

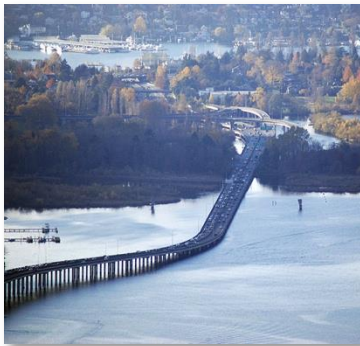
# SR 520 West Approach Bridge North

Seattle Design Commission – Jan. 23, 2014

**Julie Meredith**  
SR 520 Program Director

**Lynn Peterson**  
Secretary of Transportation

**Daniel Babuca**  
West Approach Bridge Engineering Manager



SR 520 West Approach Bridge North  
Seattle Design Commission  
Seattle Municipal Tower  
Jan. 23, 2014

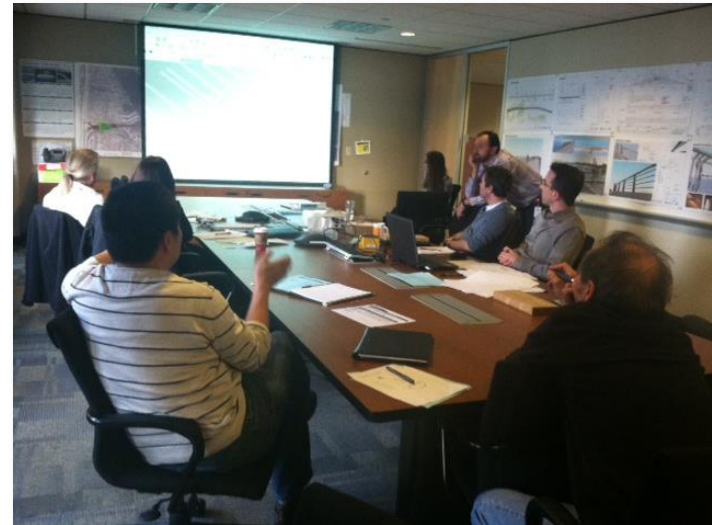
# Seattle Design Commission Coordination – 2011 – 2012

- **2011 – 2012: Seattle Community Design Process (SCDP).** WSDOT began coordinating with the SR 520 Seattle Design Commission Subcommittee to help define a Vision to guide design decisions for the Seattle side of the SR 520 corridor.
- **Sep. 2012: Vision Endorsement.** At the conclusion of the SCDP, the Seattle Design Commission endorsed the vision developed with the Subcommittee.
- **Fall / winter 2012: West Approach Bridge North (WABN).** Using the Vision, WSDOT began working with the Subcommittee to develop the major, permanent elements of WABN.
- **Nov. 2012: SDC Concurrence.** The SDC concurred on the major WABN elements.

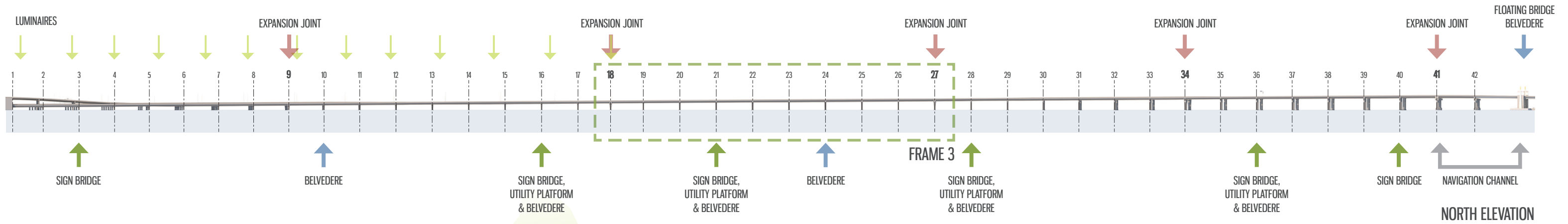


# Seattle Design Commission Coordination – 2013 – Ongoing

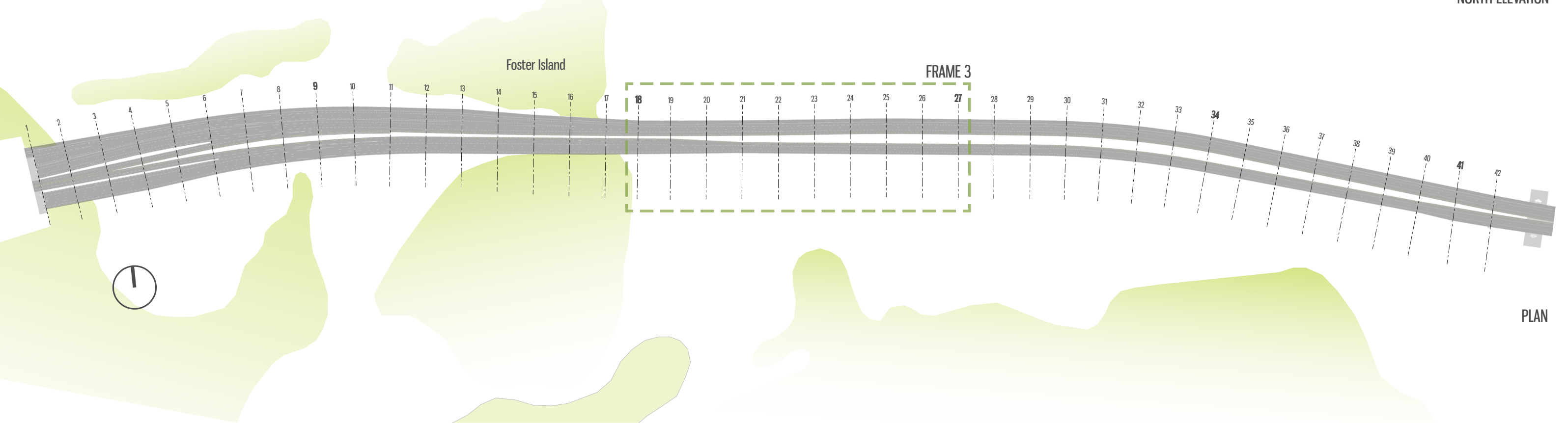
- **Jun. 2013:** WABN 60% PS&E review
- **Sep. 2013:** Montlake area informational meeting
- **Nov. 2013:** 90% WABN PS&E review
- **Jan. 2014:** 100% WABN PS&E review
- **Ongoing:** WSDOT will continue to coordinate with the Subcommittee as additional project funding is received.



# ABOVE-BRIDGE ELEMENTS



NORTH ELEVATION



PLAN

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January 2014

**CONCEPTUAL**  
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# WABN SUPERSTRUCTURE



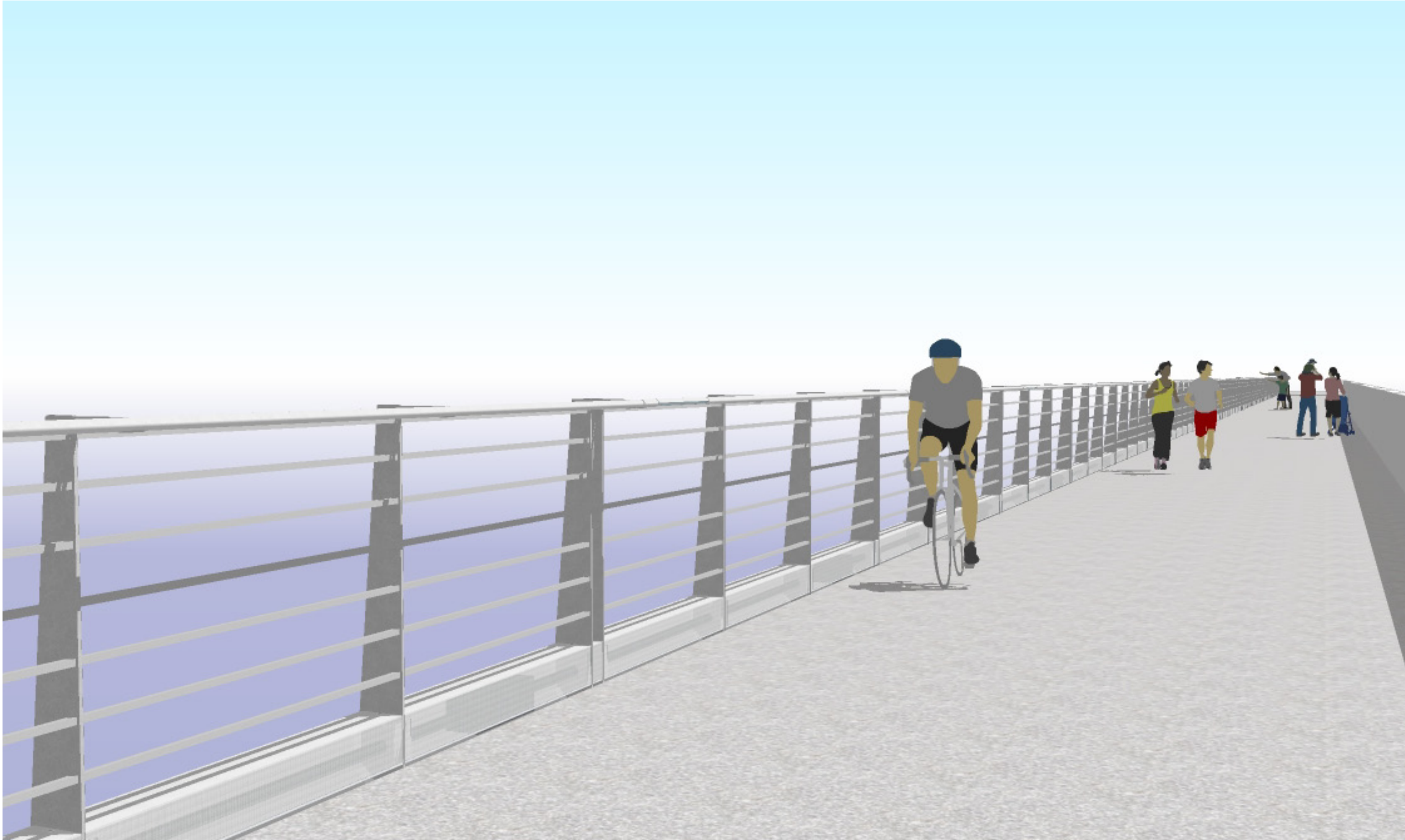
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# REGIONAL SHARED-USE PATH (RSUP)



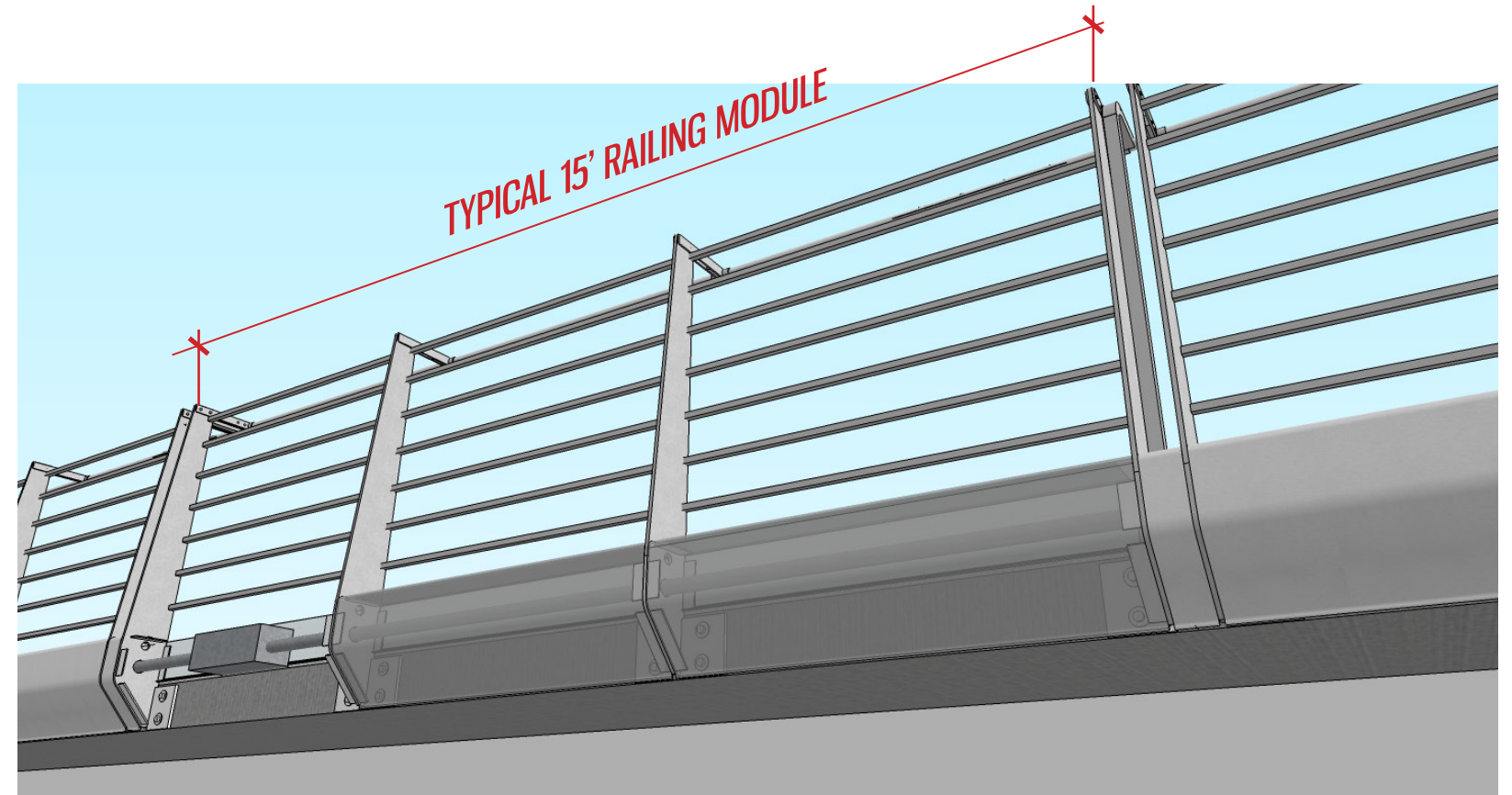
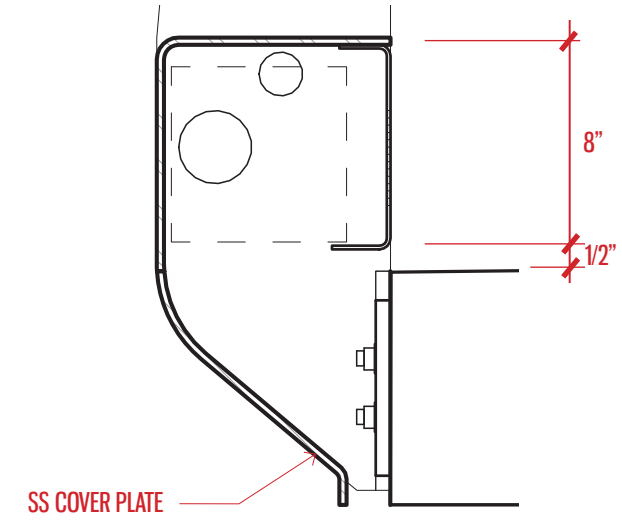
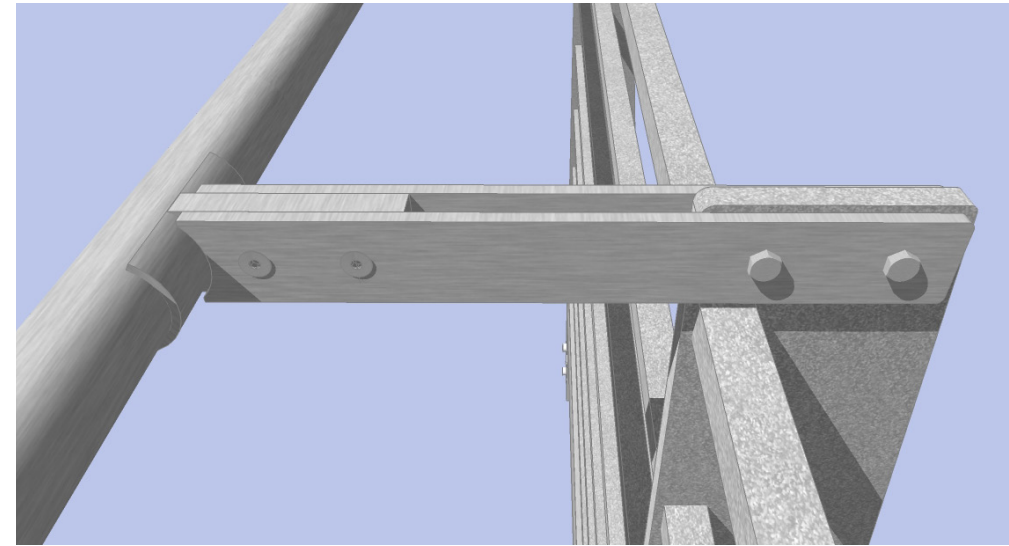
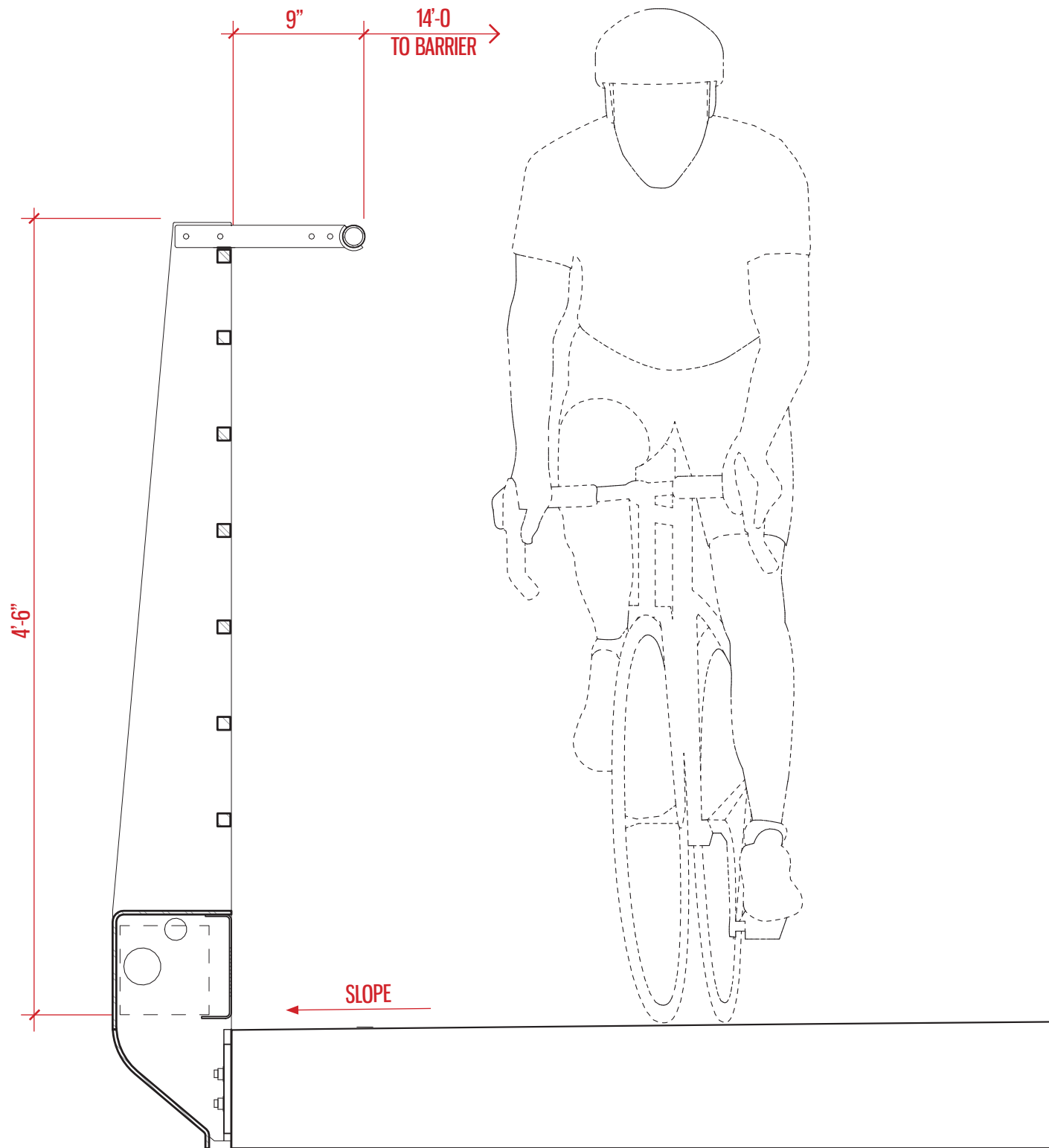
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# RAILING DETAIL



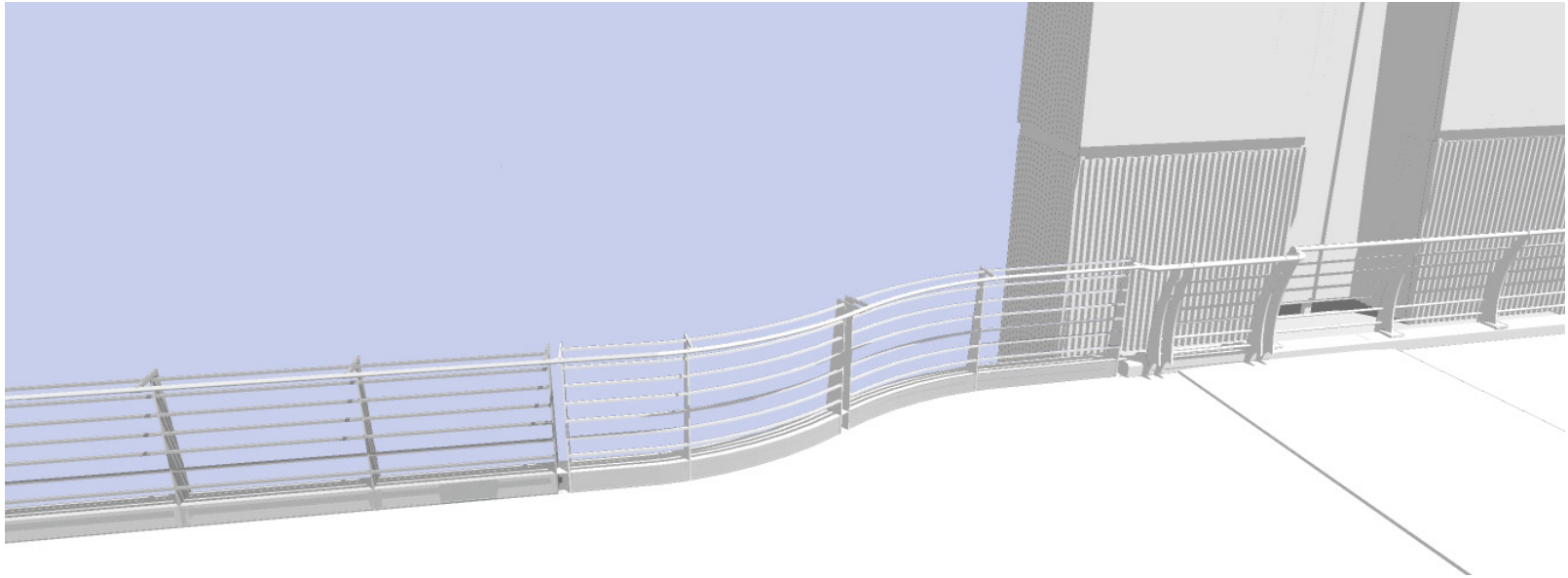
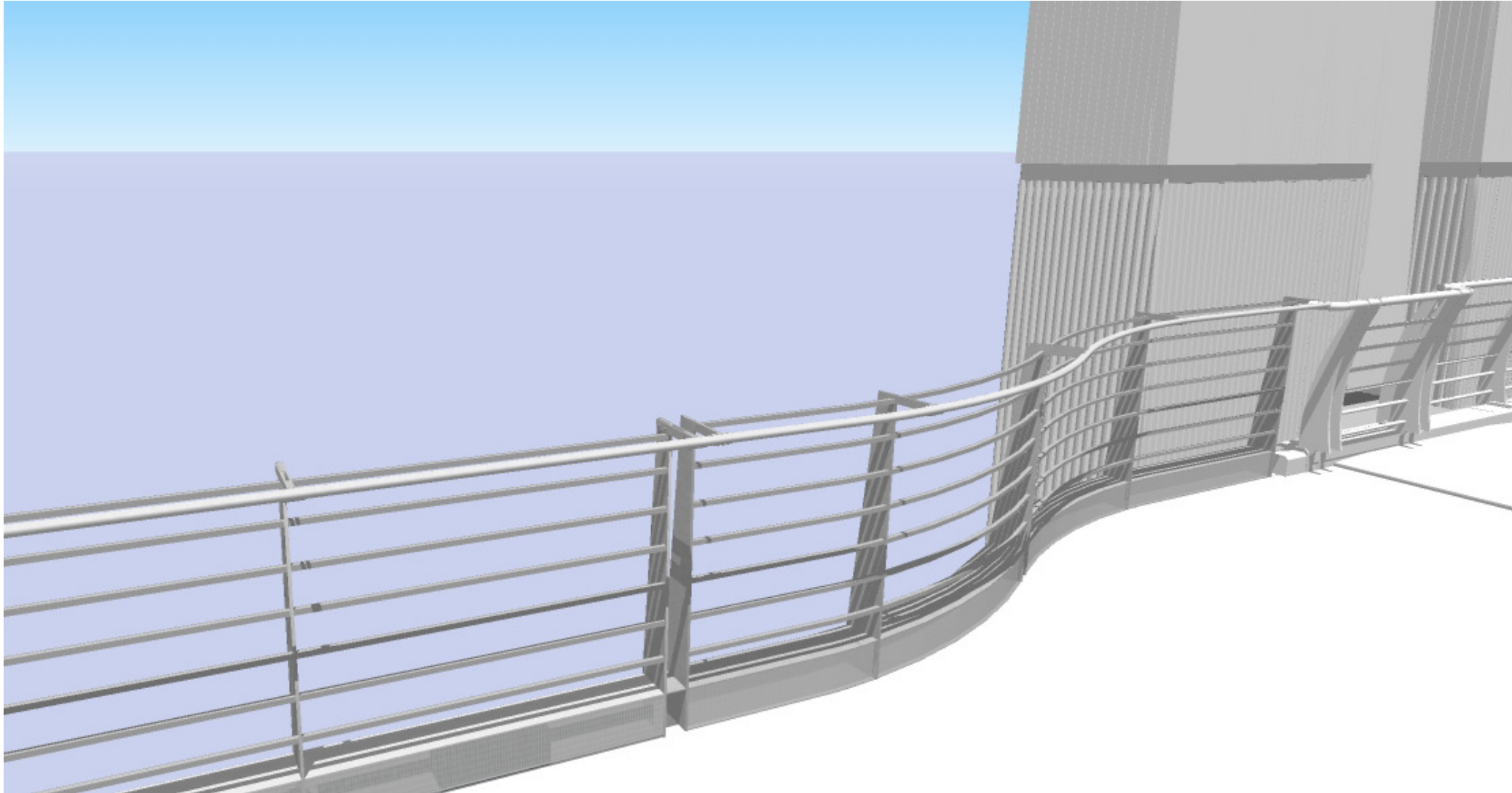
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# RAILING TRANSITION AT FLOATING BRIDGE SENTINEL



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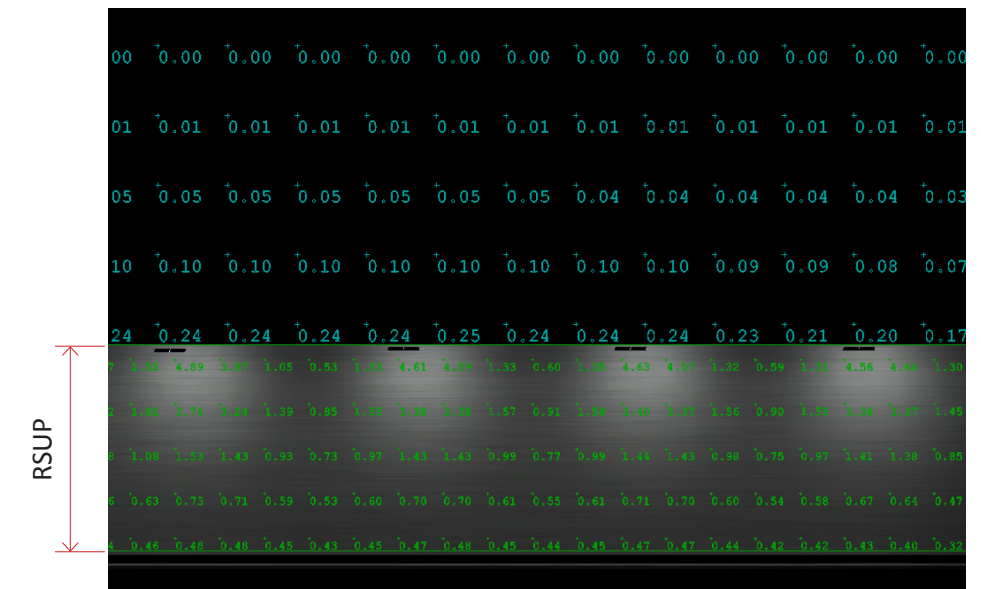
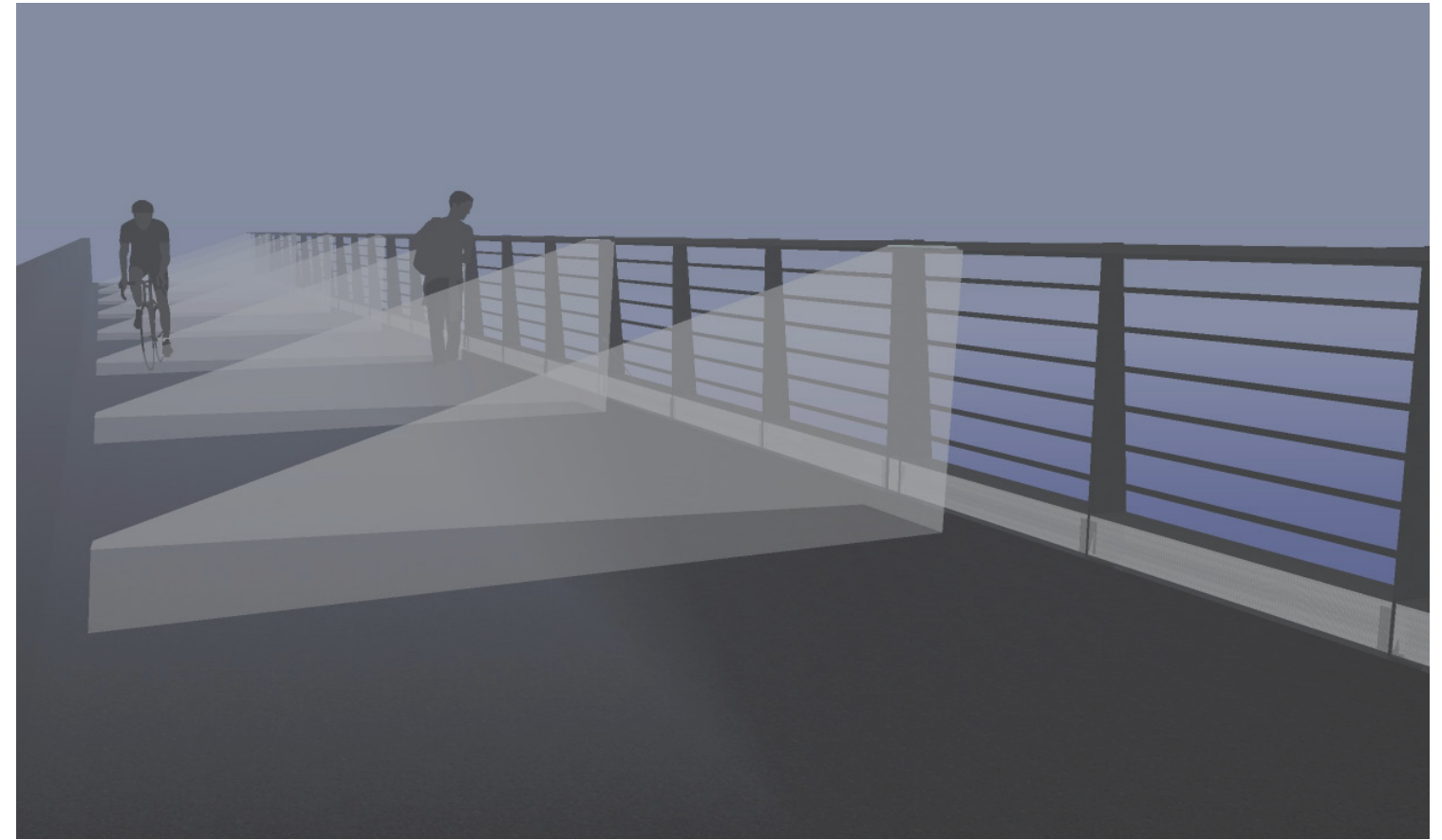
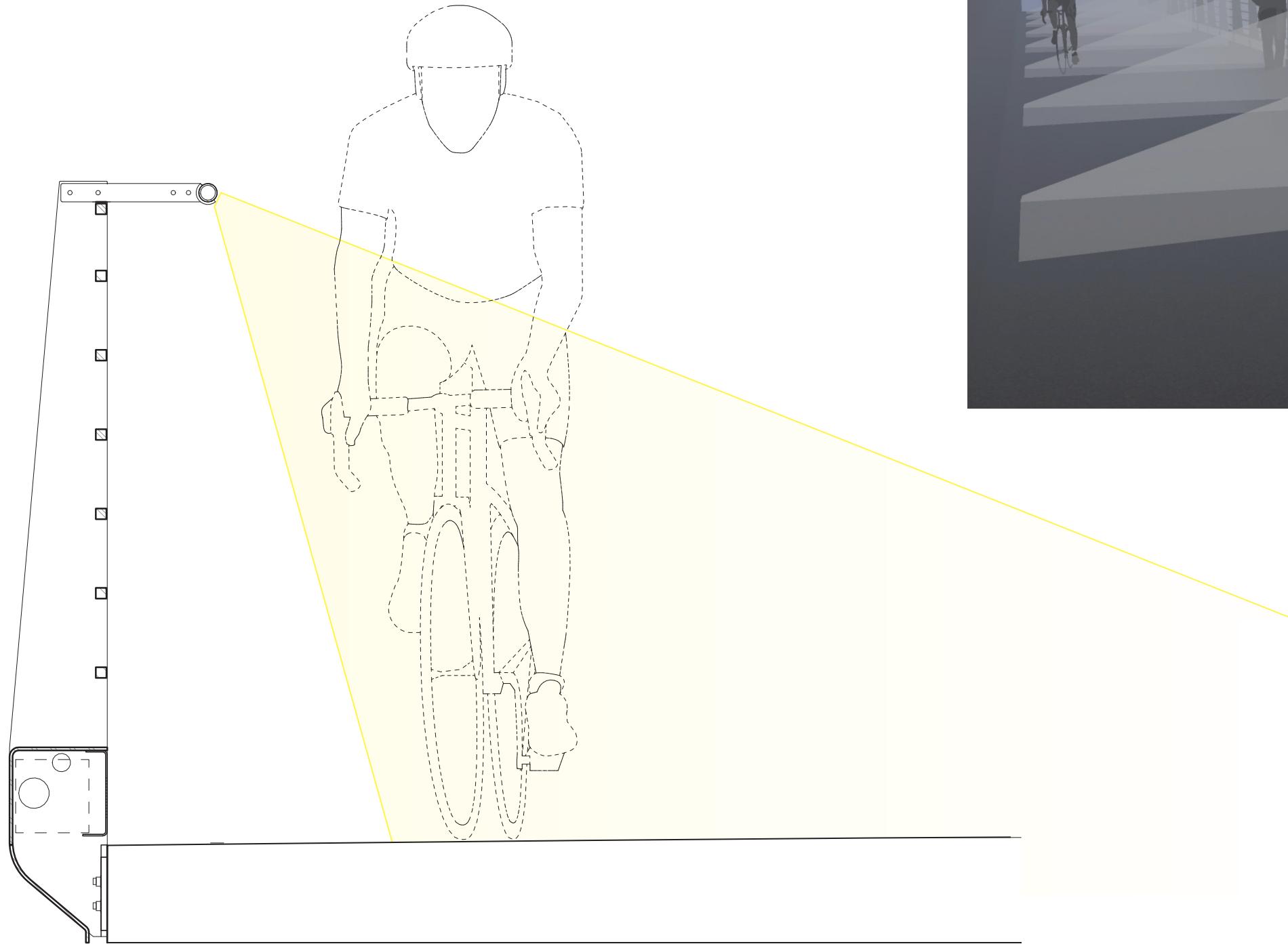
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# LIGHTING



2' LED mounted at 4' height, rotated 30 degrees, spaced 15 feet o.c.

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# RSUP AT DUSK



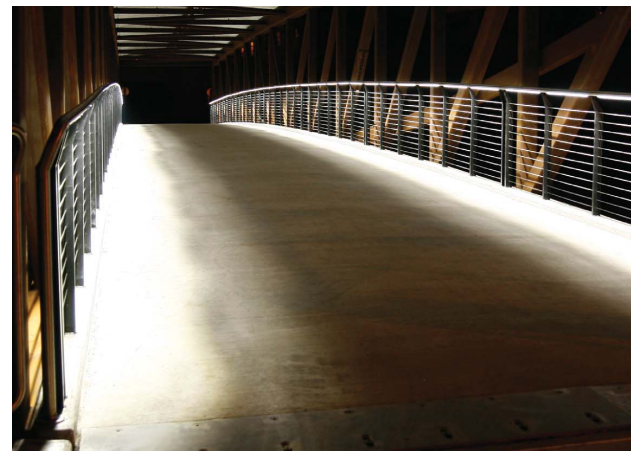
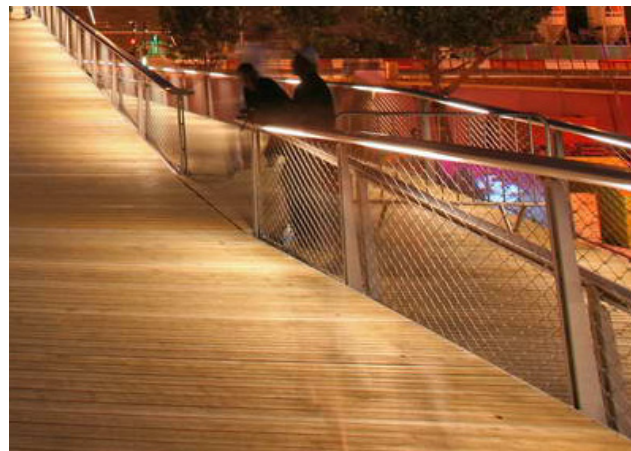
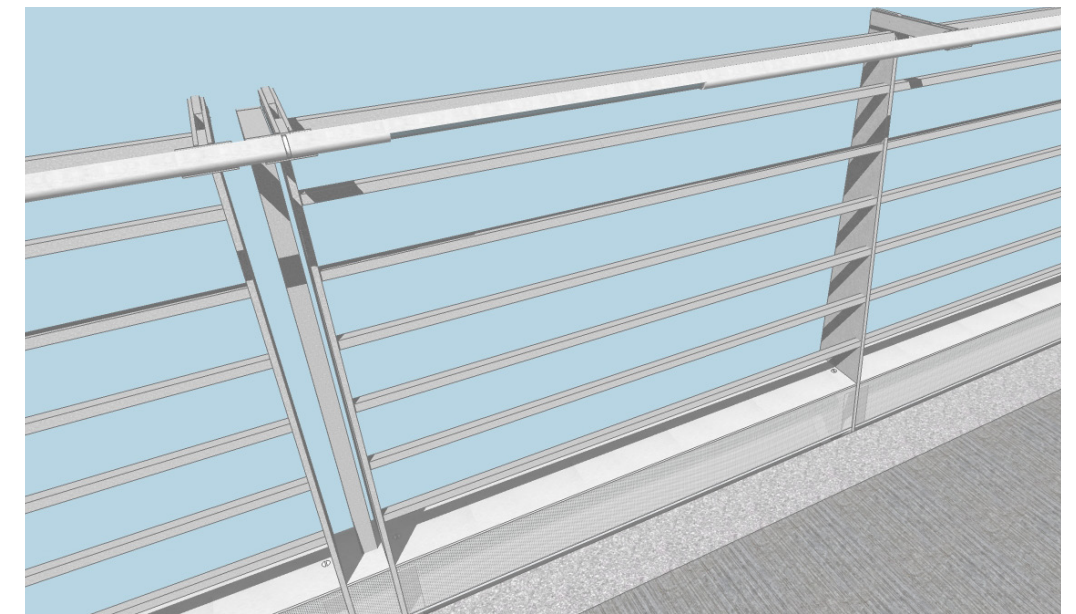
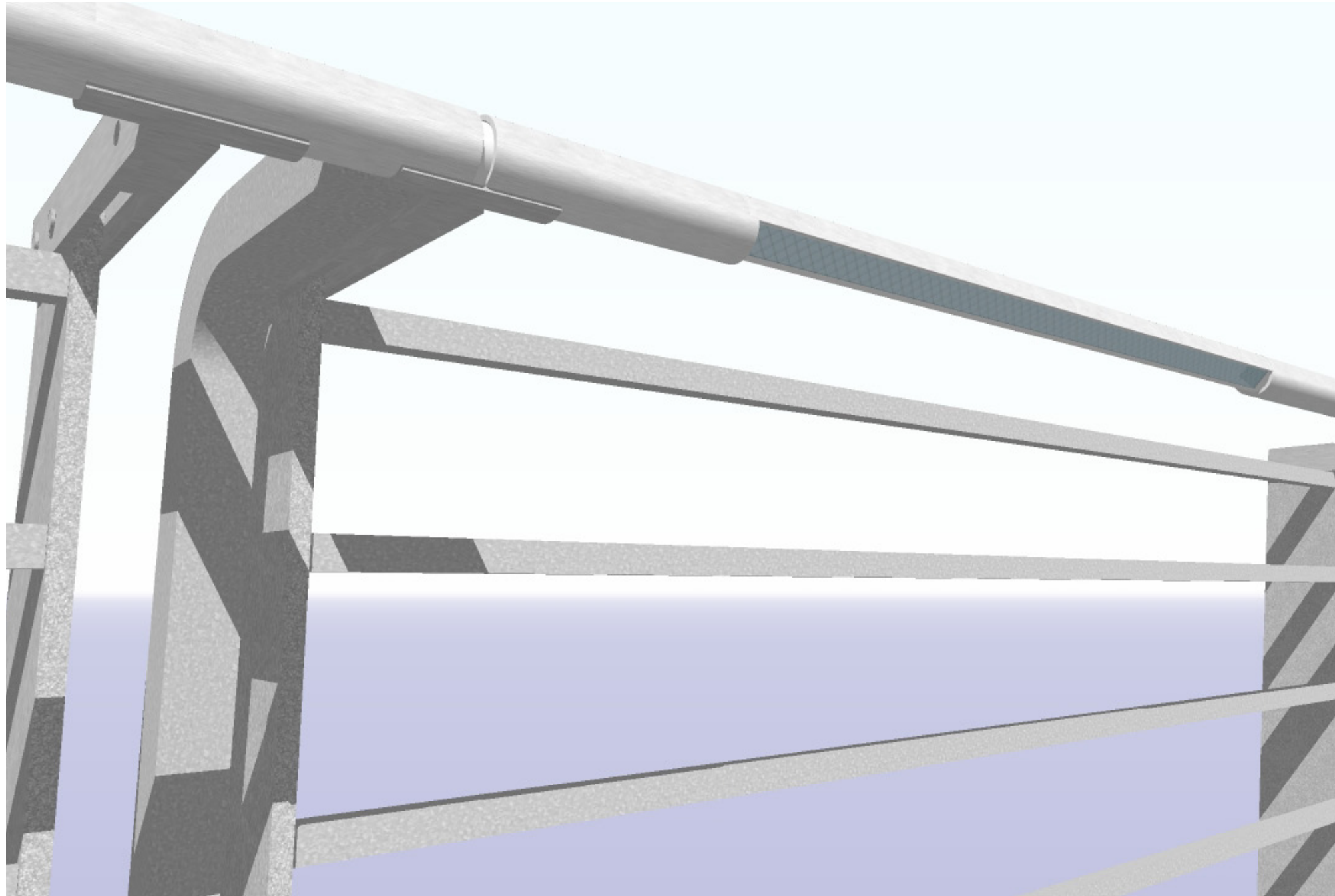
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# INTEGRATED LED LUMINAIRE



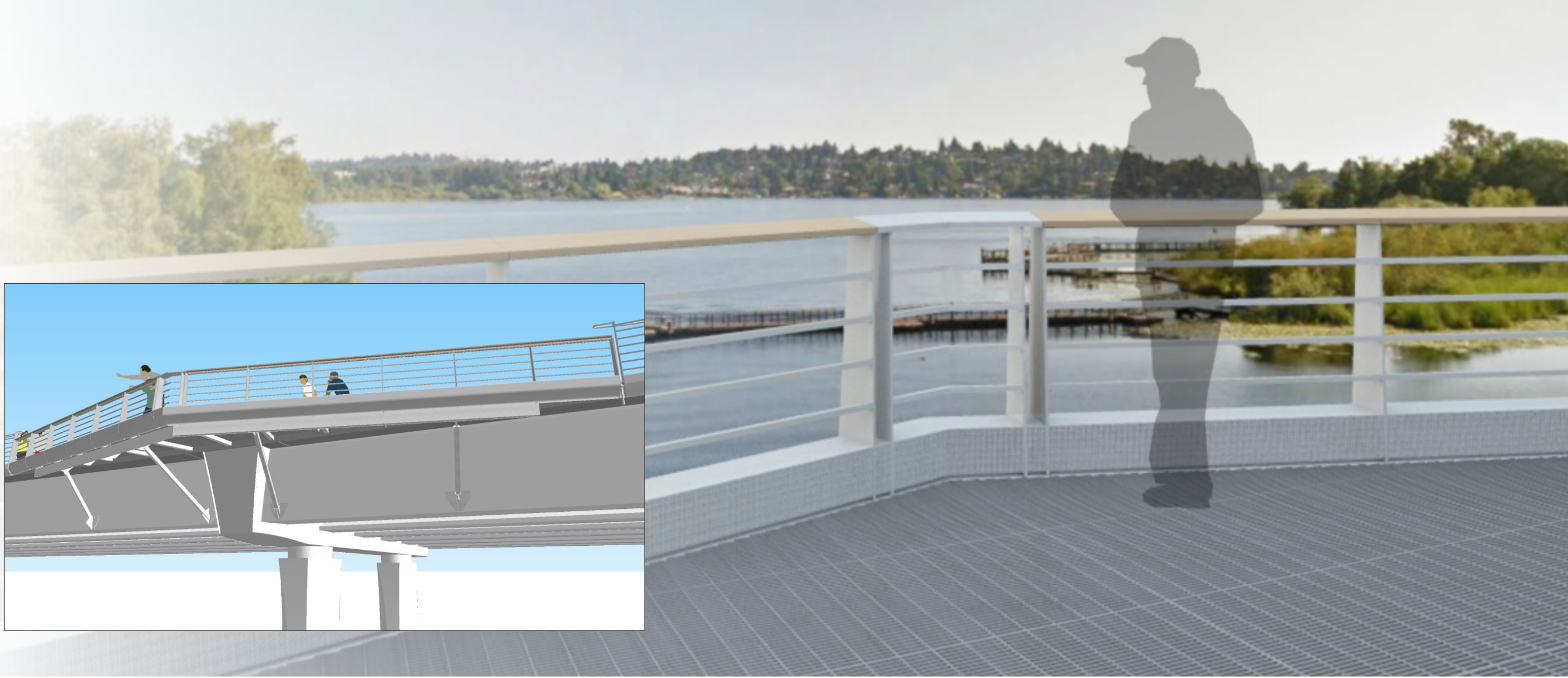
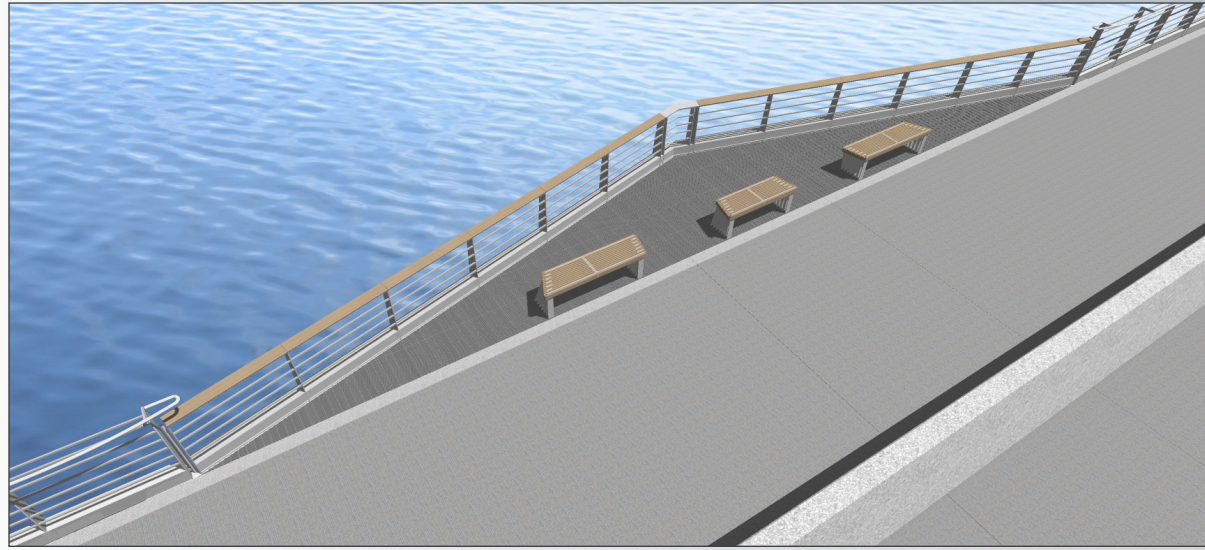
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ANALYSIS REQUIRED.

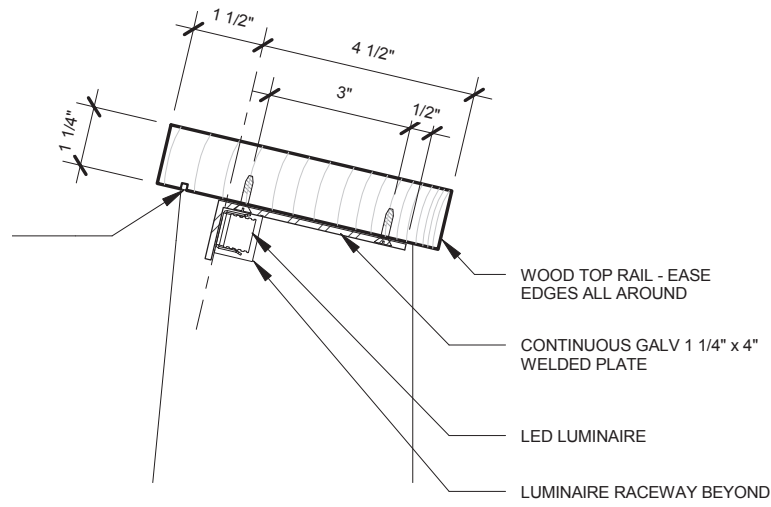
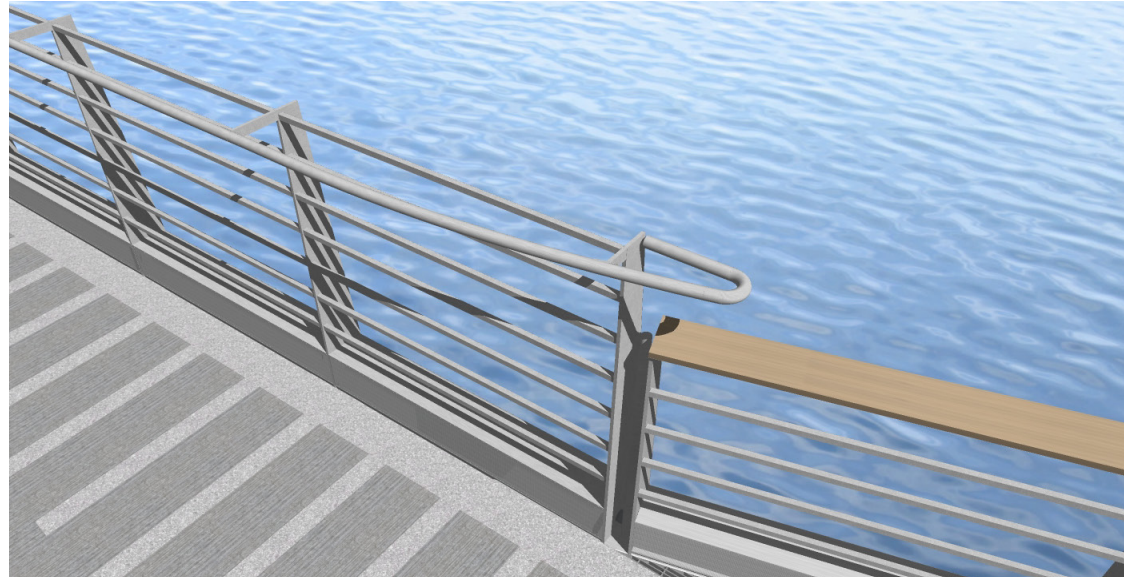
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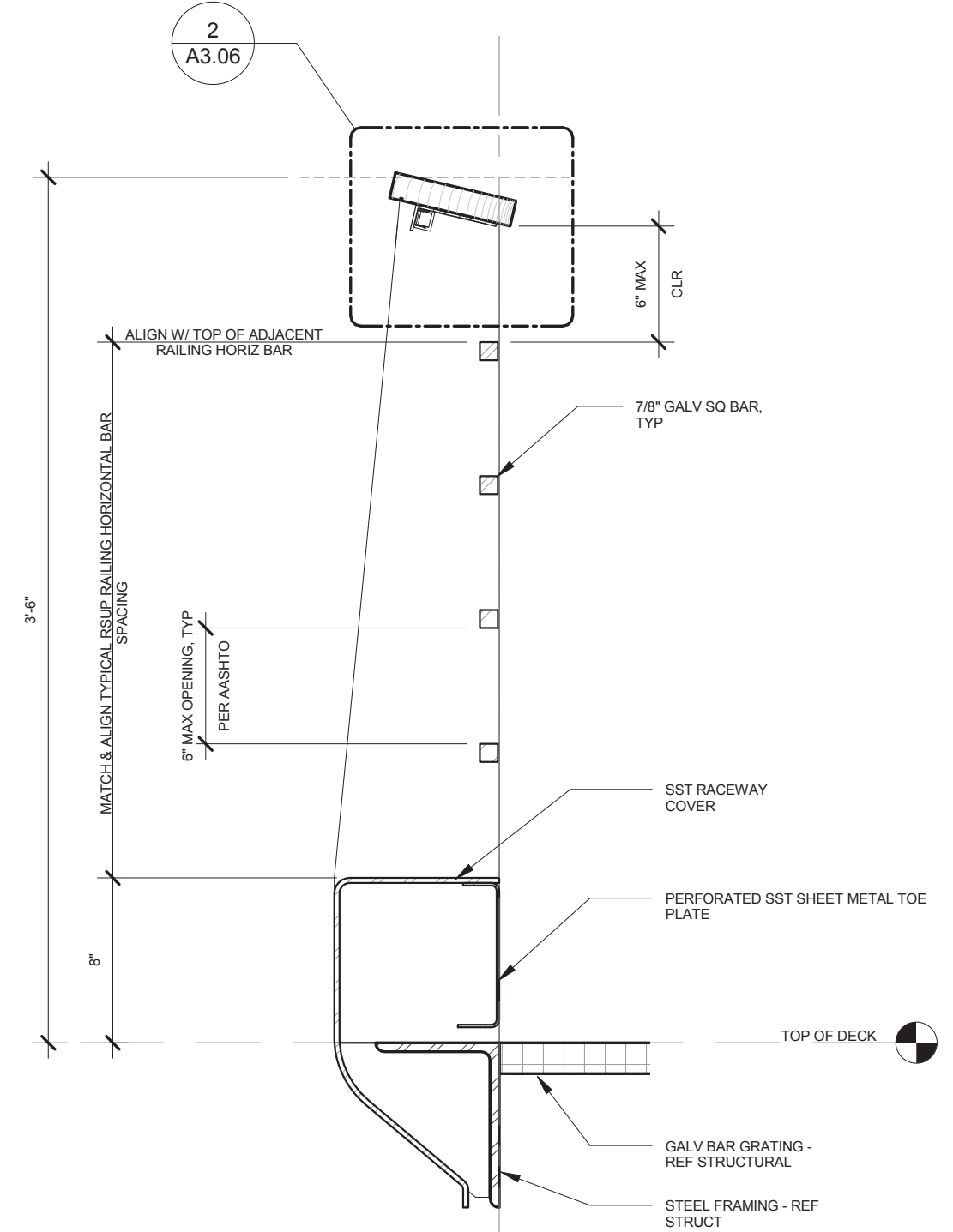
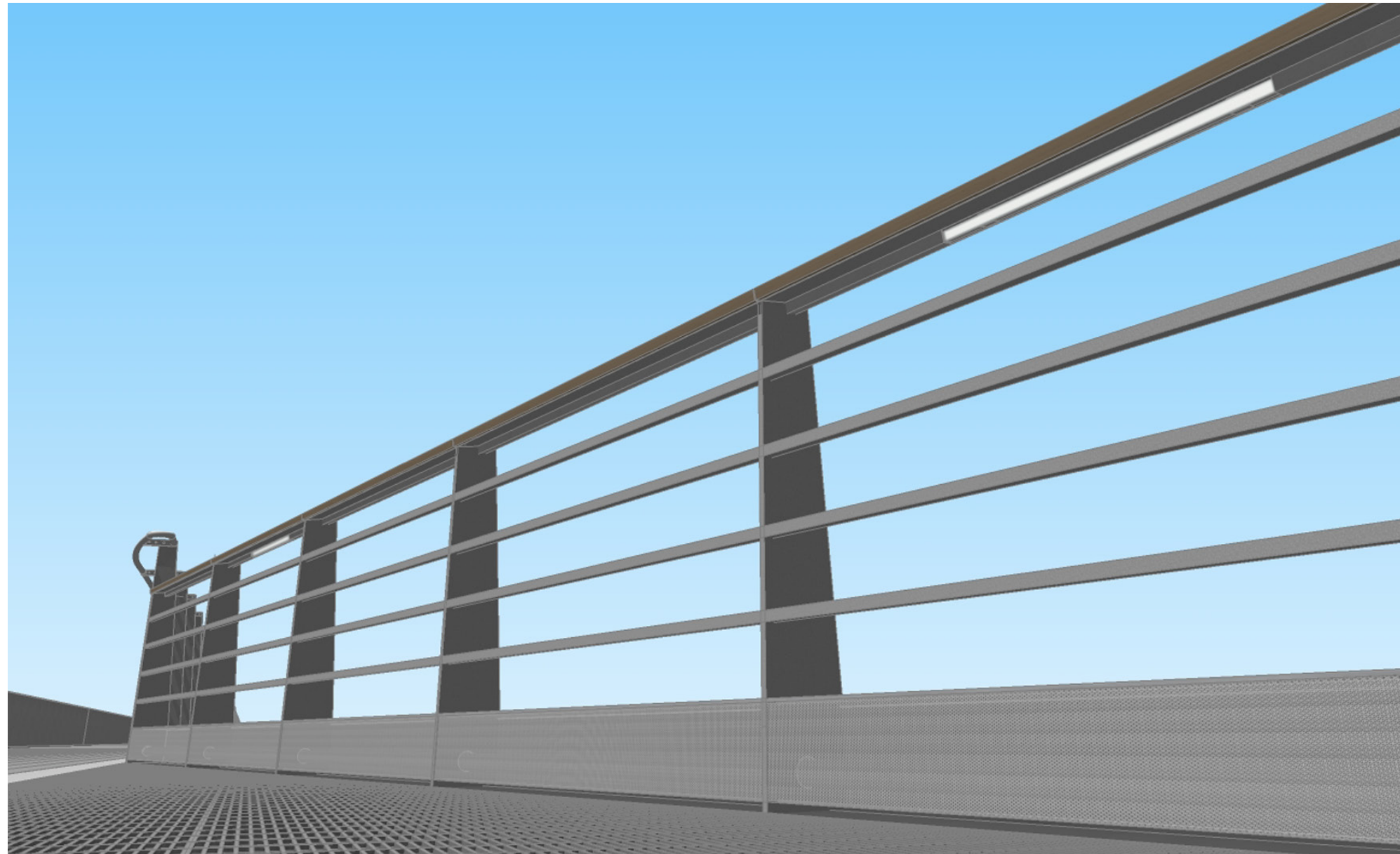
# BELVEDERES



# BELVEDERE RAIL & LUMINAIRE



2 WOOD TOP RAIL  
 3" = 1'-0"



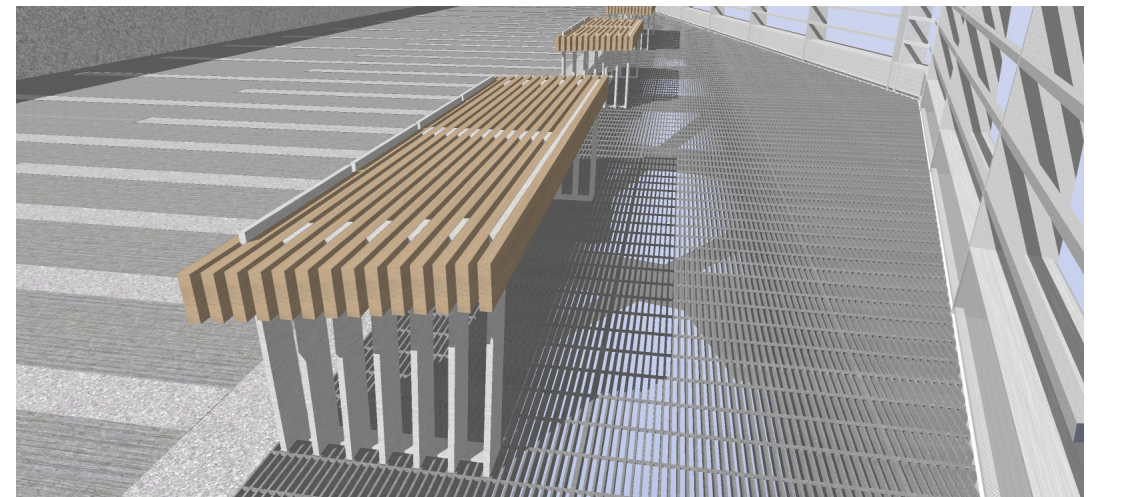
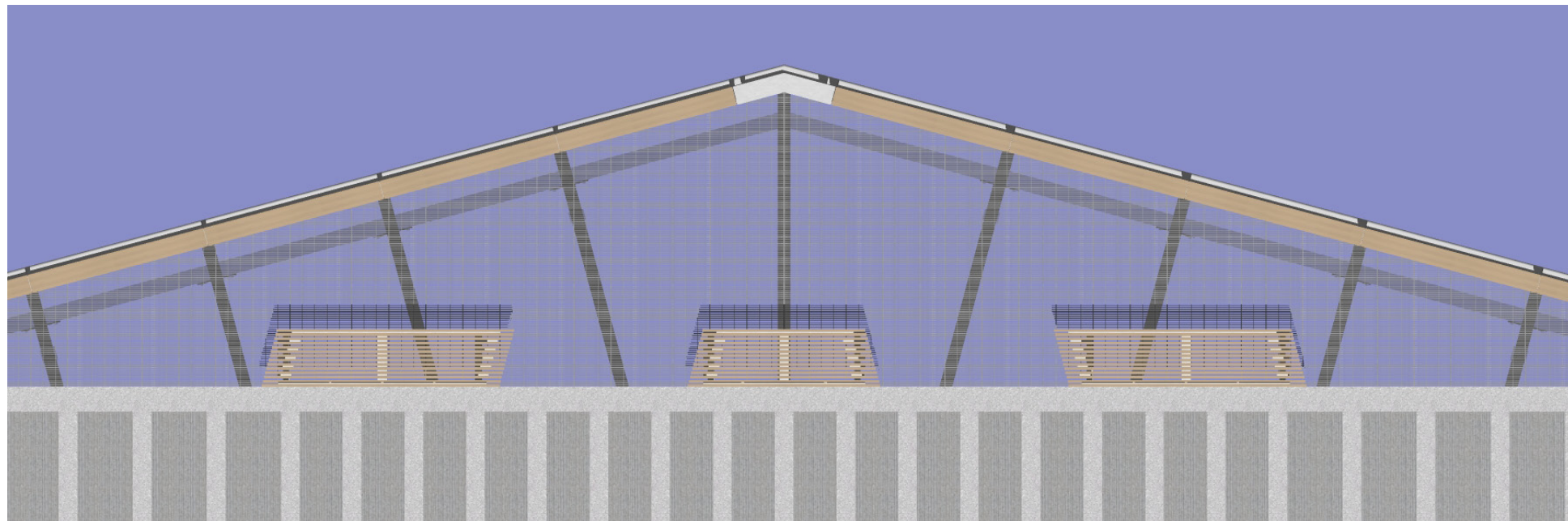
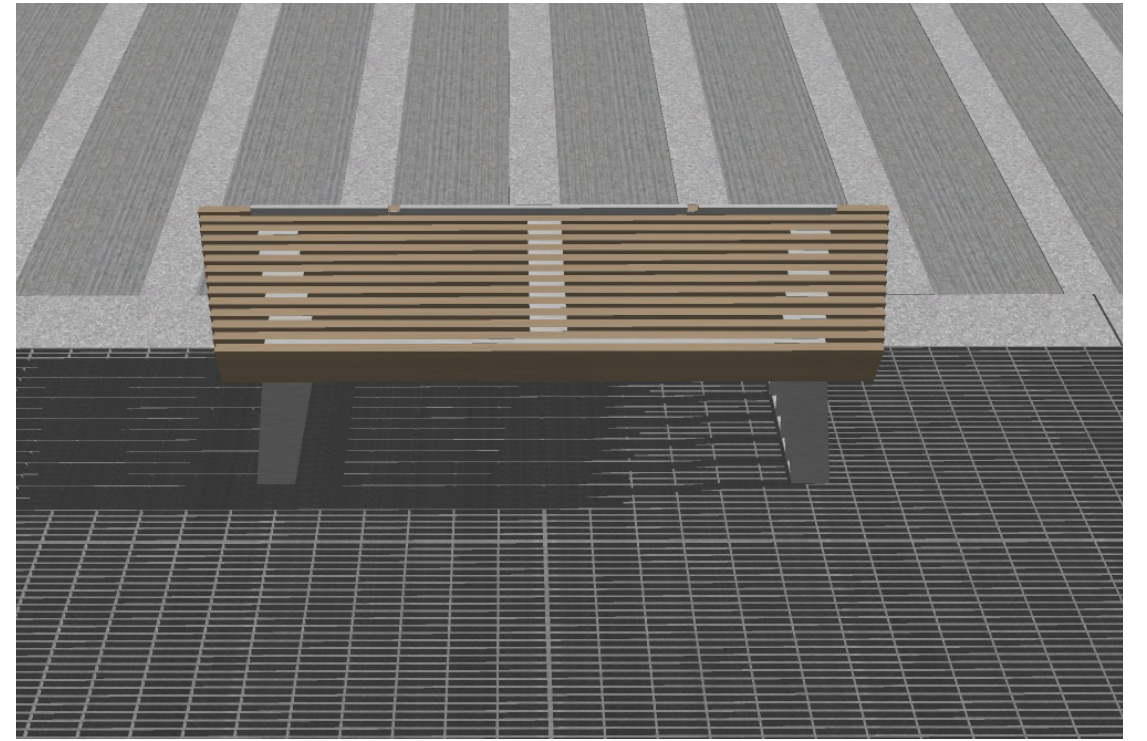
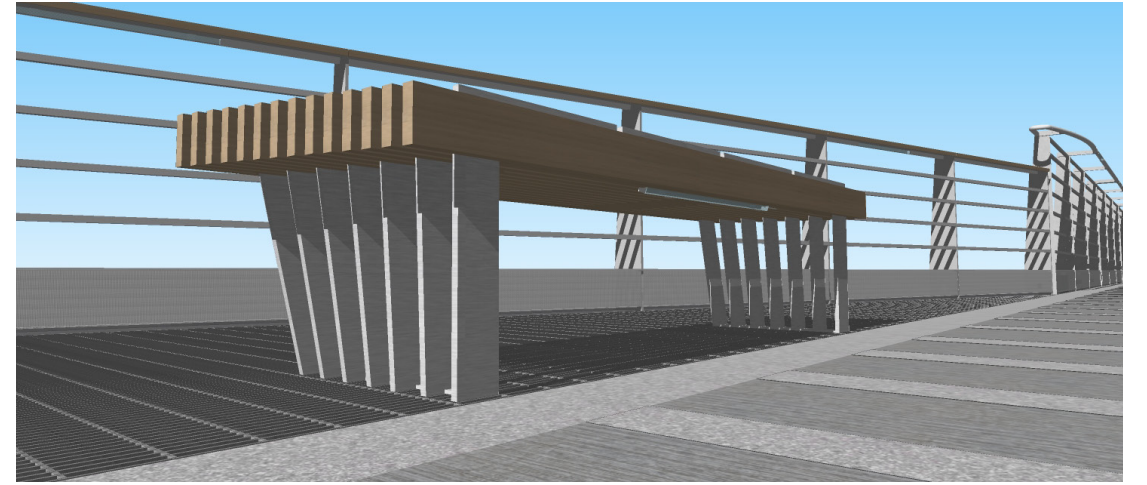
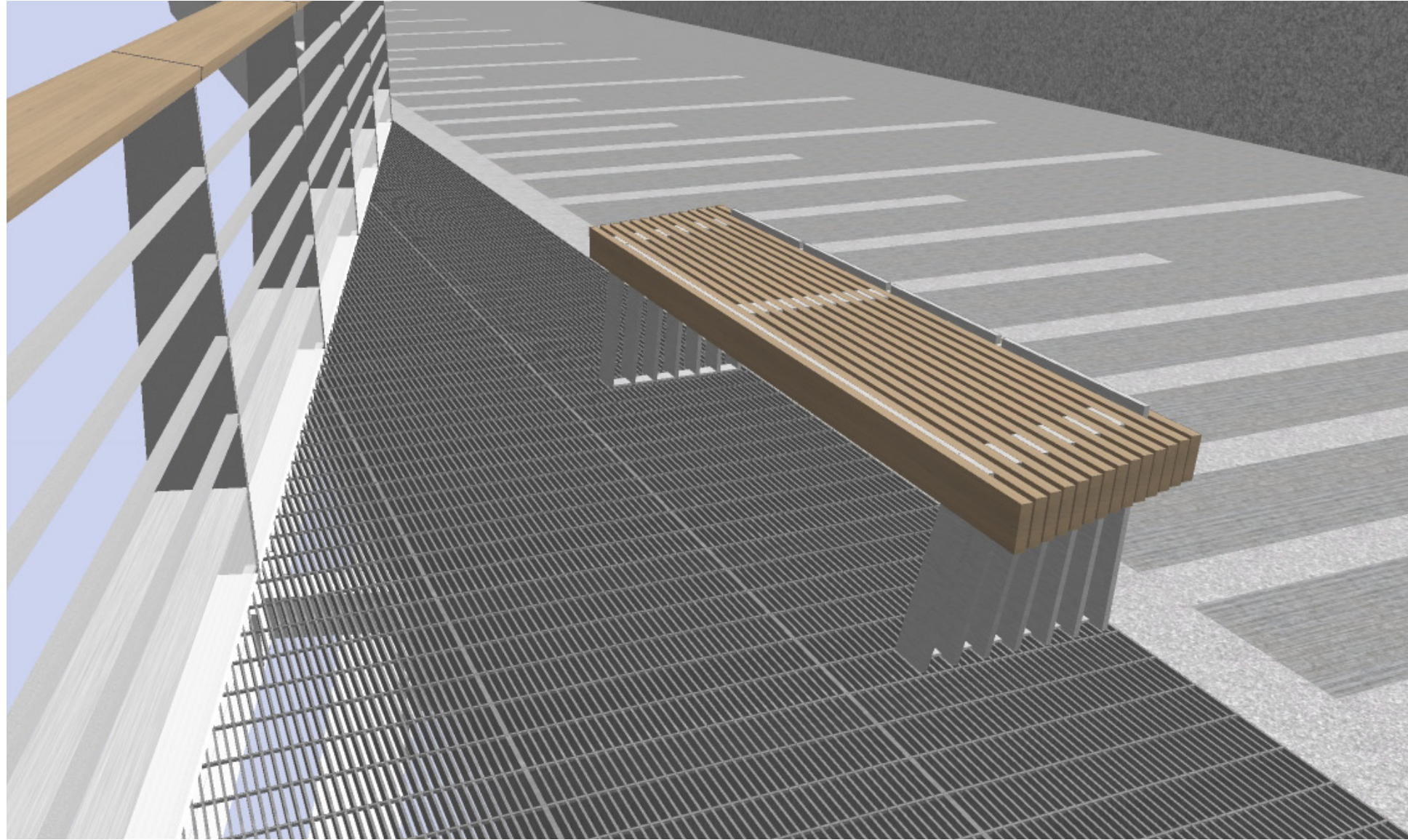
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# BENCHES



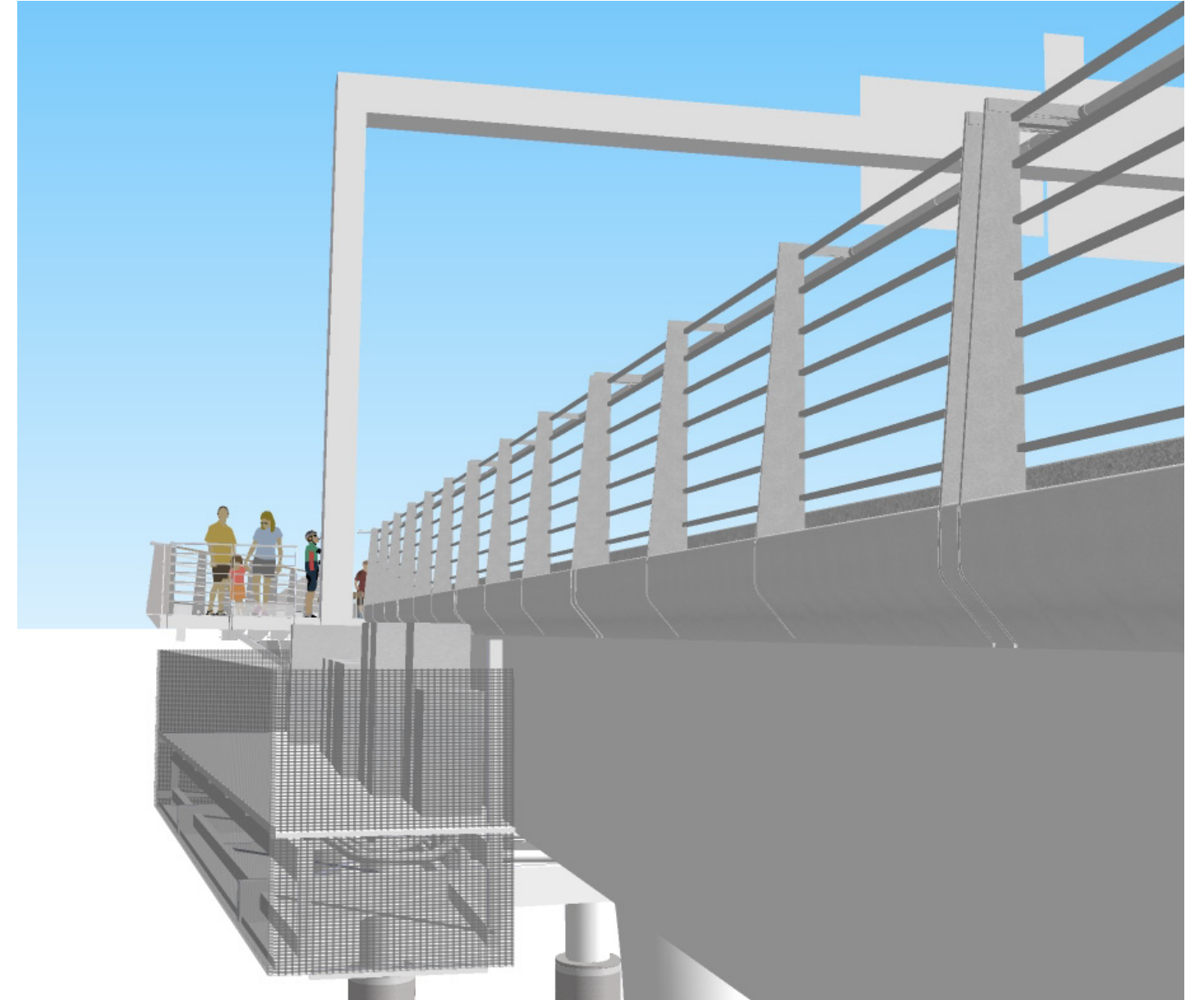
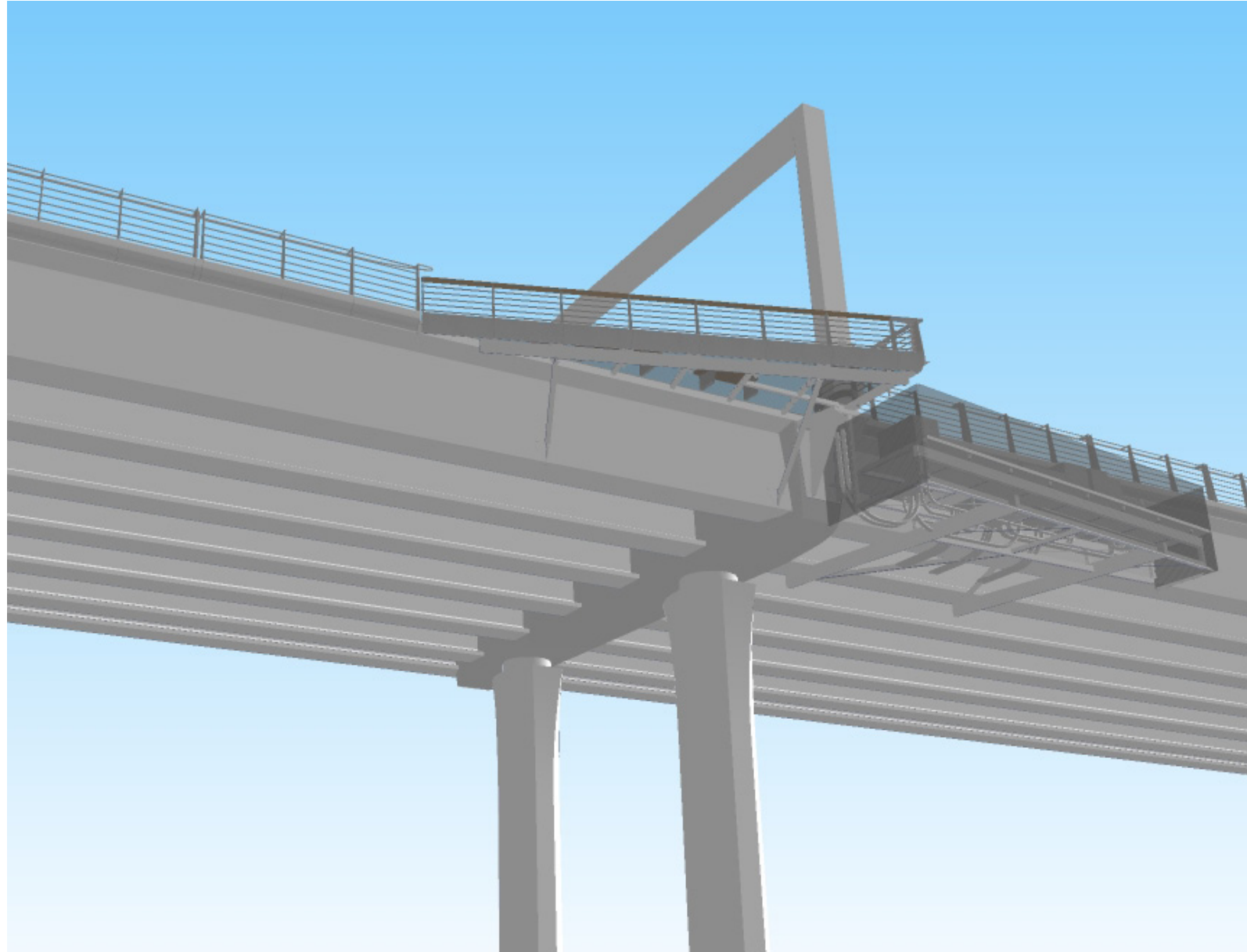
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# BELVEDERE / UTILITY PLATFORMS



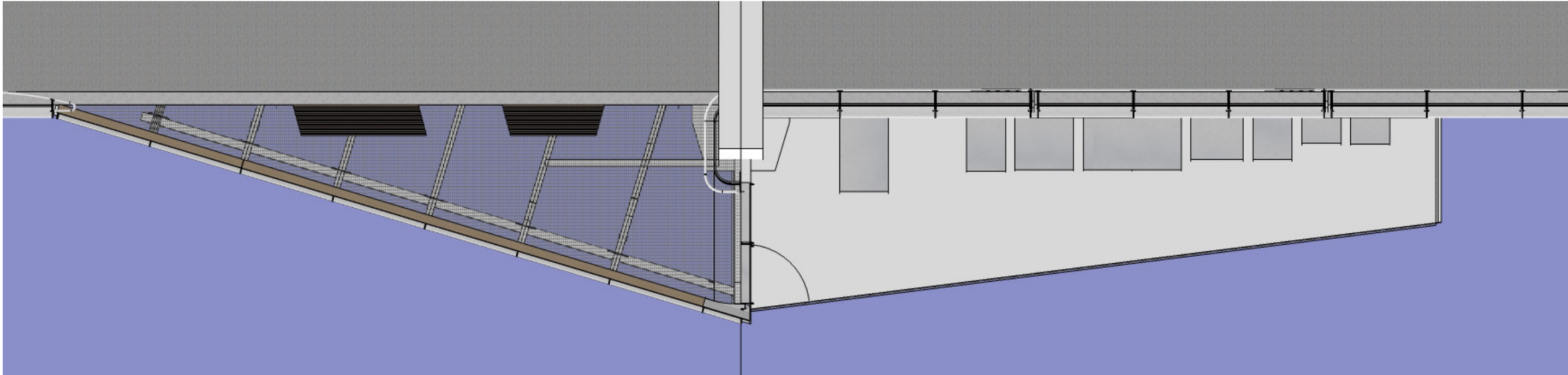
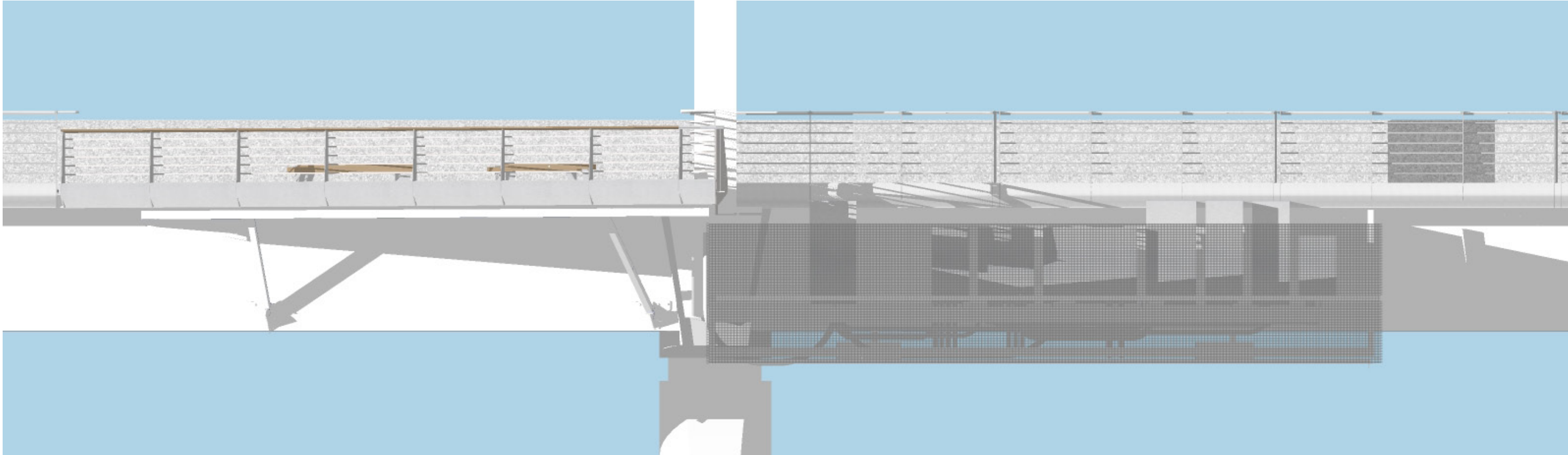
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# BELVEDERE / UTILITY PLATFORMS



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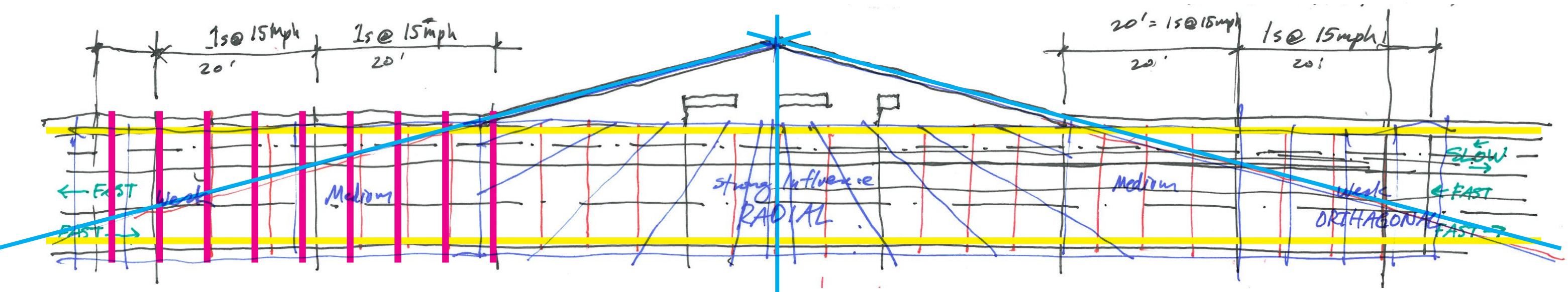
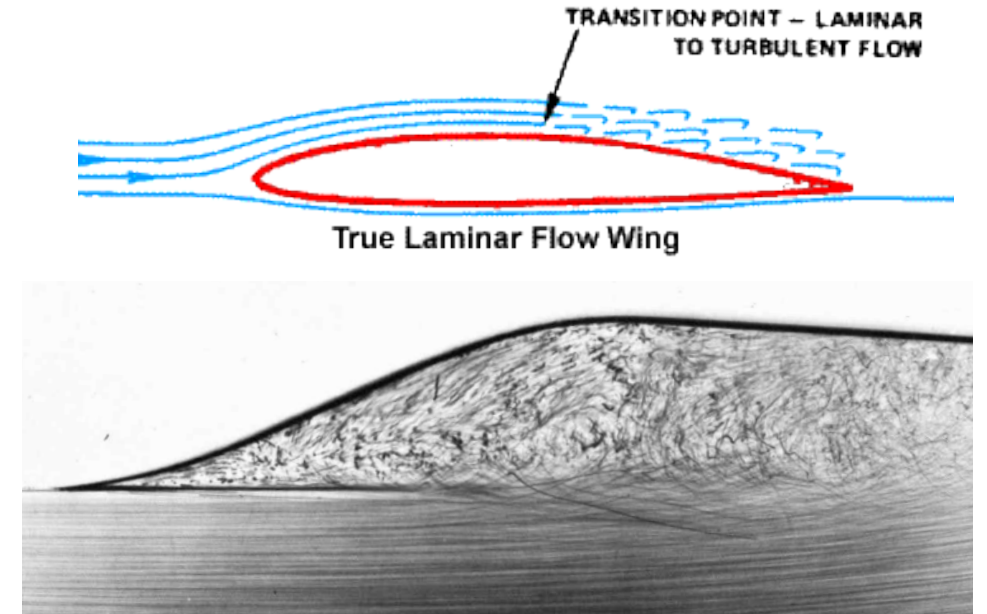
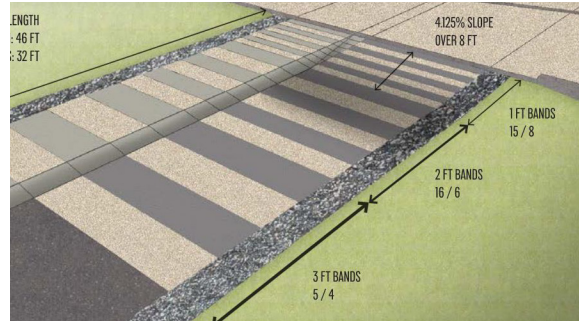
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# THE CROSSING EXPERIENCE: MARKINGS, TEXTURES & TURBULENCE



Street View from bike lane on I-90 bridge



Bridge Length (ft)

6000

	mph*	feet per hour	feet per min	feet per second
Bike fast	20	105,600	1,760	29.3
Bike moderate	14	73,920	1,232	20.5
Run	9	47,520	792	13.2
Walk	3.1	16,368	273	4.5

Piers

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100
		0.09	0.17							0.77					
		0.12	0.24							1.10					
		0.19	0.38							1.70					
		0.55	1.10							4.95					

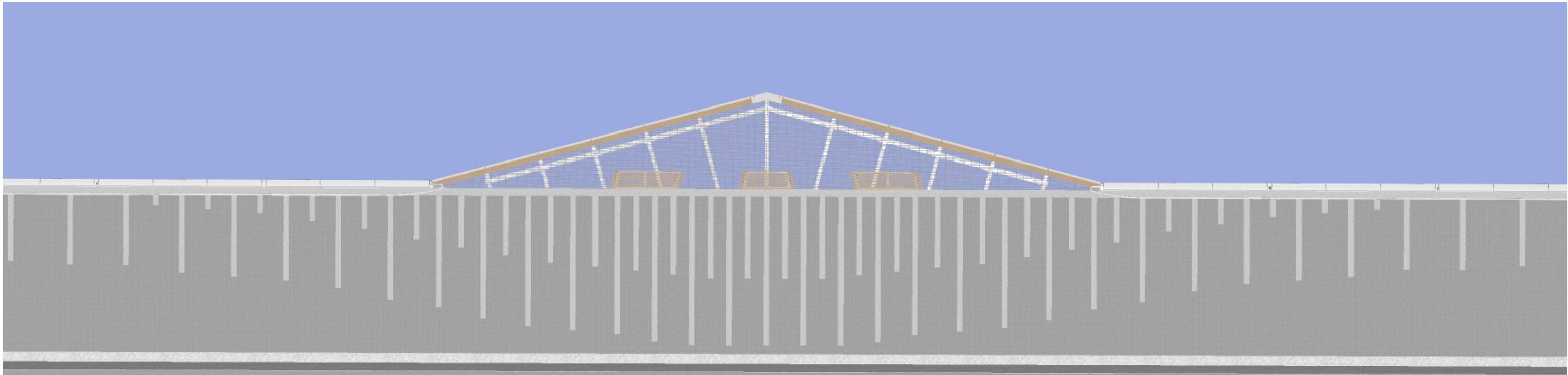
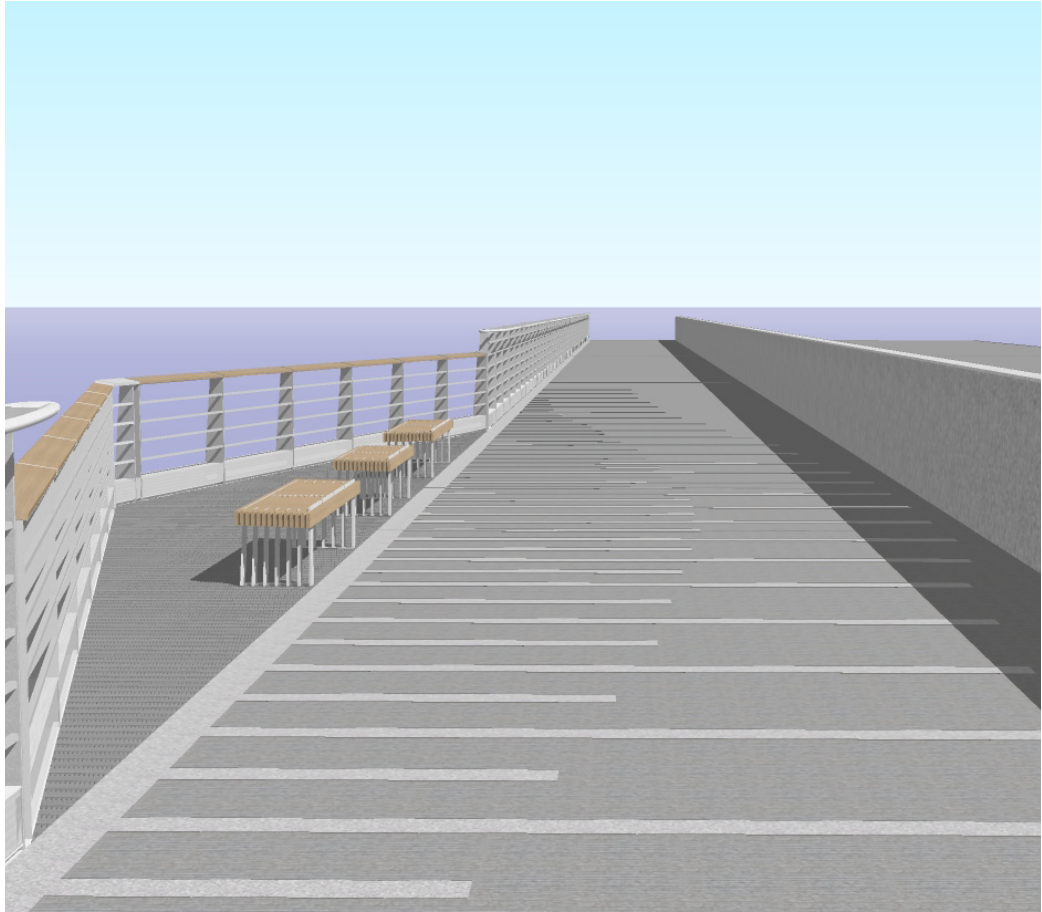
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# TEXTURED SURFACE PATTERN



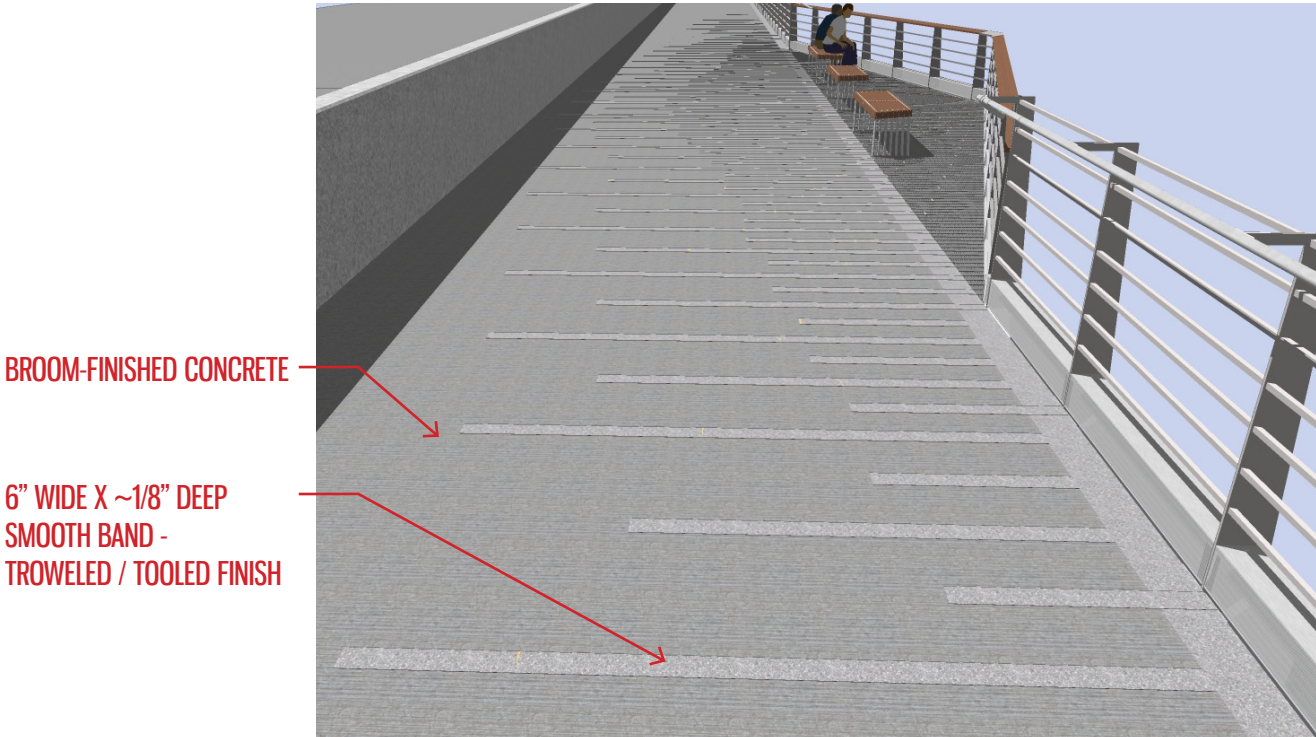
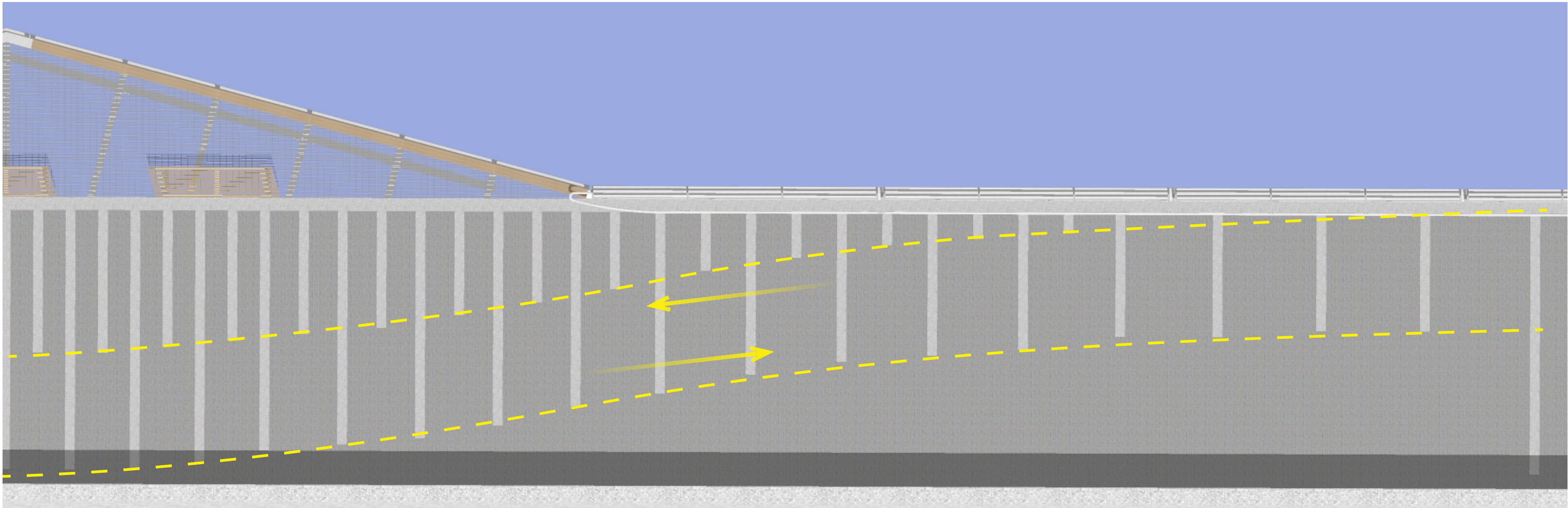
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January 2014

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# TEXTURED SURFACE PATTERN

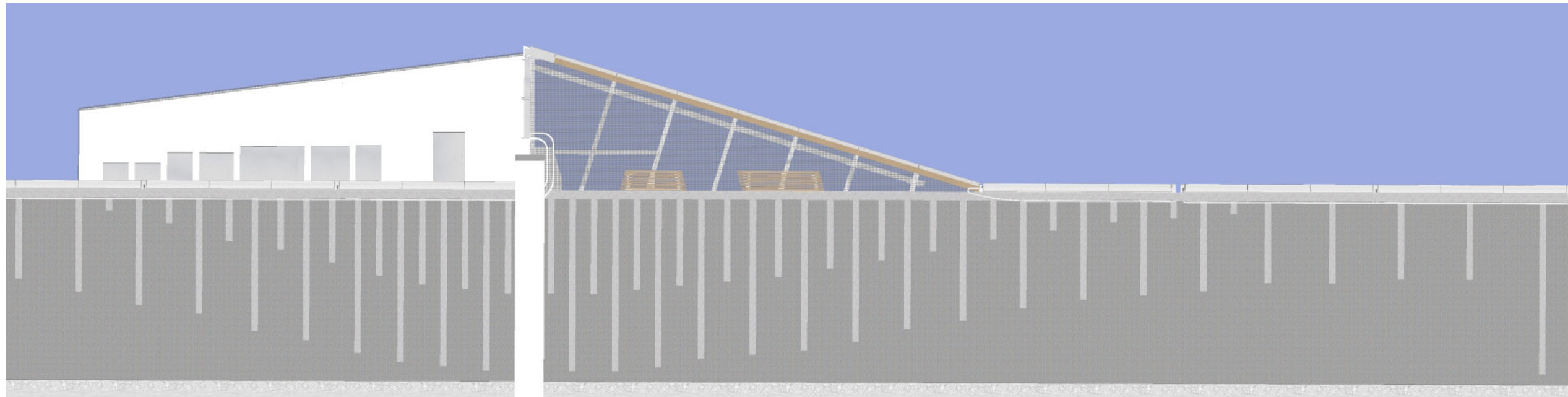


BROOM-FINISHED CONCRETE

6" WIDE X ~1/8" DEEP  
SMOOTH BAND -  
TROWELED / TOOLED FINISH



# PATTERN AT UTILITY PLATFORM BELVEDERES



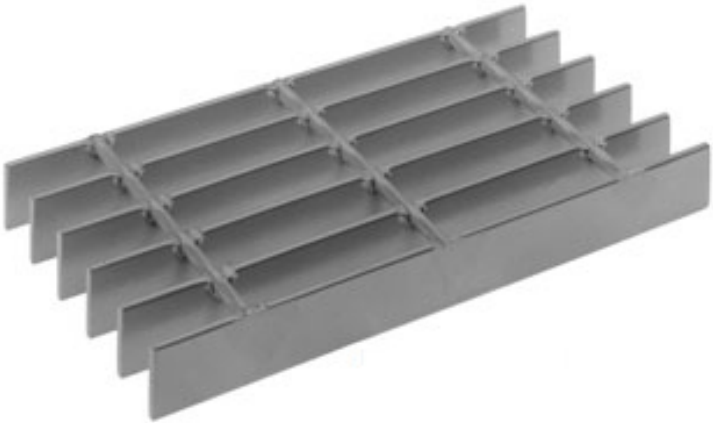
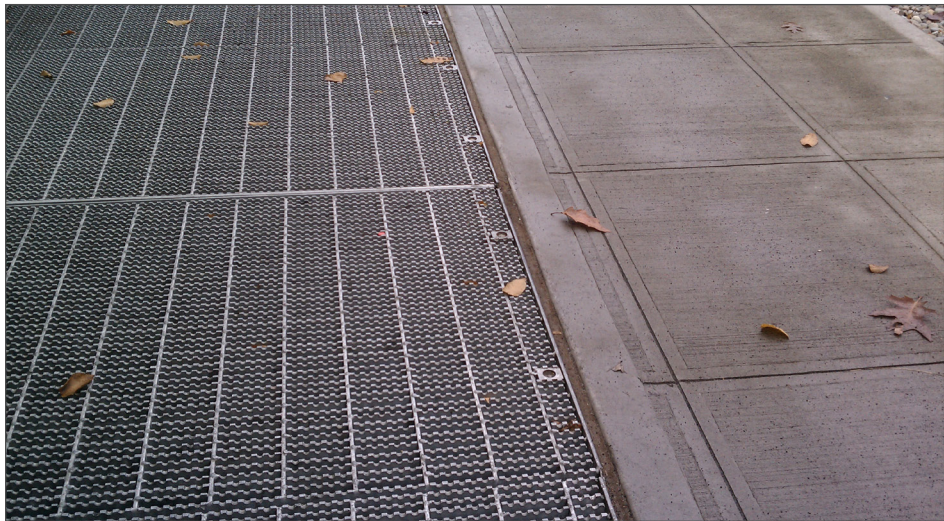
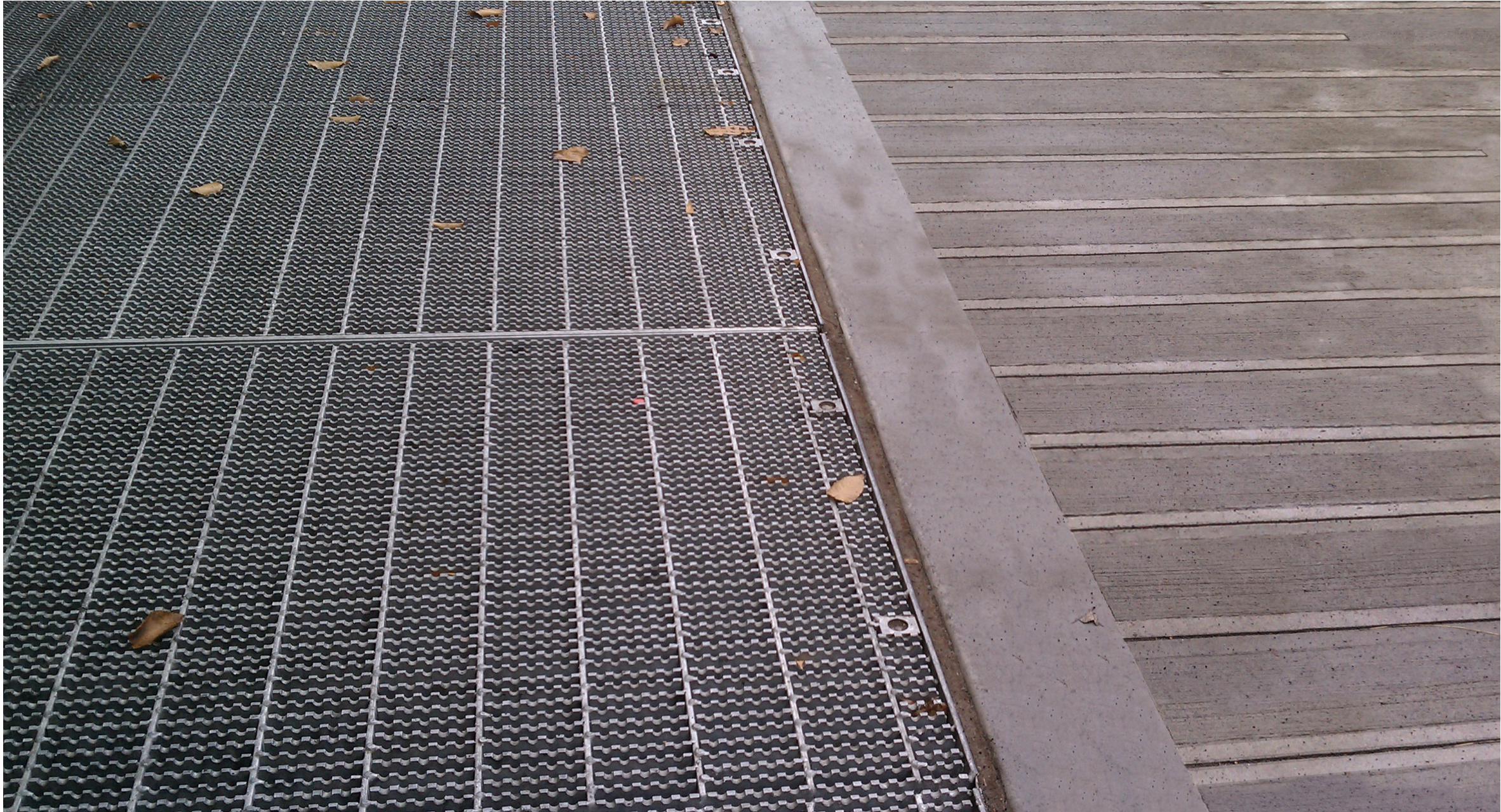
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January 2014

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# BAR GRATING & CONCRETE



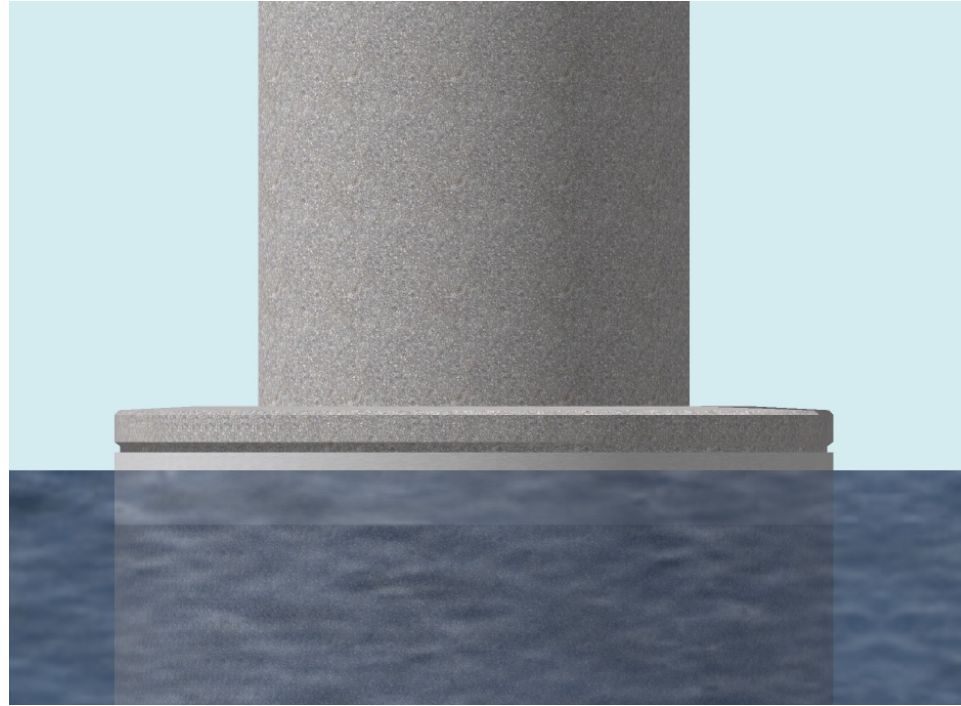
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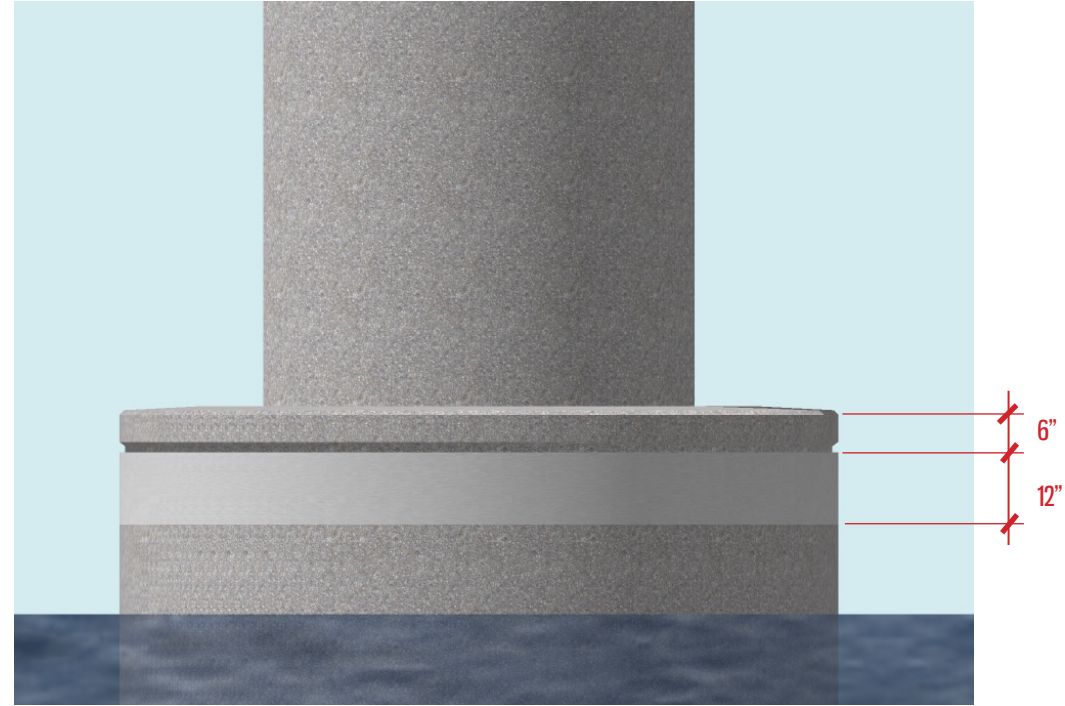
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# PIER CAPS



NORMAL HIGH WATER LAKE LEVEL



LOW WATER

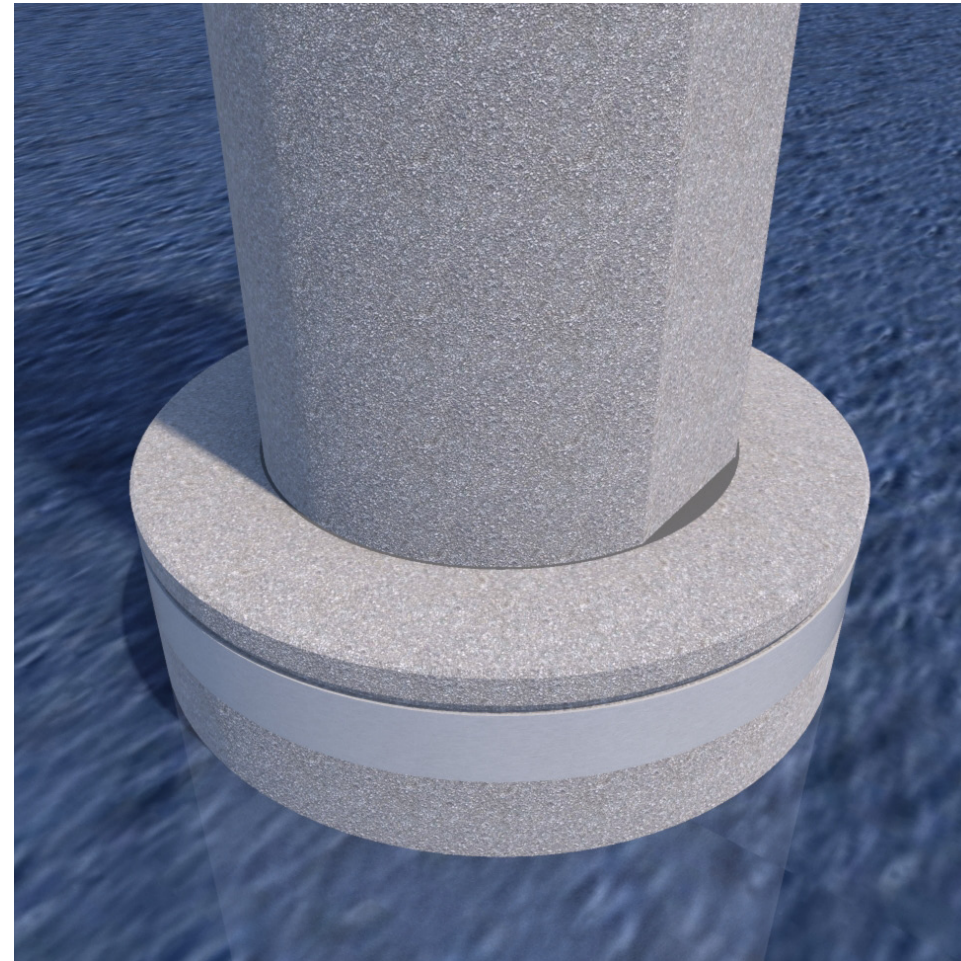
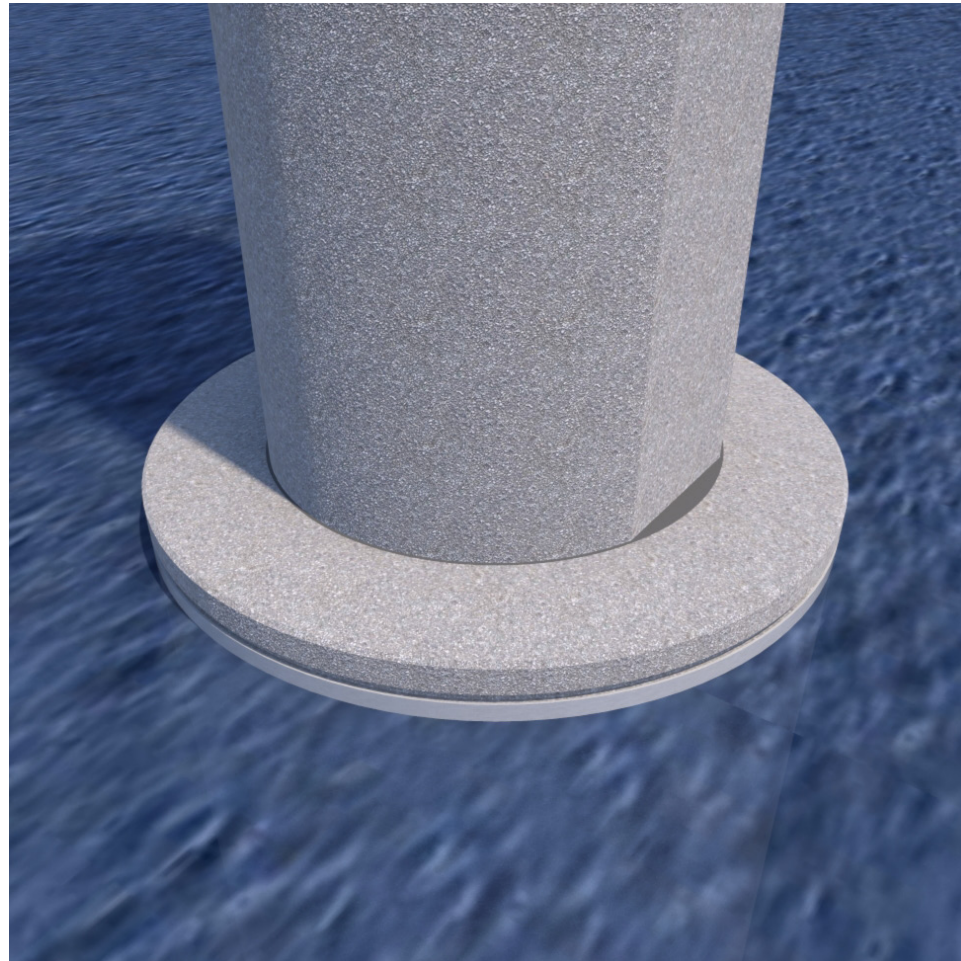
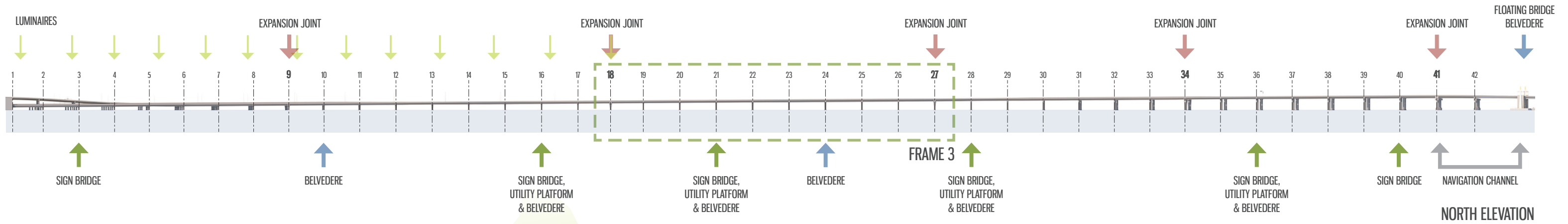
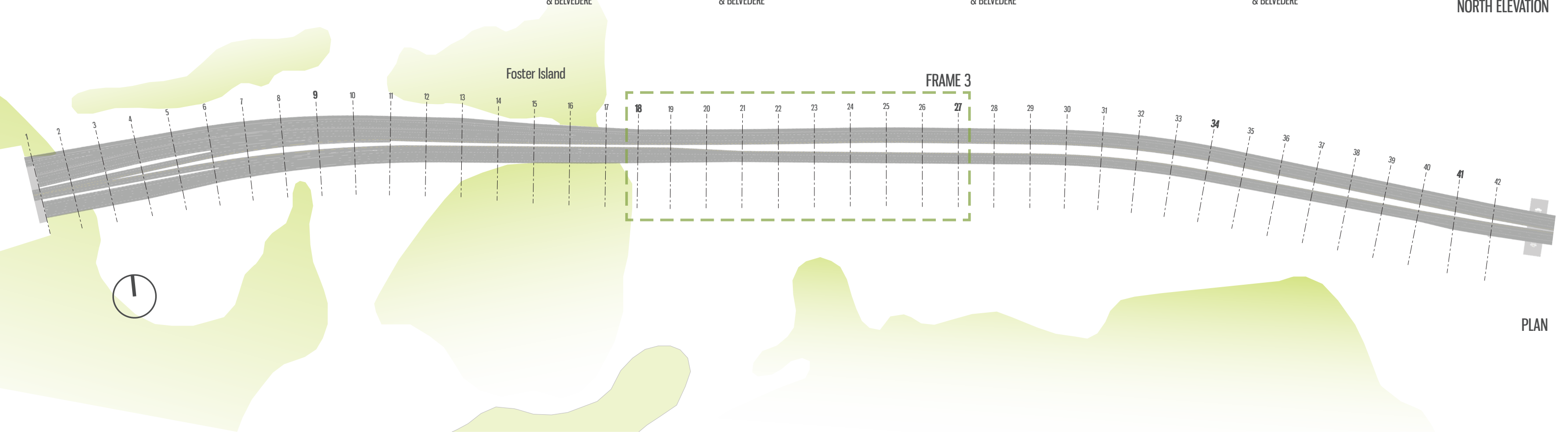


Figure 89. Photos. Specimen DS-1 column damage after cyclic testing.

# ABOVE-BRIDGE ELEMENTS



NORTH ELEVATION



PLAN

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January 2014

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