

30% Design & Variances



Agenda

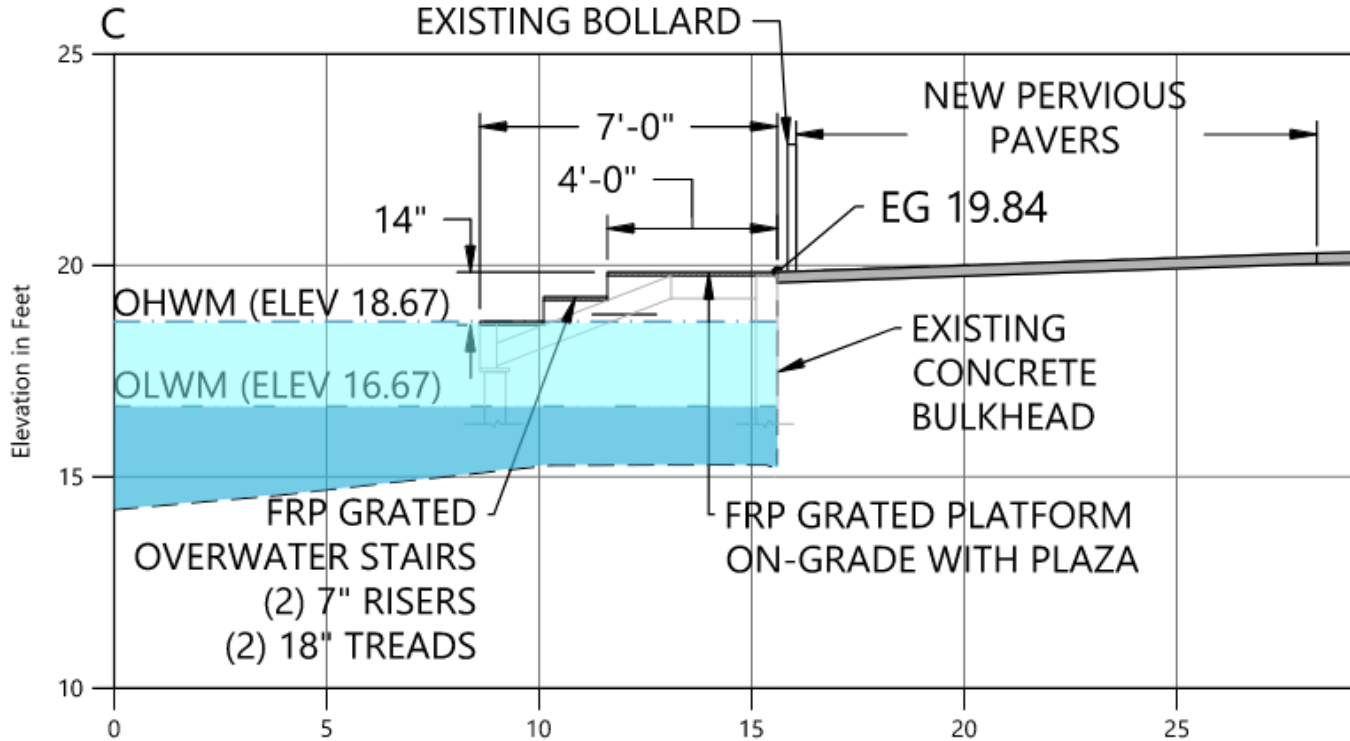
In-Water Design

- Overwater stairs
- Wave attenuator and floats
- Variance request

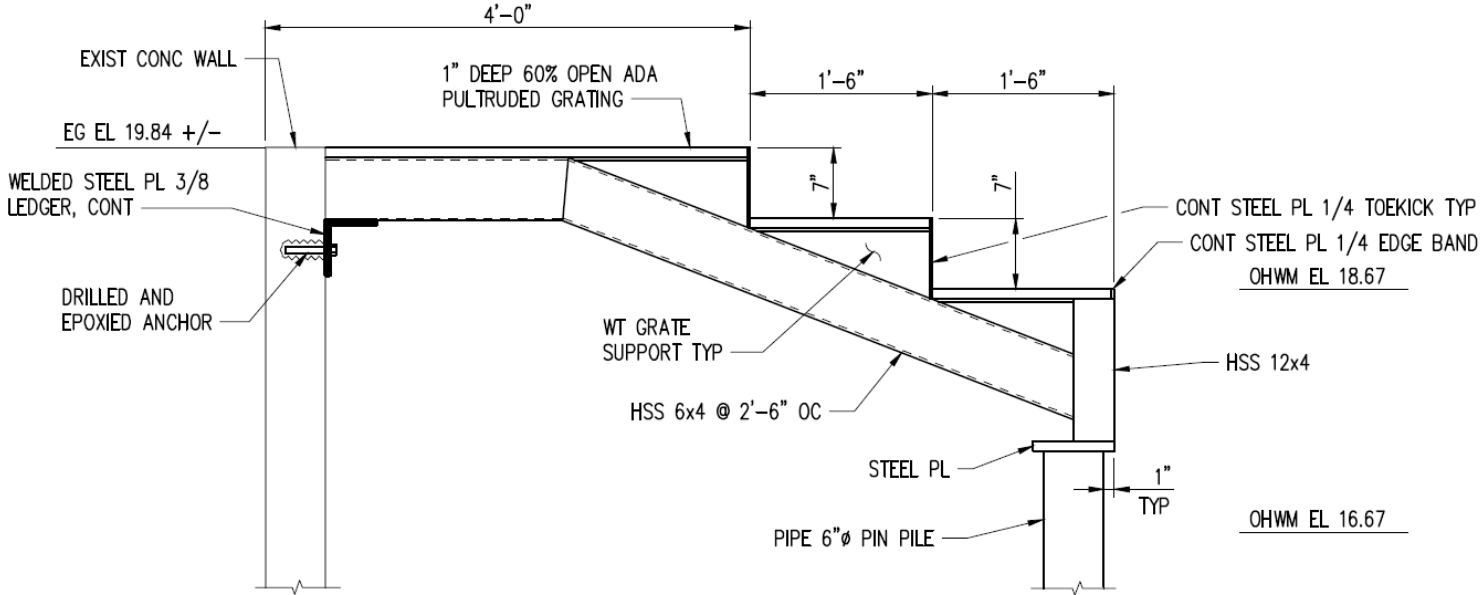
Upland Design

- Beach access north of plaza
- Plaza and outdoor classroom access
- Public art

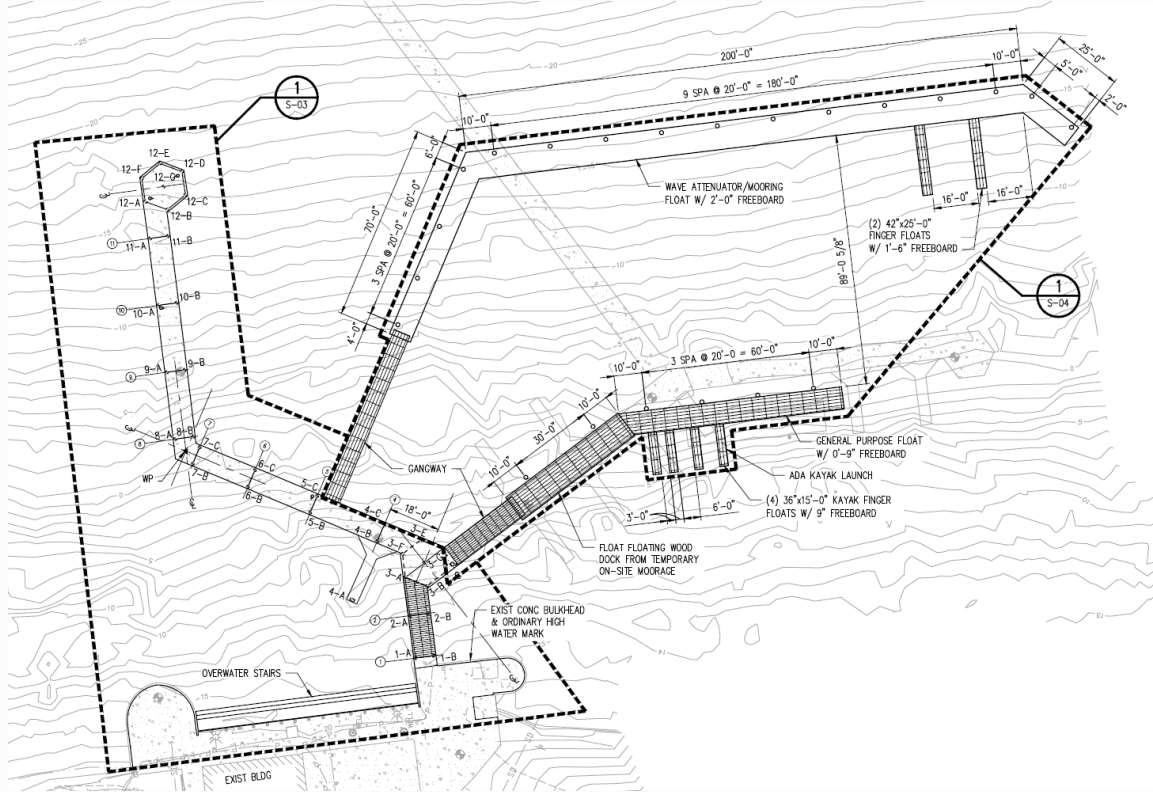
New Overwater Stair



New Overwater Stair



Possible Dock Modifications



Shoreline Variances Request

Background

- Project goals support the goals of the Shoreline Management Act
- City of Mercer Island Shoreline Management Plan focuses on residential development
- Variances are requested to provide safer access for all users

Variances Requested

- Limit on dock width of 6'
- Light-transmitting grating over 100% of the dock surface
- Fixed pier structure at least 18" above Ordinary High Water Mark

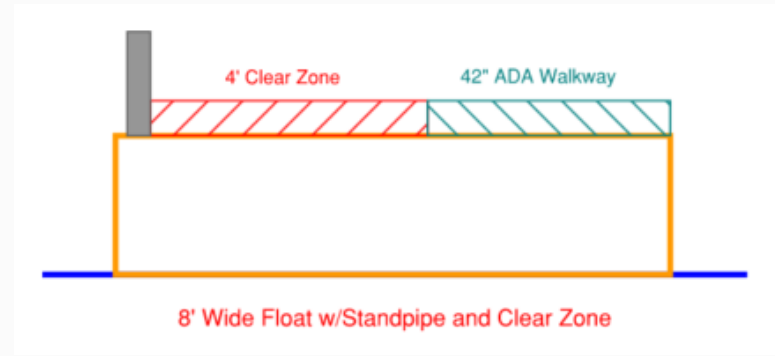
Shoreline Variances Justification

Dock Width

- Wider outer dock will provide more wave attenuation
- 8' wide dock required at standpipes to meet fire code and provide ADA access

Table 1: Effect of Width on Attenuation

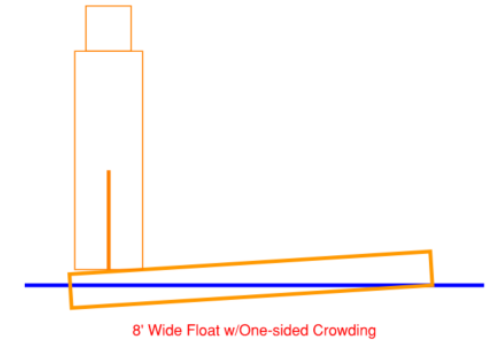
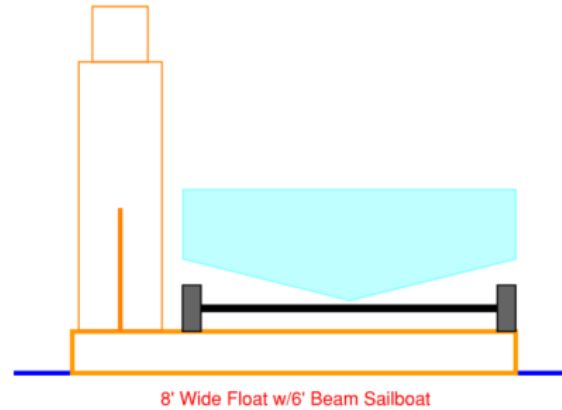
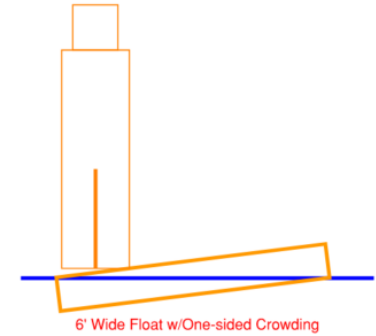
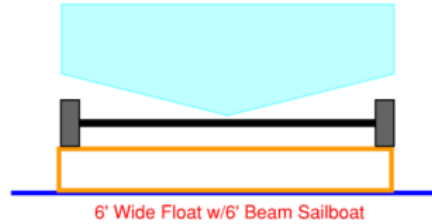
Floating Structure Width (ft)	Floating Structure Draft (ft)	Tp (s) Wave Period	Depth, d (ft)	Transmission (%)
6	3	3	15	42
8	3	3	15	33
10	3	3	15	28



Shoreline Variances Justification

Dock Width

- Wider inner dock will allow two-way movement with sailboats on dolleys
- Wider inner dock will be more stable for educational programs
- Wider inner dock more stable against residual wave energy



Shoreline Variances Justification

100% Grated Surface

- Wave attenuation requires use of heavy, preferably concrete, docks and floatation elements do not allow light transmission

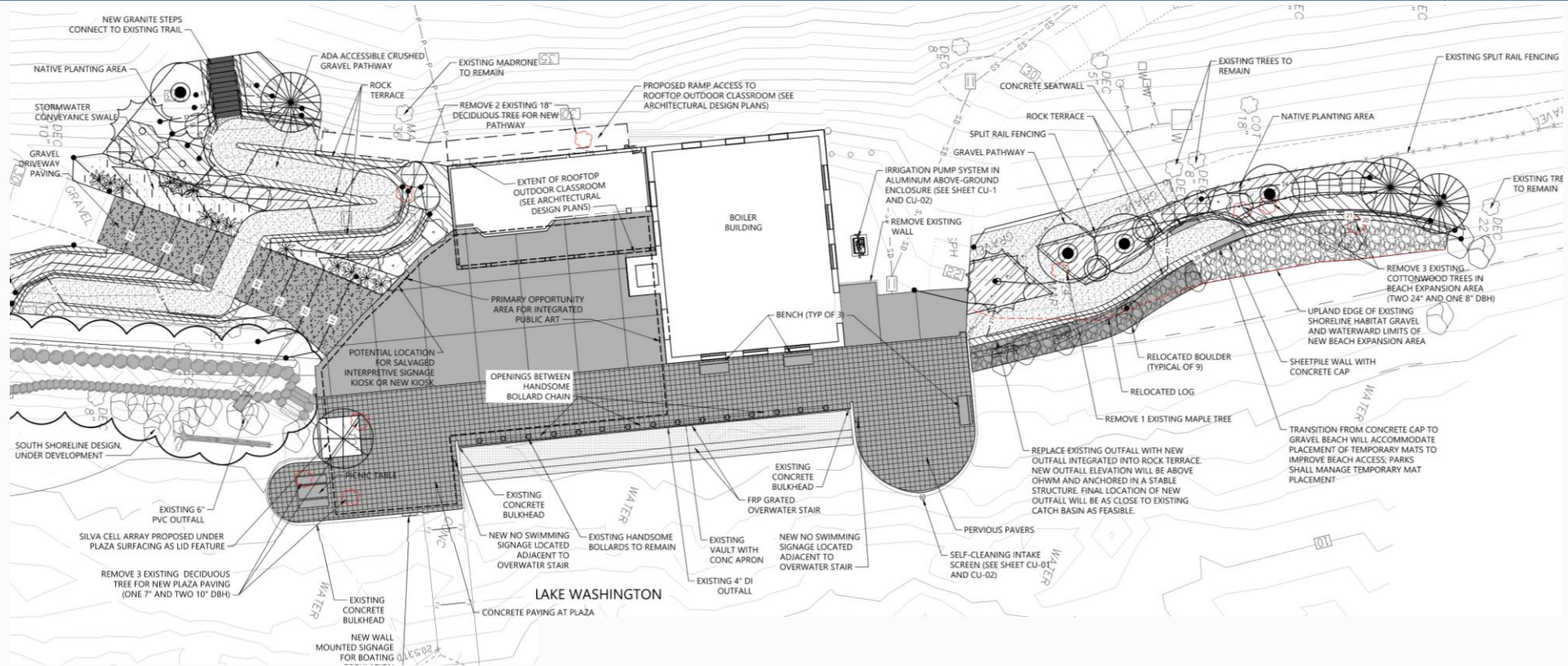
Minimum Structure Height

- To provide experience of connecting with the lake, stairs need to touch the water at summer (high) lake levels

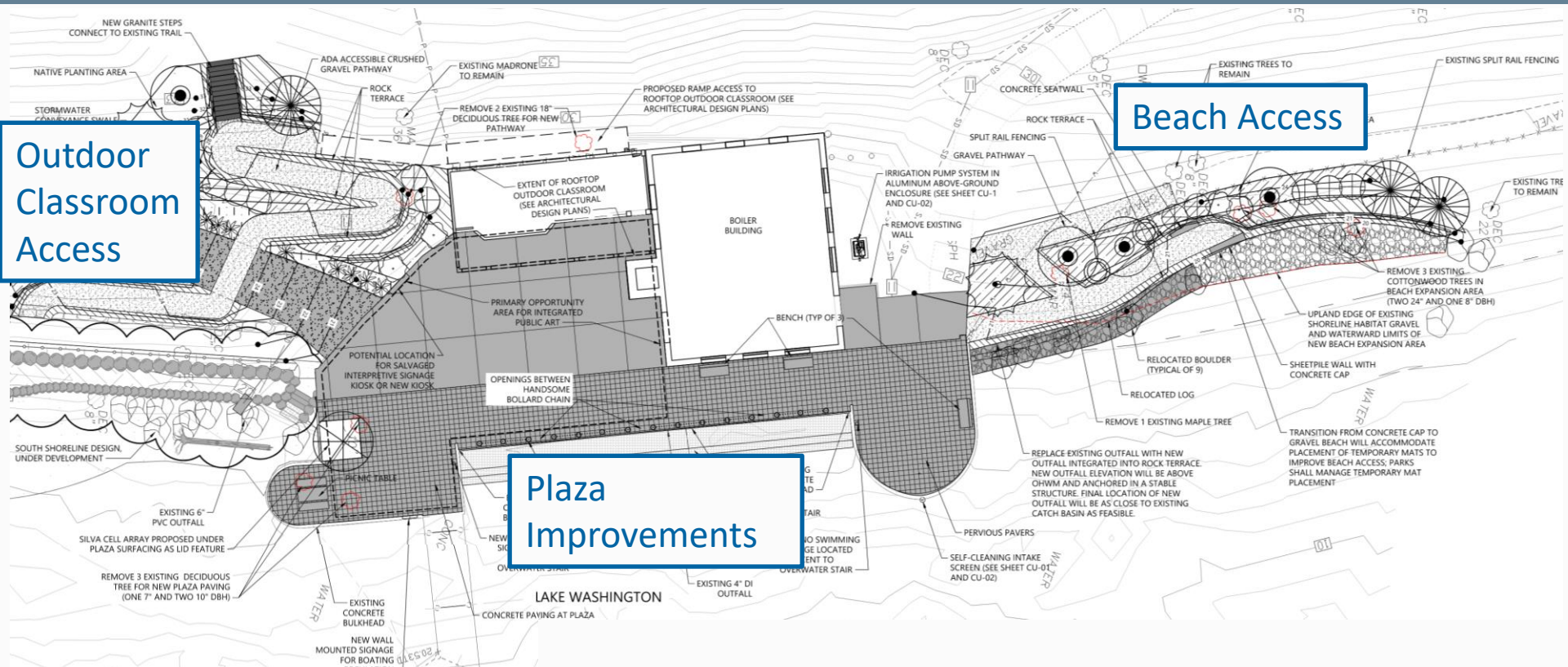
Potential Mitigation

- Remove concrete decking near shore and replace with grating
- Shift floating docks into deeper water
- Find and remove derelict overwater cover
- Additional shoreline restoration

Upland Design



Upland Design






Area of
wider beach



New lighting
for safety

2 new benches
next to building



**Remove
kiosk**

**New plaza
concrete paving
(1,925 square feet)**

**New pervious
plaza paving
(2,415 square feet)**

Location of outdoor classroom
(deck and railing)



Location of ramp and pathway
to outdoor classroom

Location of
proposed
kiosk





South
shoreline trail
(separate
project)

Pathway to
outdoor
classroom

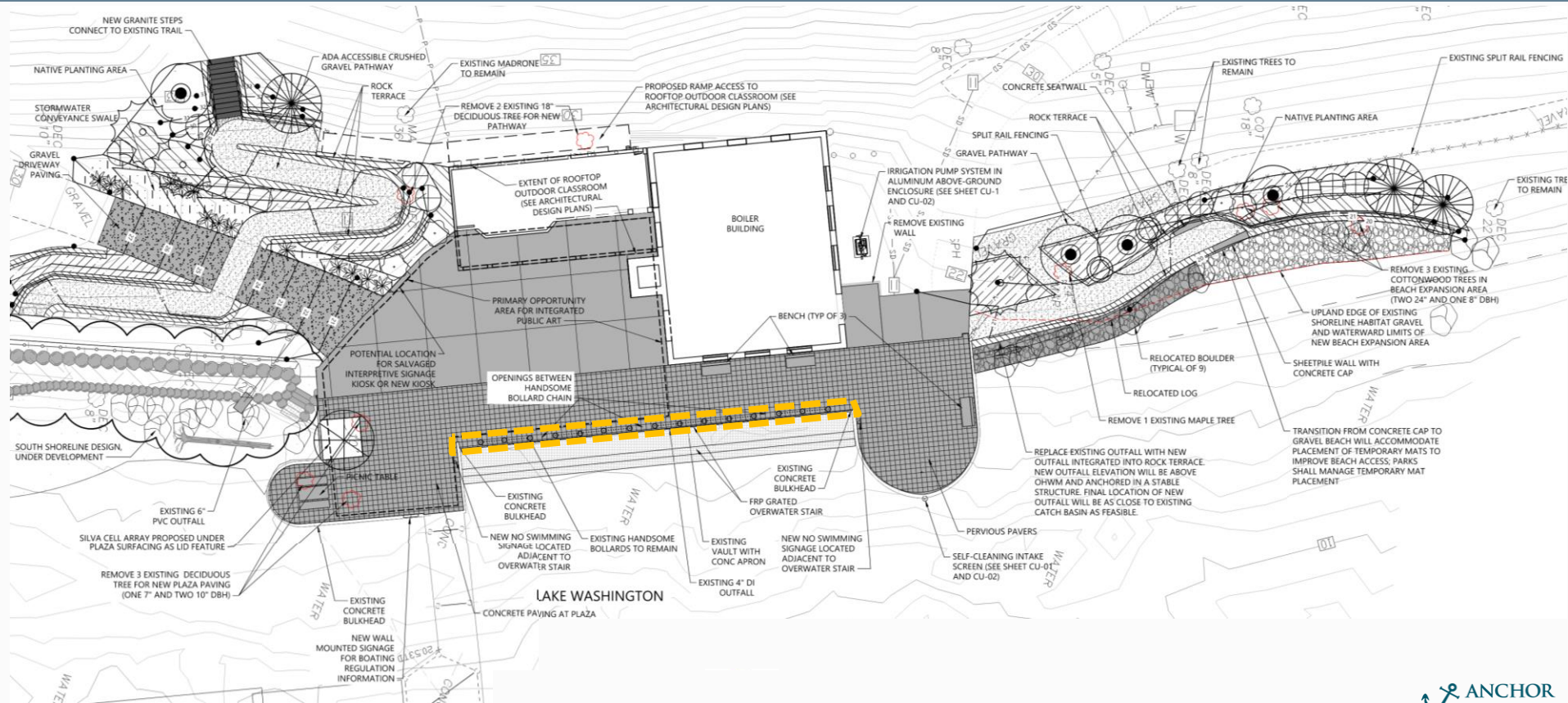
New picnic
table

1 new tree
plaza

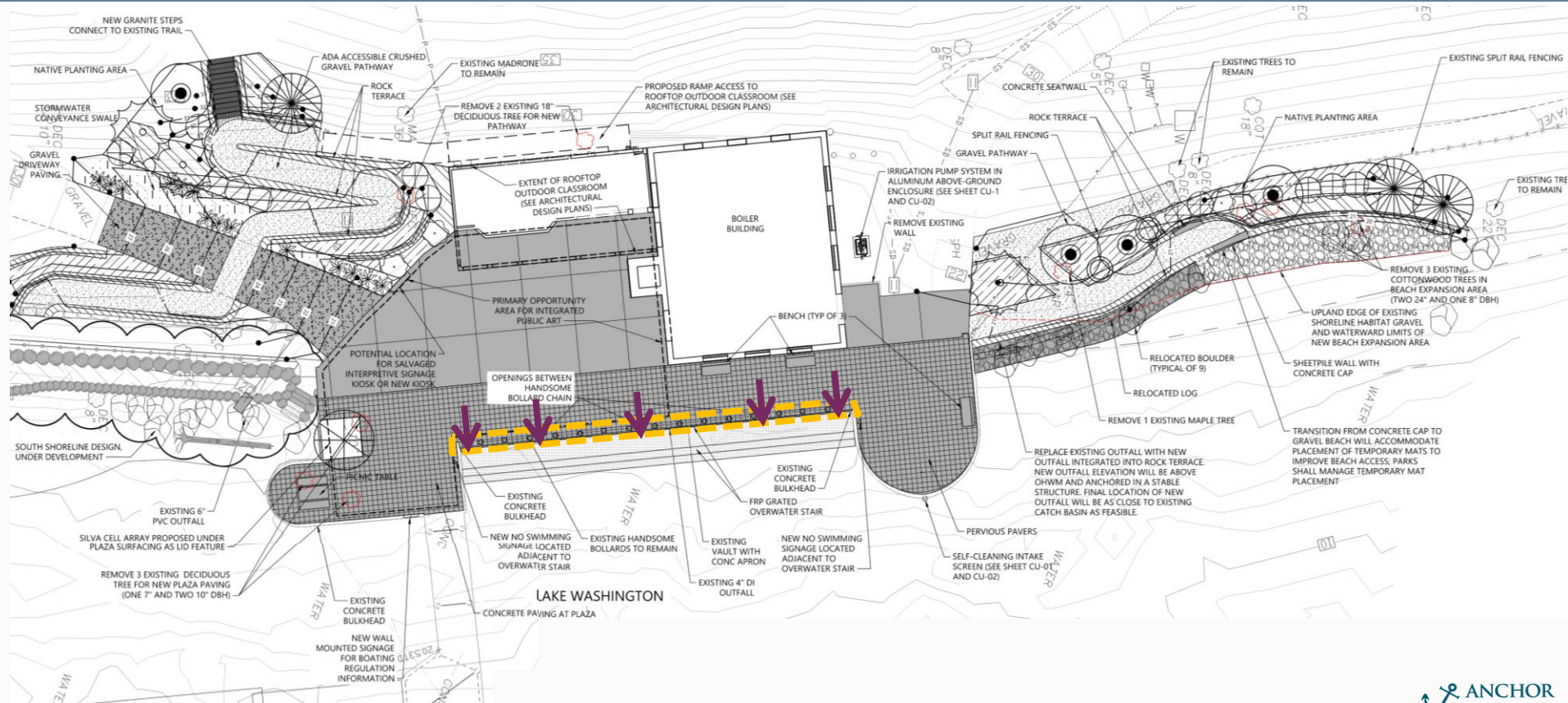
New signage
mounted on existing
concrete wall

New pervious
plaza paving
(2,415 square feet)

Public Art – Handsome Bollards

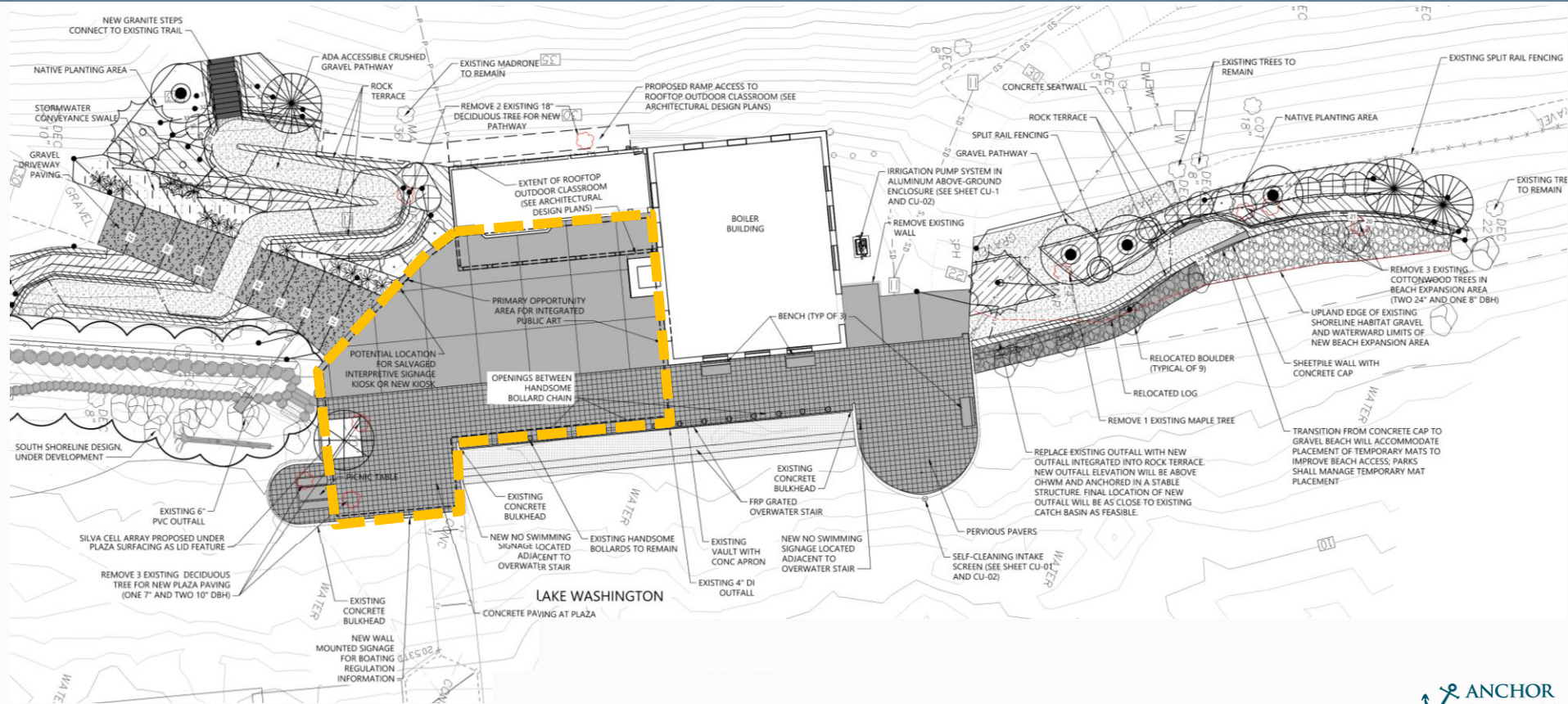


Public Art – Handsome Bollards





Public Art – Integration

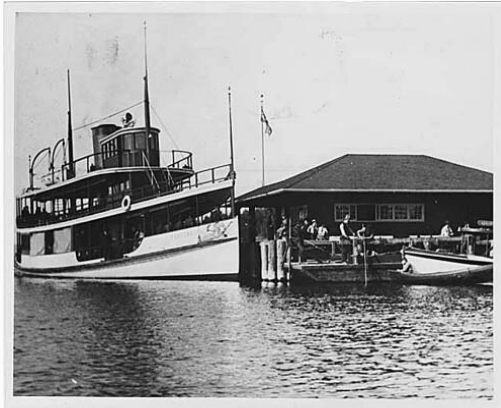




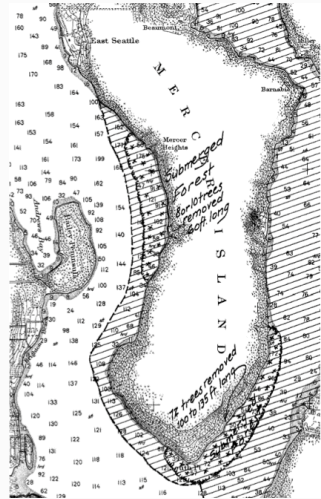
Public Art – Handsome Bollards

Potential Themes

- Boating and boat construction
- Local and regional geography
- Mercer Island natural and cultural history



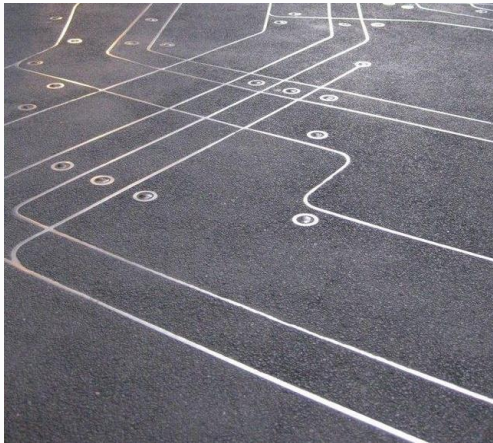
Property of Puget Sound Maritime Historical Society



Public Art – Handsome Bollards

Potential Types of Art/Media

- Sculptural elements
- Paving treatments
- Tile Murals
- Custom park elements



Questions
or
Comments?

Thank you.