



REHABILITATE TIDAL BASIN AND WEST POTOMAC PARK SEAWALL

National Park Service, National Mall and Memorial Parks

Consulting Party Meeting #2

December 15, 2022

INTRODUCTION

Let us begin by acknowledging that we are in the territory of many Indigenous peoples that have known the Potomac Valley and its lands and waters as their homeland for thousands of years to the present day, including Algonquin, Iroquois, and Siouan peoples.

We are just beginning our engagement with traditionally associated Native American communities to identify all of the different connections with these lands held by many Native Nations. Together we recognize the Native Nations' past, present, and future unbroken and unbreakable connections to these lands. We honor the resilience and perseverance of these Nations even as colonizers claimed this land as their own.



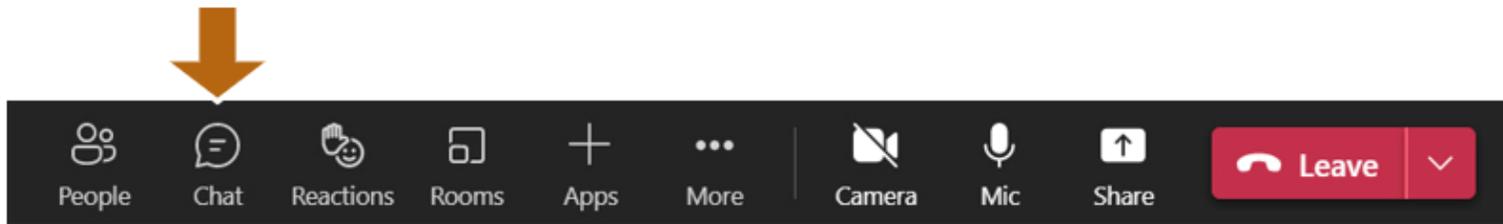
VIRTUAL MEETING OVERVIEW

- This meeting will be **recorded**
- Type your questions into the Meeting Chat
- Questions will be answered at the end of the presentation as time allows
- Questions or comments submitted as part of this meeting will **not** be considered formal comments on the project
 - Formal comments must be submitted online or postmarked by January 6th, 2023



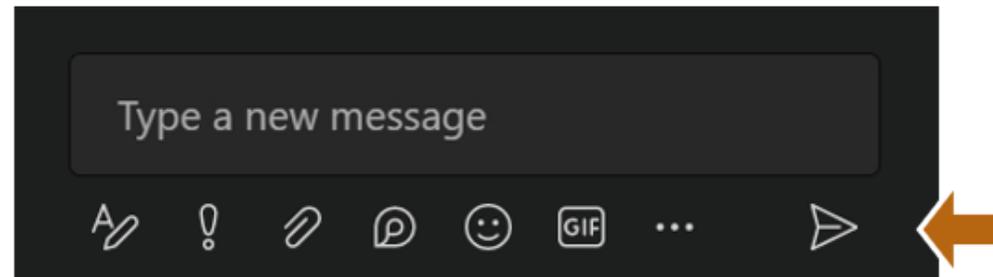
HOW TO ASK A QUESTION

1. Click on the “Chat” icon at the top of your screen.



2. The Meeting Chat panel will open on the right side of the screen.

3. Enter your question into the text box and select **Send**. ➤



AGENDA

1. Project Updates
 - Section 106
 - Seawall Elevations
 - Seawall Character
 - Tidal Basin
 - West Potomac Park
2. Determination Of Effect
3. Avoidance, Minimization,
And Mitigation Measures
4. Schedule
5. Questions & Answers



GOALS OF THIS MEETING

1. Informational Update

2. Collect Comments On
Assessment Of Effects And
Memorandum Of Agreement

PLEASE HOLD QUESTIONS TO THE END



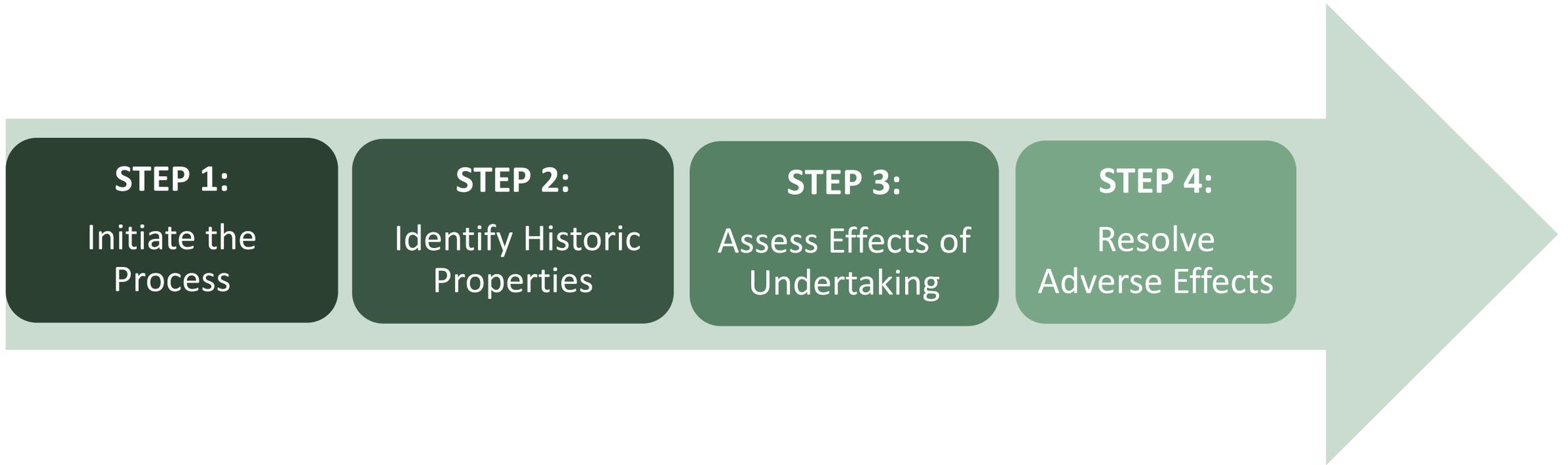


01

PROJECT UPDATES

Section 106

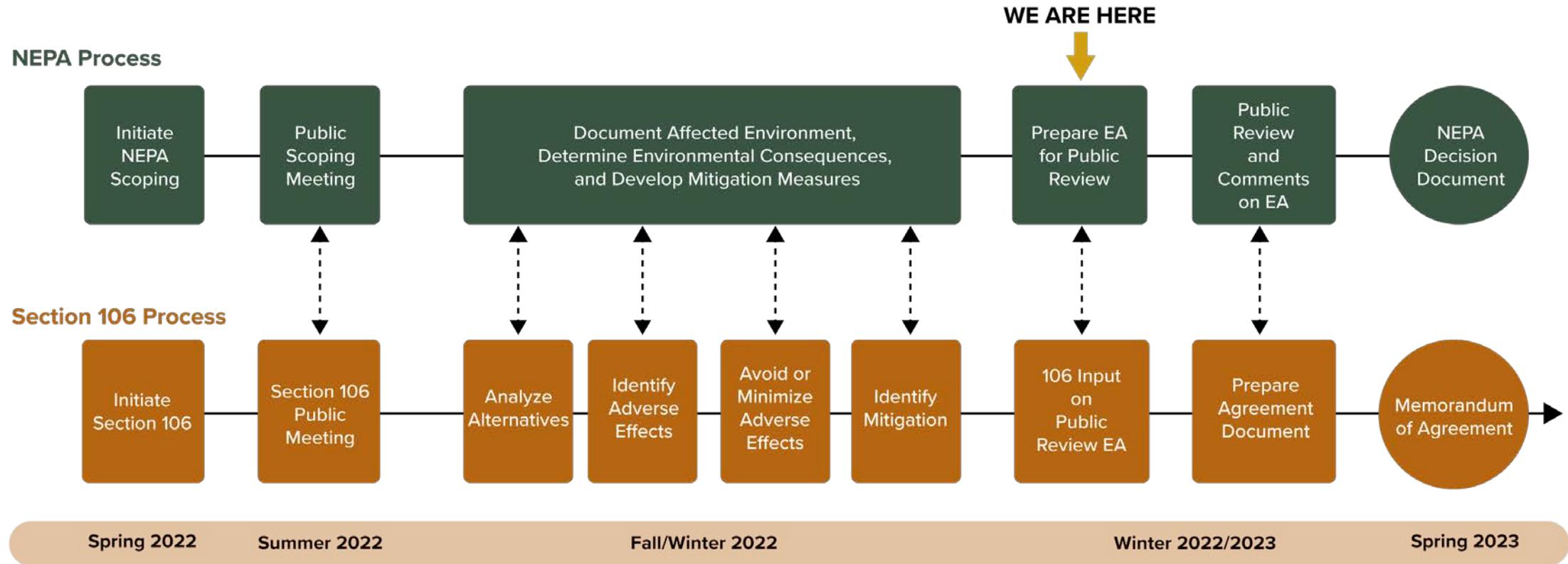
NATIONAL HISTORIC PRESERVATION ACT



SECTION 106 CONSULTATION



NEPA+SECTION 106: A COORDINATED APPROACH



AREA OF POTENTIAL EFFECTS

Key

-  Area of Potential Effects
-  Washington Monument and Grounds Historic District
-  East and West Potomac Parks Historic District
-  National Mall Historic District
-  Arlington National Cemetery Historic District
-  George Washington Memorial Parkway
-  Mount Vernon Memorial Highway Historic District

Individually Listed Resources

- A. Arlington Memorial Bridge
- B. Martin Luther King Jr., Memorial
- C. Franklin Delano Roosevelt Memorial
- D. Thomas Jefferson Memorial

 Poposed extent of seawall project



Contributing Resources

Contributing Resources	Individually Listed	National Mall/ Wash. Monument Grounds HD	East and West Potomac Parks HD	Arlington National Cemetery HD	GW Mem. Parkway HD	Mount Vernon Mem. Highway HD
Tidal Basin		X	X			
Stone Seawalls		X	X			
Japanese Cherry Trees		X	X			
Other Contributing Vegetation		X	X		X	X
Inlet Bridge		X	X			
Views around the Tidal Basin		X	X			
Arlington Memorial Bridge	X	X	X	X		
Survey Lodge		X				
Sacrifice and Valor		X		X		
John Ericsson Monument		X	X			
Ohio Drive		X	X			
First Airmail Flight Marker		X				
Japanese Pagoda		X	X			
Franklin Delano Roosevelt Memorial	X	X				
Martin Luther King Jr. Memorial	X	X				
West Potomac Park Reservation No. 332		X	X			
Independence Avenue Extension		X	X			
First Cherry Tree Planting Plaque		X				
Japanese Lantern		X				
Kutz Bridge		X	X			
Commodore John Paul Jones Statue		X	X			
Outlet Bridge		X	X			
Thomas Jefferson Memorial	X	X	X			
George Mason Memorial		X				
Number 4 Fountain		X	X			
View Lincoln Memorial to Arlington House		X		X		
View from Lincoln Memorial to Ericsson Memorial		X		X		
Views from Virginia shoreline to National Mall					X	X





01

PROJECT UPDATES

Seawall Elevations

WALL ELEVATIONS EXISTING VS. PROPOSED



WALL ELEVATIONS – EXISTING VS. PROPOSED



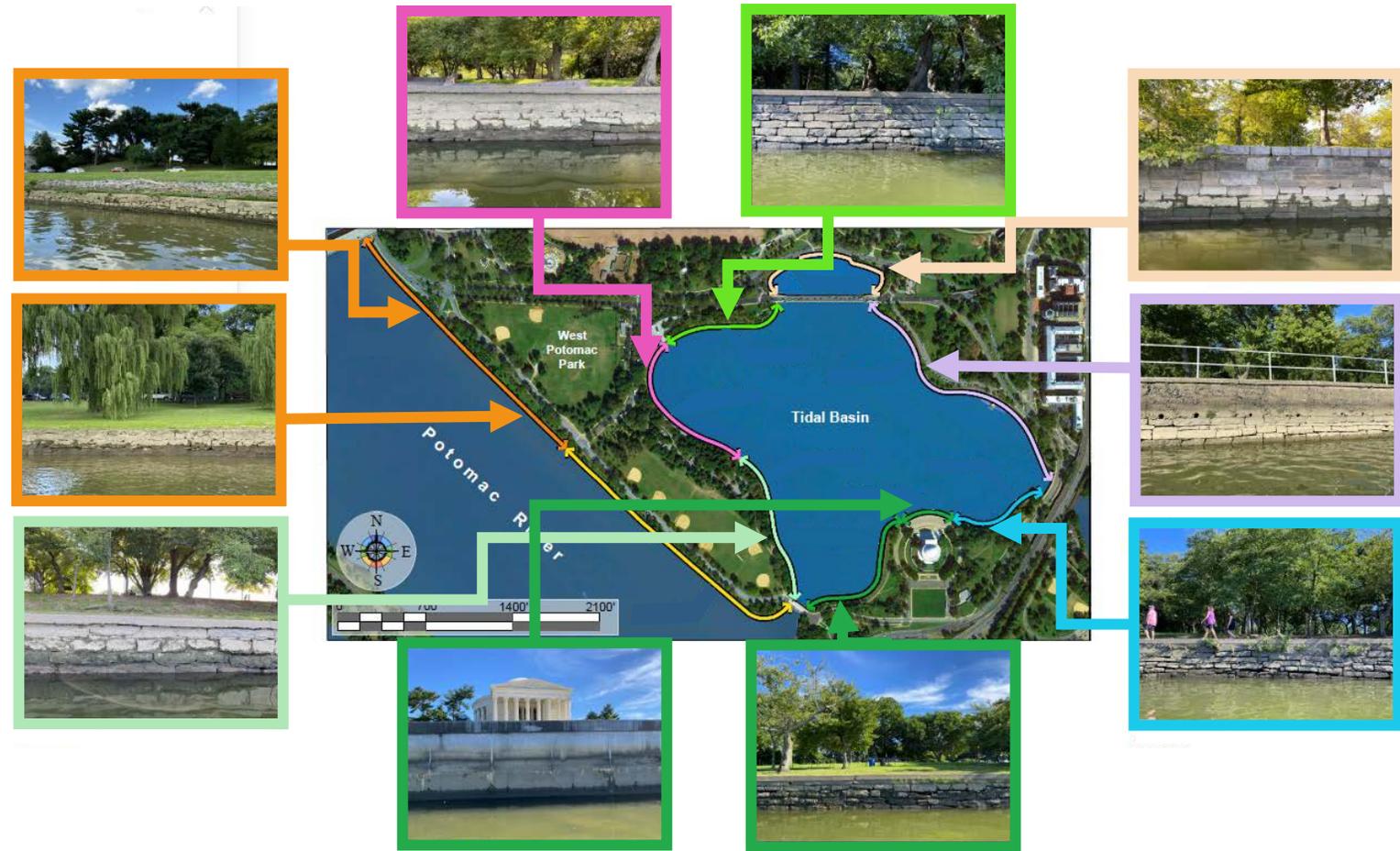


01

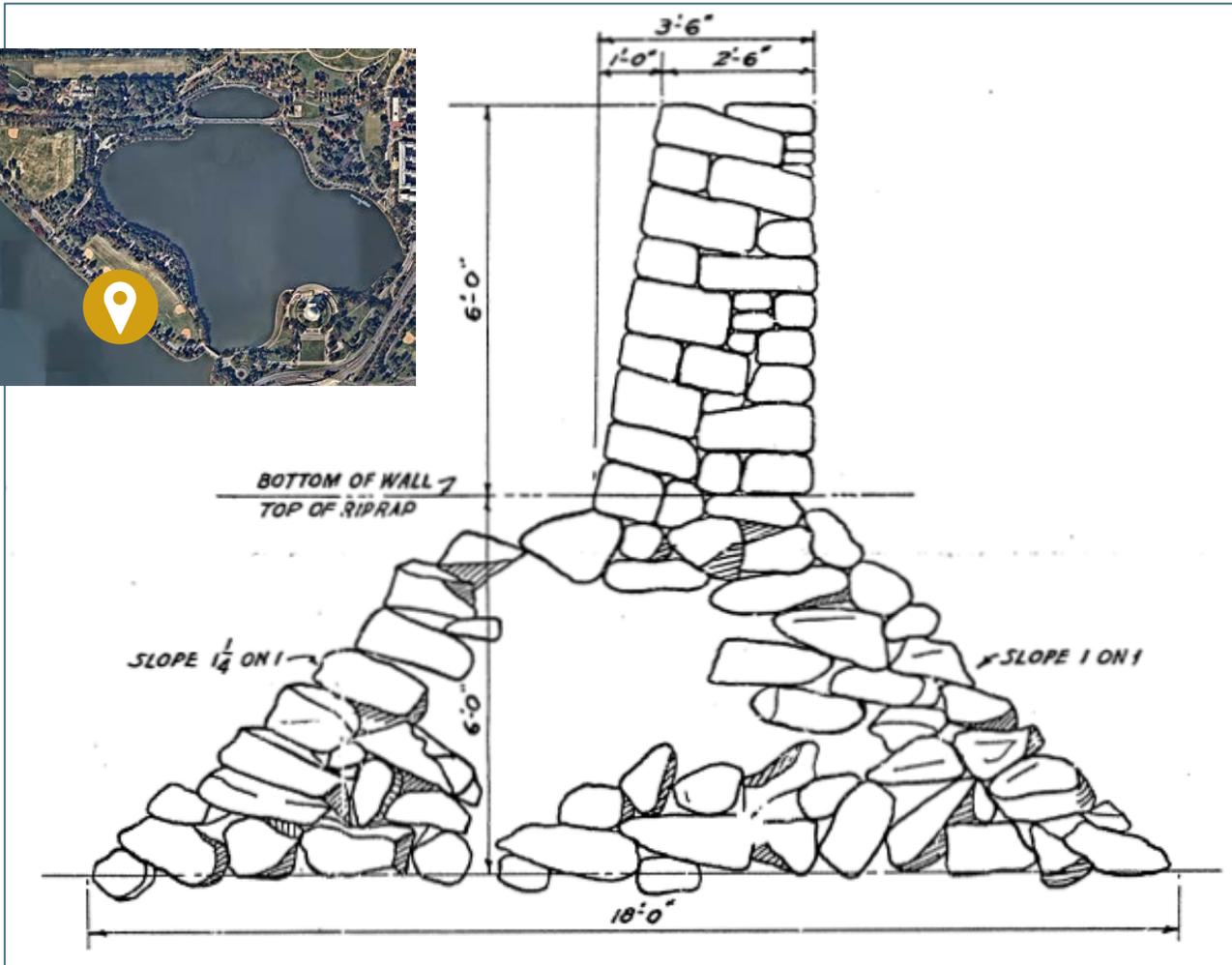
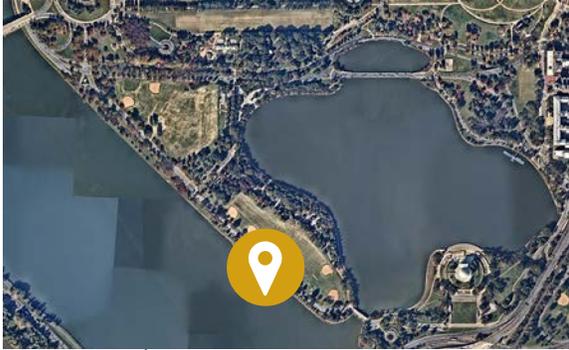
PROJECT UPDATES

Seawall Character

TIDAL BASIN AND WEST POTOMAC PARK WALL AREA IMAGE DIAGRAMS



DRY STACKED STONE, SPLIT FACE – 1893 - 1896 HISTORIC DESIGN AND EXISTING CONDITION PHOTOS



West Potomac Park South – Looking Northeast

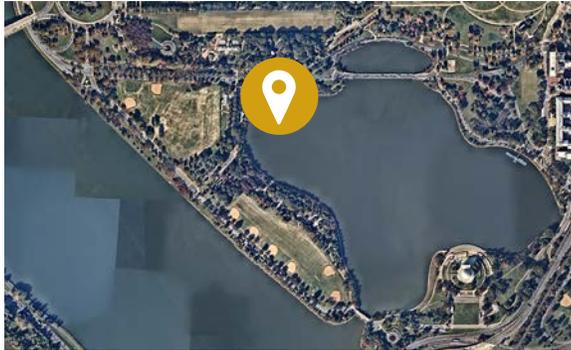
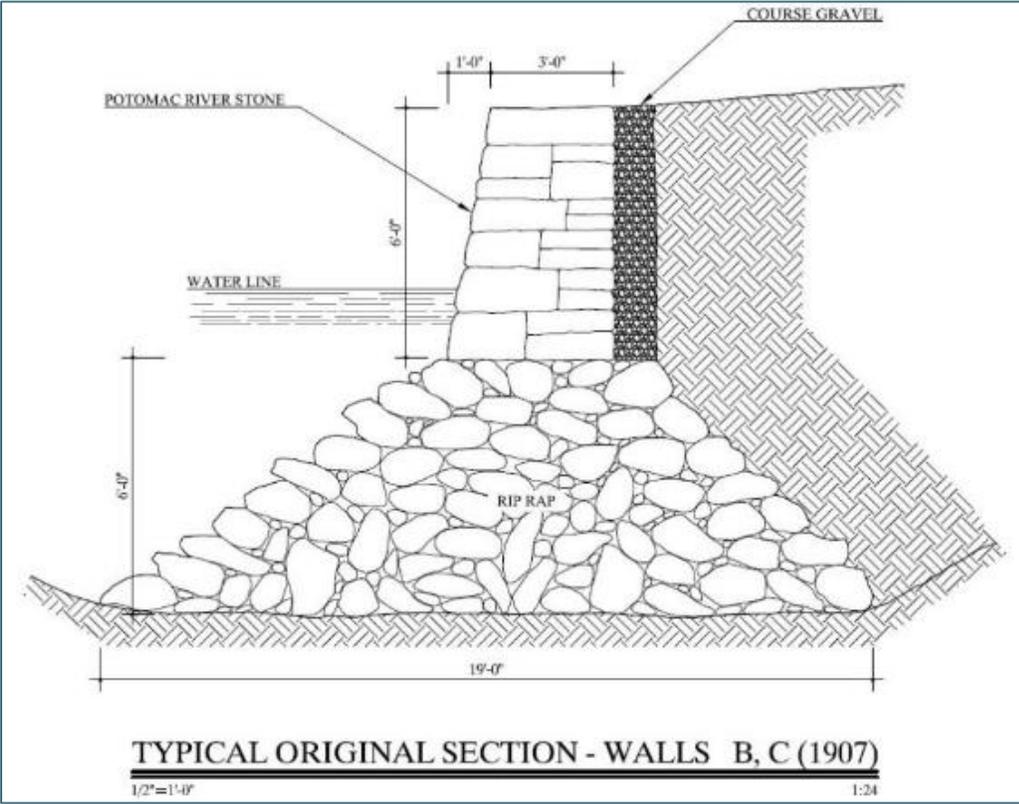


West Potomac Park South – Looking Northeast

Original Seawall Design Cross Section (NPS 1940)



MORTARED UPPER STONES – 1896+ HISTORIC DESIGN AND EXISTING CONDITION PHOTOS



*Original 1907 Design Cross Section
(NPS Cultural Landscape Report, June 2020)*

Tidal Basin West (NIC) – Looking North



3FT PORTLAND CEMENT CONCRETE – 1902 EXISTING CONDITION PHOTOS

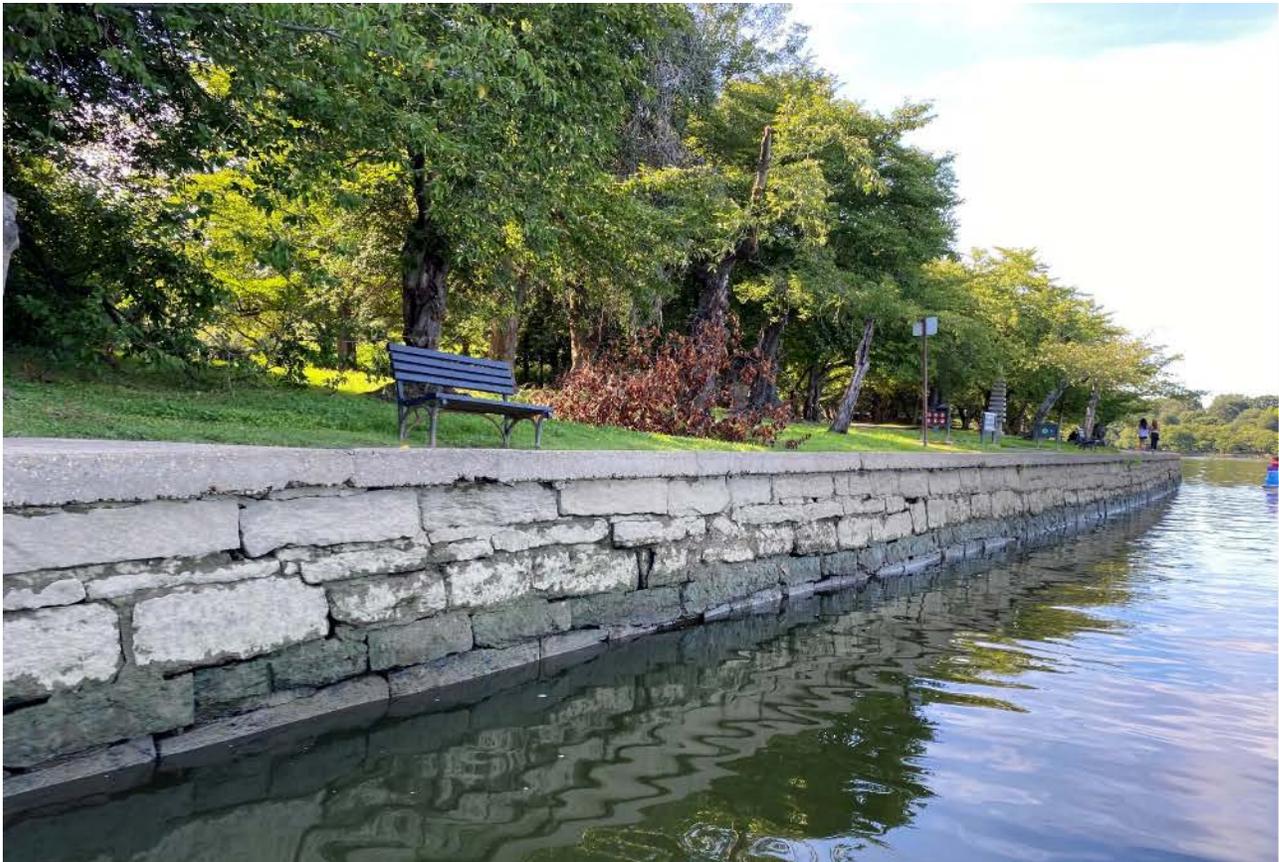


Tidal Basin North (NIC) – Looking East

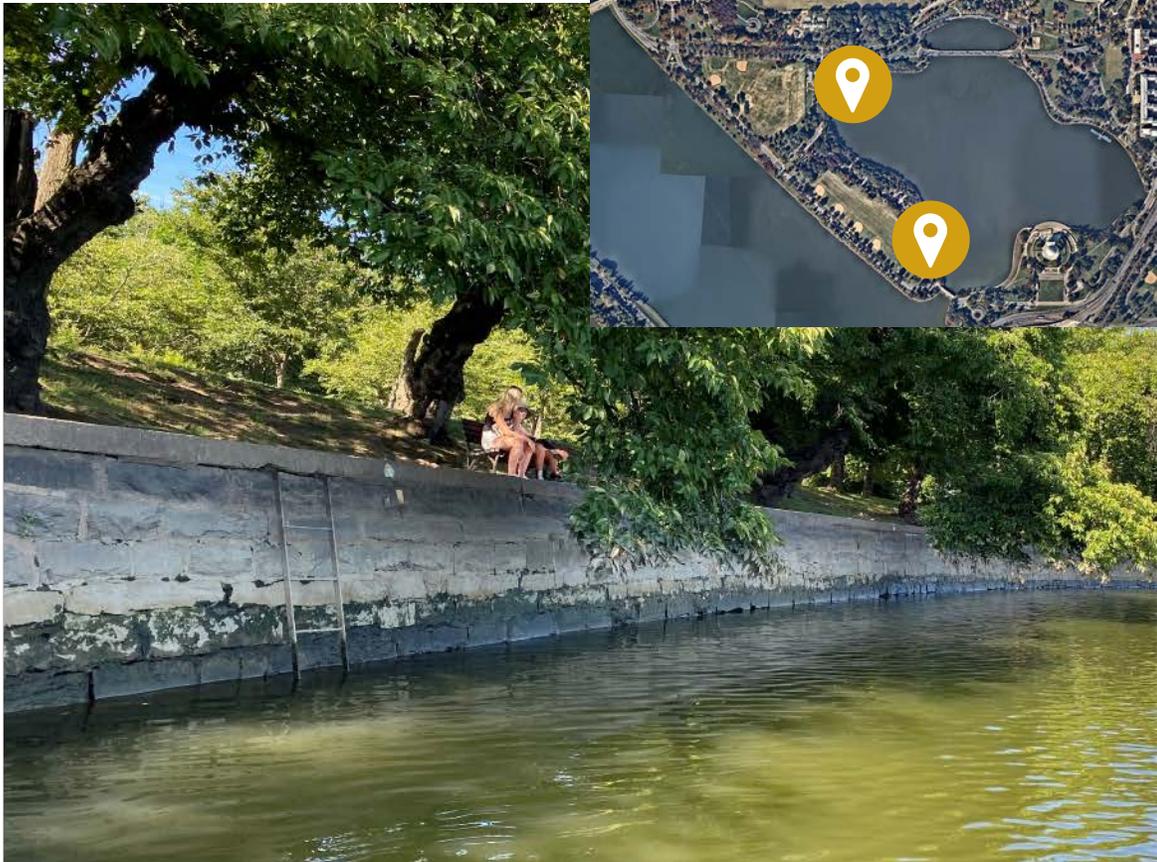


Tidal Basin North (NIC) – Looking North

CONCRETE PAVING – 1915 EXISTING CONDITION PHOTOS



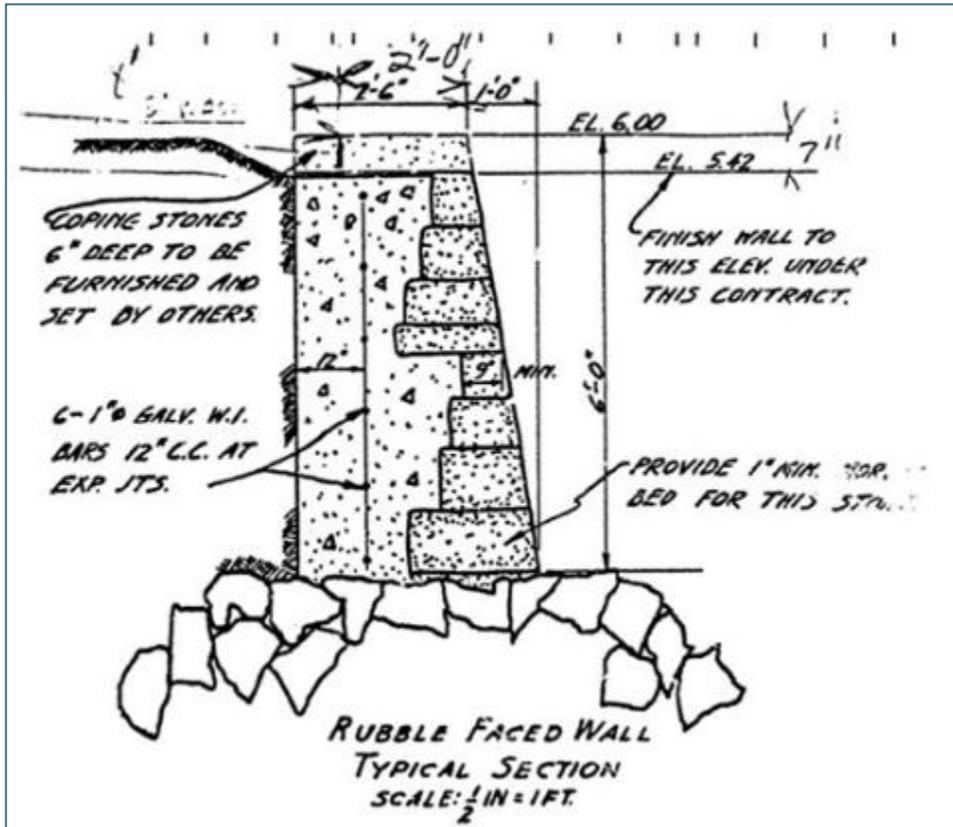
Tidal Basin West– Looking North



Tidal Basin West (NIC) – Looking Northwest



JFM CONCRETE BACKED WALL - 1941 HISTORIC DESIGN AND EXISTING CONDITION PHOTOS



Typical 1940s Tidal Basin East Seawall section

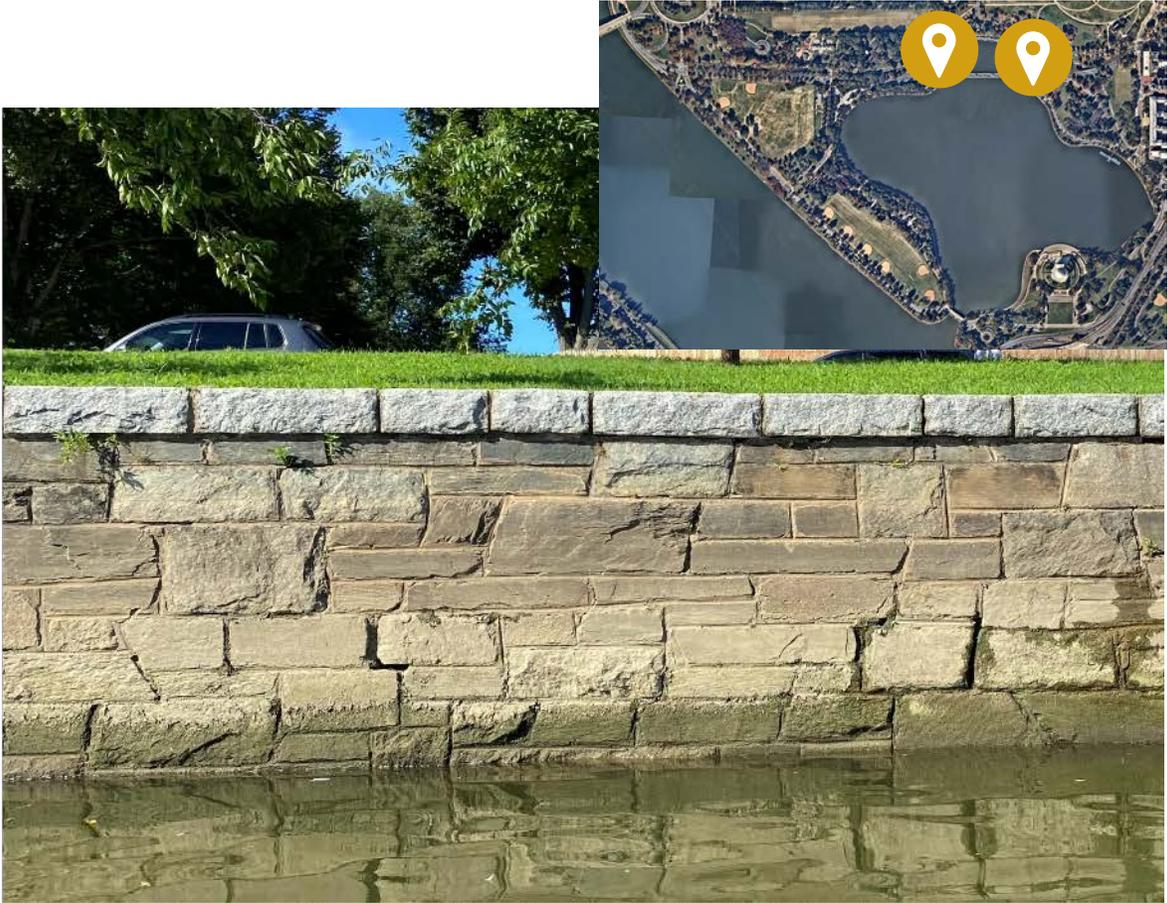


Tidal Basin East – Looking East

NON-RECTANGULAR, DRESSED, COLORED STONE – 1943 EXISTING CONDITION PHOTOS



Tidal Basin Lagoon (NIC) – Looking West



Tidal Basin Lagoon (NIC) – Looking East

CONCRETE STONE VENEER – 1943 EXISTING CONDITION PHOTOS

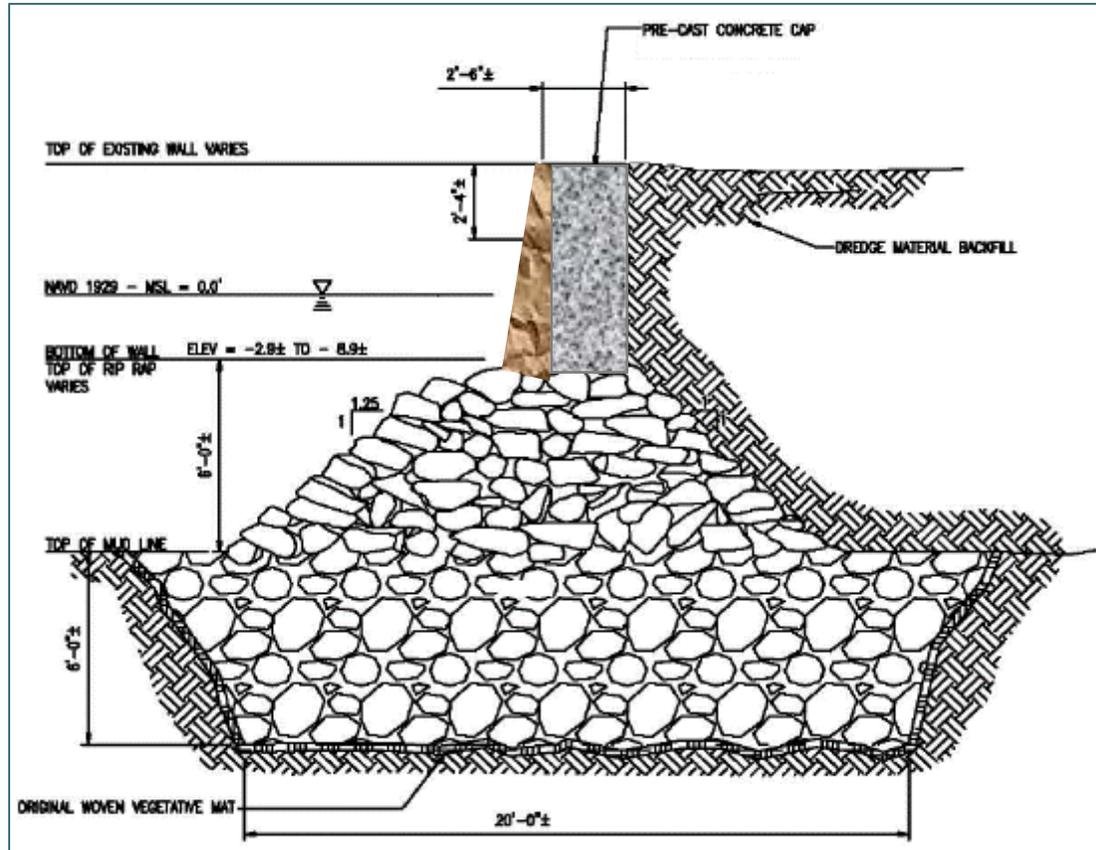


Kutz Bridge (NIC) – Looking North



Independence Ave SW (NIC) – Looking North

WPP-N CIP CONCRETE, STONE VENEER – 1958 HISTORIC DESIGN AND EXISTING CONDITION PHOTOS



Assumed Concrete Repair (Dewberry 2011)



The top 6.5' of the wall



West Potomac Park North – Looking North



SEAWALL CHARACTERIZATION



SEAWALL CHARACTERIZATION



WEST POTOMAC PARK SOUTH

- MOSTLY-RECTANGULAR STONES – RATIO 1:1 – 6:1
- UNIFORM COLOR
- MINOR PINNING/CHINKING – SMALL STONES PLACED INTO VOIDS TO HOLD LARGER STONES
- GOOD COURSING – CONTINUOUS HORIZONTAL JOINTS
- ROUGH & SMOOTH EXPOSED FACES
- POSSIBLE TOOLED/CHISELED SIDES (CUT) – SOME ROUGH OR SPLIT FACES
- SMALL TO MEDIUM HEIGHT ~ 4" – 6" (AVG)
- NO MORTAR – STONES WELL DEFINED



SEAWALL CHARACTERIZATION



Tidal Basin West

- Mostly-rectangular stones – ratio 1:1 – 4:1
- Uniform color?
- Minor pinning/chinking
- Good coursing – continuous horizontal joints
- Rough & smooth exposed face
- Tooled/chiseled sides (cut)
- Medium to large height ~ 6" – 10" (avg)
- Aged mortar to face of stone – medium sized joints (<1")



SEAWALL CHARACTERIZATION

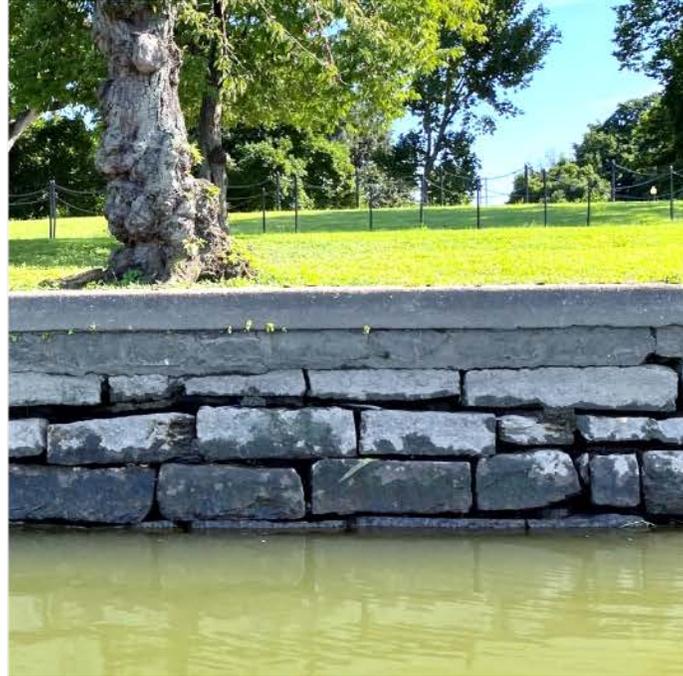


Tidal Basin East

- Rectangular stones – ratio 1:1 – 8:1
- Uniform color
- Minor to moderate pinning/chinking
- Minor to good coursing – continuous horizontal joints
- Very rough & smooth exposed face
- Some tooled/chiseled sides (cut) – some rough sides
- Small to large height ~ 3" – 10"
- Aged/degraded mortar leaves large gaps around veneer stones (>1")

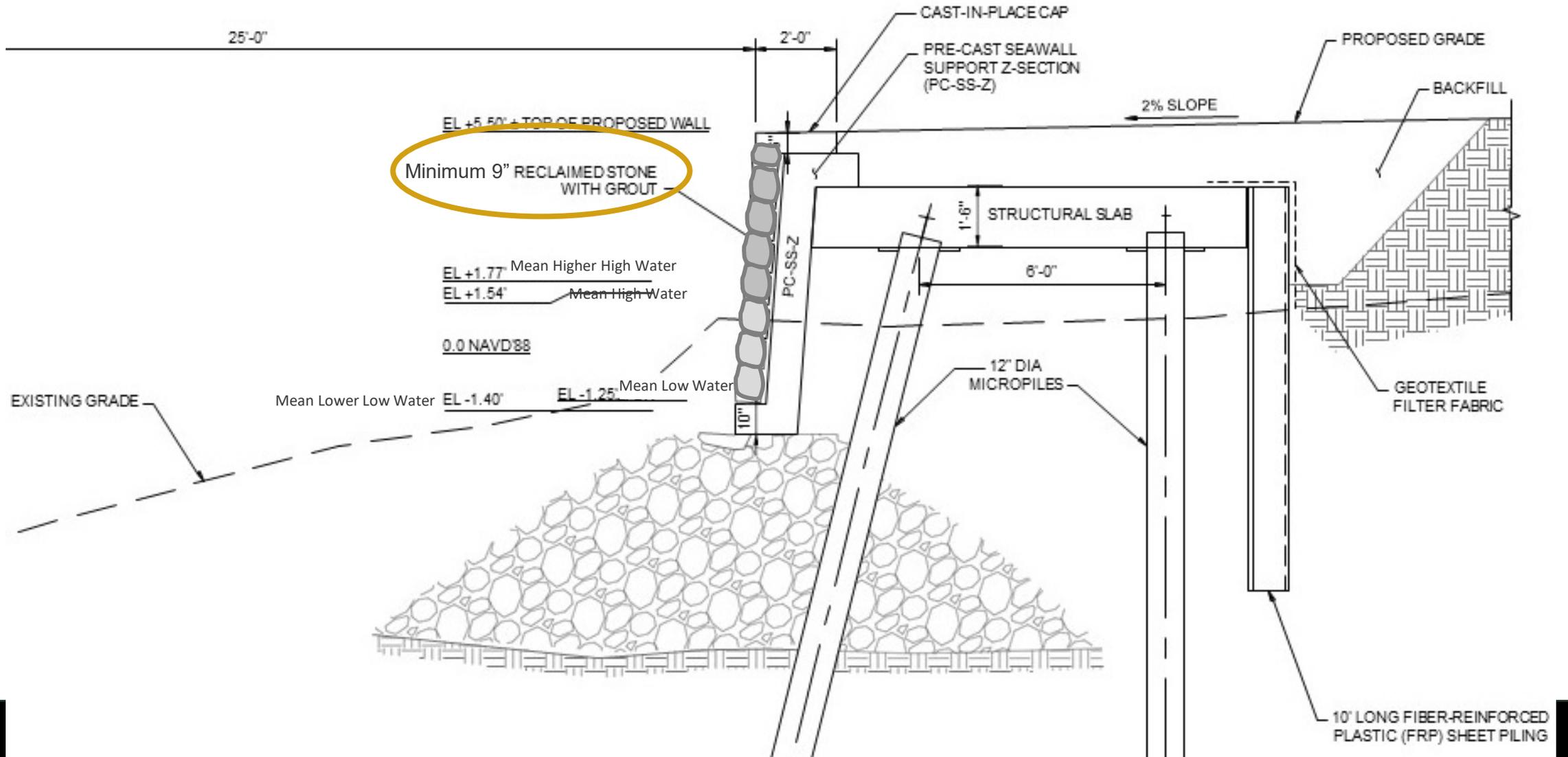


ACCEPTABLE SEAWALL CHARACTER



- Rectangular Stone Shape
- Reuse as much Historic Stone as Possible
 - Large Stone Variability
 - Moderate Pinning/Chinking
- Good Horizontal Coursing
- Less than 1" Joint Gaps Around Stones with Recessed Mortar
- Uniform Color
- Rough & Smooth Stone Faces

TYPICAL SCHEMATIC DESIGN SECTION



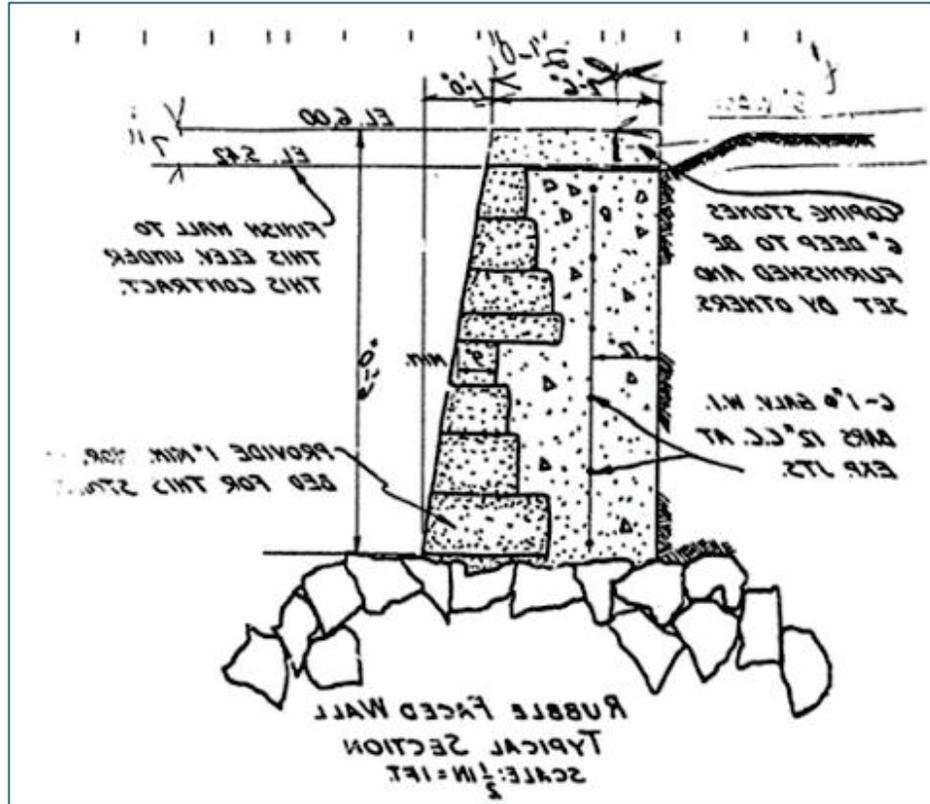


01

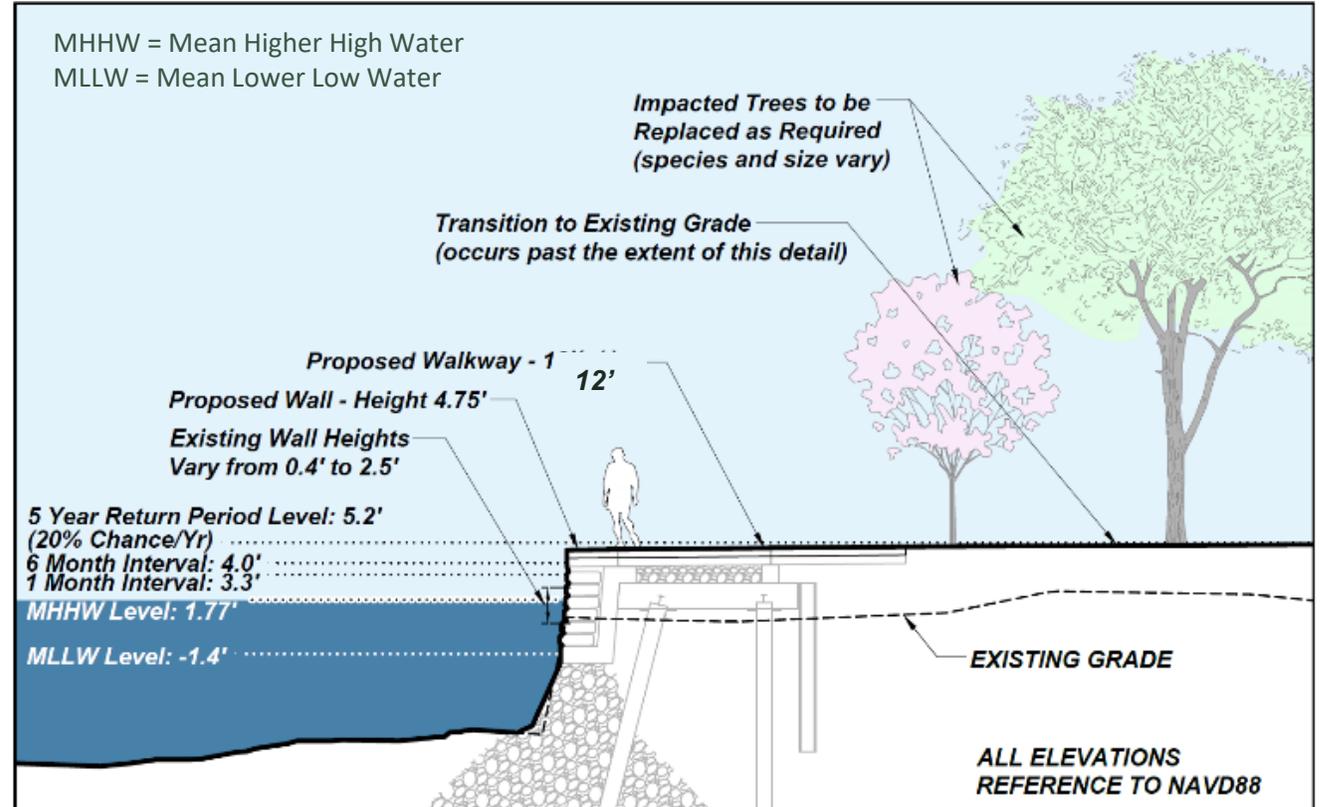
PROJECT UPDATES

Tidal Basin

TIDAL BASIN EAST – PROPOSED



EXISTING CONDITIONS
(Typical 1940s Tidal Basin East Seawall section)

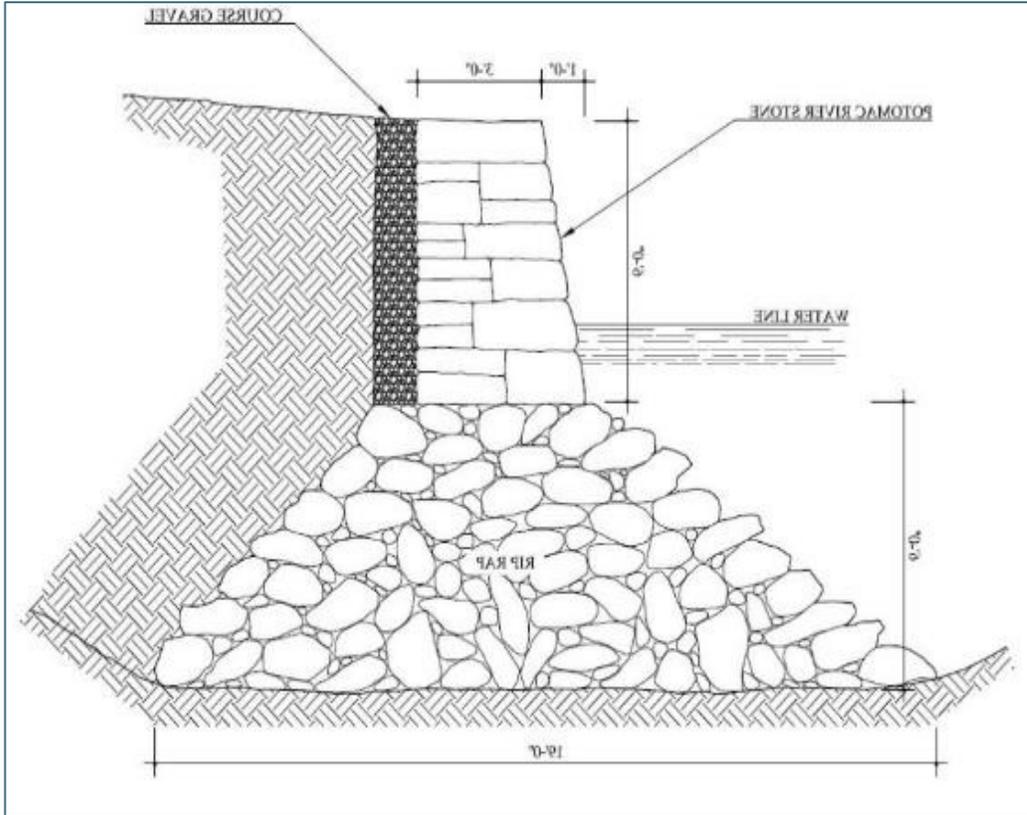


PROPOSED CONDITIONS (TYPICAL)
Tidal Basin - East
(Visualization for Planning Purposes Only)

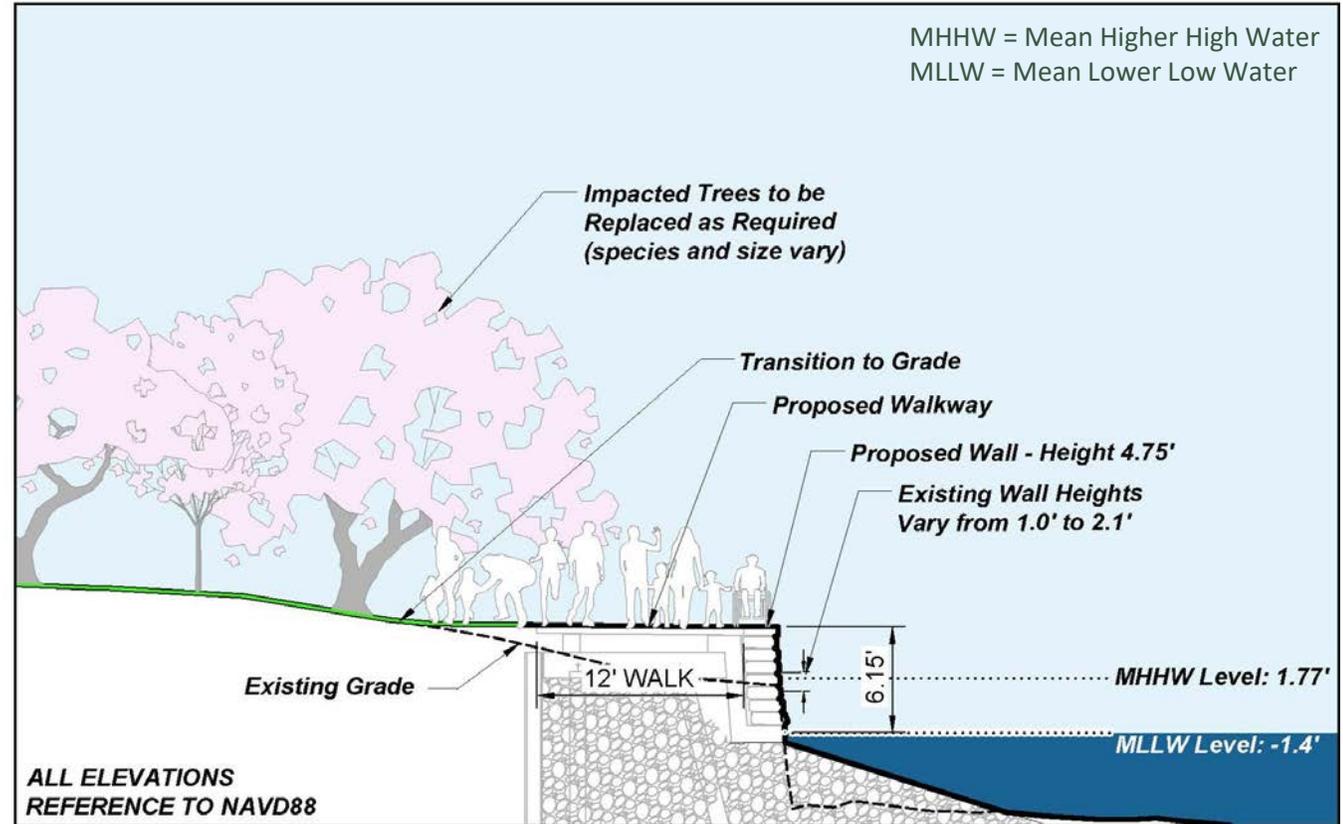
SCALE: 1/8" = 1'-0"
SECTION 2



TIDAL BASIN WEST - PROPOSED



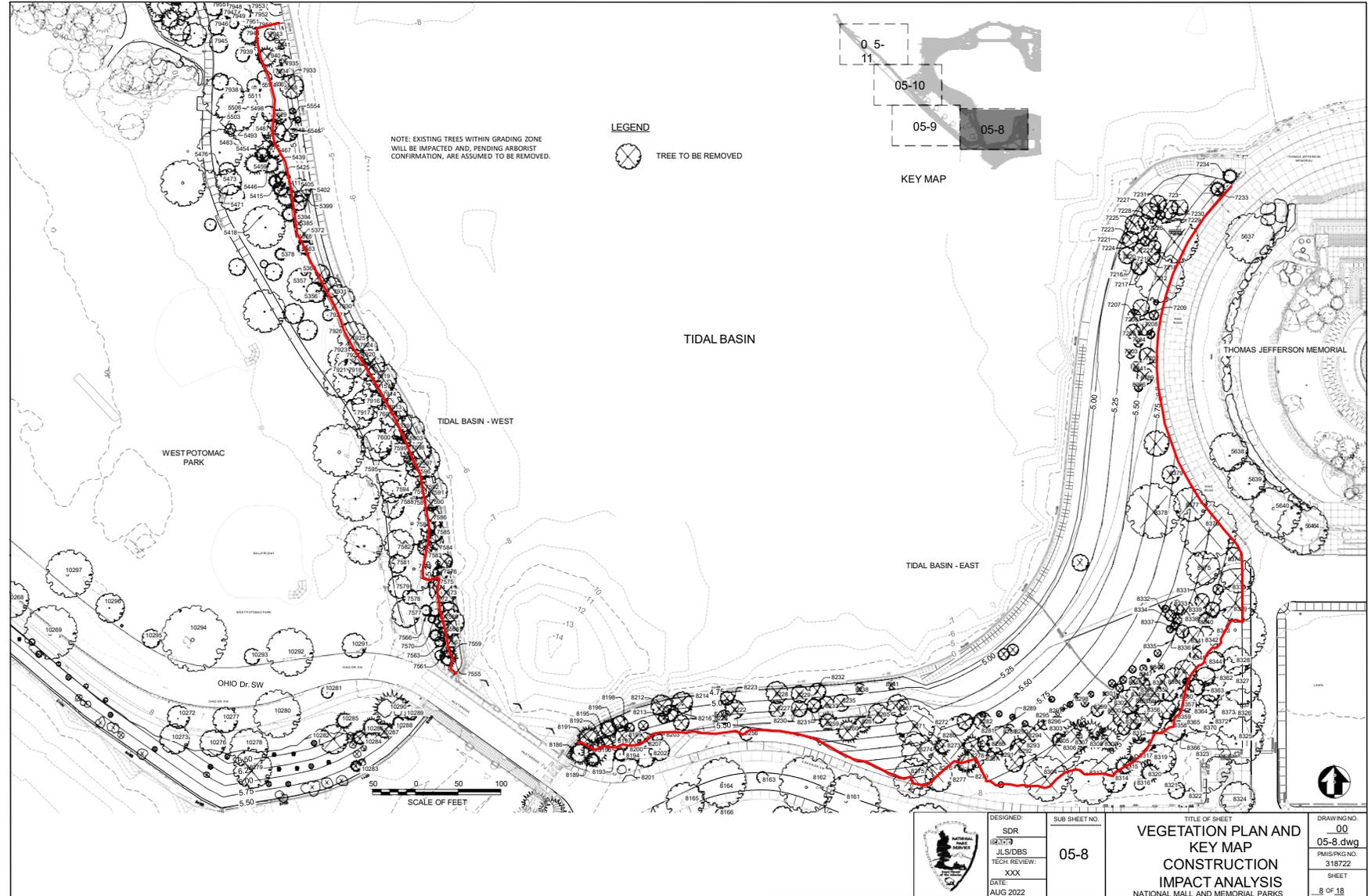
EXISTING CONDITIONS
(Original 1907 Tidal Basin West Seawall section)



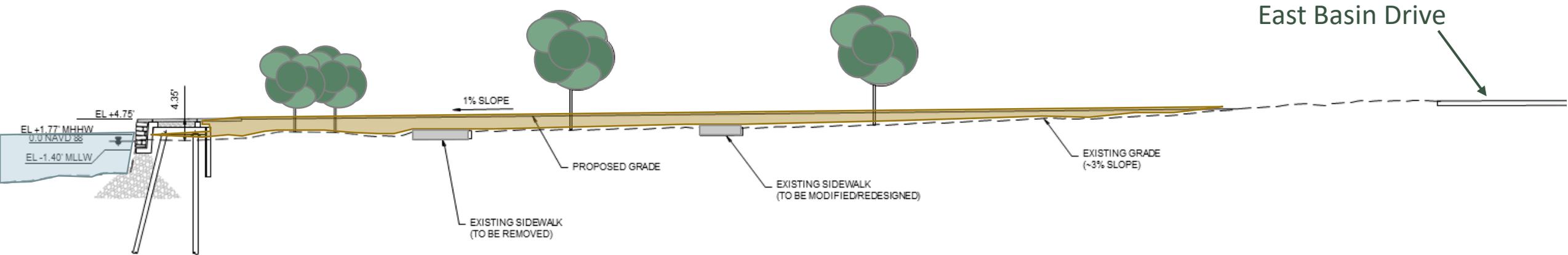
12' WALKWAY
PROPOSED CONDITIONS (TYPICAL)
Tidal Basin - West
(Visualization for Planning Purposes Only)



TIDAL BASIN - LIMITS OF GRADING

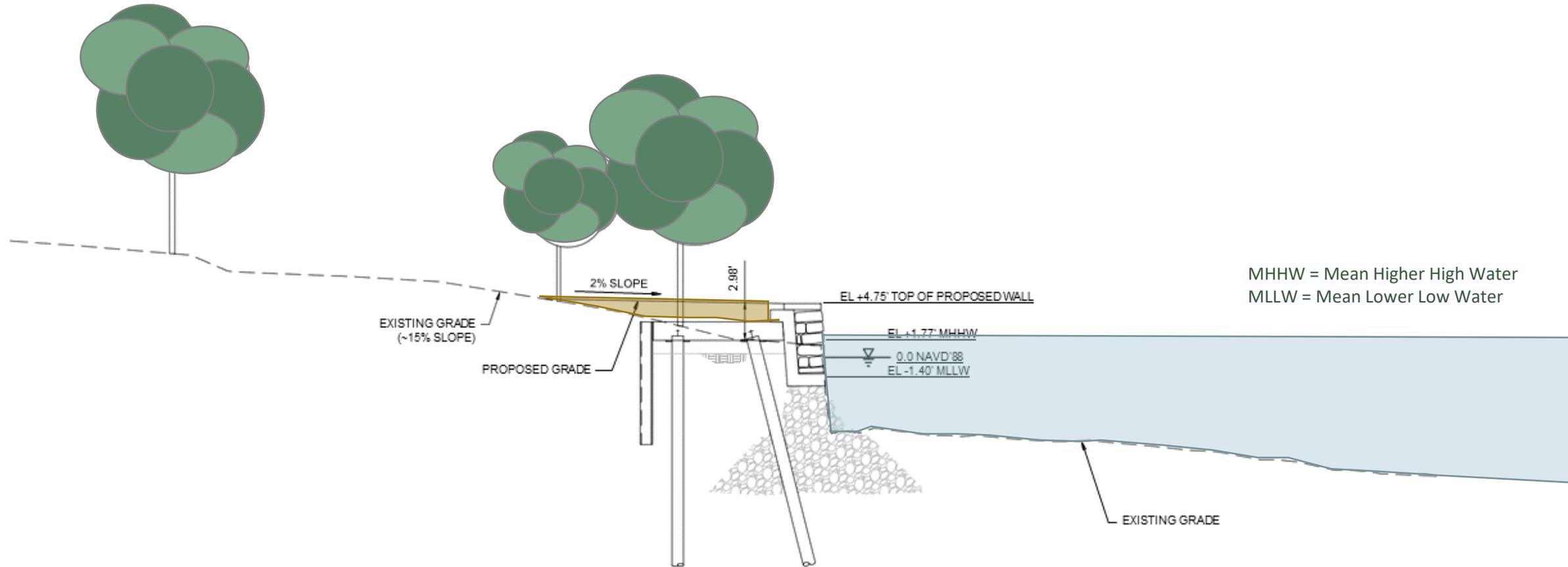


TIDAL BASIN EAST – INLAND GRADING*



*Cross sectional view of grading/fill to maintain 1% slope to top of wall

TIDAL BASIN WEST – INLAND GRADING*



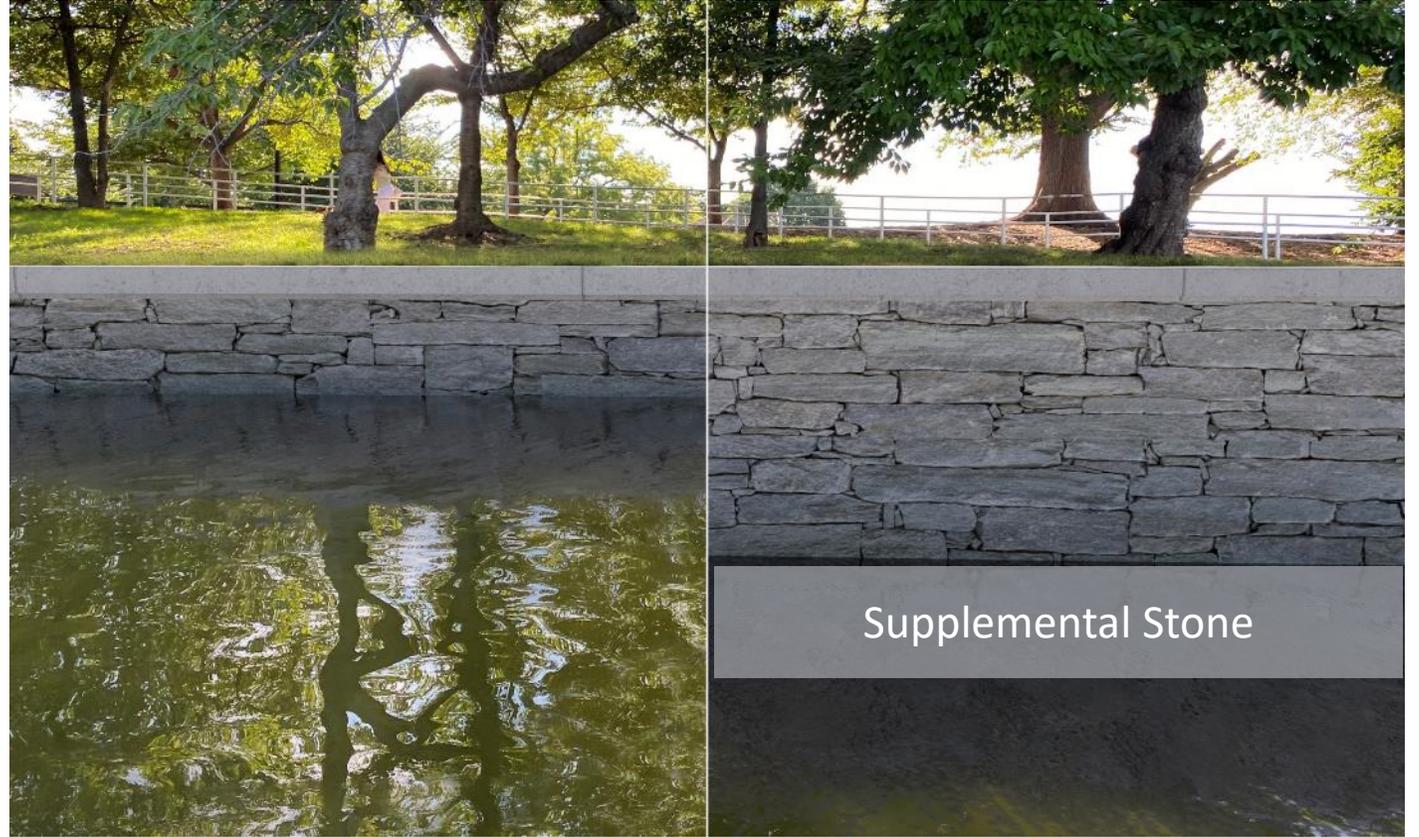
*Cross sectional view of grading/fill to maintain 2% slope to top of wall



TIDAL BASIN WEST - RENDERING



EXISTING



PROPOSED AT HIGH TIDE

PROPOSED AT LOW TIDE

Supplemental Stone



TIDAL BASIN EAST - RENDERING

VIEW OF TIDAL BASIN EAST



EXISTING



PROPOSED

TIDAL BASIN EAST - RENDERING



TIDAL BASIN EAST - RENDERING



EXISTING



TIDAL BASIN EAST TRANSITION - RENDERING

VIEW OF WEST STEPS OF JEFFERSON MEMORIAL PLAZA



EXISTING



PROPOSED



TIDAL BASIN WEST TRANSITION - RENDERING

VIEW FROM FDR MEMORIAL WALKWAY TO INLET BRIDGE



EXISTING



PROPOSED

TIDAL BASIN EAST & WEST - RENDERING

VIEW FROM MLK MEMORIAL TO TIDAL BASIN EAST AND TIDAL BASIN WEST



EXISTING



TIDAL BASIN EAST & WEST - RENDERING

VIEW FROM PADDLE BOAT AREA TO TIDAL BASIN EAST AND TIDAL BASIN WEST



EXISTING



VEGETATION

- Cherry trees are contributing resources to the Historic District and Cultural Landscape
- Some date back to 1912, though they are contributing regardless of their age
- Factors leading to the decline of cherry trees include regular flooding and soil compaction



Tidal Basin West – Looking North



Tidal Basin East– Looking East from Inlet Bridge



Tidal Basin East – Looking West



Tidal Basin West – Looking South

EXISTING VEGETATION PLAN – TIDAL BASIN

ESTIMATED # OF TREES TO BE REMOVED

Section	Cherry	Deciduous	Evergreen	Unknown	Total
TB - East	108	29	26	5	168
TB - West	49	3	12	2	66
TOTAL	157	32	38	7	234



EXISTING CONDITIONS
CULTURAL LANDSCAPE REPORT TIDAL BASIN JUNE 2020



PROPOSED PLANTING PLAN – TIDAL BASIN

ESTIMATED # OF TREES TO BE PLANTED

Section	Cherry	Deciduous	Evergreen	Unknown	Total
TB - East	145	45	35	0	225
TB - West	64	6	16	0	86
TOTAL	209	51	51	0	311



CONCEPT DESIGN PROPOSED CONDITIONS
TIDAL BASIN

*Concept will develop further, and full tree assessment will be conducted by project team and NPS arborist



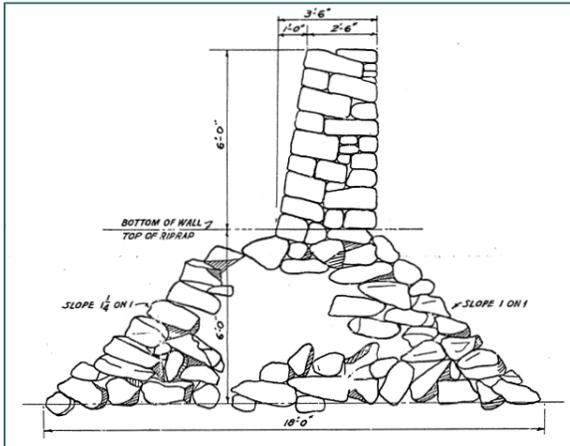


01

PROJECT UPDATES

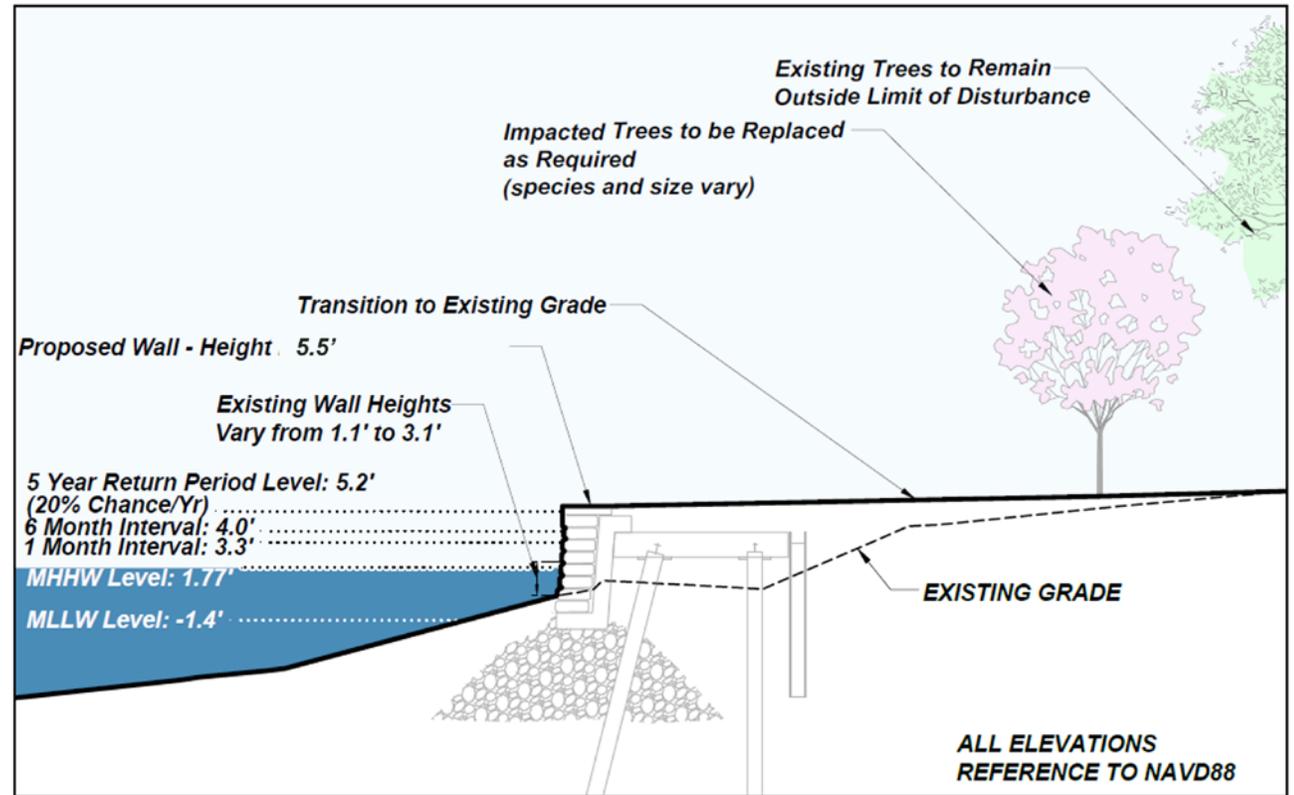
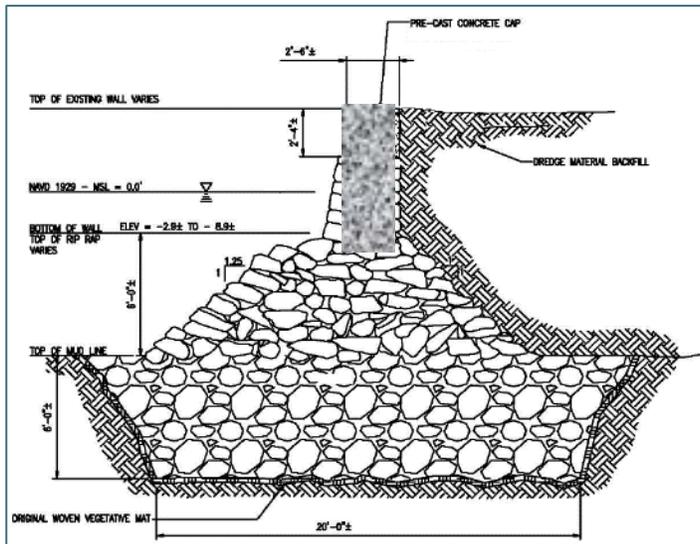
West Potomac Park

WEST POTOMAC PARK - PROPOSED



EXISTING
CONDITIONS
(Original Section:
WPP South)

EXISTING
CONDITIONS
(Assumed
Concrete
Repair: WPP
North)

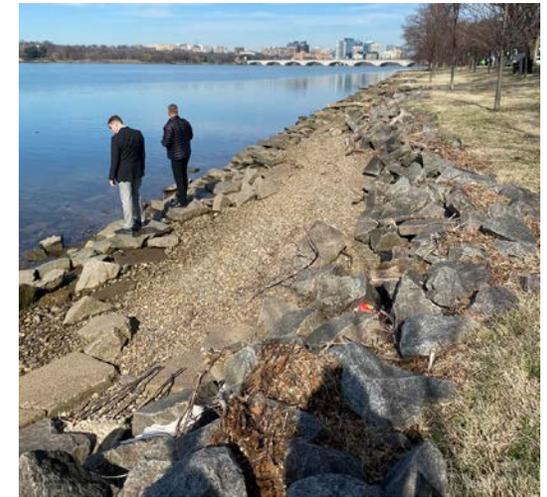
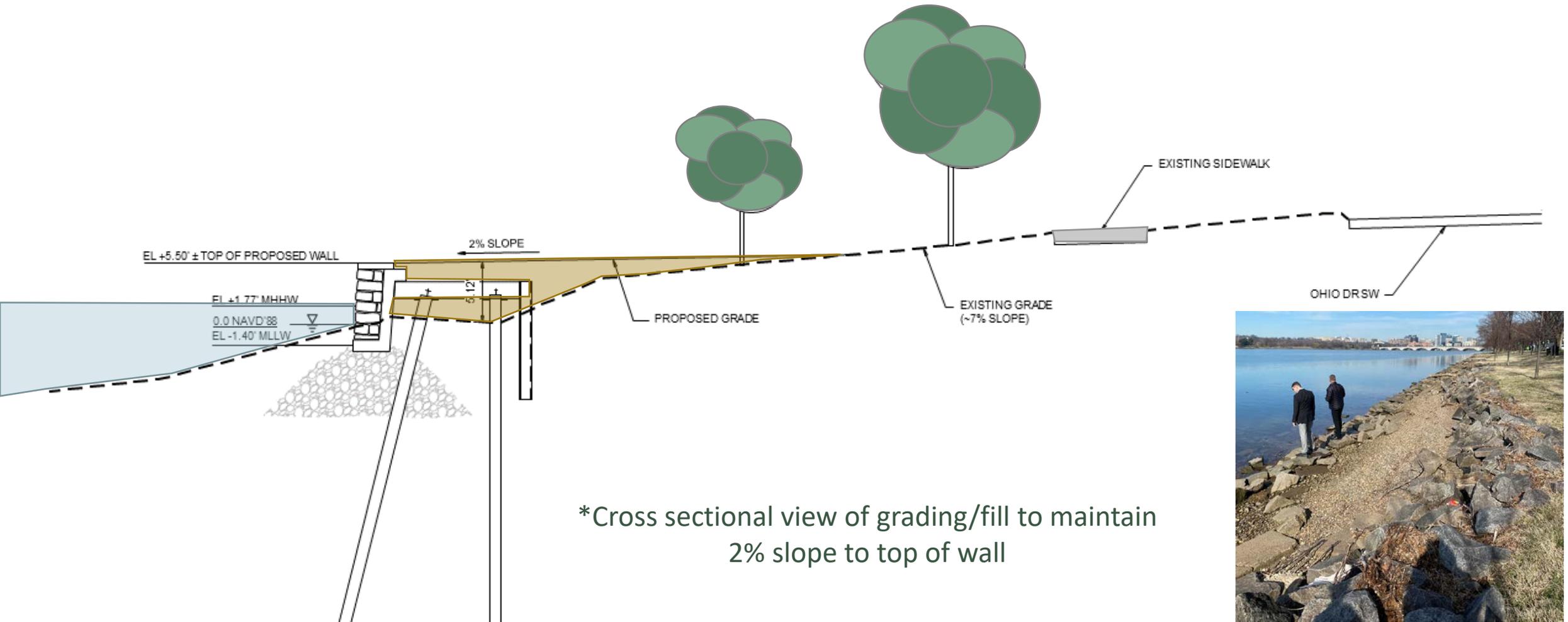


SCALE: 1/8" = 1'-0"
SECTION 8

PROPOSED CONDITIONS (TYPICAL)
West Potomac Park
(Visualization for Planning Purposes Only)



WEST POTOMAC PARK- INLAND GRADING



WEST POTOMAC PARK- RENDERING



EXISTING



PROPOSED AT HIGH TIDE



PROPOSED AT LOW TIDE

WEST POTOMAC PARK - RENDERING

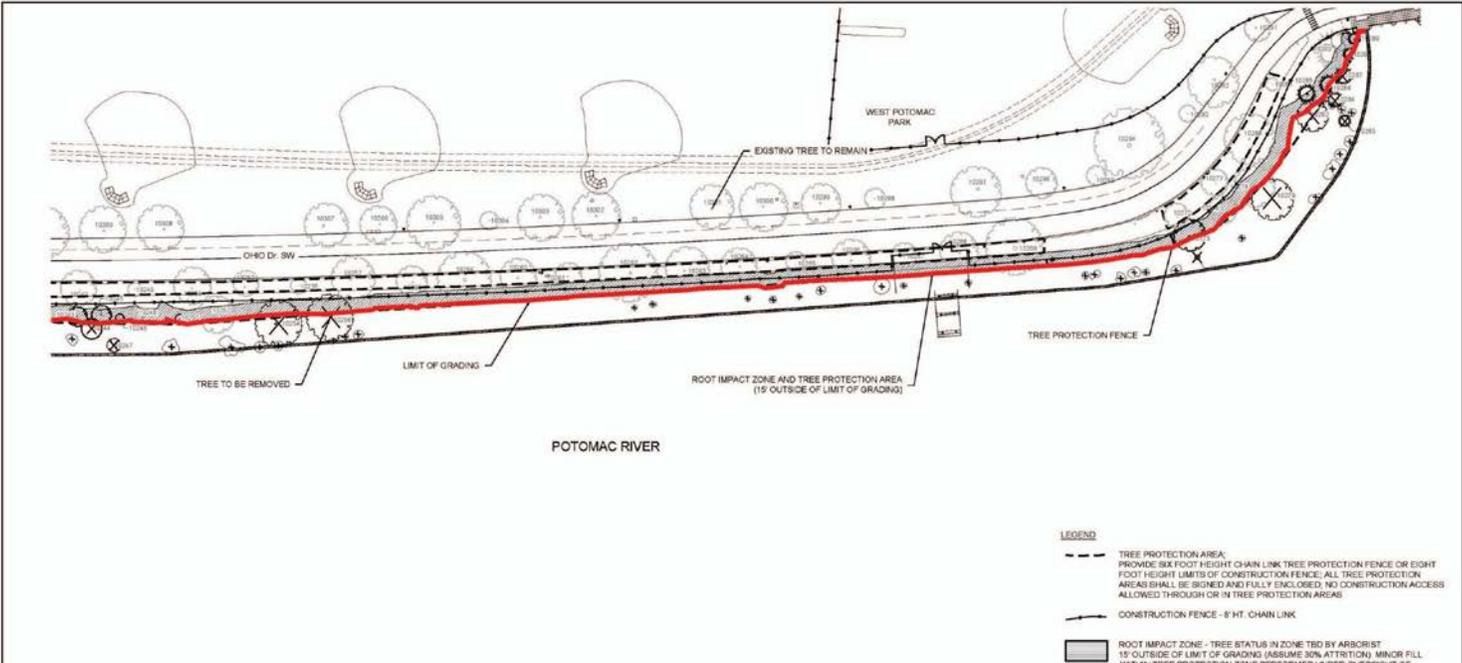
VIEW FROM VIRGINIA SHORELINE TO WEST POTOMAC PARK



EXISTING



EXISTING VEGETATION PLAN – WPP (1 of 3)



TREES TO BE REMOVED IN THIS SECTION

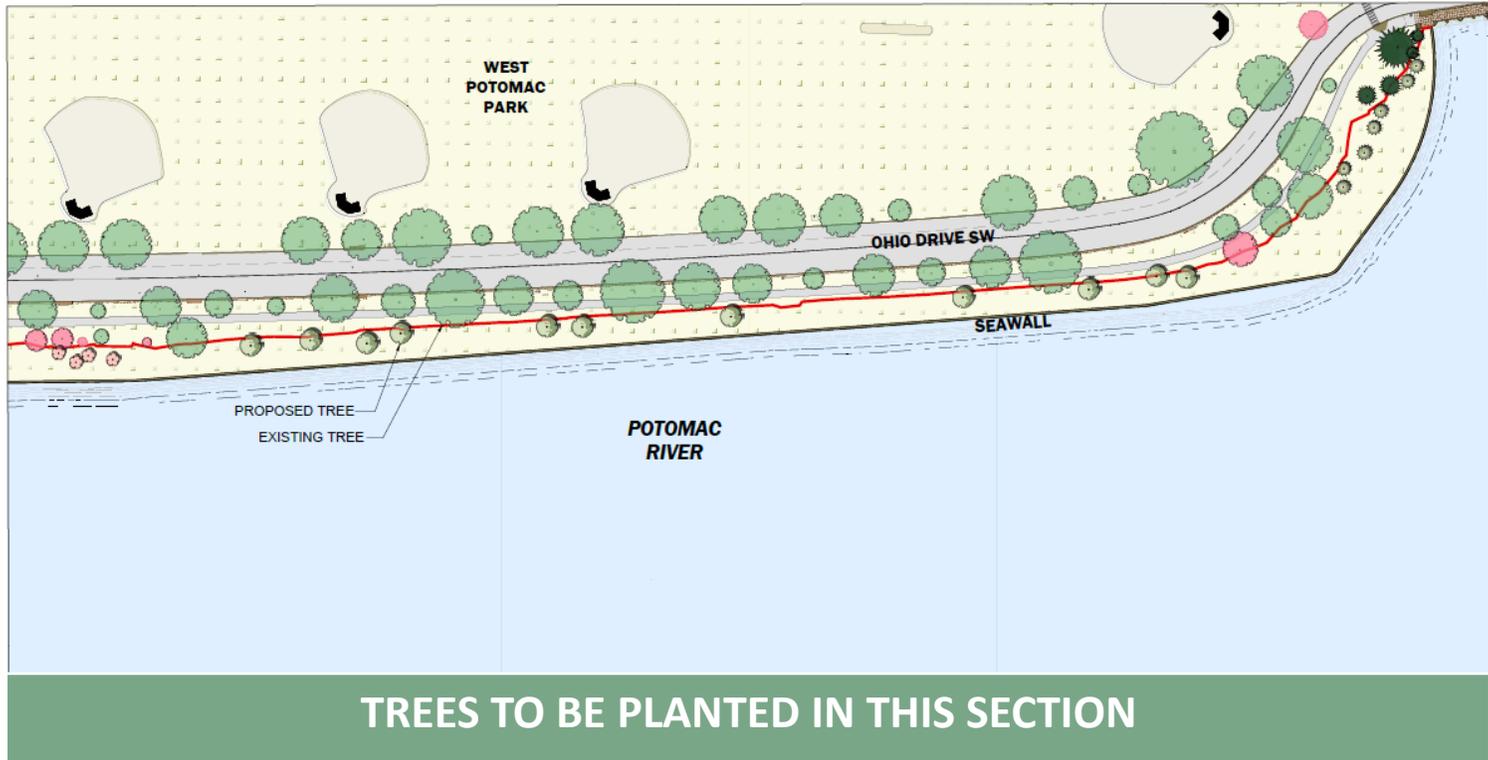
Cherry	Deciduous	Evergreen	Unknown	Total
2	4	4	1	11

Totals for West Potomac Park

TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70



PROPOSED PLANTING PLAN – WPP (1 of 3)



TREES TO BE PLANTED IN THIS SECTION				
Cherry	Deciduous	Evergreen	Unknown	Total
4	11	9	0	24

CONCEPT DESIGN PROPOSED CONDITIONS
WEST POTOMAC PARK (SOUTHEAST SECTION)

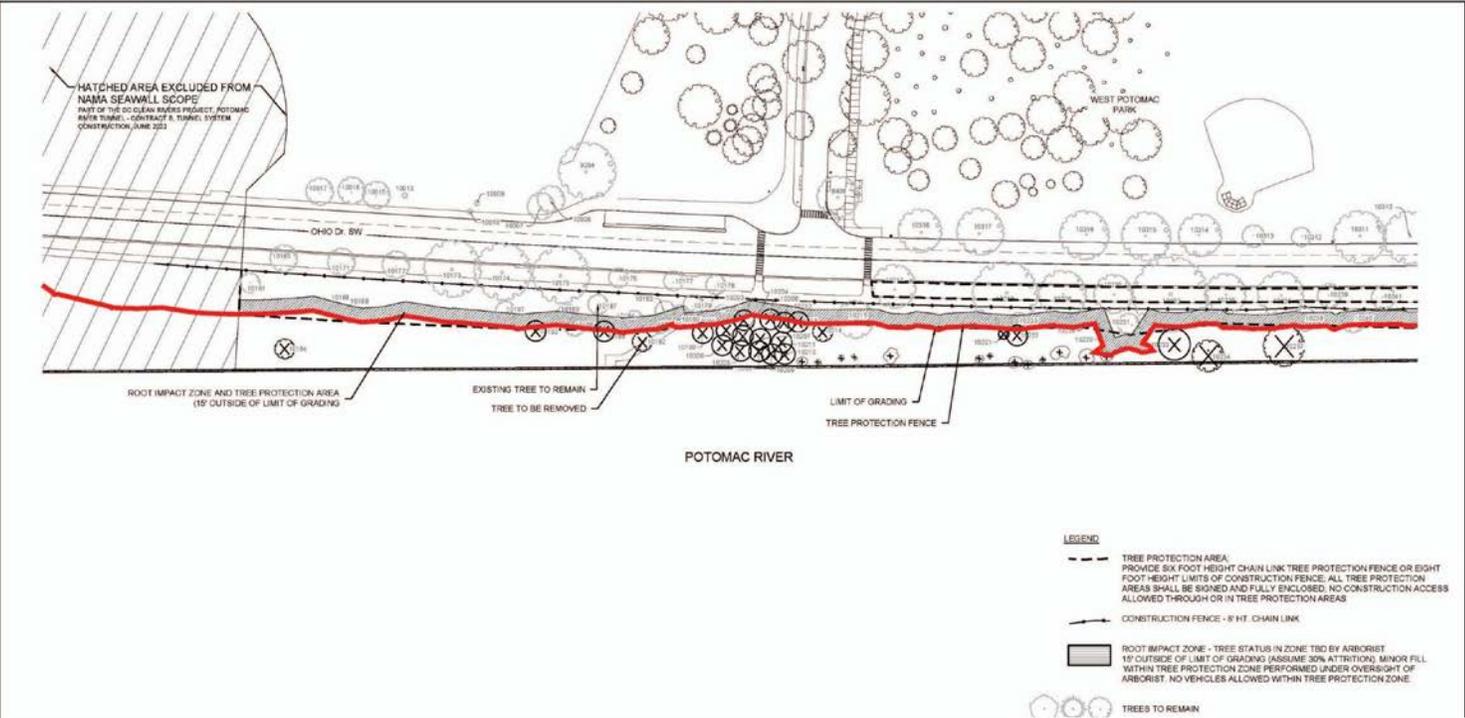


TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70

*Concept will develop further, and full tree assessment will be conducted by project team and NPS arborist



EXISTING VEGETATION PLAN – WPP (2 of 3)



Totals for West Potomac Park

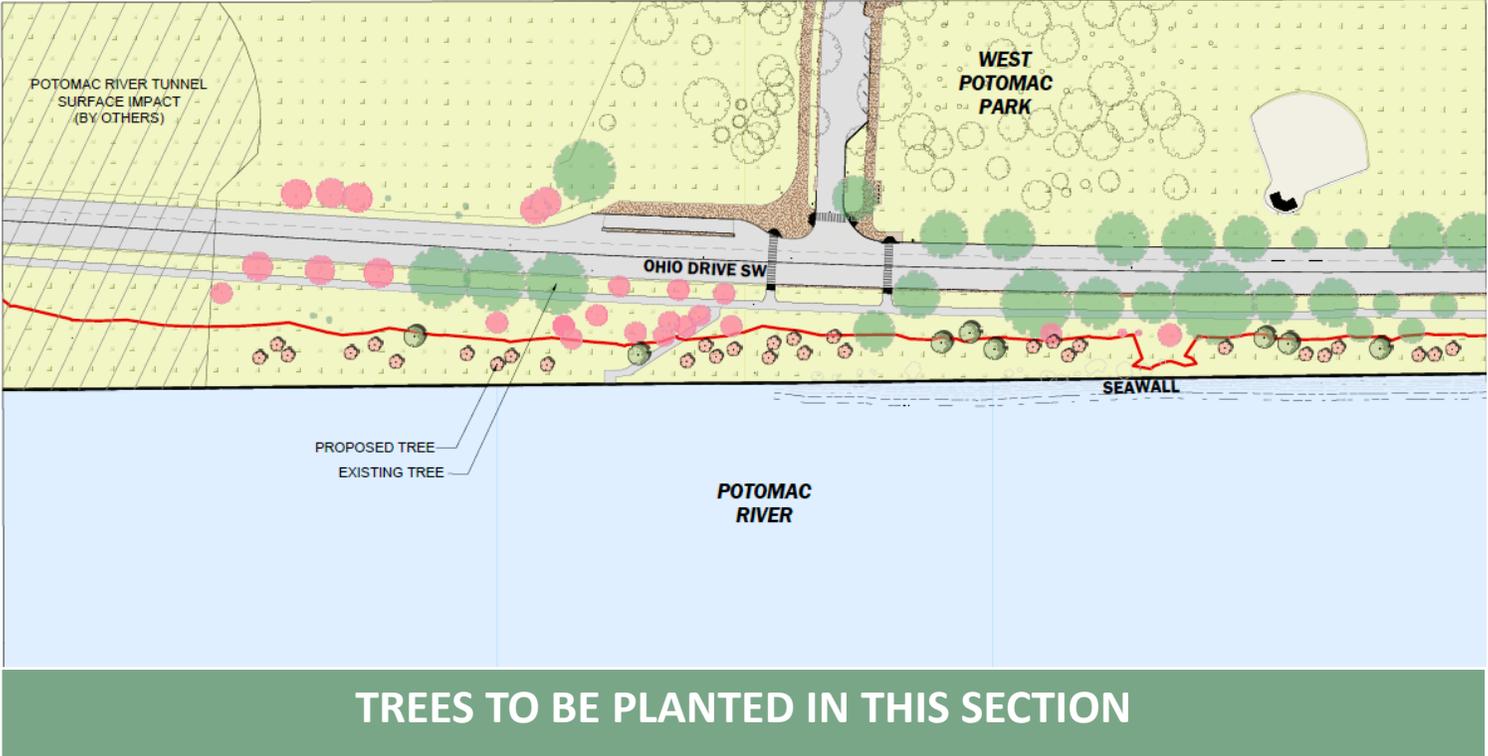
TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70

TREES TO BE REMOVED IN THIS SECTION

Cherry	Deciduous	Evergreen	Unknown	Total
19	5	0	0	24



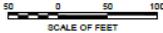
PROPOSED PLANTING PLAN – WPP (2 of 3)



TREES TO BE PLANTED IN THIS SECTION

Cherry	Deciduous	Evergreen	Unknown	Total
31	8	0	0	39

CONCEPT DESIGN PROPOSED CONDITIONS
WEST POTOMAC PARK (MIDDLE SECTION)



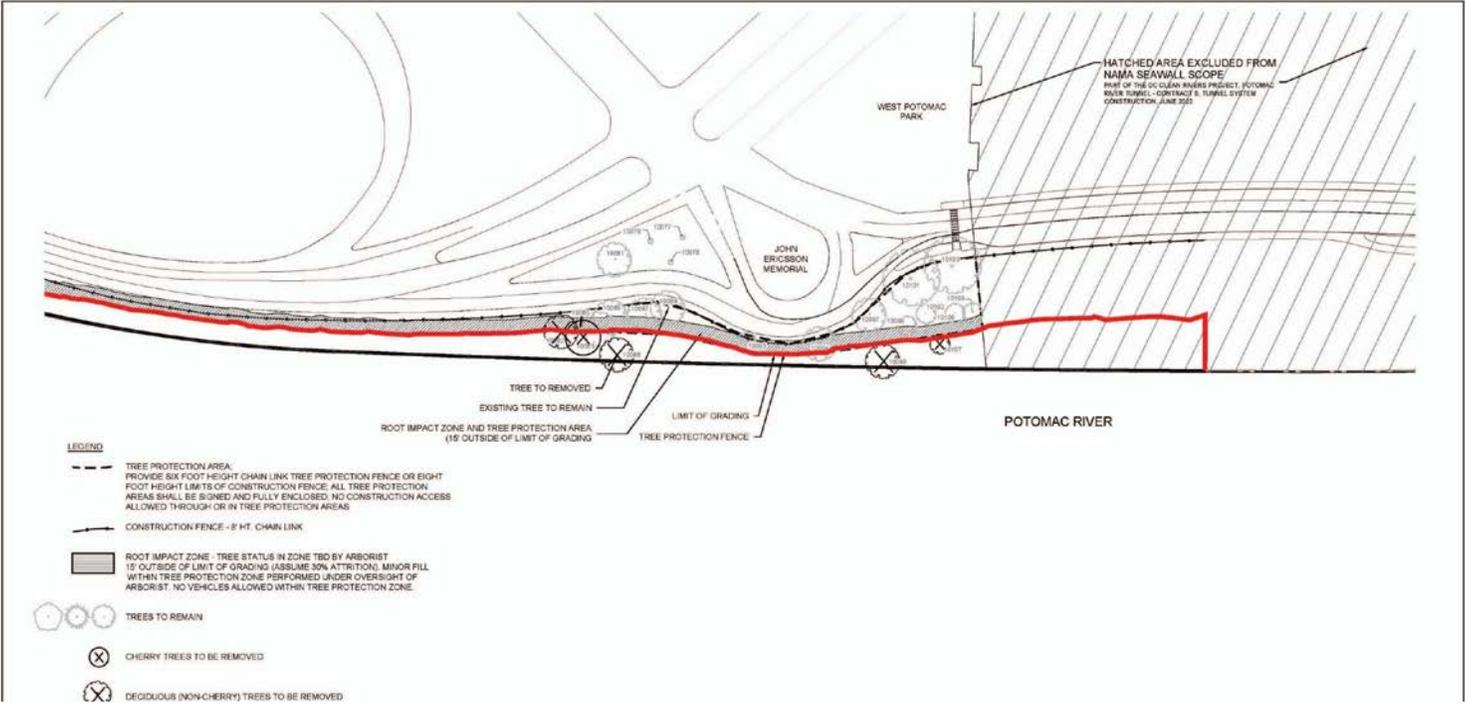
Totals for West Potomac Park

TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70

*Concept will develop further, and full tree assessment will be conducted by project team and NPS arborist



EXISTING VEGETATION PLAN – WPP (3 of 3)



TREES TO BE REMOVED IN THIS SECTION

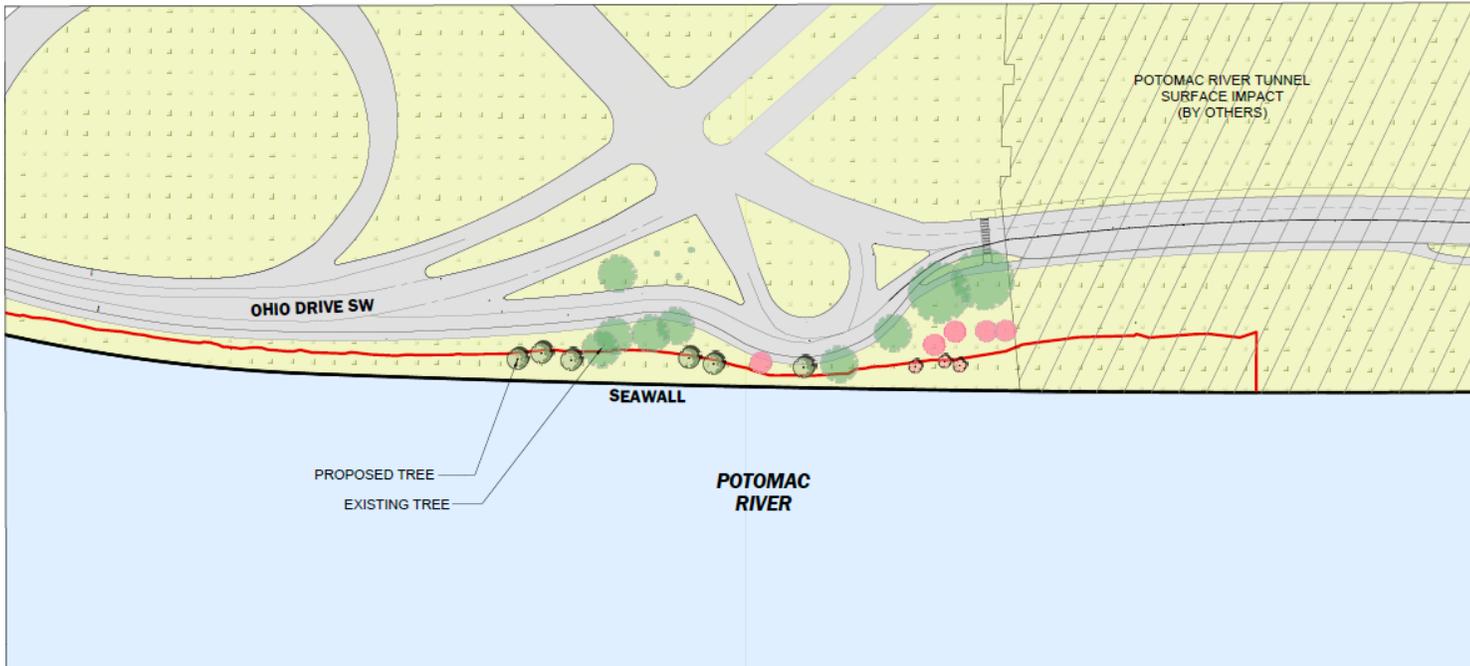
Cherry	Deciduous	Evergreen	Unknown	Total
1	4	0	0	5

Totals for West Potomac Park

TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70



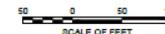
PROPOSED PLANTING PLAN – WPP (3 of 3)



TREES TO BE PLANTED IN THIS SECTION

Cherry	Deciduous	Evergreen	Unknown	Total
1	6	0	0	7

CONCEPT DESIGN PROPOSED CONDITIONS
WEST POTOMAC PARK (NORTHWEST SECTION)



Totals for West Potomac Park

TYPE	# REMOVED	# PLANTED
Cherry	22	36
Deciduous	13	25
Evergreen	4	9
Unknown	1	0
TOTAL	40	70

*Concept will develop further, and full tree assessment will be conducted by project team and NPS arborist





02

DETERMINATION OF EFFECT

DETERMINATION OF EFFECT

	Adverse Effects	Temporary Construction Adverse Effect	Temporary Visual Adverse Effects
National Mall/Wash Monument Grounds HD	X	X	X
East and West Potomac Parks HD	X	X	X
Arlington National Cemetery HD			X
GW Memorial Parkway HD			X
Mount Vernon Memorial Highway HD			X
Arlington Memorial Bridge			X
MLK Jr. Memorial			X
FDR Memorial		X	X
Thomas Jefferson Memorial		X	X



ADVERSE EFFECTS

1. Alteration and loss of historic fabric;
2. Loss of contributing trees and vegetation (including Japanese cherry trees);
and,
3. Temporary effects to views/viewsheds and visitor access and experience during construction.





03

AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

AVOIDANCE MEASURES

1. Horizontal alignment of the seawalls will not be altered, avoiding changes to the shape of the Tidal Basin and West Potomac Park.
2. Rehabilitating the seawalls to their historic functional height will restore historic viewsheds, avoiding visual adverse effects.
3. Trees and vegetation to remain will be protected throughout construction to avoid damage.



MINIMIZATION MEASURES

1. Design and construction to follow the Secretary of the Interior's Standards.
2. Design and construction will ensure the historic ashlar pattern of stacked stone is retained, minimizing visual effects.
3. Maximum amount of historic stone possible will be reused to minimize the loss of historic fabric and will be concentrated at the most visible portion of walls to minimize visual effects.
4. Signage and sensitive construction fencing will minimize temporary visitor experience and viewshed effects.



MITIGATION MEASURES

1. Interpretive signage at the Tidal Basin on the history and significance of the seawalls.
2. Comprehensive plan for the Tidal Basin.
3. Trees and vegetation will be replaced in kind (Japanese cherry trees), or with a more acceptable/suitable species as determined by a cultural landscape architect.





04

SCHEDULE

SCHEDULE

- Memorandum of Agreement
 - **Provide comments by January 6, 2023**
- Environmental Assessment Schedule
 - December 2022/January 2023 – Drafting
 - February 2023/March 2023 – Public Comment Period
 - April 2023 – Decision Document
- Anticipated Start of Construction: Fall 2024





05

QUESTIONS & ANSWERS



END OF PRESENTATION