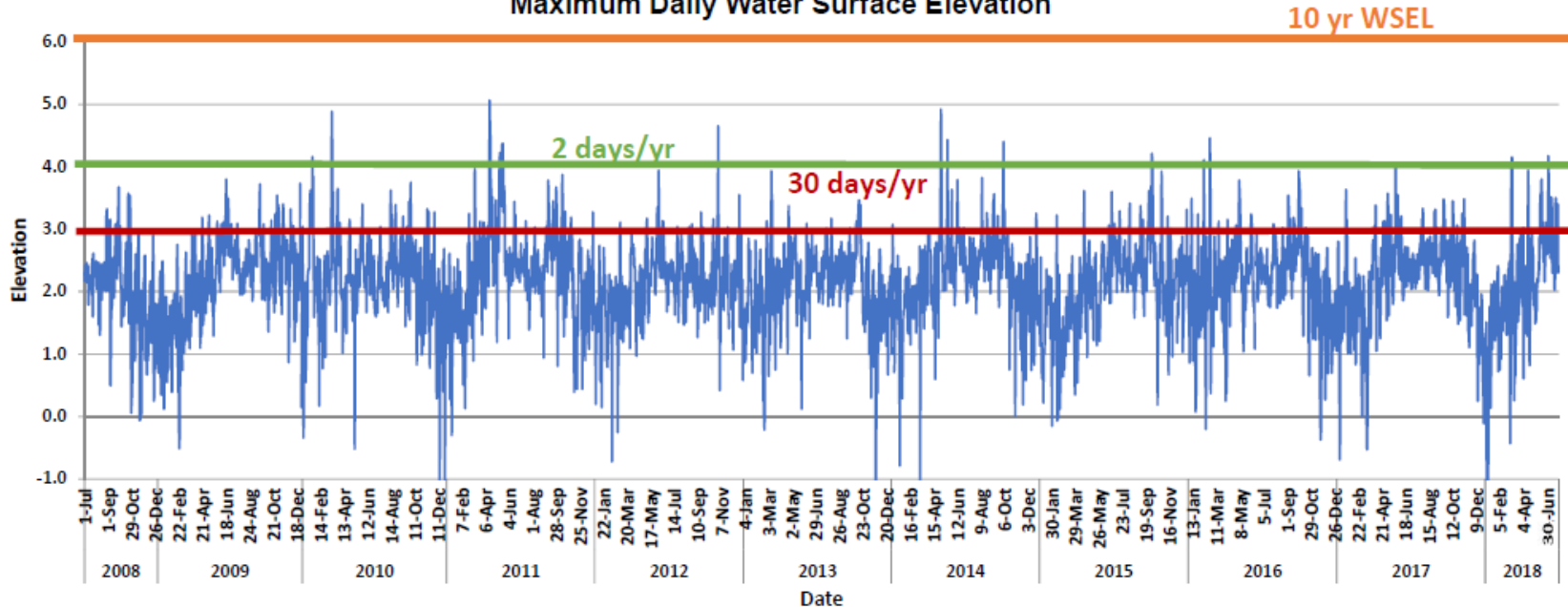






# River Elevations: 10-Year Summary

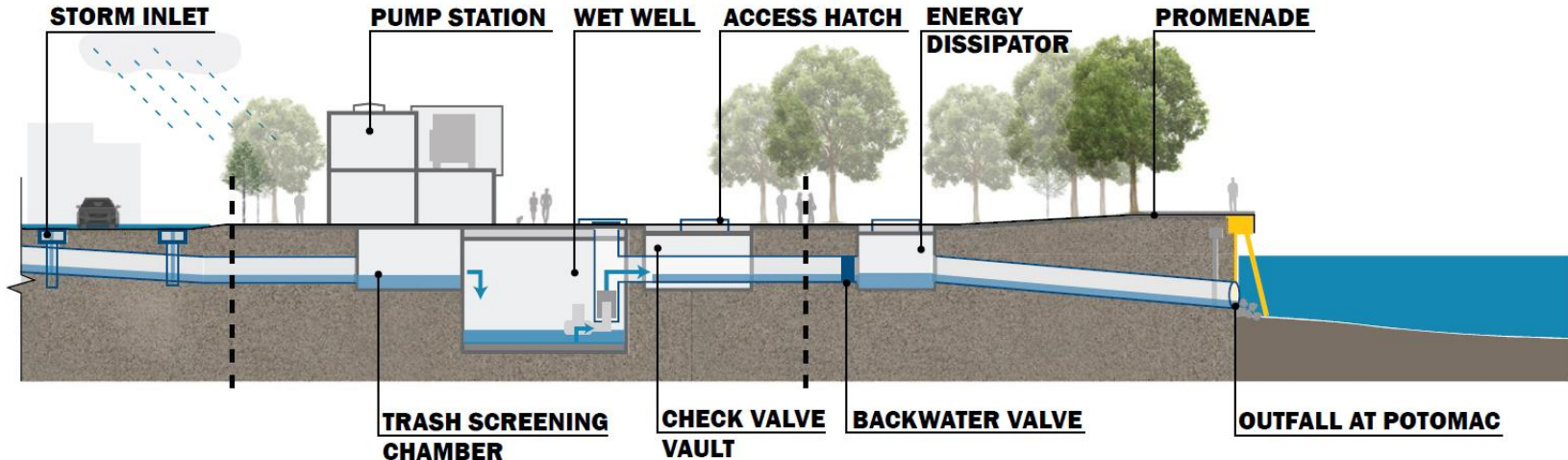
**USGS River Elevation**  
 July 2008 - June 2018  
 Maximum Daily Water Surface Elevation



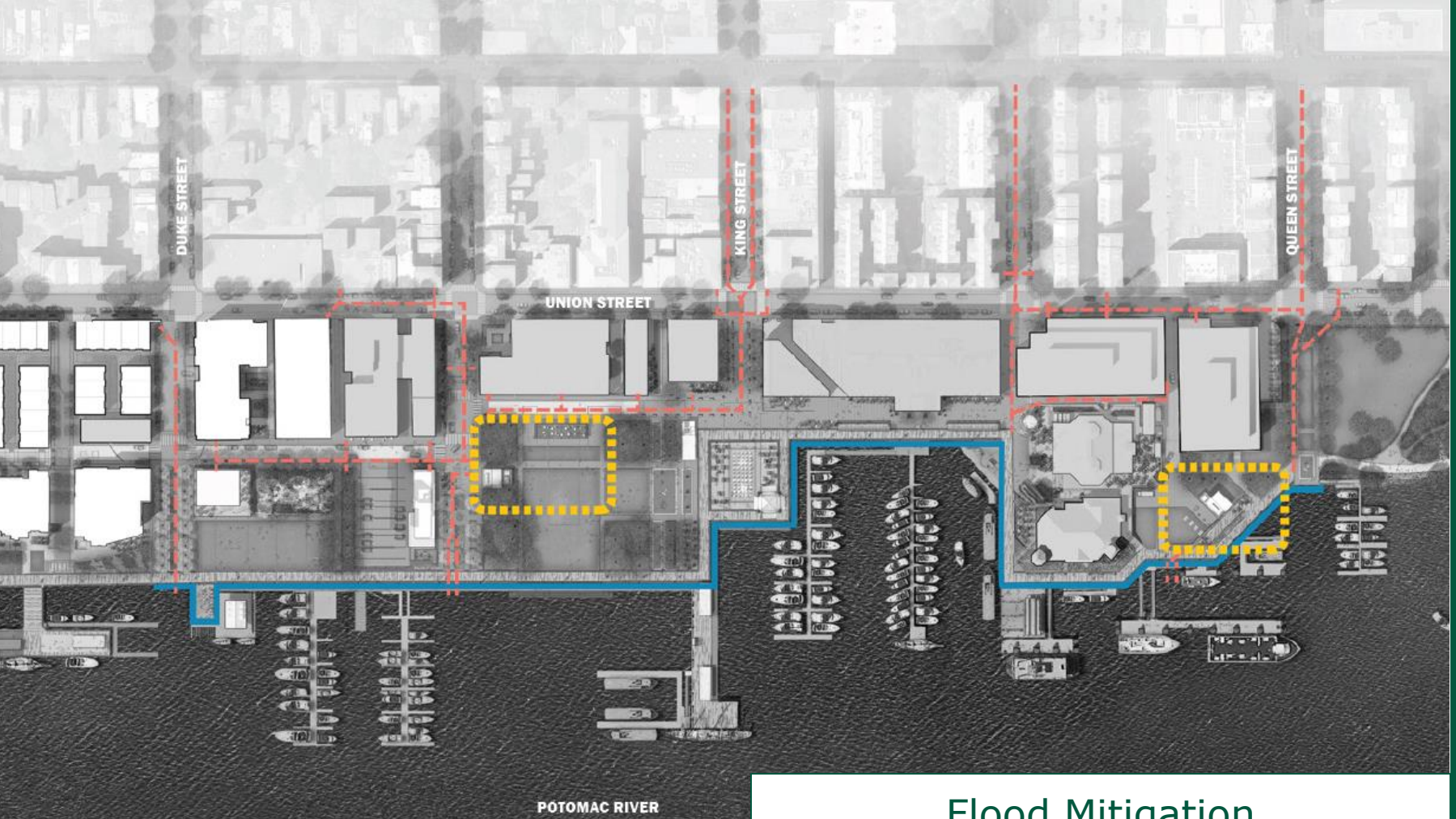


# FY 2020 Proposed Budget

- Unallocated funding consolidated to FY 2021
- Cost re-evaluation to be done for FY 2021 budget cycle
- Funding provides flexibility to use alternative delivery methods (progressive design-build)







## Flood Mitigation

# Next Steps

- Procure owner-advisor consultant.
- Conduct civic engagement to inform design elements.
- Develop priority-based construction contract package.
- Evaluate construction costs and budget.
- Develop infrastructure maintenance plan.
- Procure design-build team.





# RiverRenew Update



RiverRenew is a program owned and implemented by Alexandria Renew Enterprises, with support from the City of Alexandria.



1800 Limerick Street | Alexandria, VA 22314



# Proposed RiverRenew Tunnel System Routes

## Waterfront Tunnel Routes\*

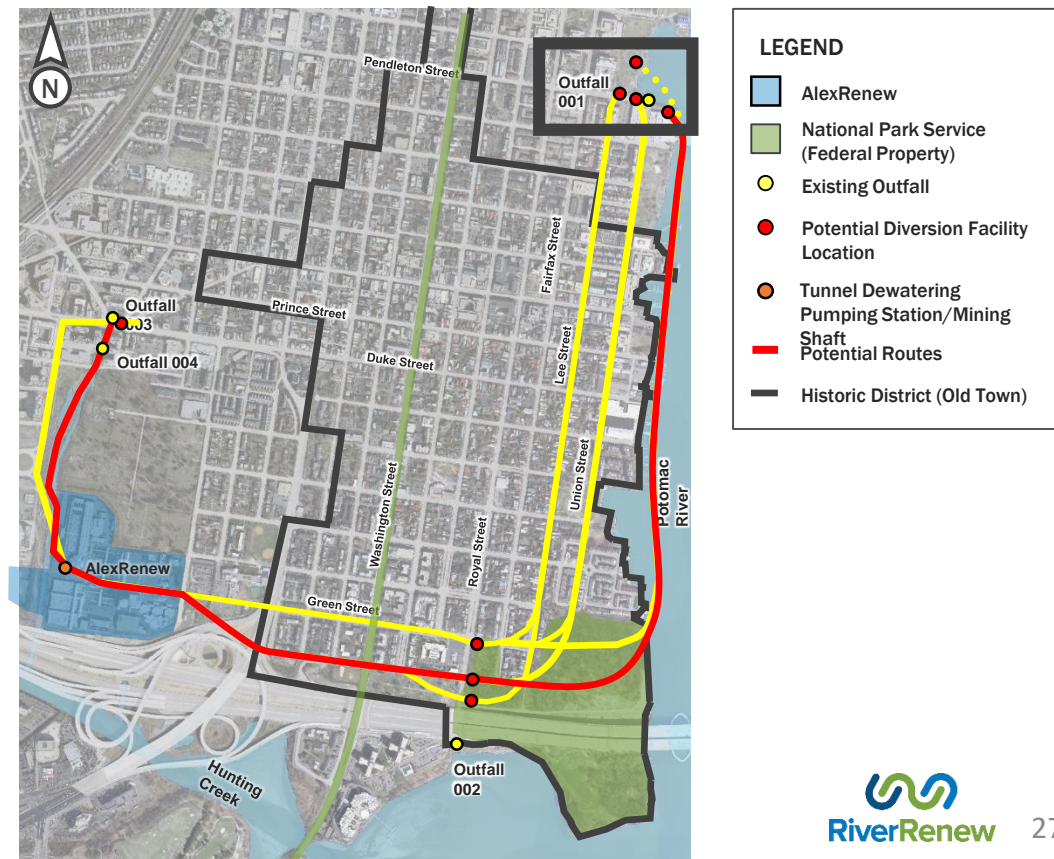
East-West	North-South
Green Street	Lee Street
Church Street	Union Street
	Potomac River

\*over 100 feet deep

## Hooffs Run Tunnel Routes

Option	Approx. Depth
Deep	100 feet
Trenchless	20 to 40 feet
Open-Cut	10 to 20 feet

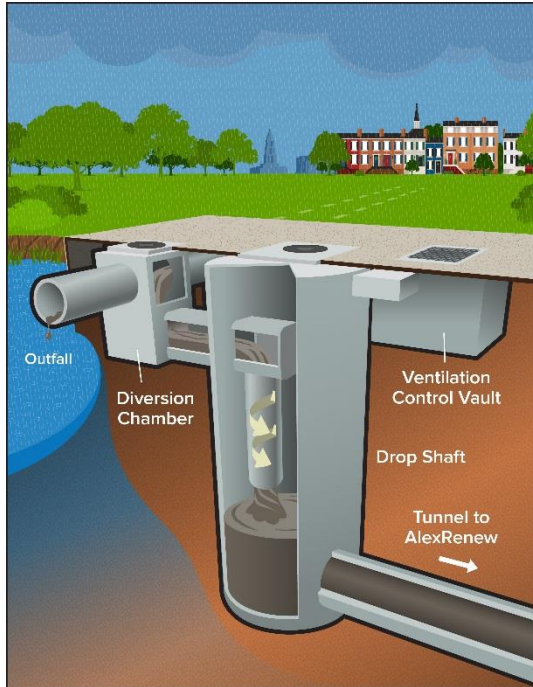
*Note: The selection of a final route will be determined through the Environmental Assessment process*





# RiverRenew Tunnel System Components

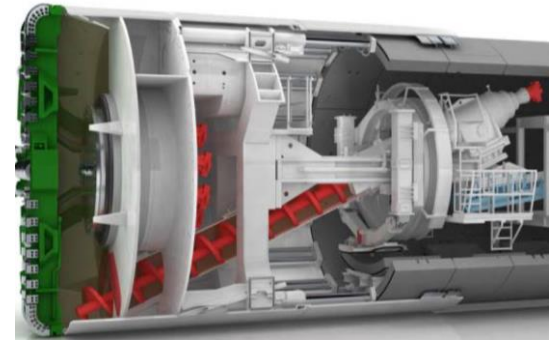
Diversion Facility



Hooffs Run Tunnel (open-cut)



Waterfront Tunnel



# Proposed RiverRenew Work at City Waterfront





# Outfall 001 Existing Conditions



# The Environmental Assessment is Analyzing Four (4) Alternatives at Outfall 001 to Control Discharges of Combined Sewage





# What RiverRenew Construction Activities May Look Like at Outfall 001

## Phase 1: Site Mobilization (3 months)



# What RiverRenew Construction Activities May Look Like at Outfall 001

## Phase 2: Cofferdam Installation (8 months)



Sheet pile installation



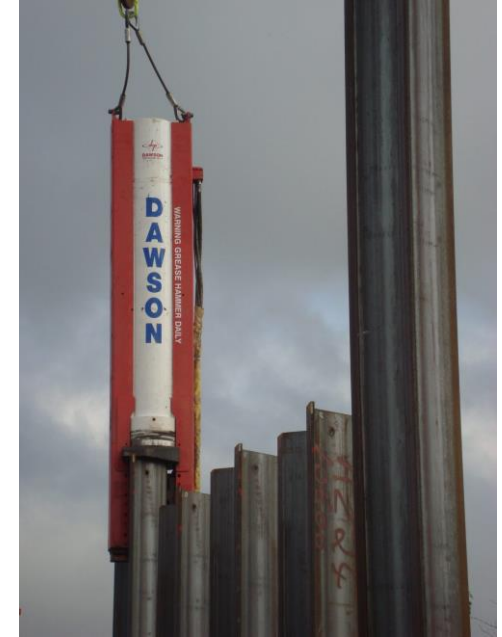
Work within sheet pile wall



Finished sheet pile wall



Braced sheet pile wall



Sheet pile hammer



# What RiverRenew Construction Activities May Look Like at Outfall 001

## Phase 3: Shaft Construction (10 months)



Shaft excavation support installation



Shaft excavation



Finished shaft excavation support

# What RiverRenew Construction Activities May Look Like at Outfall 001

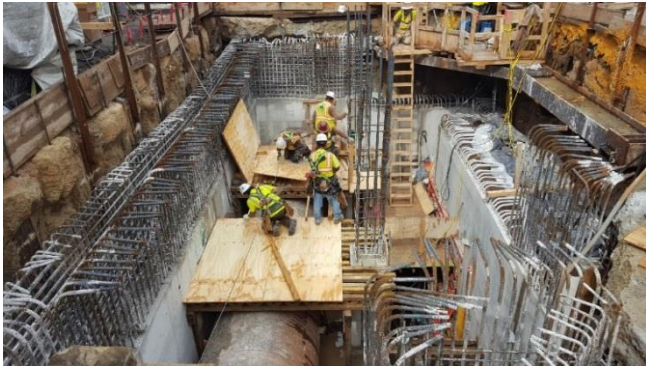
## Phase 4: Near Surface Structures (9 months)



Excavation support and flume



Concrete formwork and pours



Reinforcing installation



Equipment installation (where necessary)



# What RiverRenew Construction Activities May Look Like at Outfall 001

## Phase 5: TBM Removal & Shaft Fit-out (4 months)



TBM removal



Shaft internal concrete (upper shaft)



Shaft internal concrete (lower shaft)

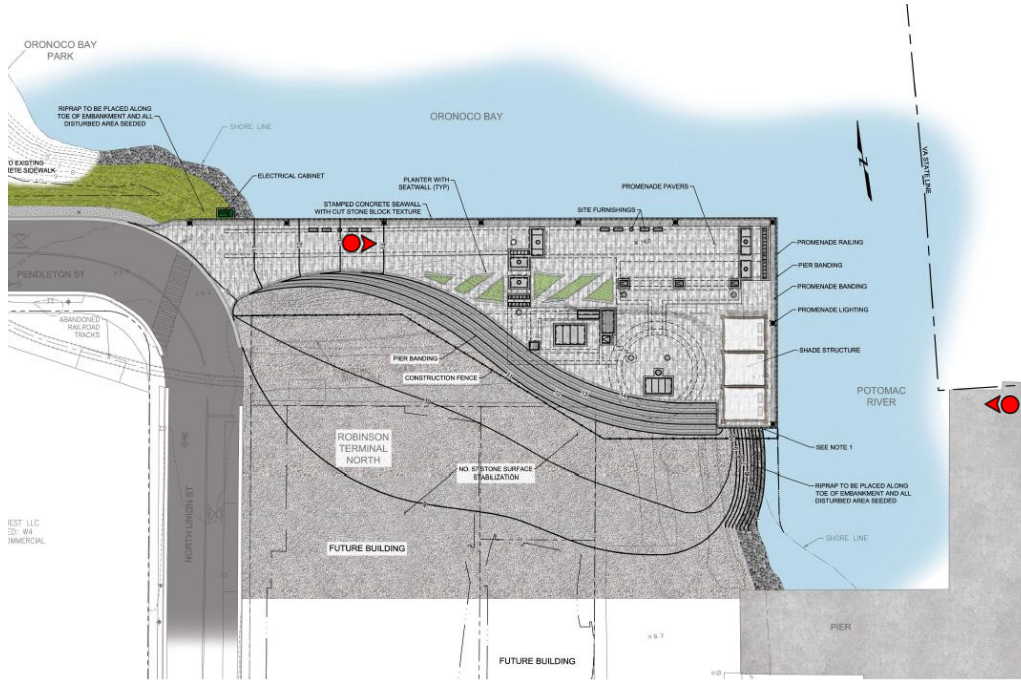


Shaft cover and backfill



# Illustrative Renderings of Outfall 001 Diversion Facility Restoration

## Robinson Terminal North Alternative



Illustrative Landscaping Plan



Rendering, looking west at Robinson Terminal North

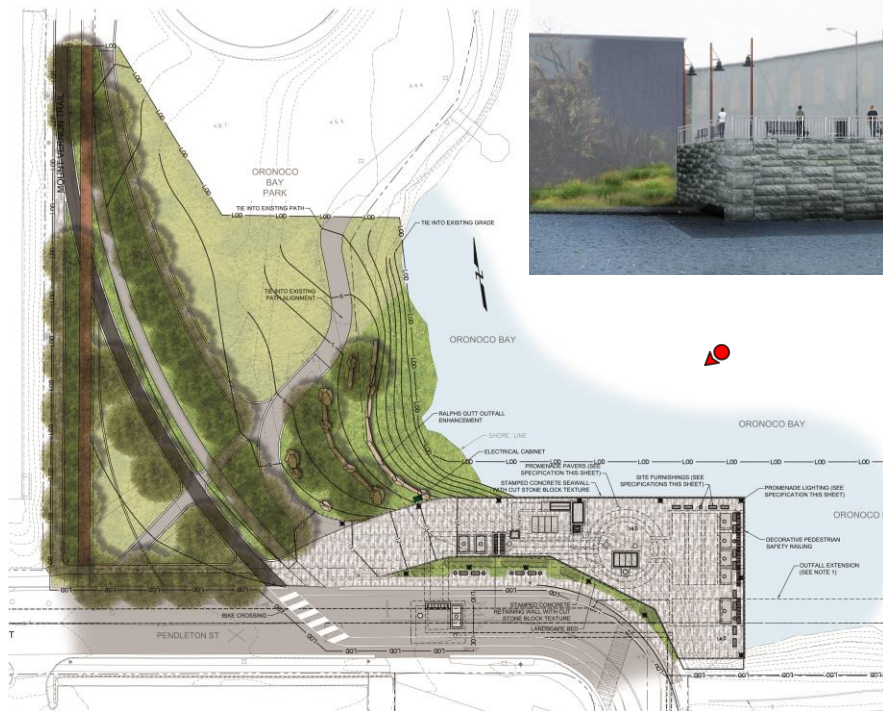


Rendering, looking east at Robinson Terminal North

## Illustrative Renderings of Outfall 001 Diversion Facility Restoration Oronoco Bay Park East Alternative



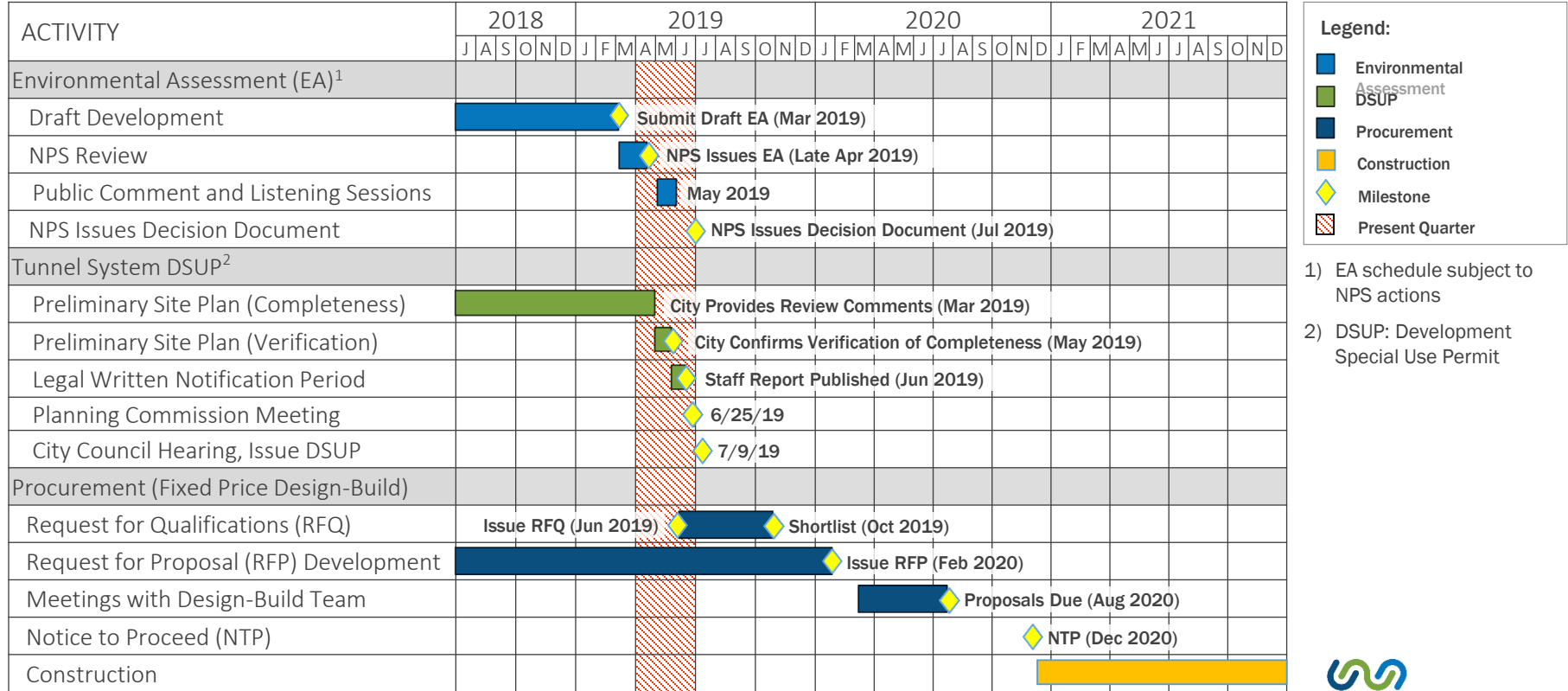
Rendering, looking south from Oronoco Bay



## Illustrative Landscaping Plan



# RiverRenew Tunnel System Permit and Procurement Schedule



# Questions?

