

WEST APPROACH BRIDGE - VISION



Our vision for the SR 520 corridor is to become the premier gateway for the City of Seattle by **reconnecting to the early Seattle vision of Nature meets City.**

We intend to implement our Program in a manner that yields **affordable solutions** and fosters **groundbreaking sustainability practices** that support regional and local connectivity, ecology and the use of low-carbon materials. Further, the design of the corridor will **balance aesthetics, functionality, proportion and sense of speed** along the SR 520 facility to provide a **memorable experience** for all users.

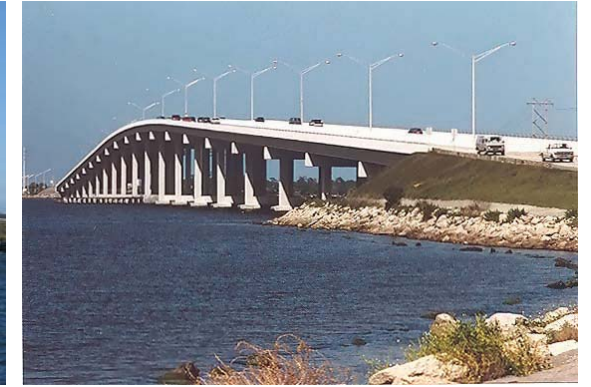
WEST APPROACH BRIDGE - DESIGN INSPIRATION



Robert Moses Causeway
Suffolk County, New York



Eau Gallie Causeway
Eau Gallie, Florida



Tay Road Bridge
Firth of Tay, Scotland



Dauphin Island Bridge/Gordon Persons Bridge
Mobile County, Alabama



Øresund Bridge
Copenhagen, Denmark/Malmö, Sweden



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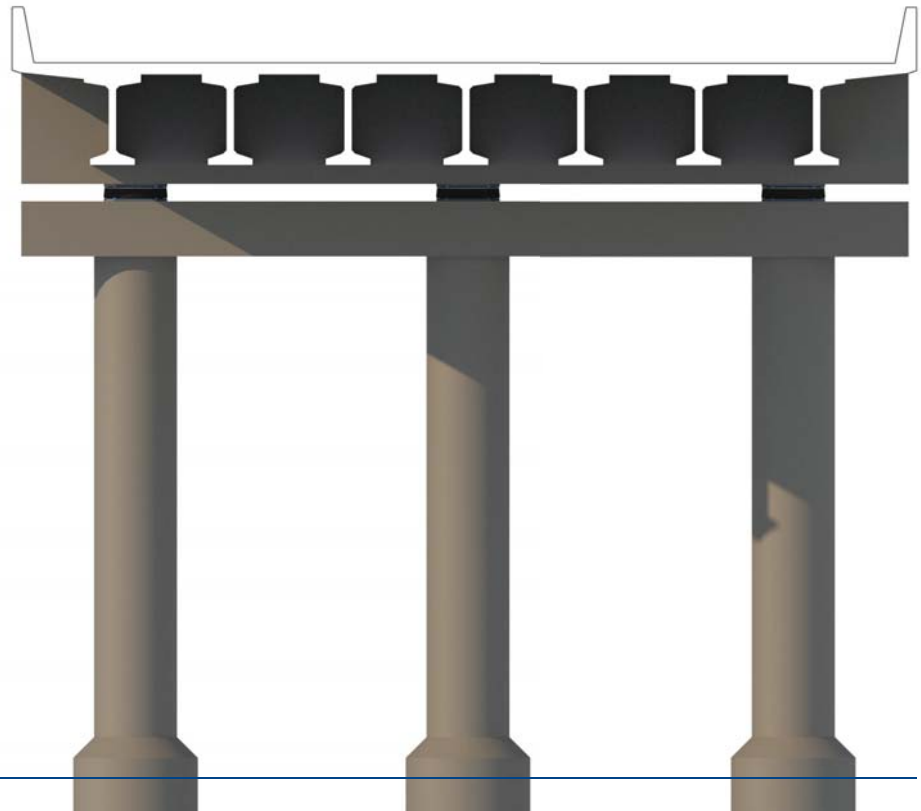
CONCEPTUAL
DRAFT - THIS SKETCH ONLY DEPICTS THE IDEAL.
ENGINEERING, OPERATIONS AND ENVIRONMENTAL
ANALYSIS REQUIRED.

 **Washington State
Department of Transportation**

 **STATE ROUTE
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WEST APPROACH BRIDGE - DESIGN PROGRESSION

Baseline Design



NORMAL HIGH WATER LINE

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Department of Transportation**

 **STATE ROUTE
520**

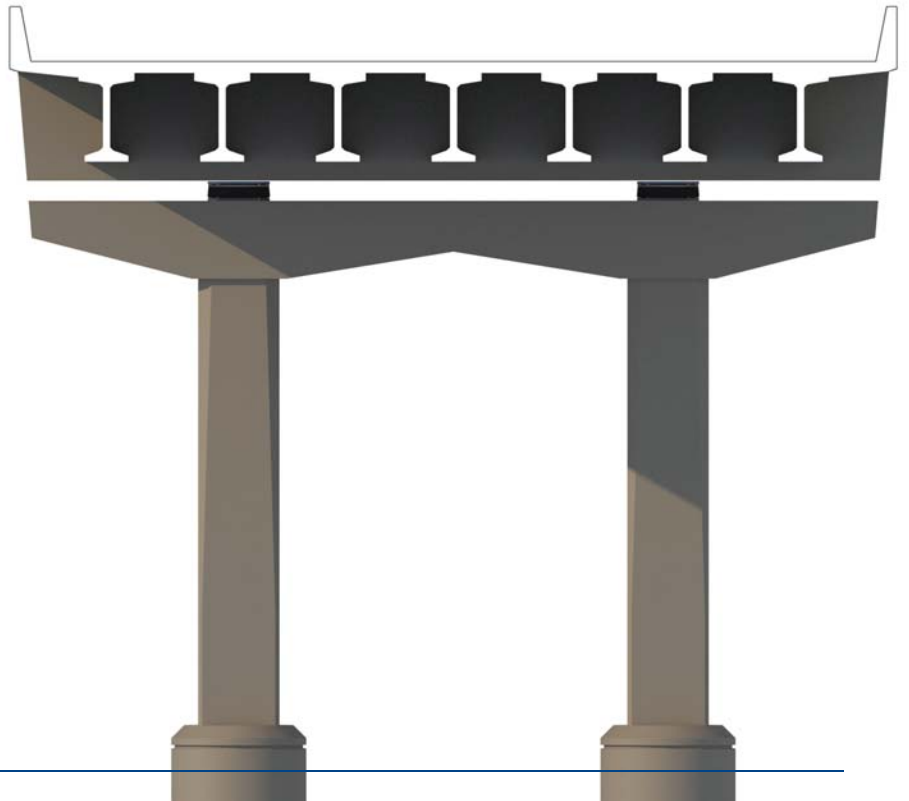
WEST APPROACH BRIDGE - DESIGN PROGRESSION

9-20-2012

Seattle Design Commission Meeting



NORMAL HIGH WATER LINE



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WEST APPROACH BRIDGE - DESIGN PROGRESSION

10-10-2012

Seattle Design Commission Subcommittee Meeting



NORMAL HIGH WATER LINE

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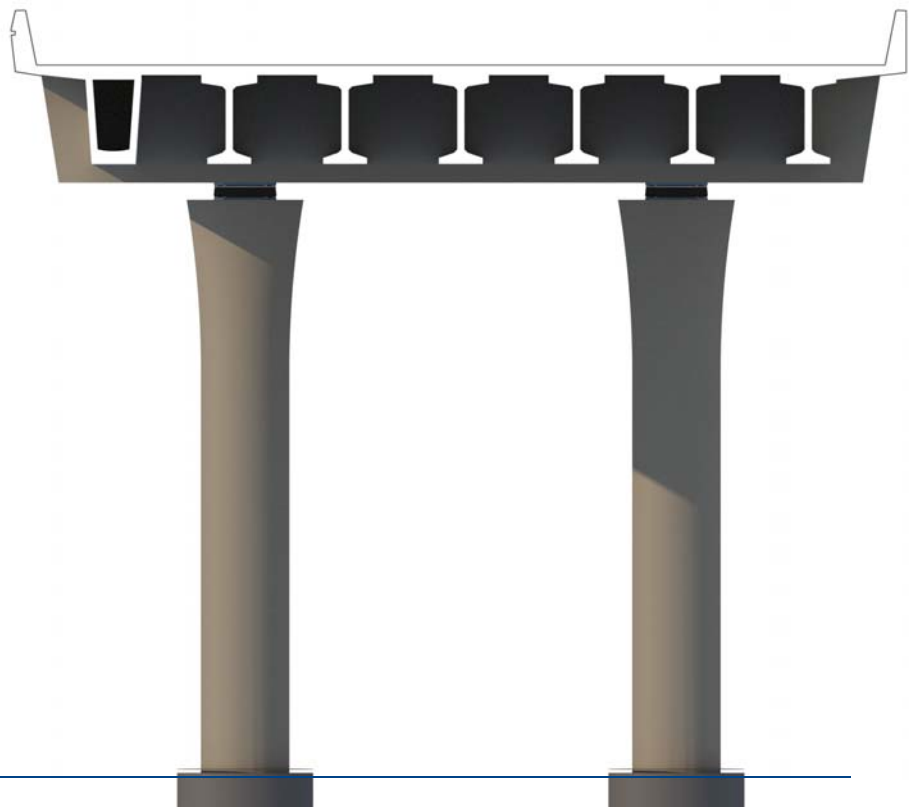
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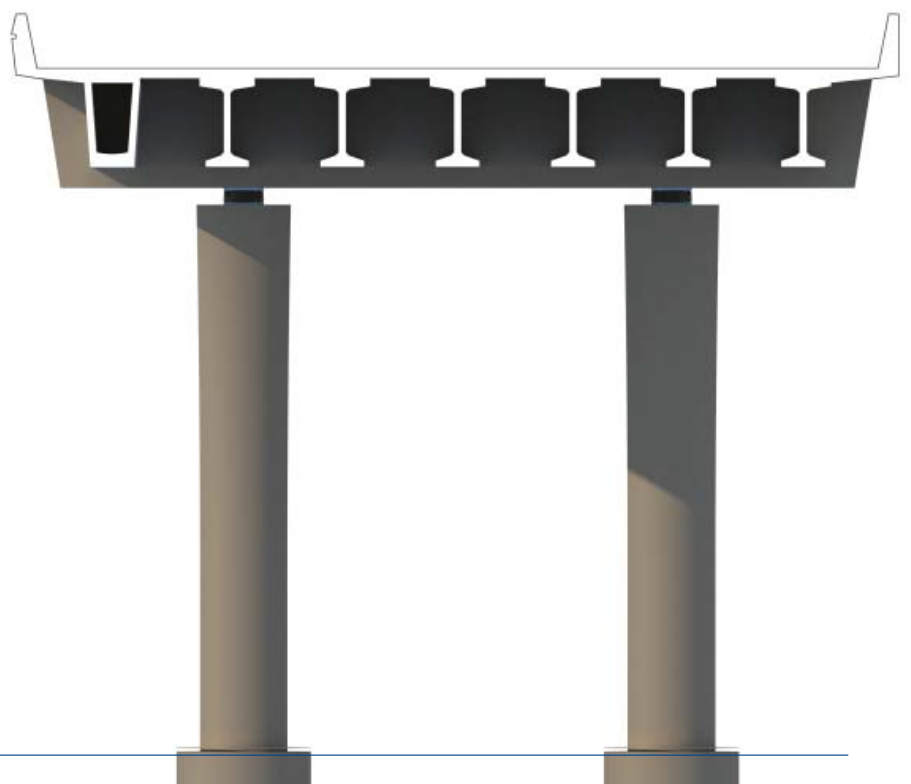
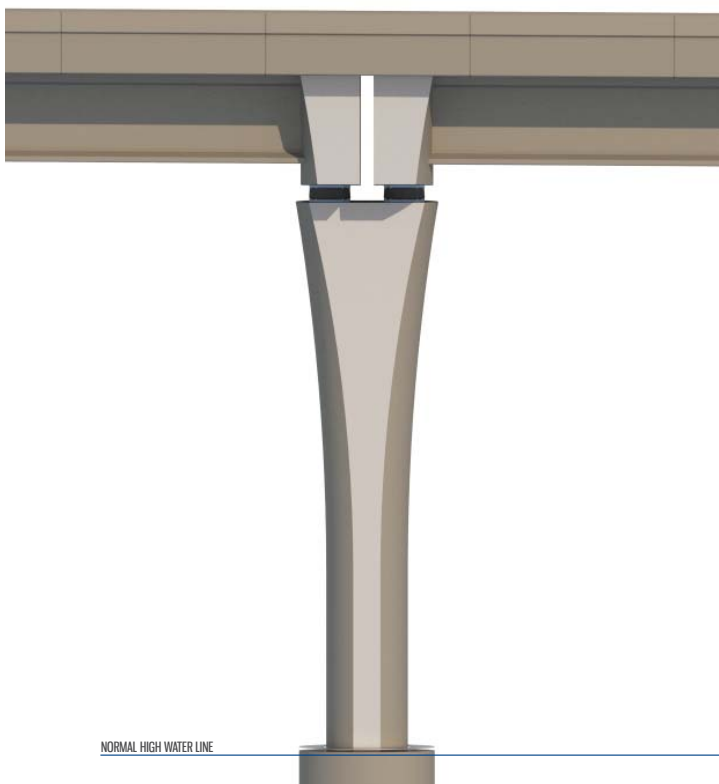
Preferred Design



WEST APPROACH BRIDGE - DESIGN PROGRESSION

Preferred Design

Expansion Joints



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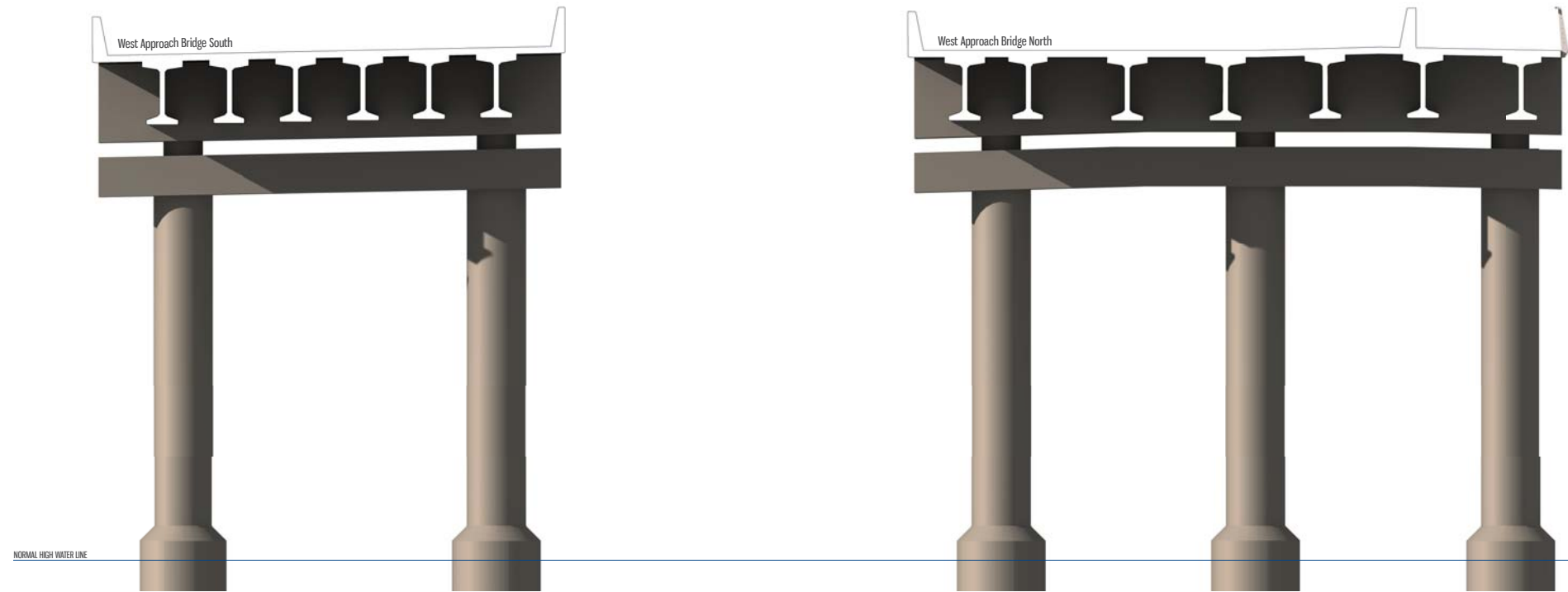
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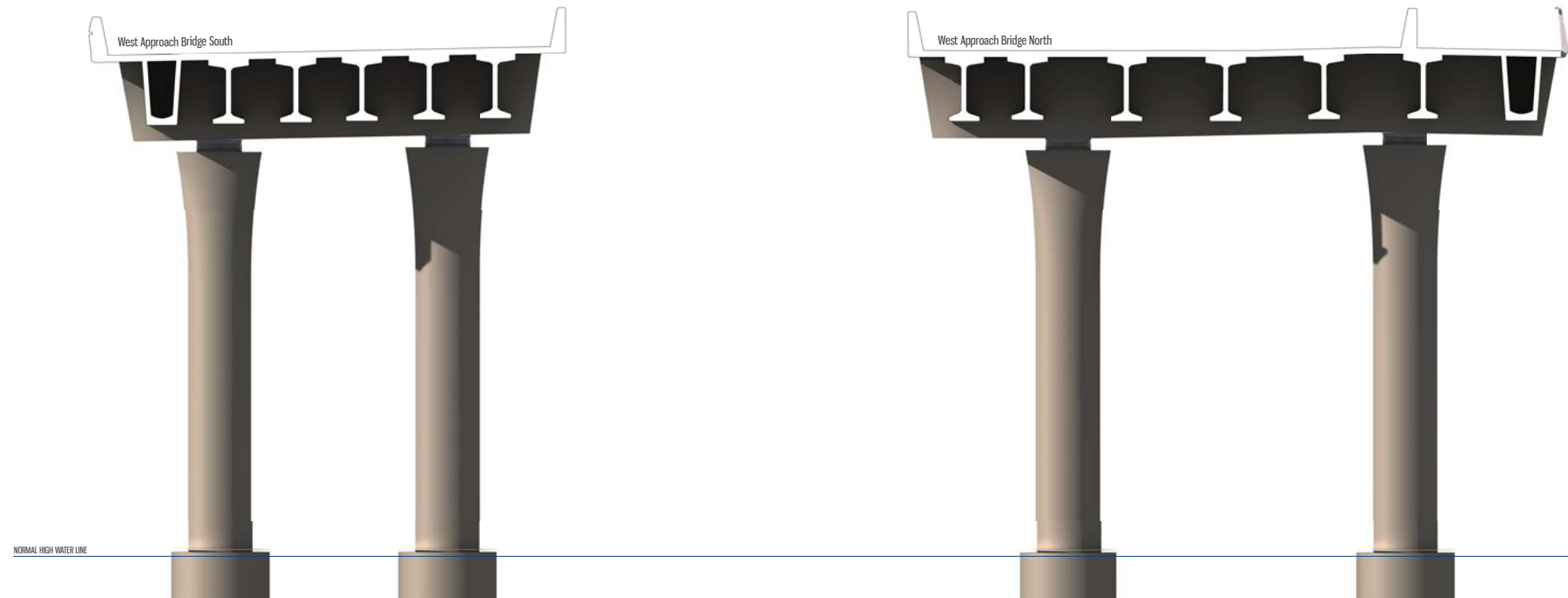
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WEST APPROACH BRIDGE - DESIGN PROGRESSION

Baseline



Preferred



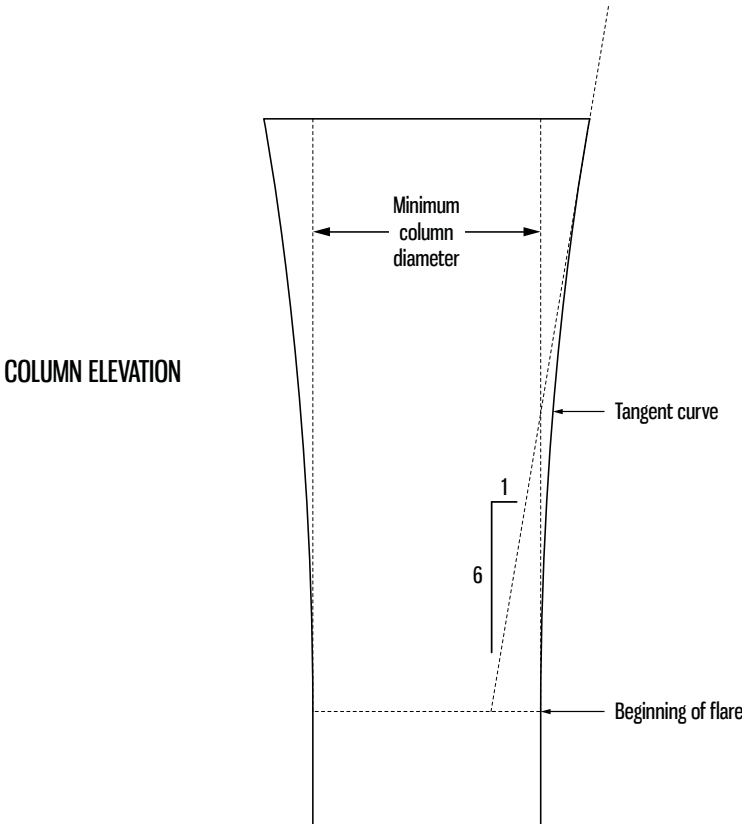
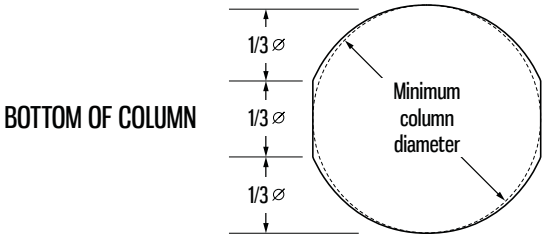
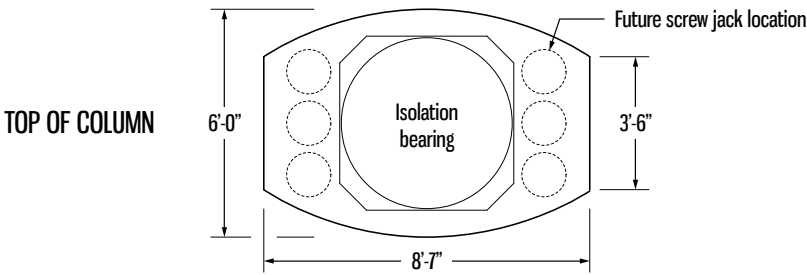
SUSTAINABILITY GOALS

Design and construction of the West Approach Bridge continues to meet and augment SR 520 sustainability goals by lessening construction impacts and reducing concrete volumes by nearly 50 percent from the baseline design to the preferred design. This reduction in concrete is achieved through:

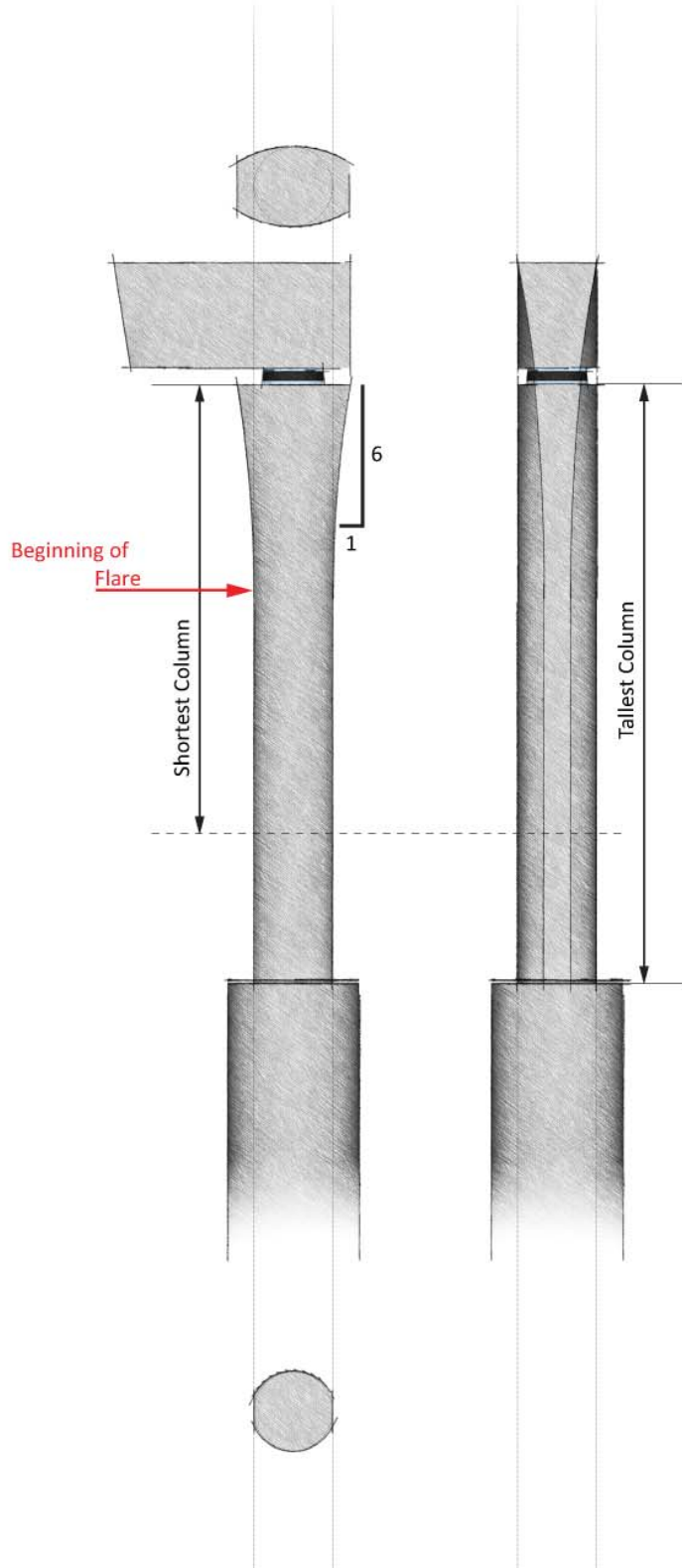
- Innovative technologies, such as seismic isolation bearings
- Simplification and reduction of substructure elements

The reduction in concrete has the potential to produce significant carbon dioxide (CO₂) emission reductions.

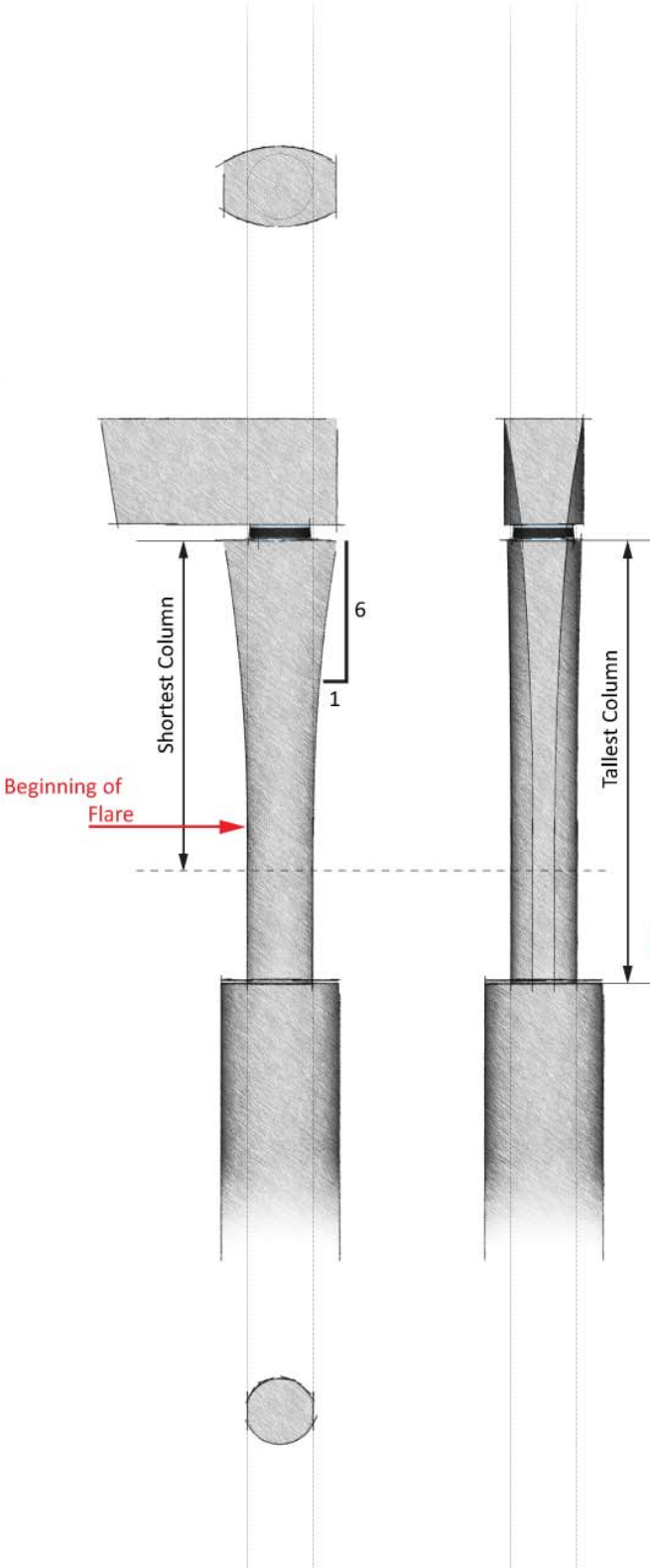
TYPICAL COLUMN DETAILS



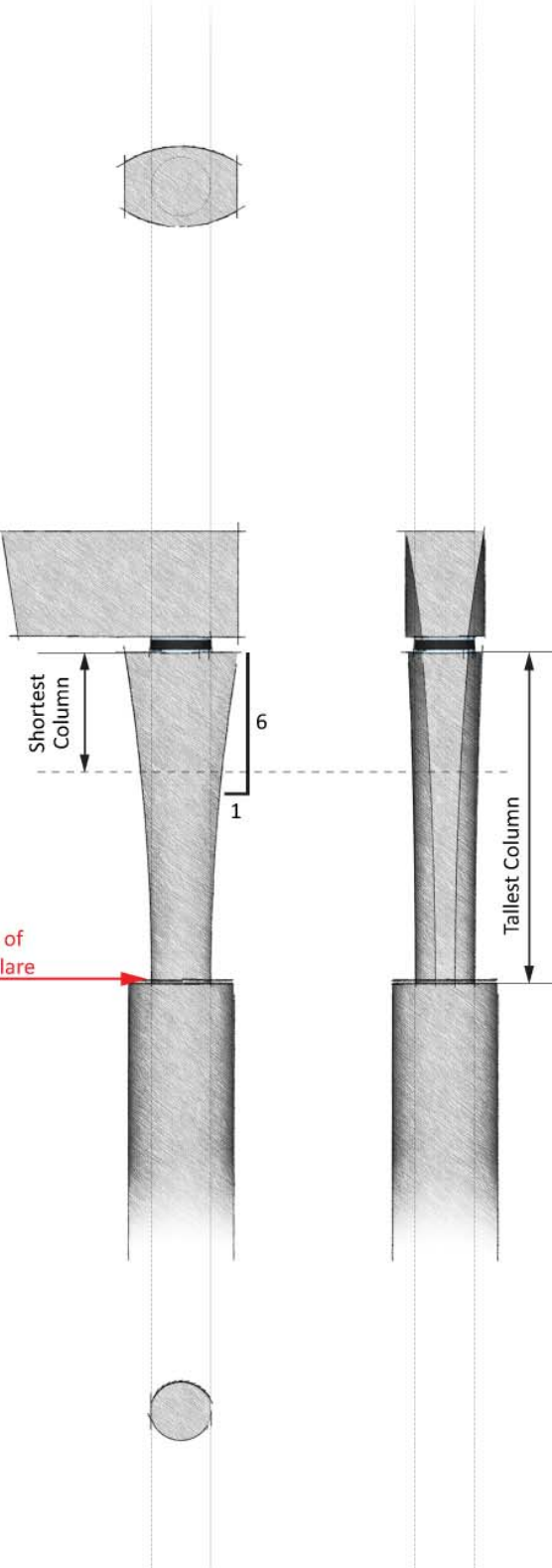
6' Ø COLUMN



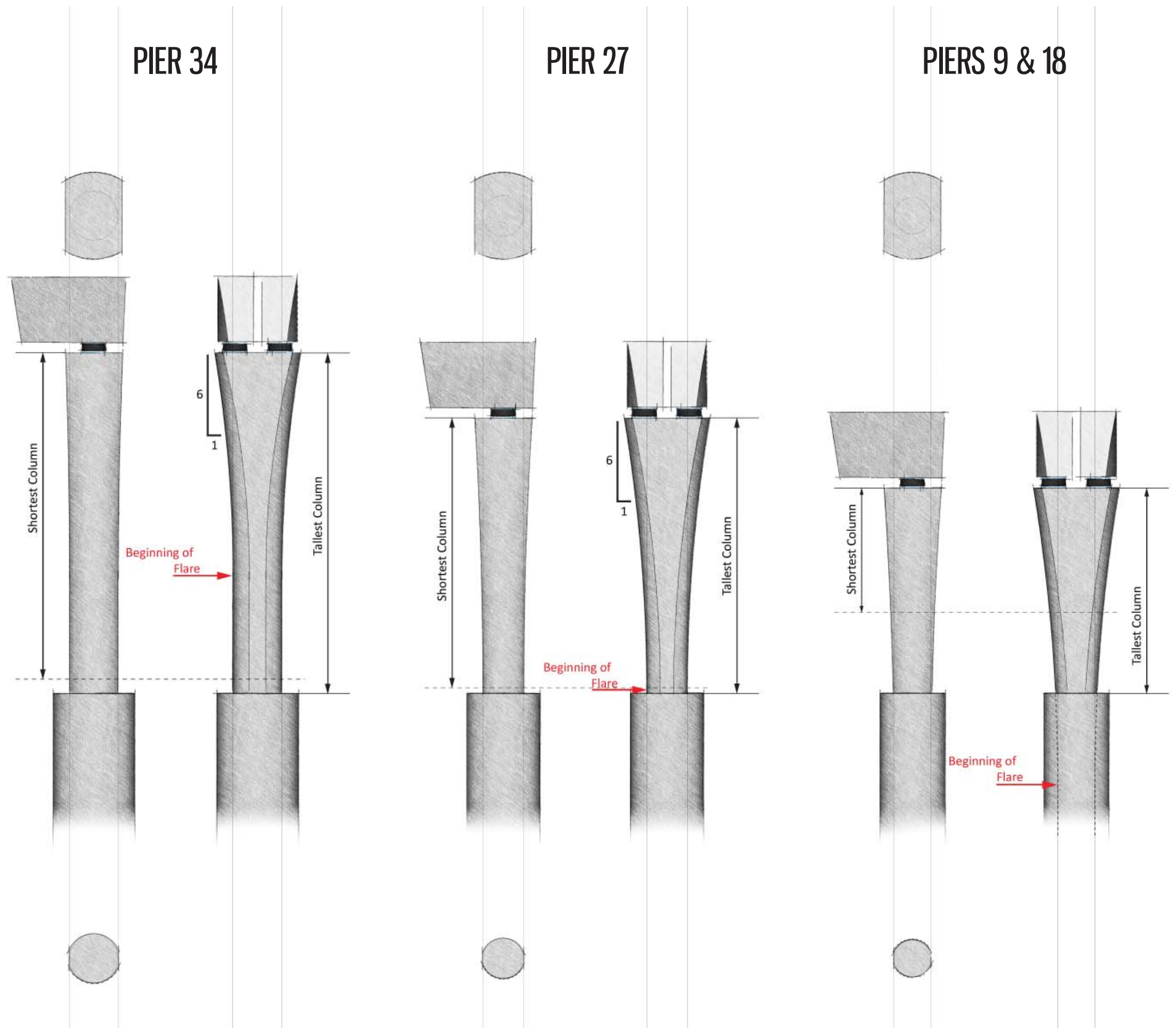
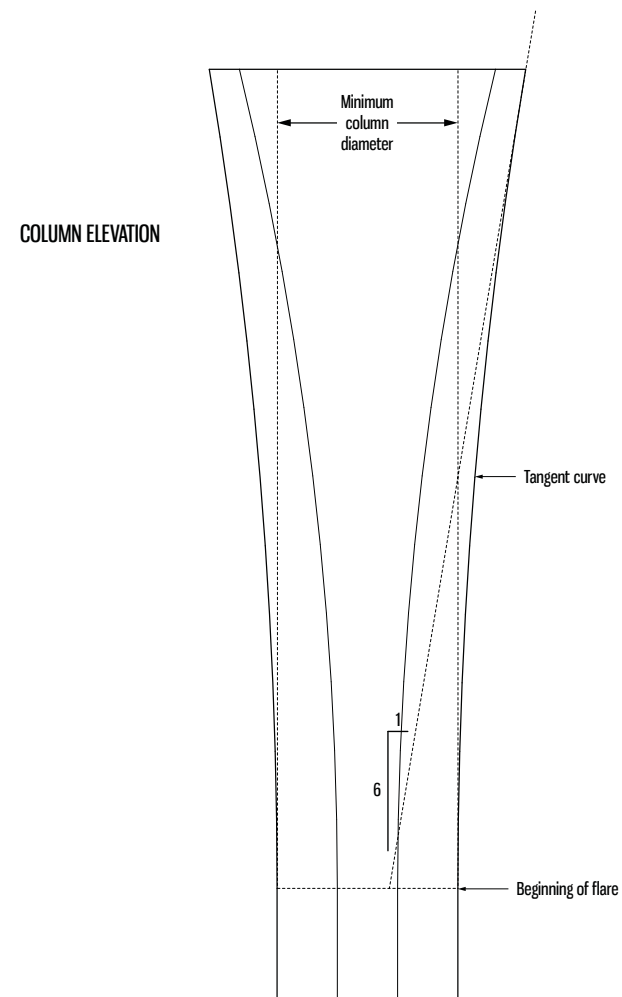
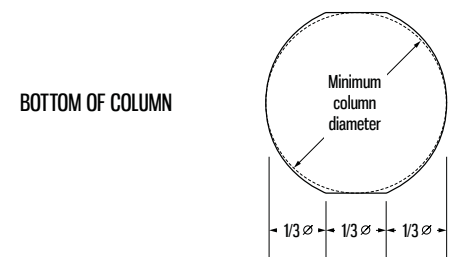
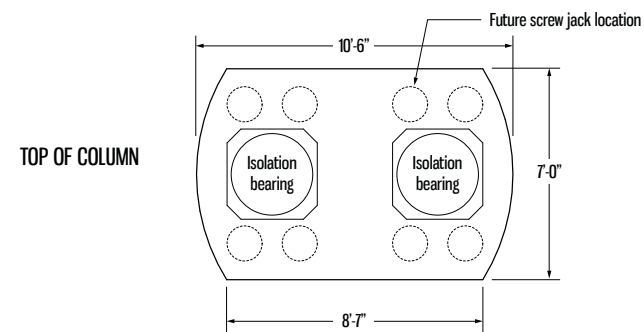
5' Ø COLUMN



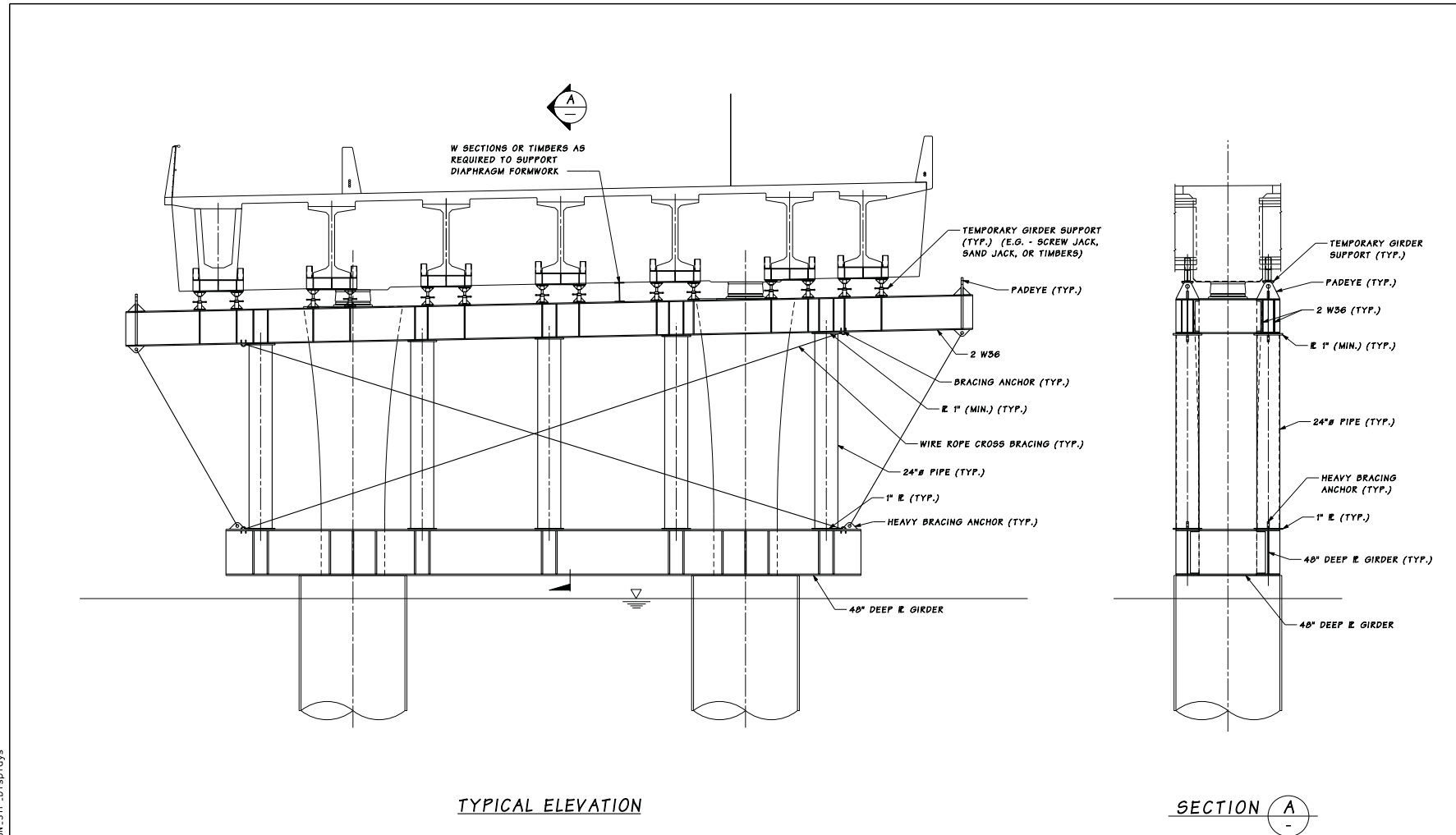
4.5' Ø COLUMN



TYPICAL COLUMN DETAILS AT EXPANSION JOINTS



TEMPORARY SUPPORTS



TYPICAL ELEVATION

SECTION A



SHEET NO. 520
 Projectwise You! File: WABN_Str_Disploys

Bridge Design Engr.	KOHALEGI, B	FILE NO.	520
Supervisor	BOTT, P.	Projectwise You!	File: WABN_Str_Disploys
Designed By			
Checked By			
Detailled By	TONNEY, D.		
Bridge Projects Engr.			
Printed: Plan By			
Architect/Inspector			
DATE	REVISION	BY	APPD

REVISION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH			
JOB NUMBER				
FE2544				

Washington State Department of Transportation

HR ENGINEERING, INC.

TEMPORARY SUPPORTS
TYPICAL ELEVATION AND SECTION

SHEET
OF
SHEETS

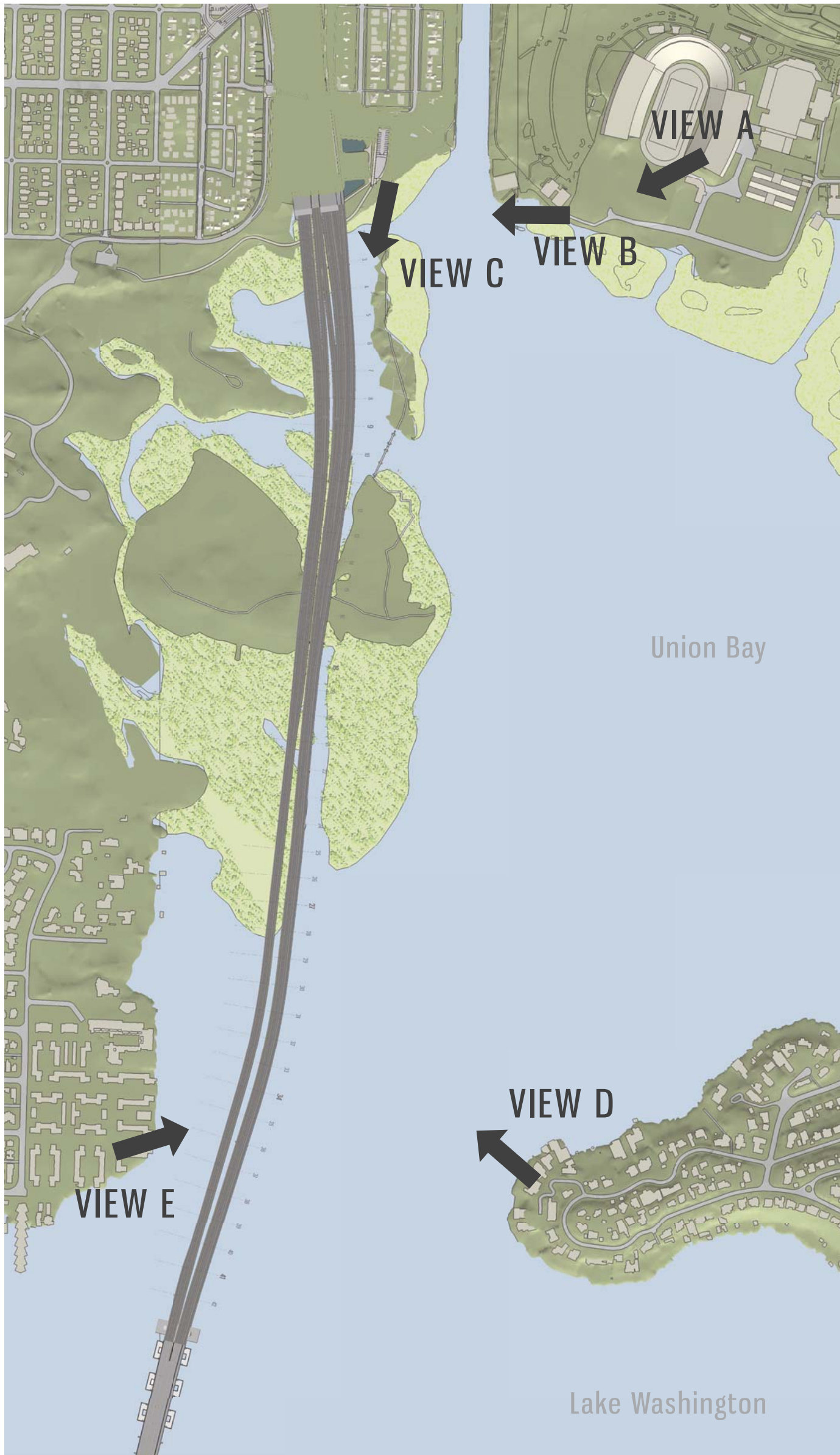
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STATE ROUTE 520

FEIS VIEWS KEY



↓ FLOATING BRIDGE

A: VIEW FROM HUSKY STADIUM

EXISTING CONDITIONS



FEIS VIEWS KEY



FLOATING BRIDGE

BASELINE DESIGN



CURRENT DESIGN



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B: VIEW FROM UW WATERFRONT ACTIVITIES CENTER

EXISTING CONDITIONS



BASELINE DESIGN



CURRENT DESIGN



FEIS VIEWS KEY



↓ FLOATING BRIDGE

C: VIEW FROM MARSH ISLAND BOARDWALK

EXISTING CONDITIONS



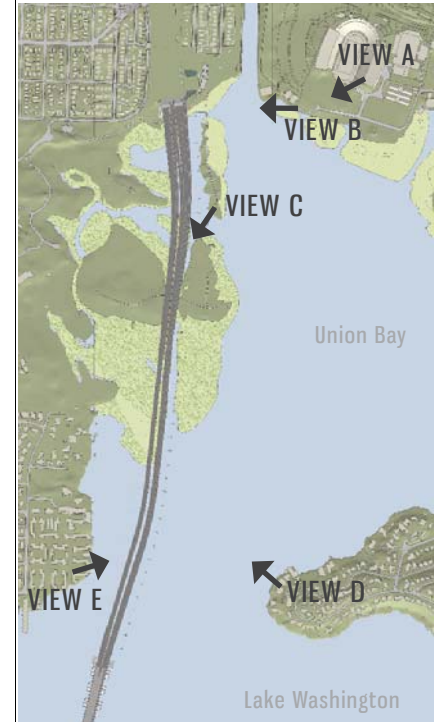
BASELINE DESIGN



CURRENT DESIGN



FEIS VIEWS KEY



↓ FLOATING BRIDGE

D: VIEW FROM WEBSTER POINT

EXISTING CONDITIONS



FEIS VIEWS KEY



FLOATING BRIDGE

BASELINE DESIGN



CURRENT DESIGN

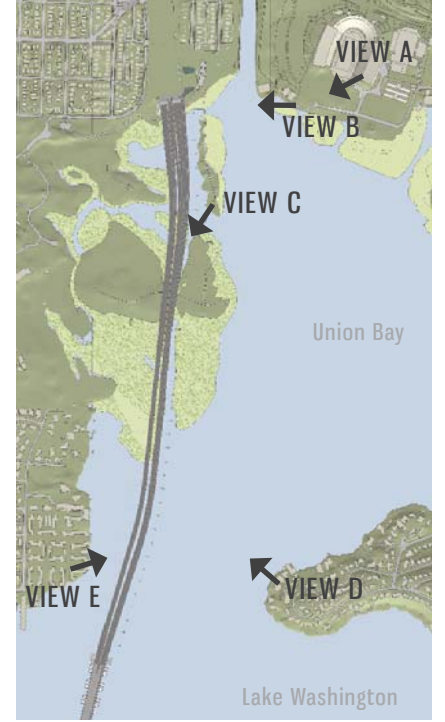


E: VIEW FROM NORTH MADISON PARK

EXISTING CONDITIONS



FEIS VIEWS KEY



FLOATING BRIDGE

BASELINE DESIGN



CURRENT DESIGN



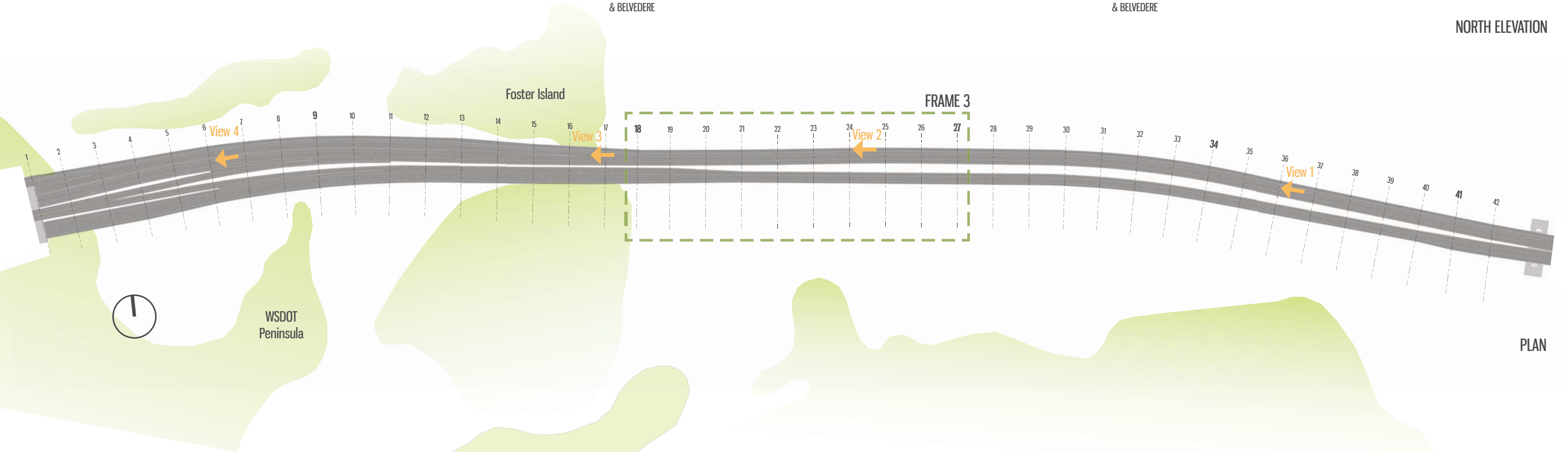
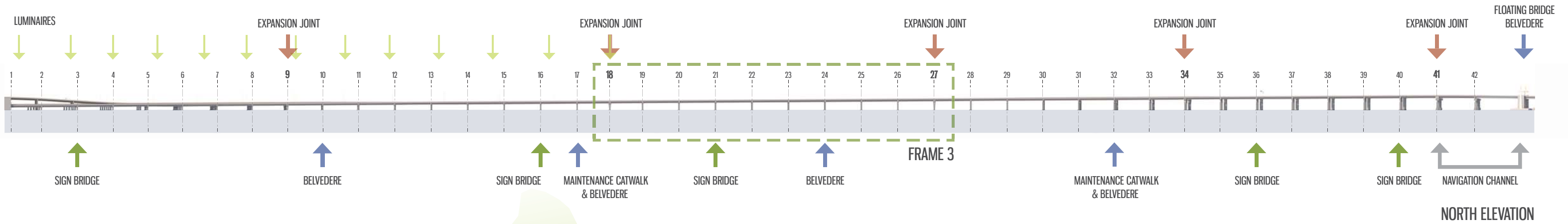
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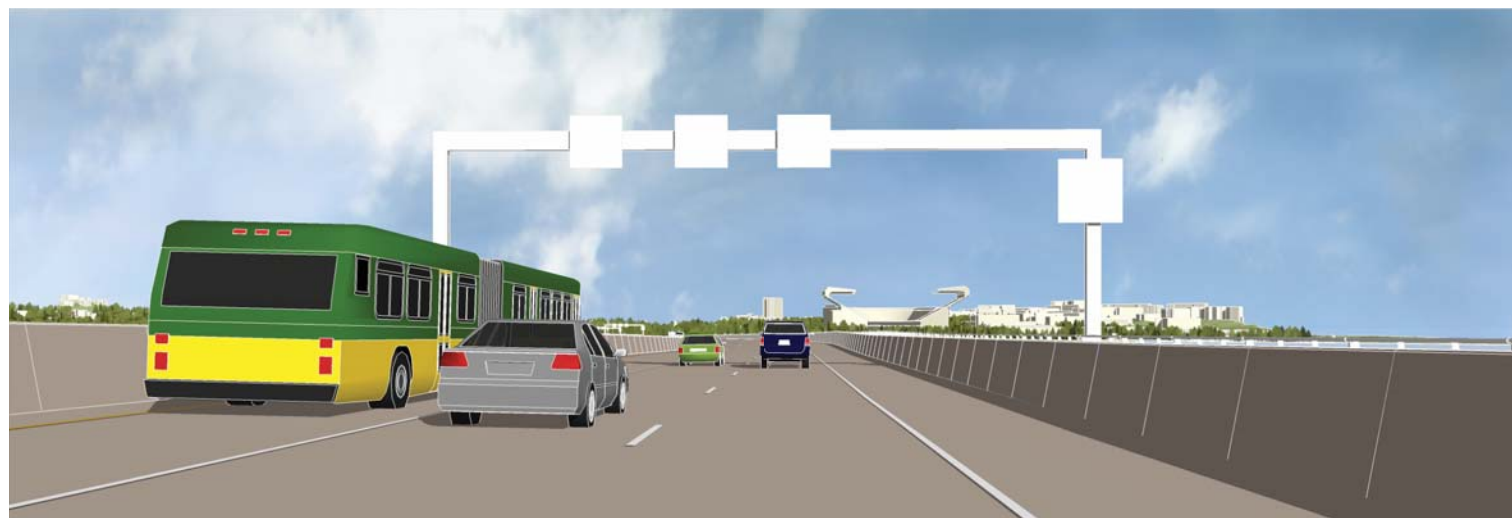
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ABOVE-BRIDGE ELEMENTS





View 1 Transition from Lake Washington to Union Bay



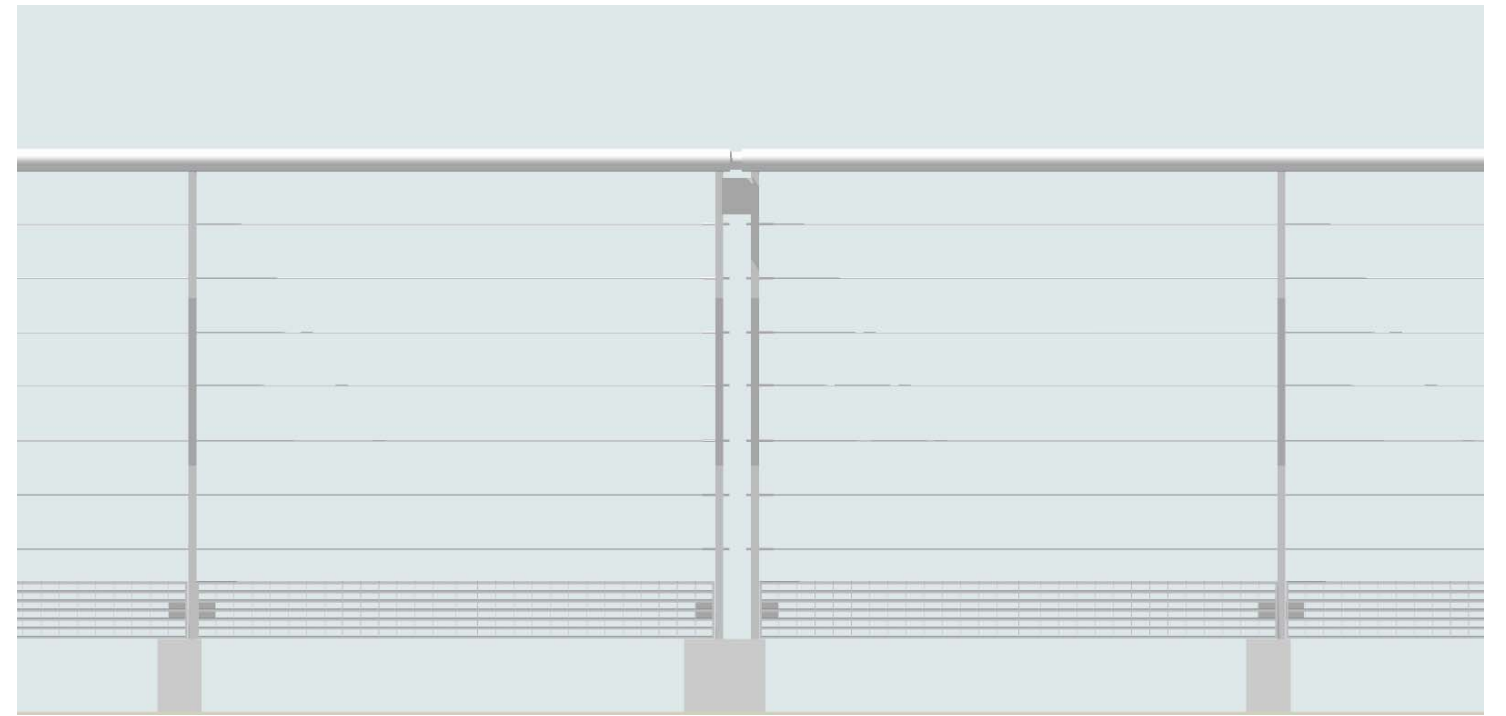
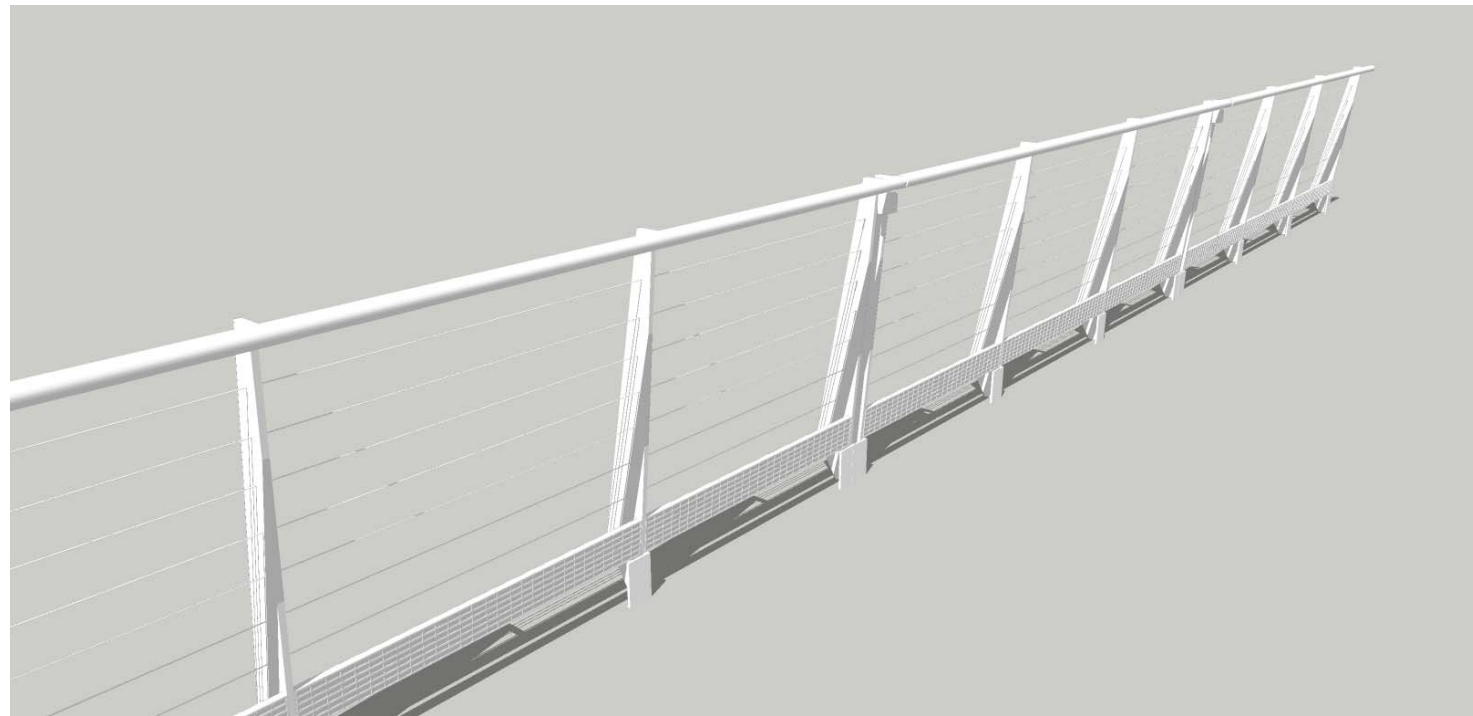
View 2 Pedestrian view along shared-use path



View 3 Passing over Foster Island



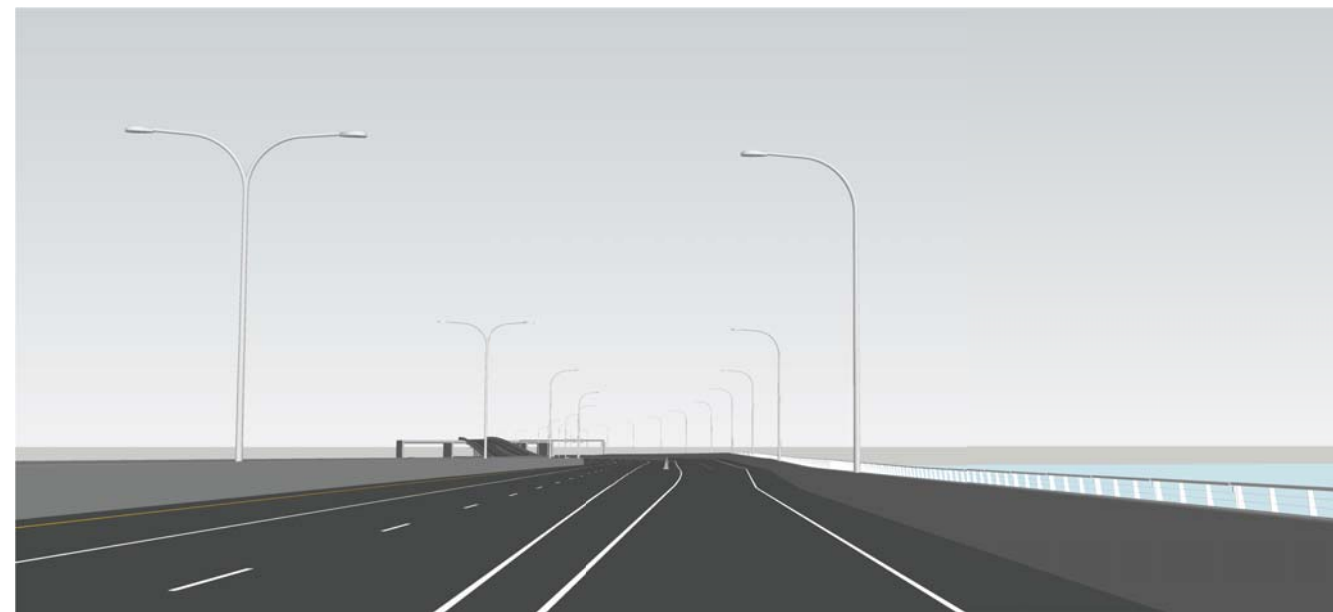
View 4 Approaching land and Montlake portal



pedestrian railing



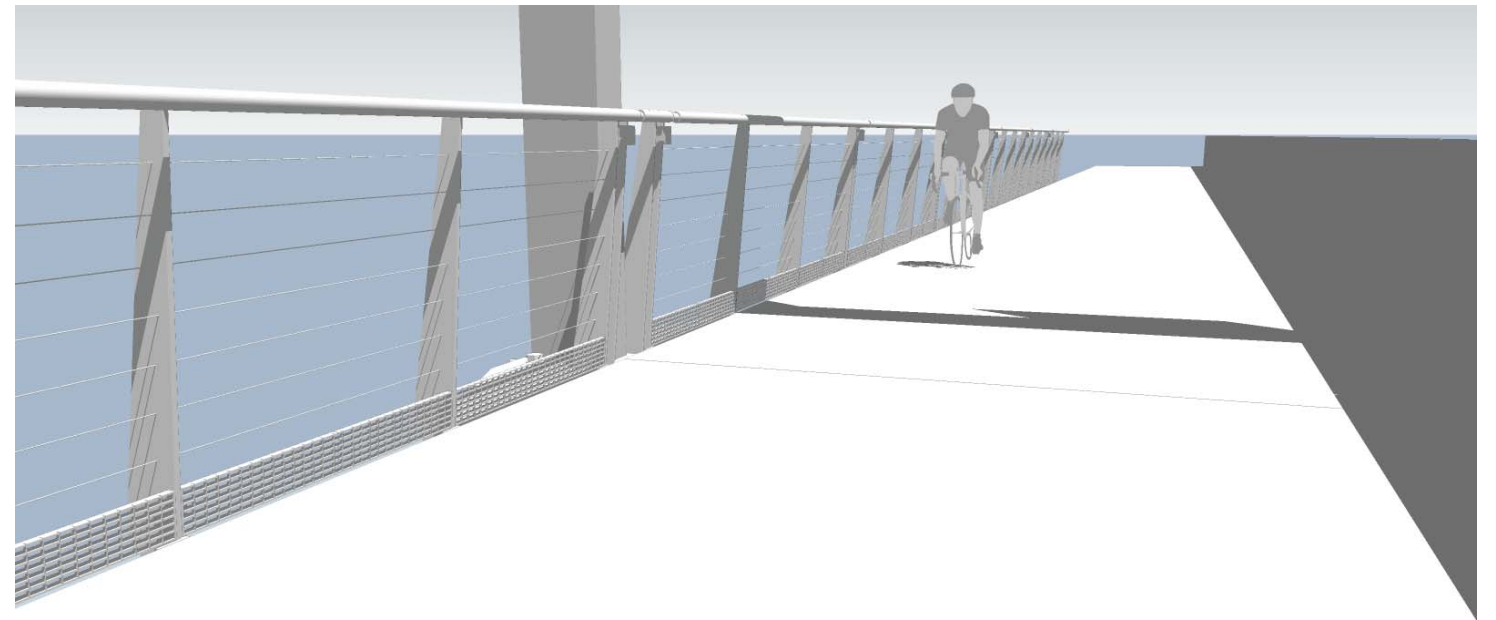
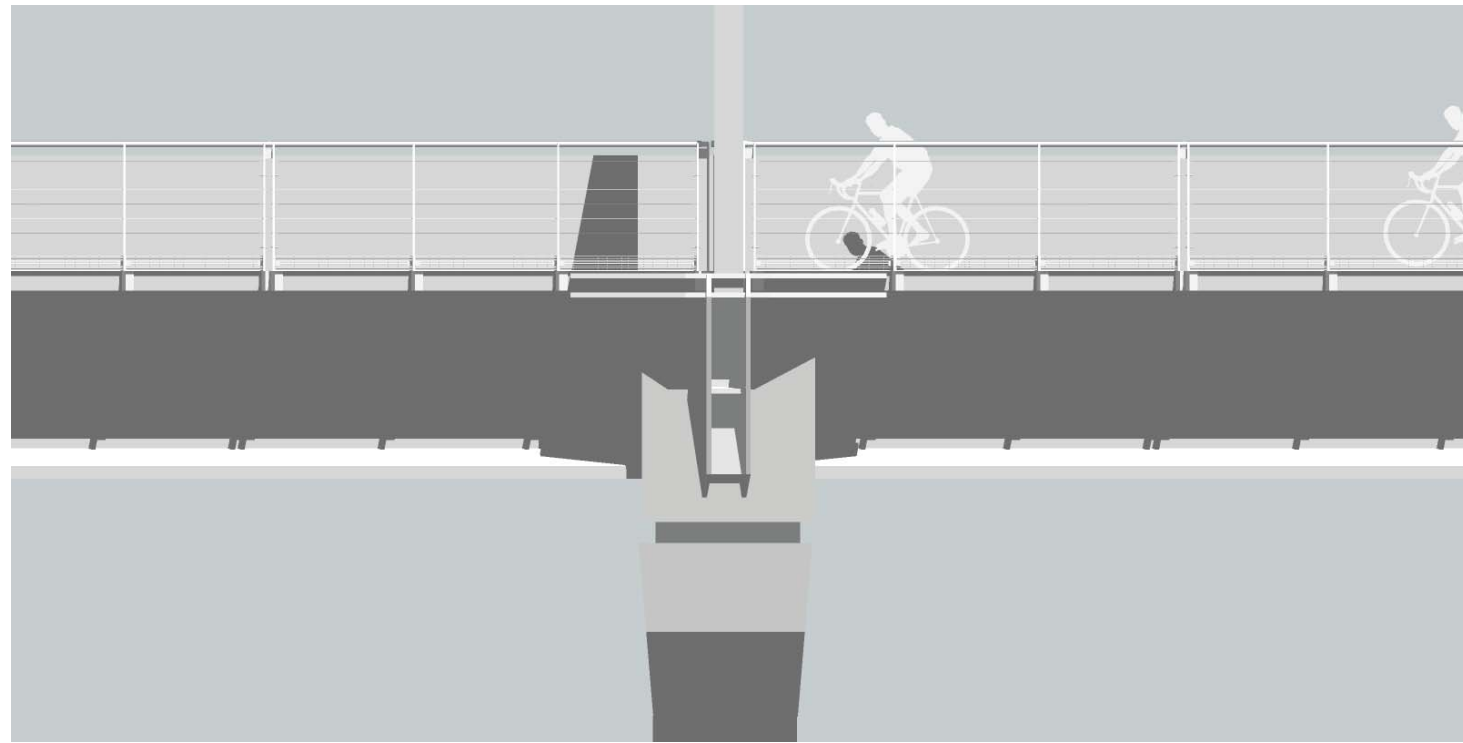
shaft caps



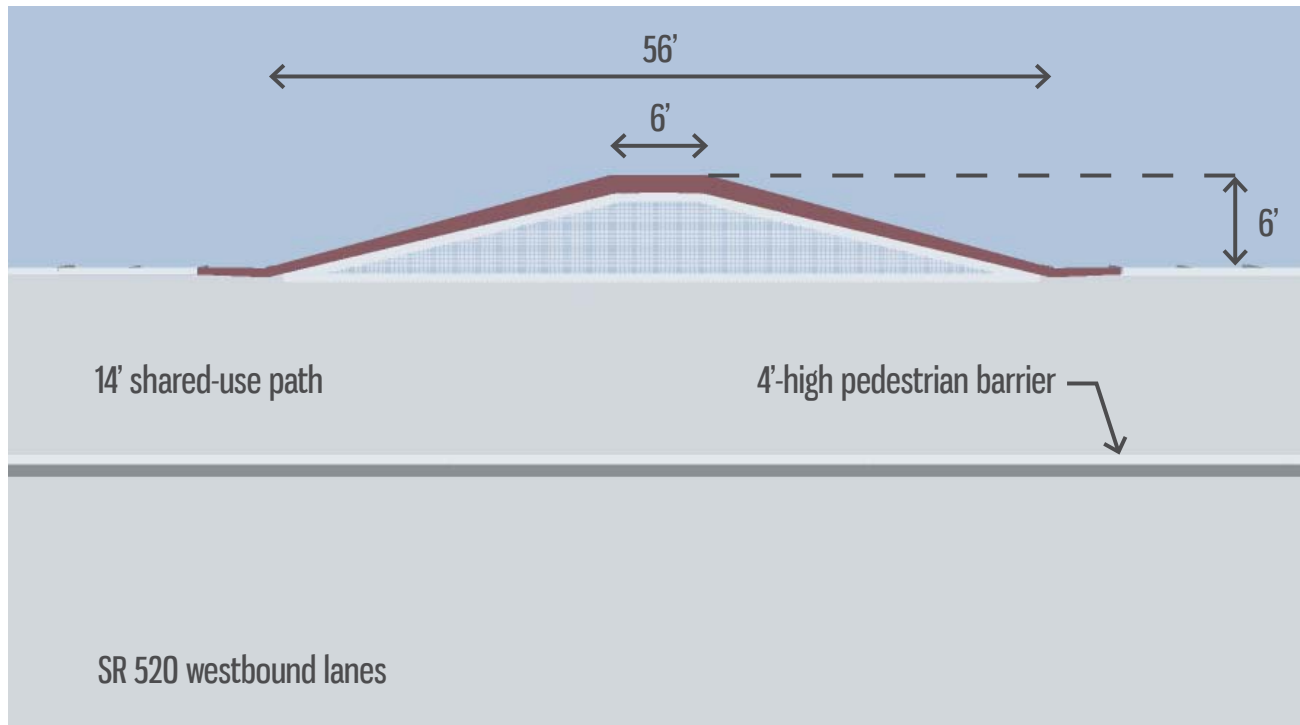
luminaires



FRAME 3, NORTH ELEVATION

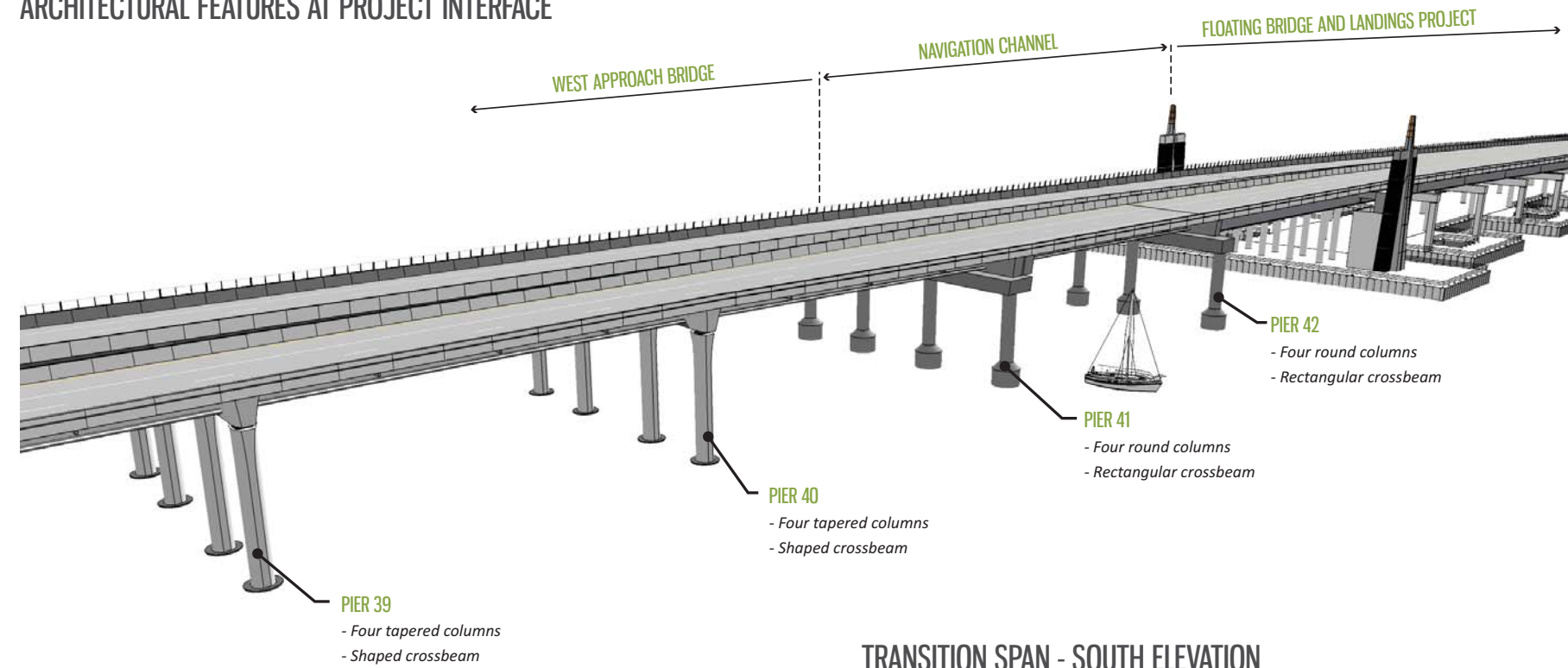


sign bridges

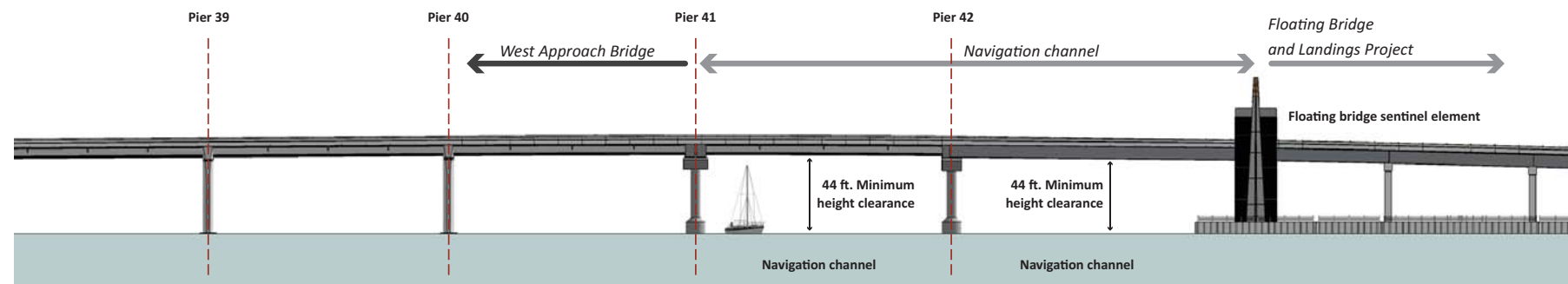


belvederes & maintenance catwalks

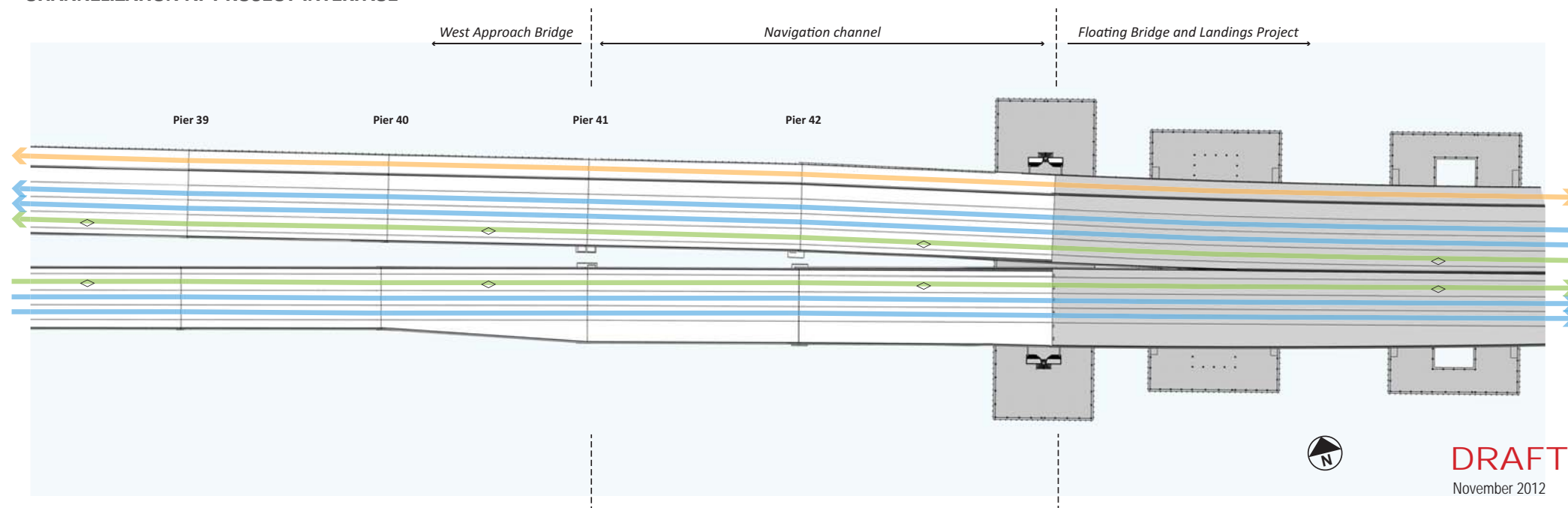
ARCHITECTURAL FEATURES AT PROJECT INTERFACE



TRANSITION SPAN - SOUTH ELEVATION



CHANNELIZATION AT PROJECT INTERFACE



Key

- Regional shared-use path
- General purpose lanes
- Transit/HOV lanes



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