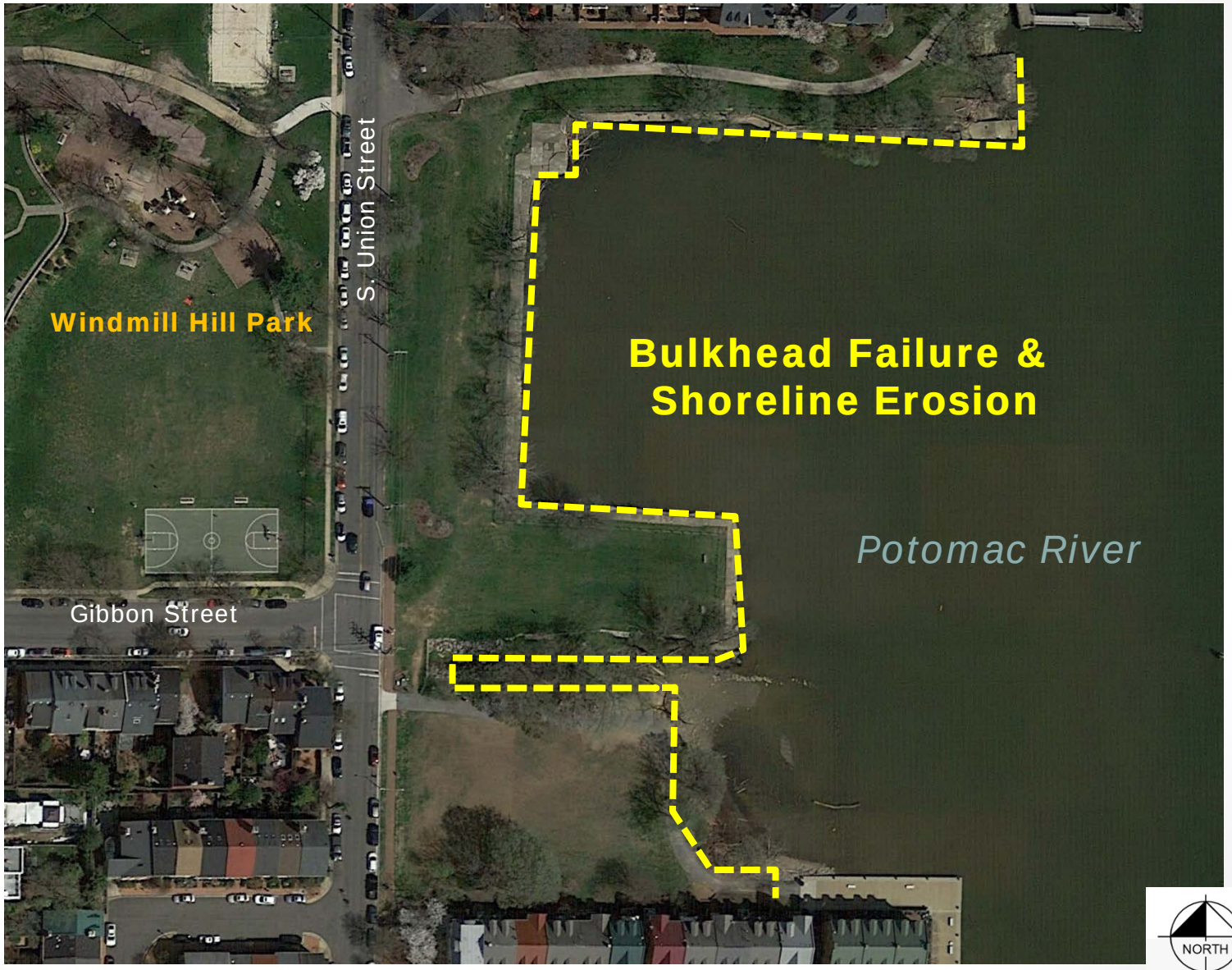
Windmill Hill Park Shoreline Rehabilitation

Project Update Meeting

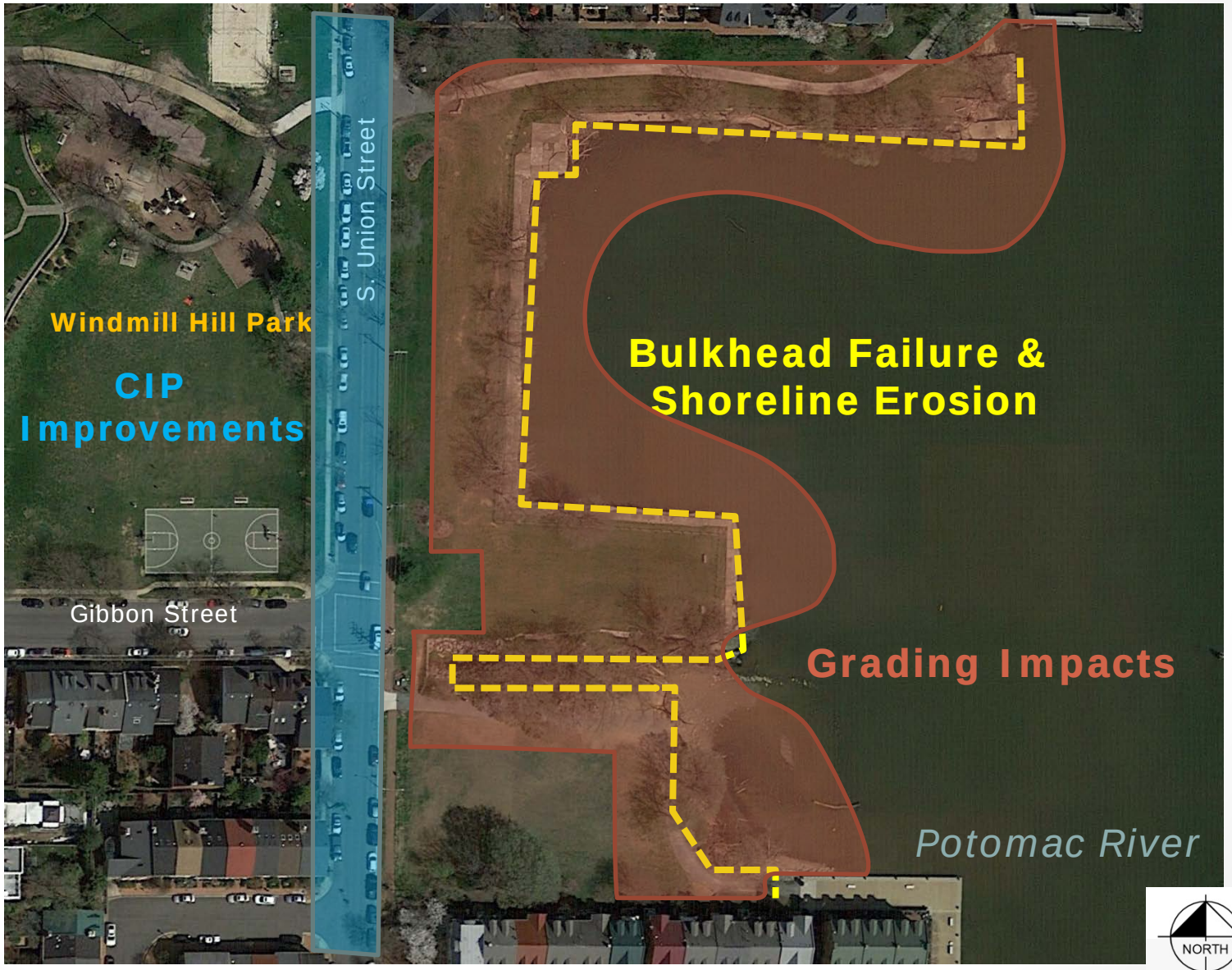
December 10, 2015

Project Location

Project Area



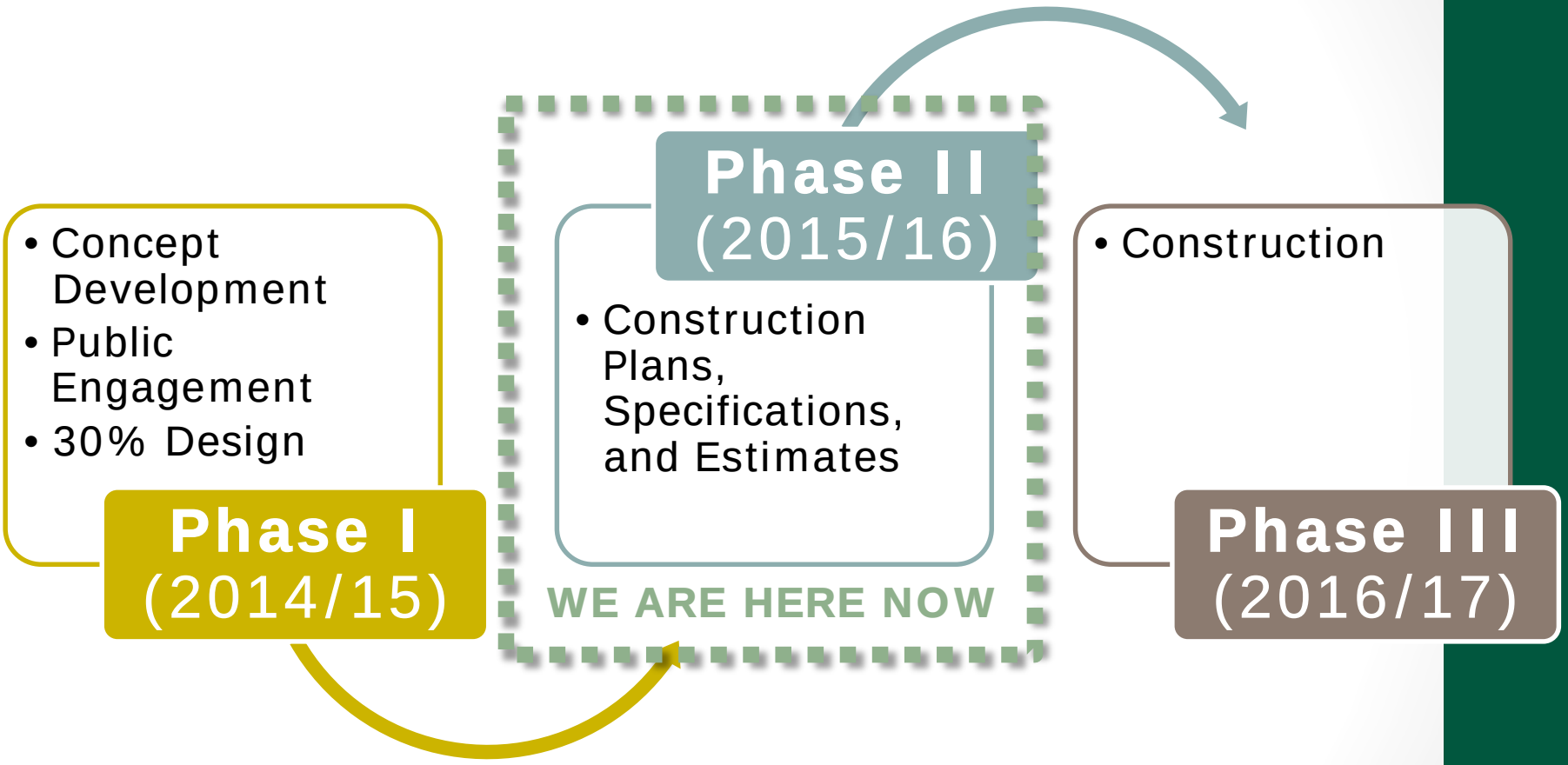
Project Area



Why We Are Here

- **Project Progress Update**
- Living Shoreline Concept approved by City Council
- Design Refinements
- Next Steps

Project Phases & Work Scopes



PUBLIC MEETINGS

Community Meetings 1, 2, Stakeholder, & City Council

#**1** – Feb. 12, 2015 - Project Overview, Review of Approved 2003 Concept and Replacement Opportunities, Community Input
#**2** – April 13, 2015 - Presentation of Three Concepts, Community Input
#**3** – May 2015 - Series of meetings with stakeholder groups including Environmental Policy Commission, Waterfront Commission, and the Park and Recreation Commission
#**4** – June 13, 2015 - City Council unanimously approves Living Shoreline Concept. Council requests Union Street Improvements

CURRENT CONDITIONS

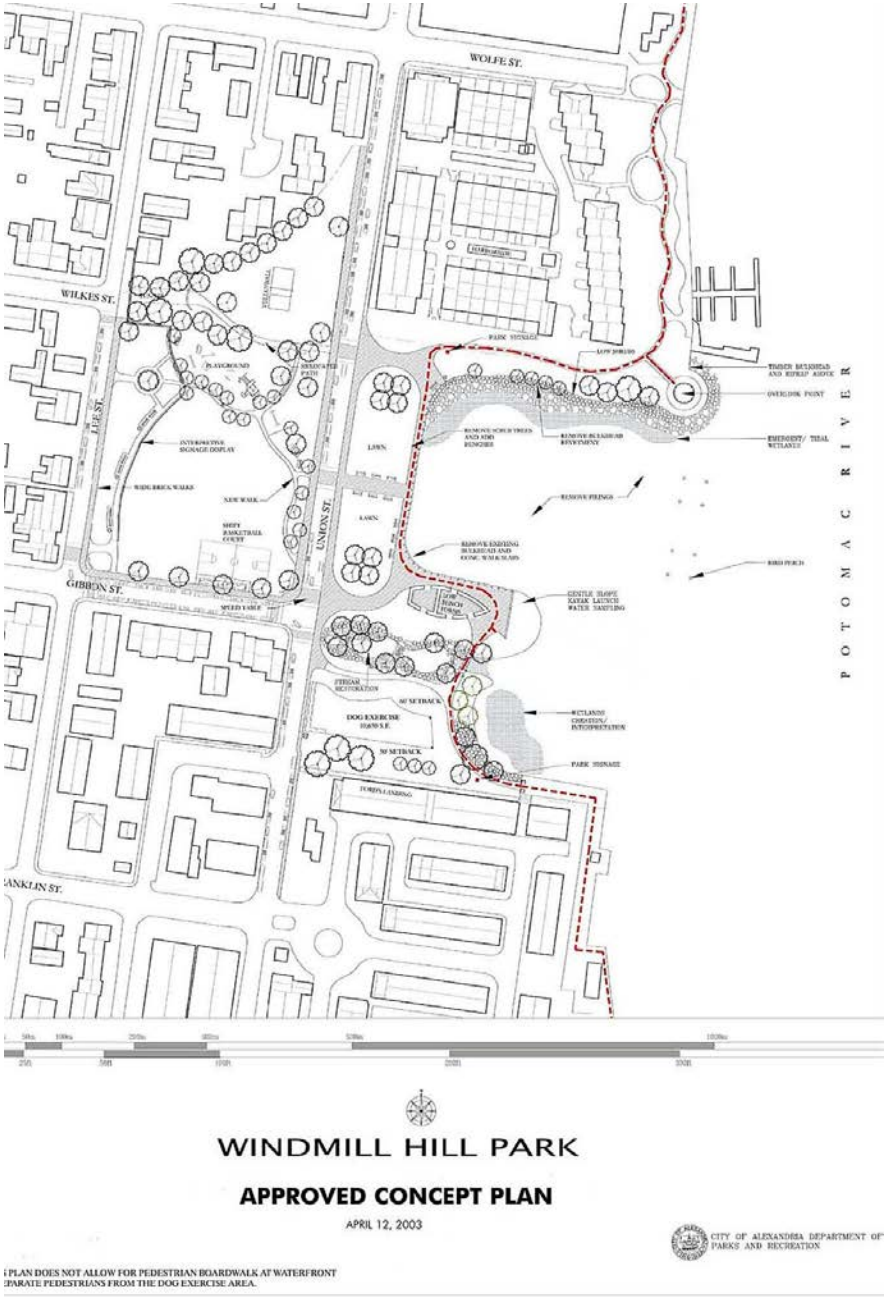
PERMITTING CONSIDERATIONS

Permitting Considerations

- Army Corps will be permitting agency
- Requires coordination with large number of state and federal agencies
- Wetland delineation is complete – Site visit with Army Corps Dec. 3, 2015 to confirm delineation
- Permit submission mid December

CONCEPT PLANS

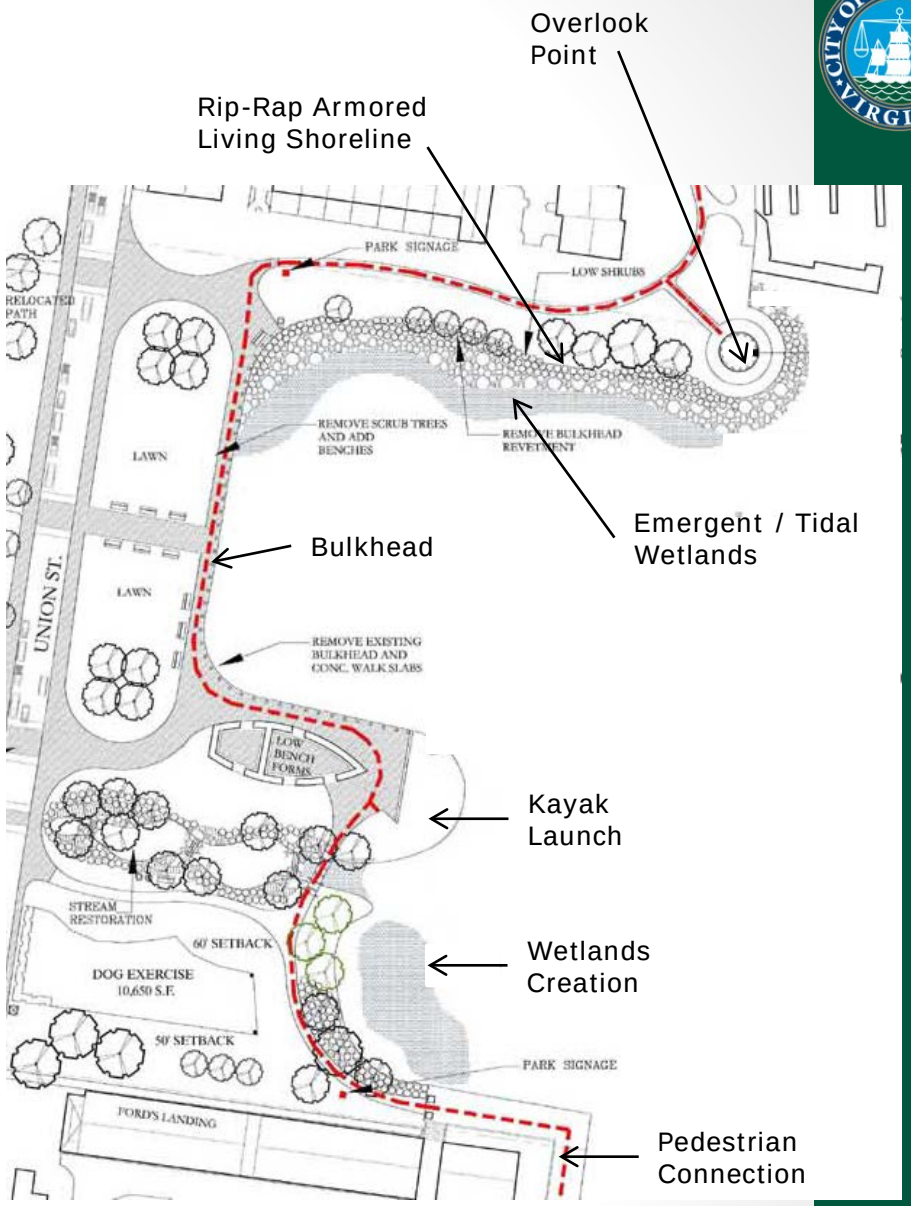
Approved 2003 Plan



Approved 2003 Plan

City Council Approved <u>Concept Plan (2003)</u>

- Recommended combination approach
- Accommodation for canoes/kayaks and dogs
- Included overlook accommodation



HARBORSIDE
STONE REVETMENT
OVERLOOK POINT
OPTIONAL PATH
EXISTING STREET TREES TO REMAIN
MEAN LOW WATER (MLW)
MEAN HIGH WATER (MHW)
STONE SILL
EXISTING BULKHEAD EDGE
POTOMAC RIVER
GIBBON ST.
BRIDGE
STREAM/OUTFALL RESTORATION
EXISTING DOLPHINS TO REMAIN
SLOPED WATER ACCESS
S. UNION ST.
FORD'S LANDING
Council Approved Plan

Current Plan

Plan Progression

2003 Approved Plan

Council Approved Plan

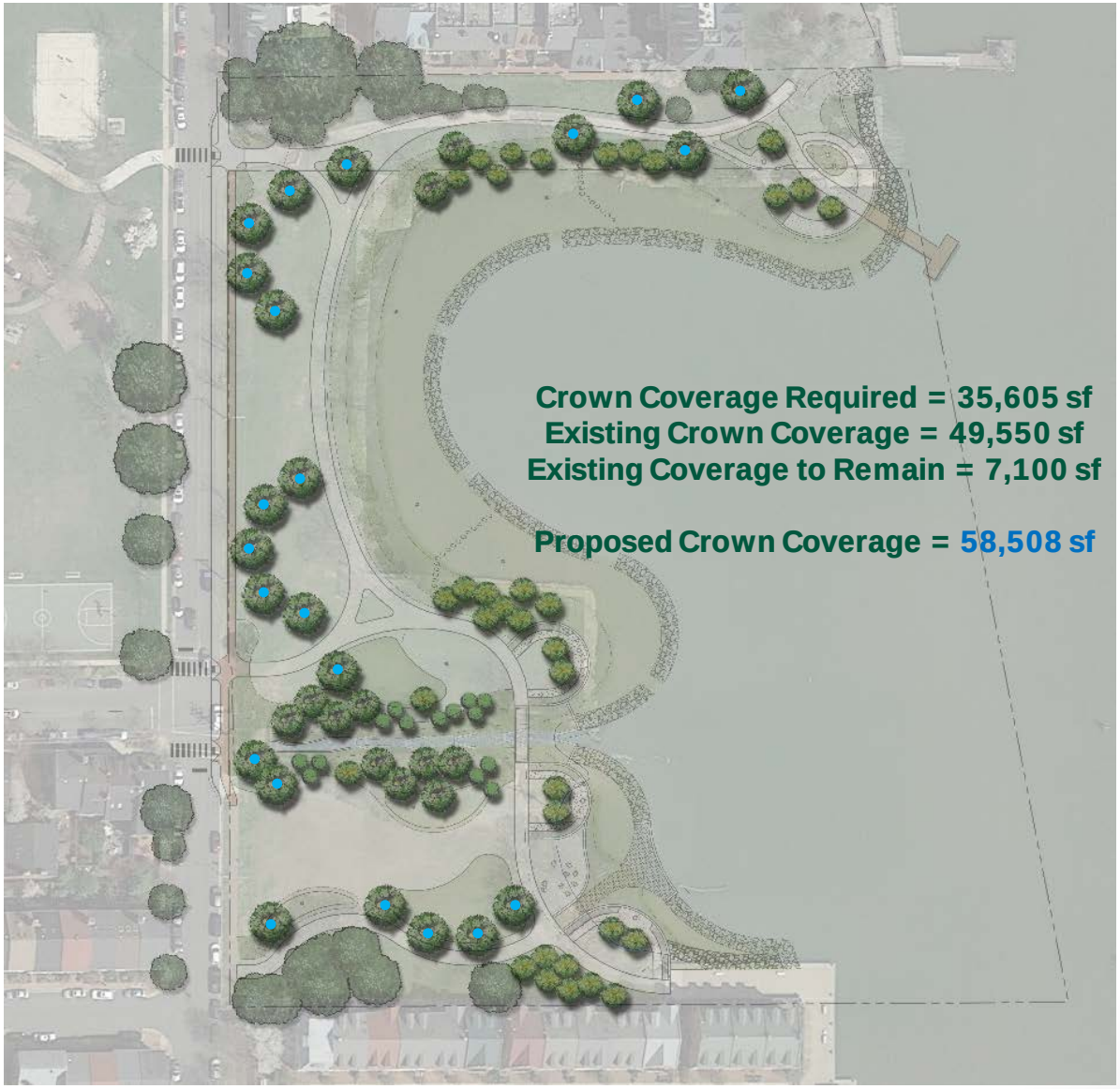
Current Plan

PARK ELEMENTS

Existing Trees

Trees to be Removed

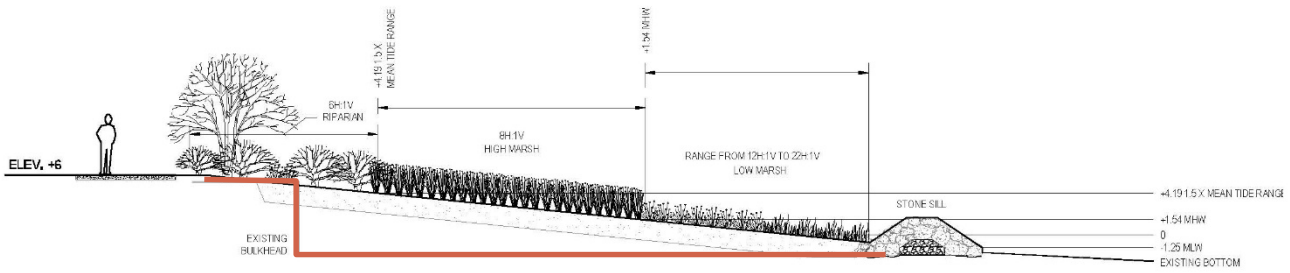
Proposed Trees



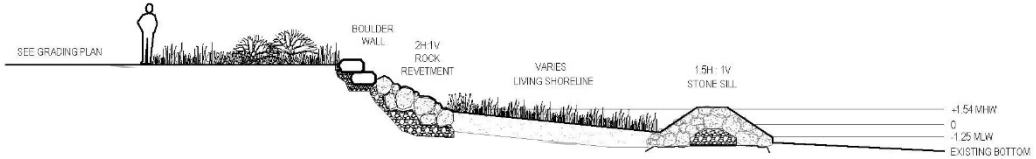
Living Shoreline Elements

Living Shoreline

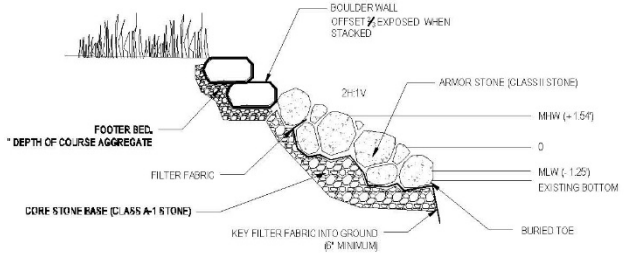
Living Shoreline



1 LIVING SHORELINE: TYPICAL SECTION
1/8"=1'-0"



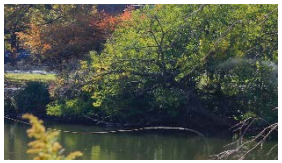
2 LIVING SHORELINE W/ STONE REVETMENT AND SILL
1/8"=1'-0"



3 IMBRICATED STONE AND REVETMENT: TYPICAL SECTION
1/4"=1'-0"

Riparian and Tidal Plantings

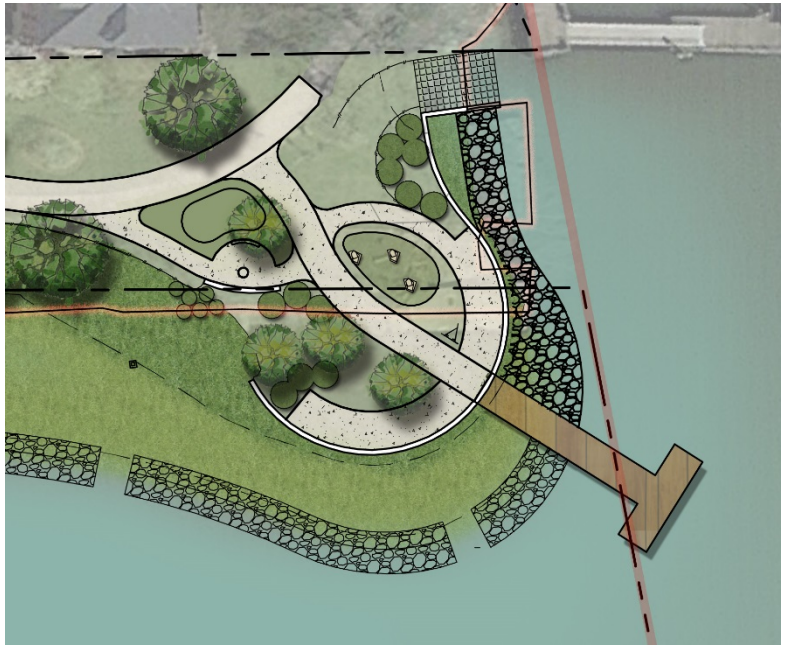
Tidal Grasses and Perennials

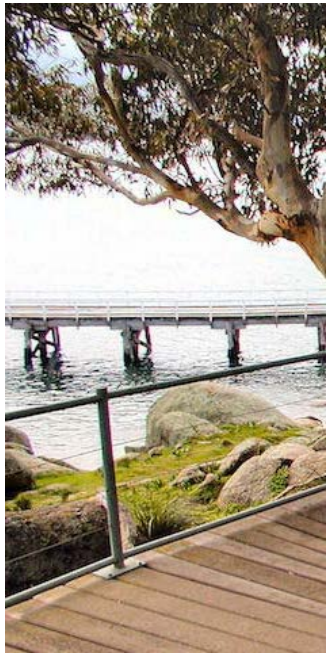


Typical Riparian Plantings

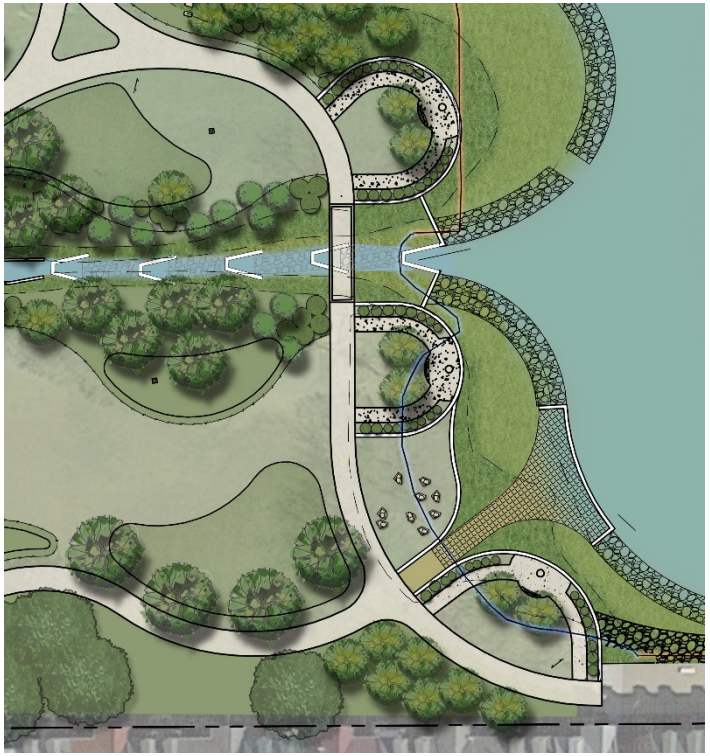
Detail Site Elements

North Point Pedestrian Areas



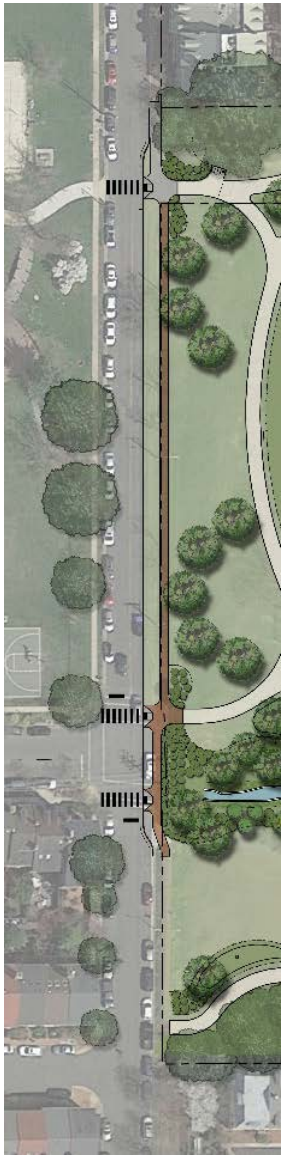


Southern Pedestrian Areas



Stream Restoration

Union Street Improvements

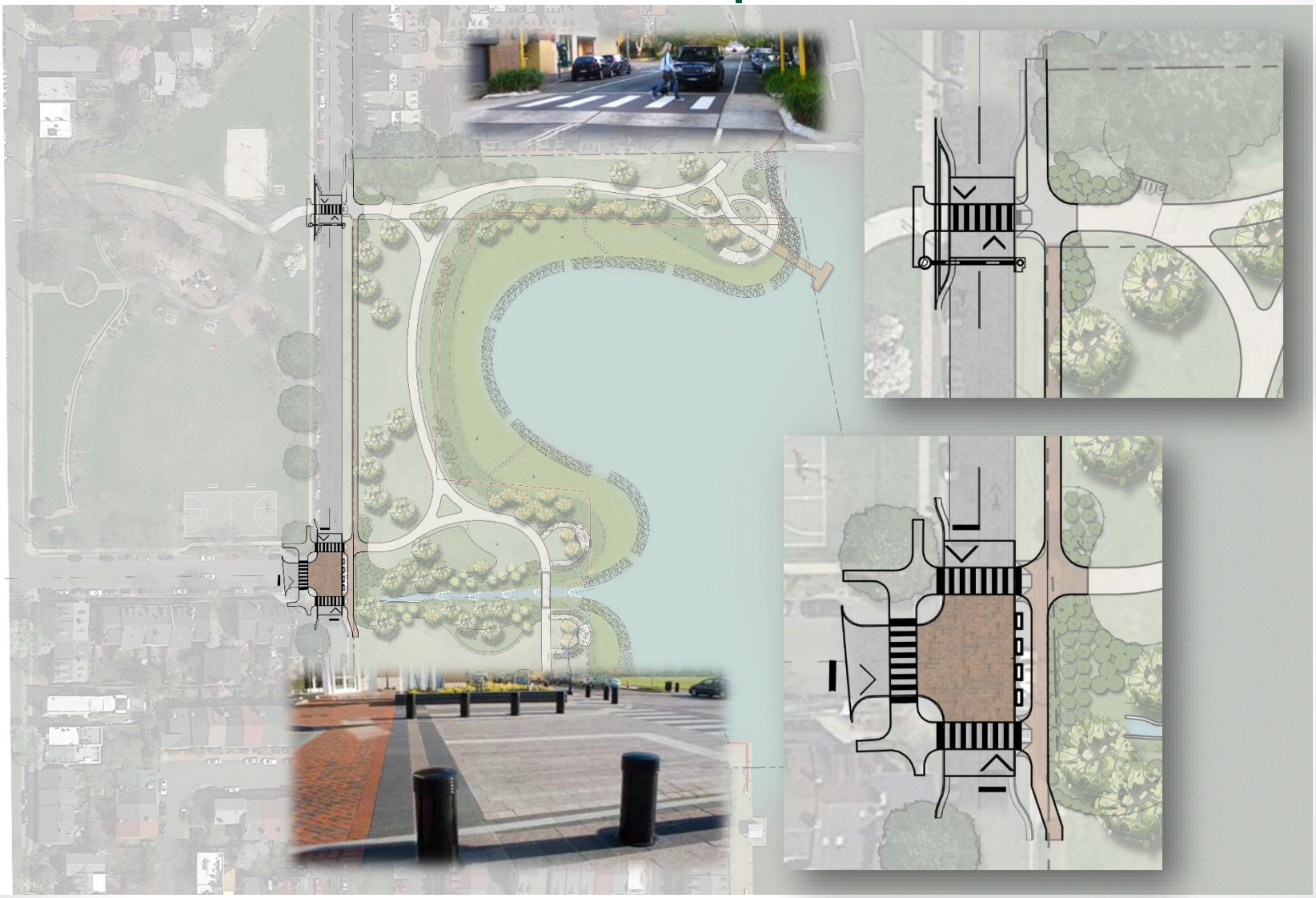


Living Shoreline Construction

Living Shoreline Construction

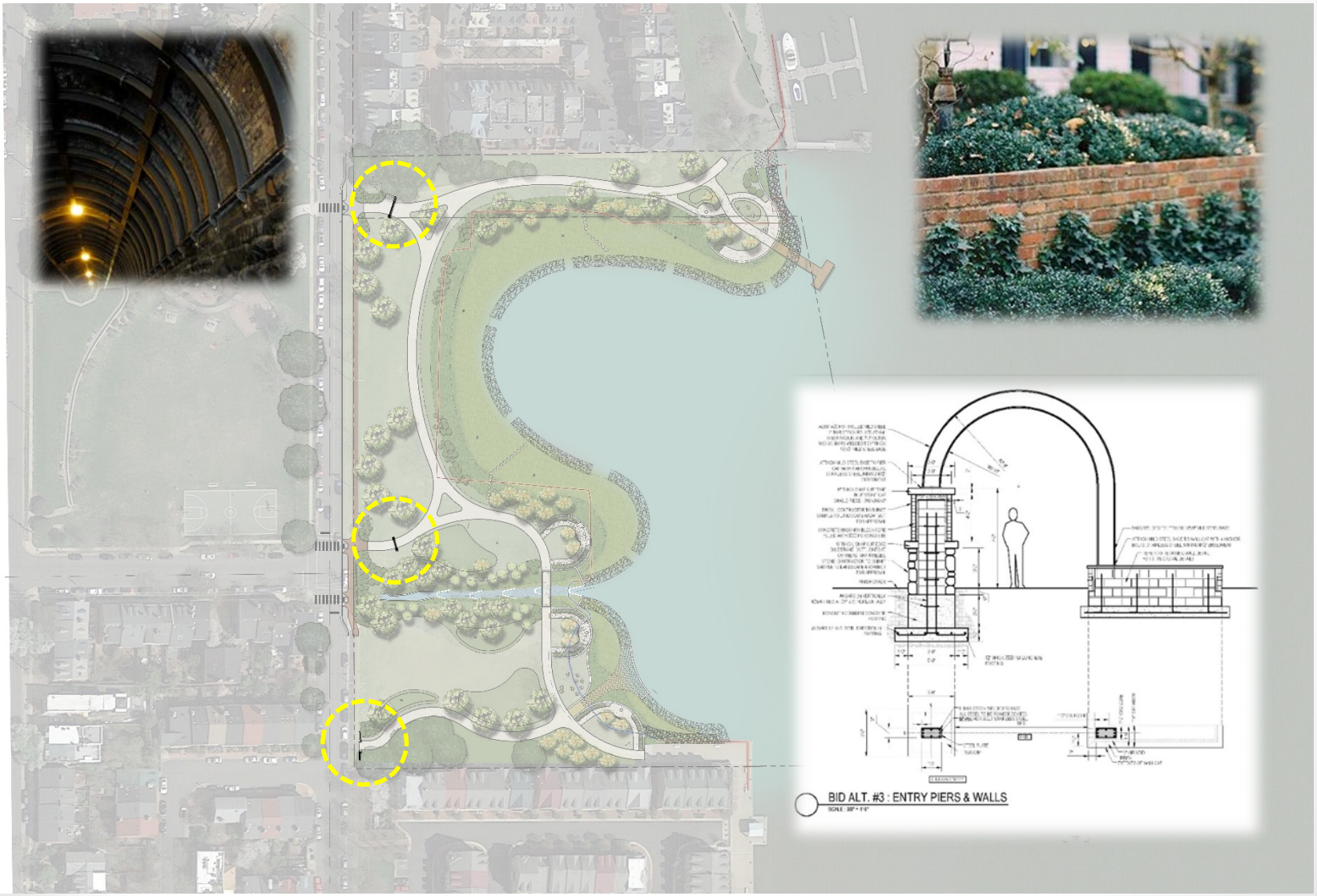
Additional Design Options Based on Budget

Design Alternate 1:
Union Street Improvements

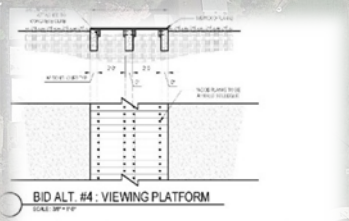


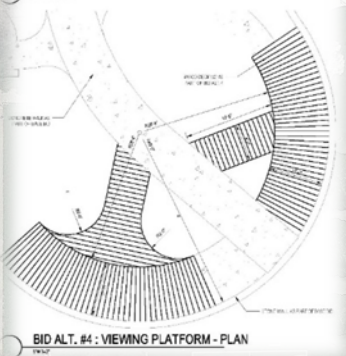
Design Alternate 2:
Seat Walls and Berms

Design Alternate 3:
Entry Piers & Walls

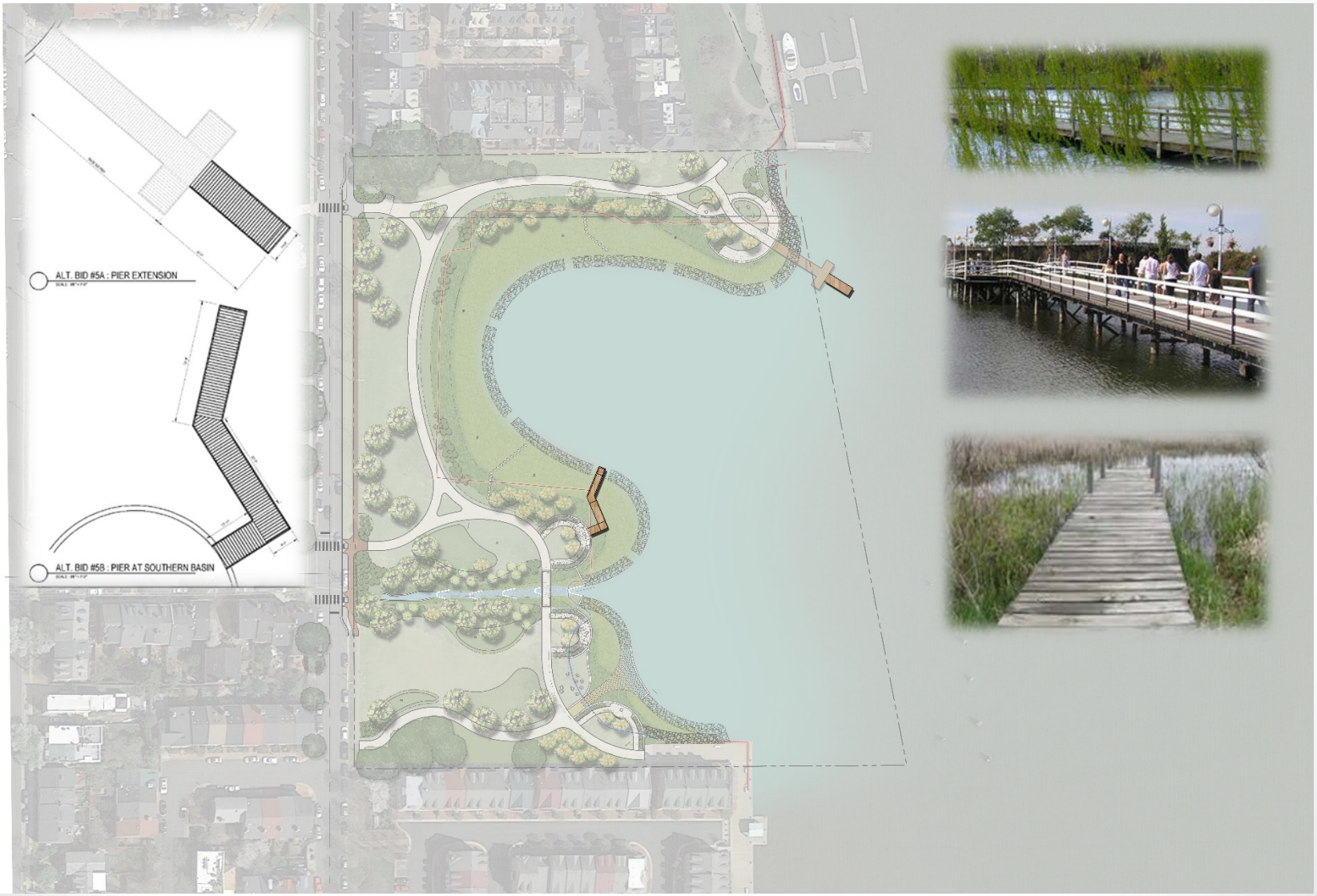


Design Alternate 4:
Viewing Platforms

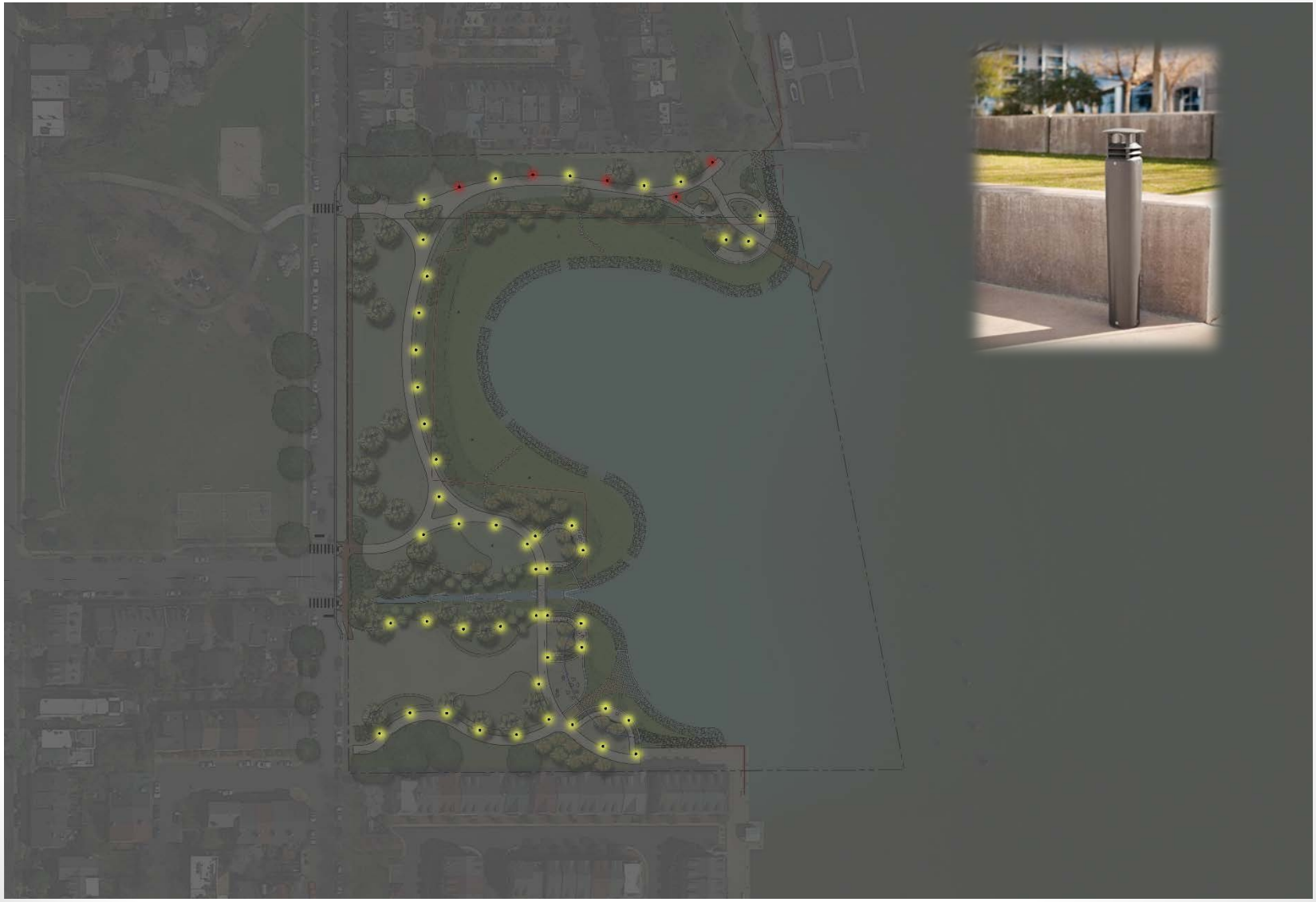




Design Alternate 5:
Pier Extensions & Construction Types



Design Alternate 6:
Bollard Lighting



Design Alternate 7:
Resin Bound Aggregate

Next Steps

- **Spring 2016 – Pre-Construction Meeting**
  - **U.S. Army Corps of Engineers – Permit**
    - *April 2016*
  - **Final Design Completion**
    - *April 2016*
  - **Preconstruction / Contractor Procurement**
    - *May/June 2016*
  - **Construction Start**
    - *July 2016*
  - **Construction Substantially Complete**
    - *October 2017*

Questions? Contact Us

- **Tony Gammon, P.E.**
  Project Manager
  City of Alexandria
  Department of Project Implementation
- **Jack Browand, CPRP**
  Division Manager
  City of Alexandria
  Department of Recreation Parks & Cultural Activities
- **Contact**
  Phone: 703.746.4155
  Email: anthony.gammon@alexandriava.gov
- **Website**
  http://www.alexandriava.gov/recreation/info/default.aspx?id=12292#WindmillHillPark