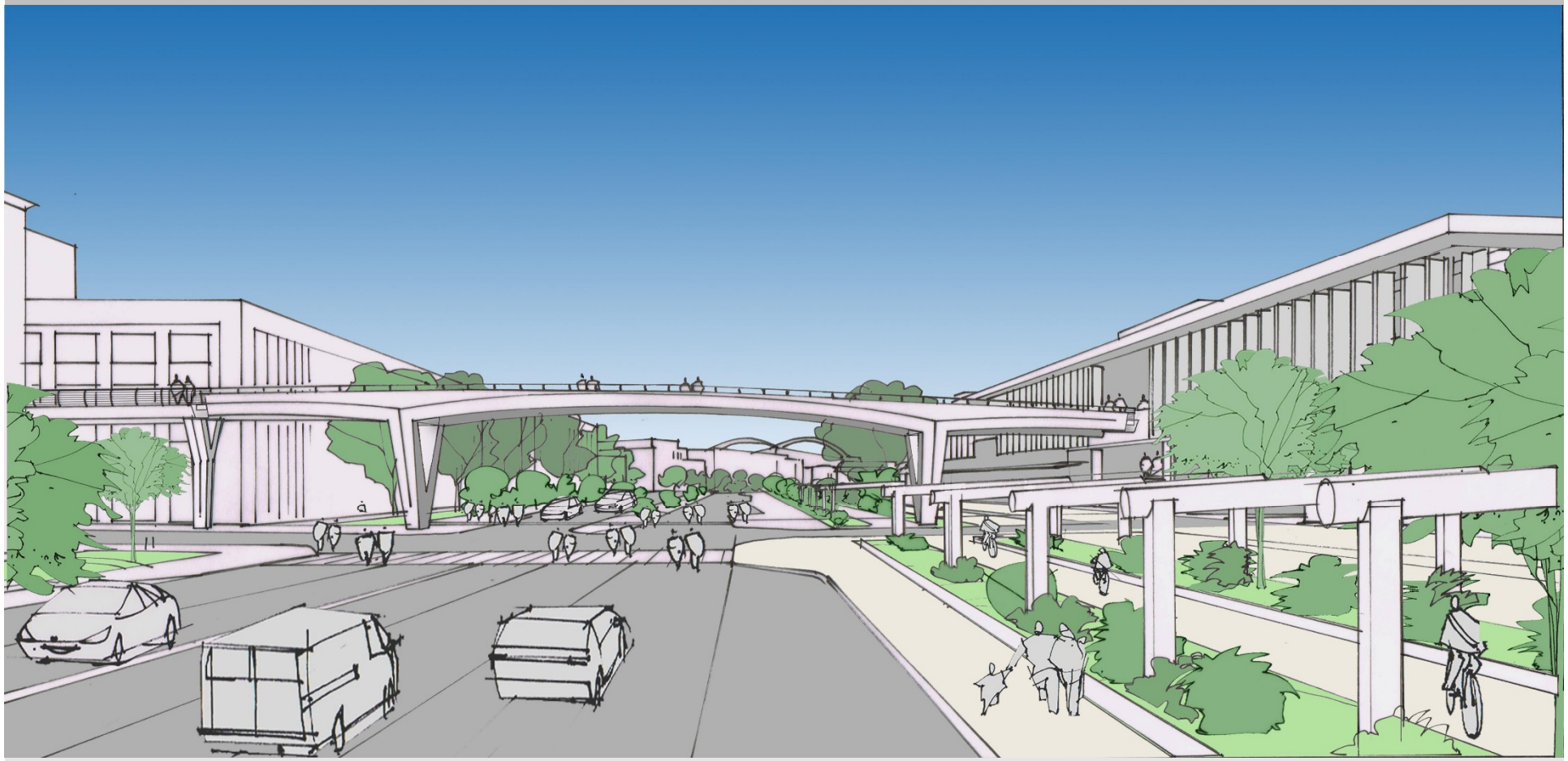
Marion Street Pedestrian Bridge

Seattle Design Commission

October 4th, 2018

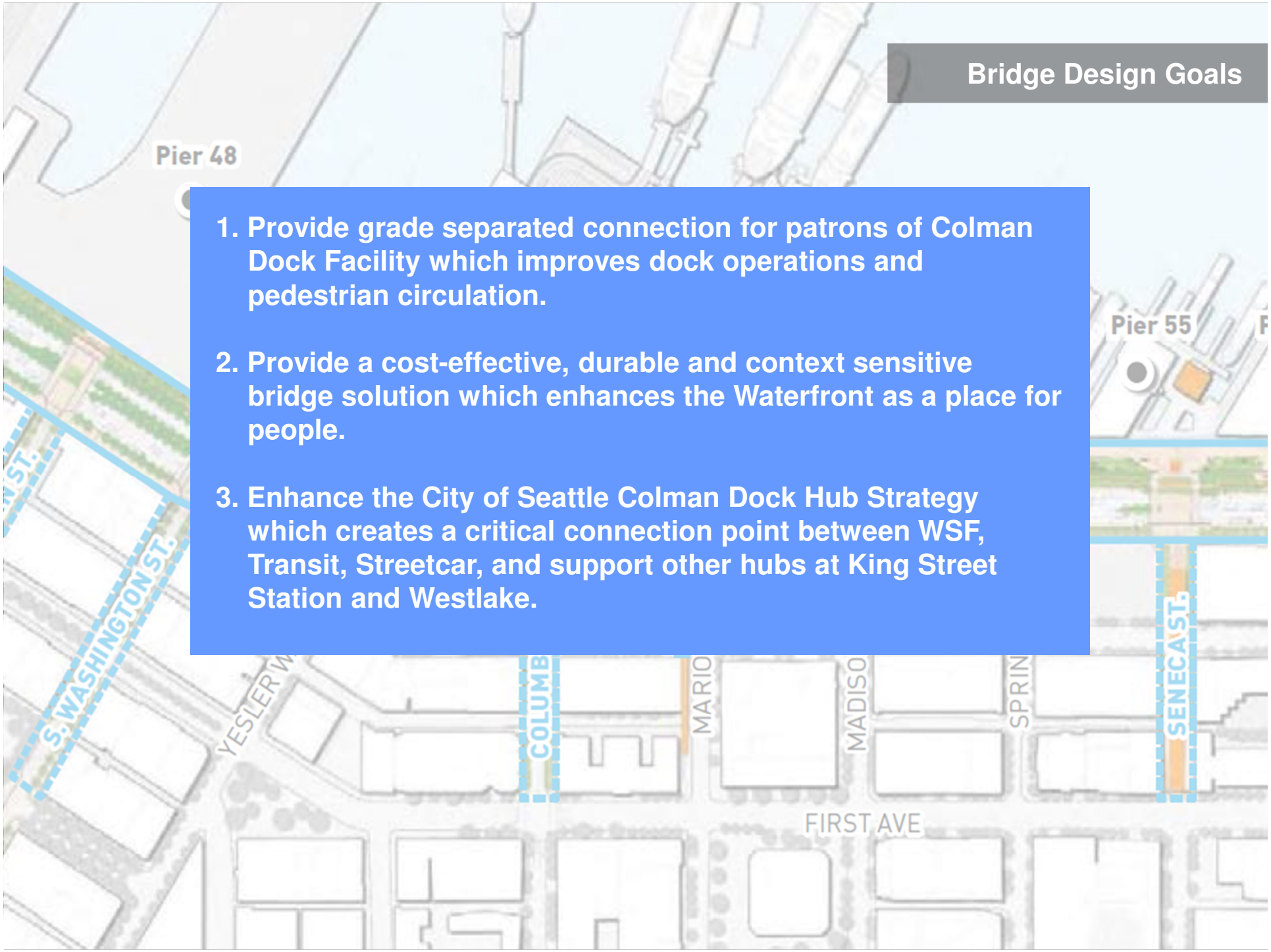


city of seattle

waterfront SEATTLE

WSDOT

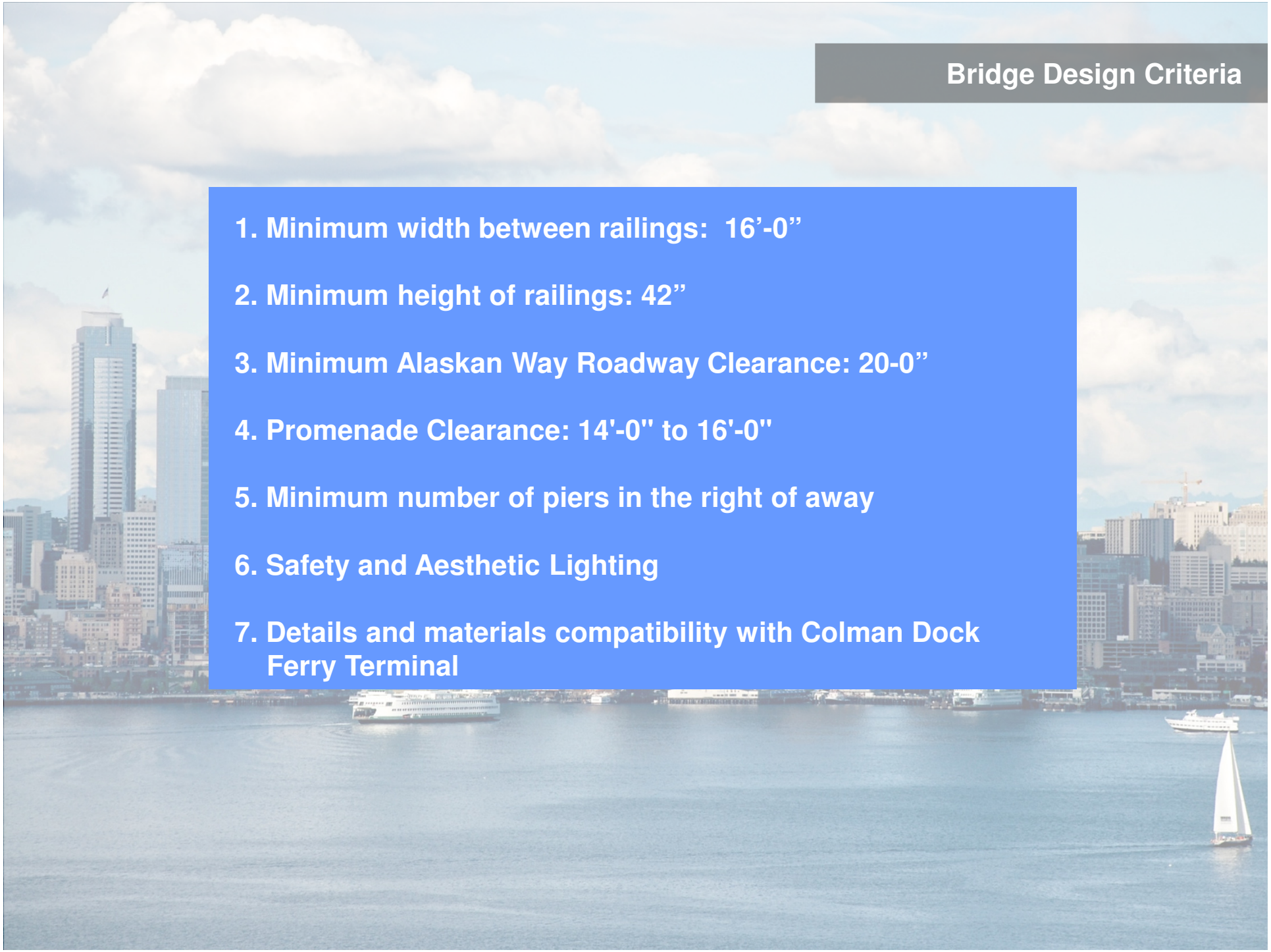
Bridge Design Goals



1. Provide grade separated connection for patrons of Colman Dock Facility which improves dock operations and pedestrian circulation.

2. Provide a cost-effective, durable and context sensitive bridge solution which enhances the Waterfront as a place for people.

3. Enhance the City of Seattle Colman Dock Hub Strategy which creates a critical connection point between WSF, Transit, Streetcar, and support other hubs at King Street Station and Westlake.



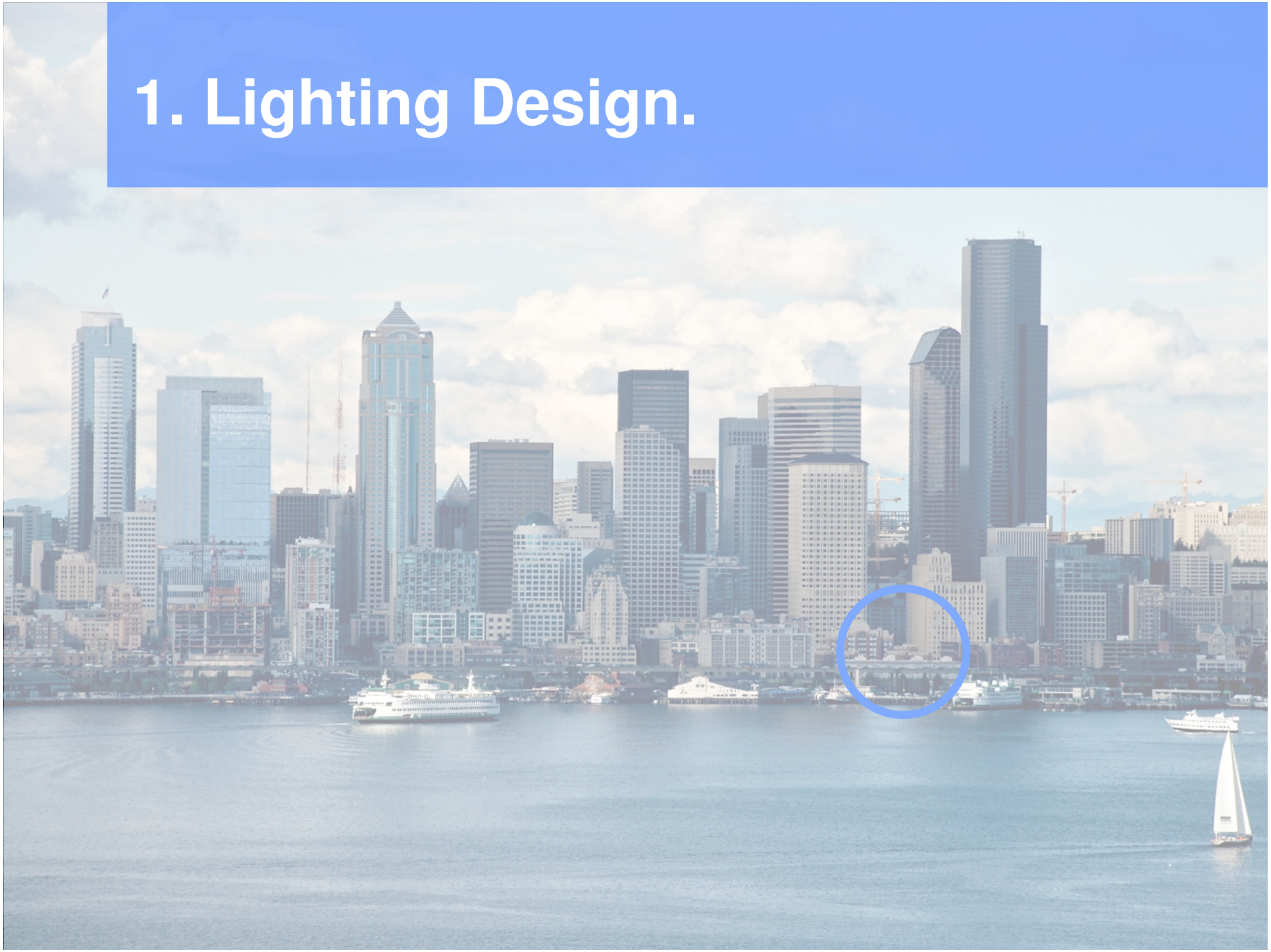
Bridge Design Criteria

1. Minimum width between railings: 16’-0”
2. Minimum height of railings: 42”
3. Minimum Alaskan Way Roadway Clearance: 20-0”
4. Promenade Clearance: 14'-0" to 16'-0"
5. Minimum number of piers in the right of away
6. Safety and Aesthetic Lighting
7. Details and materials compatibility with Colman Dock Ferry Terminal

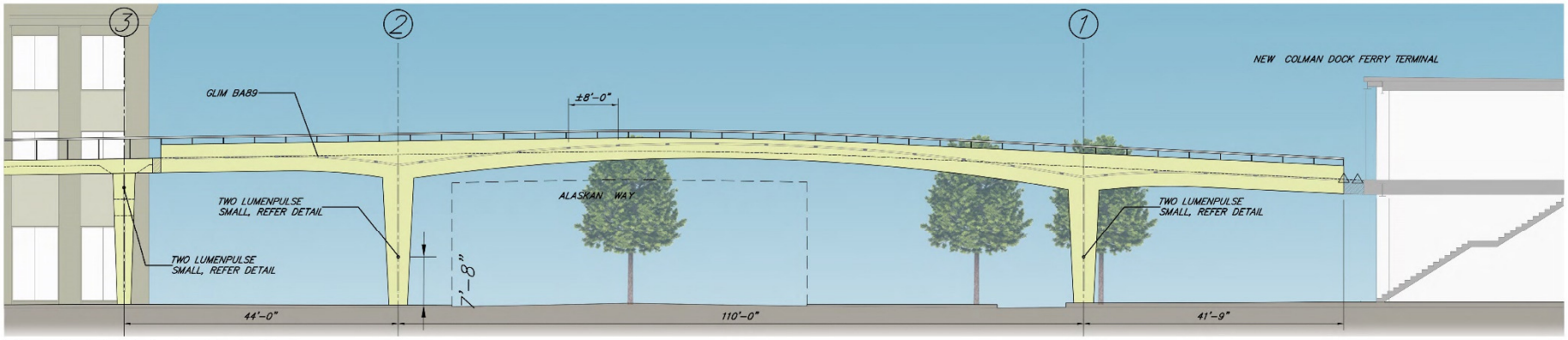
Agenda – Seattle Design Commission Comments

1. Lighting Design.
2. Vertical Circulation and Connectivity. Stair and Elevator Access Signage.
3. Promenade Level Column Placement. Overall Column Design and V Piers.
4. Interim Period Transition between Existing and New Bridge.
5. Sustainability Strategy.
6. Transition at Colman Dock Ferry Terminal.
7. Intersection at 1st Ave. and Marion St.
8. Funding Sources for Entire Bridge.
9. Pedestrian Scale Artwork for Potential Future Phase.
10. Next steps – 60% and 90% final plans.

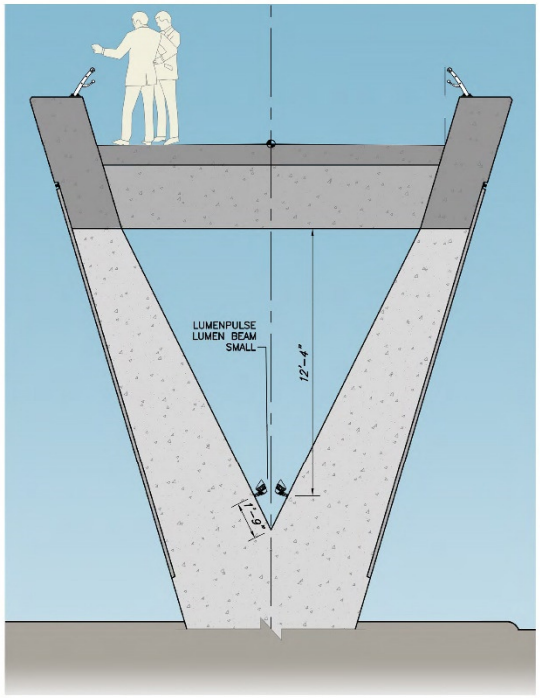
1. Lighting Design.



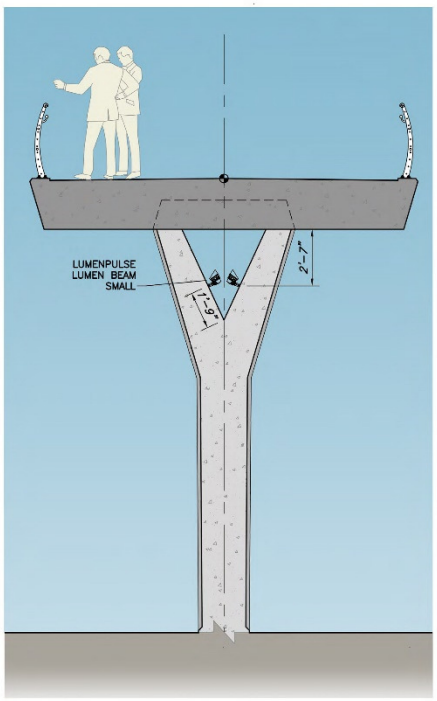
Lighting Design – Initial Design



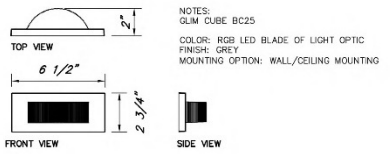
Elevation Lighting - Main Span
SCALE: 1 / 8" = 1'



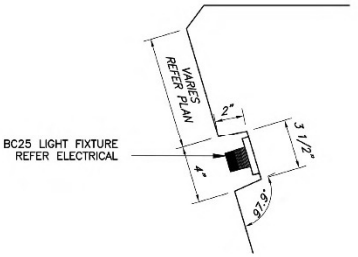
Pier Lighting (Typical of two)
SCALE: 3 / 8" = 1'



Ramp Pier Lighting (Typical of five)
SCALE: 3 / 8" = 1'



Reveal Light Fixture
SCALE: 3" = 1'



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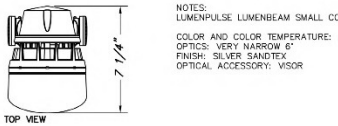

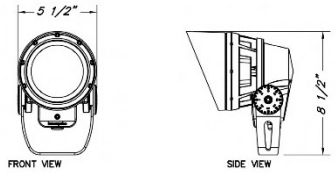

Pier Light Fixture
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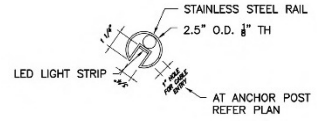
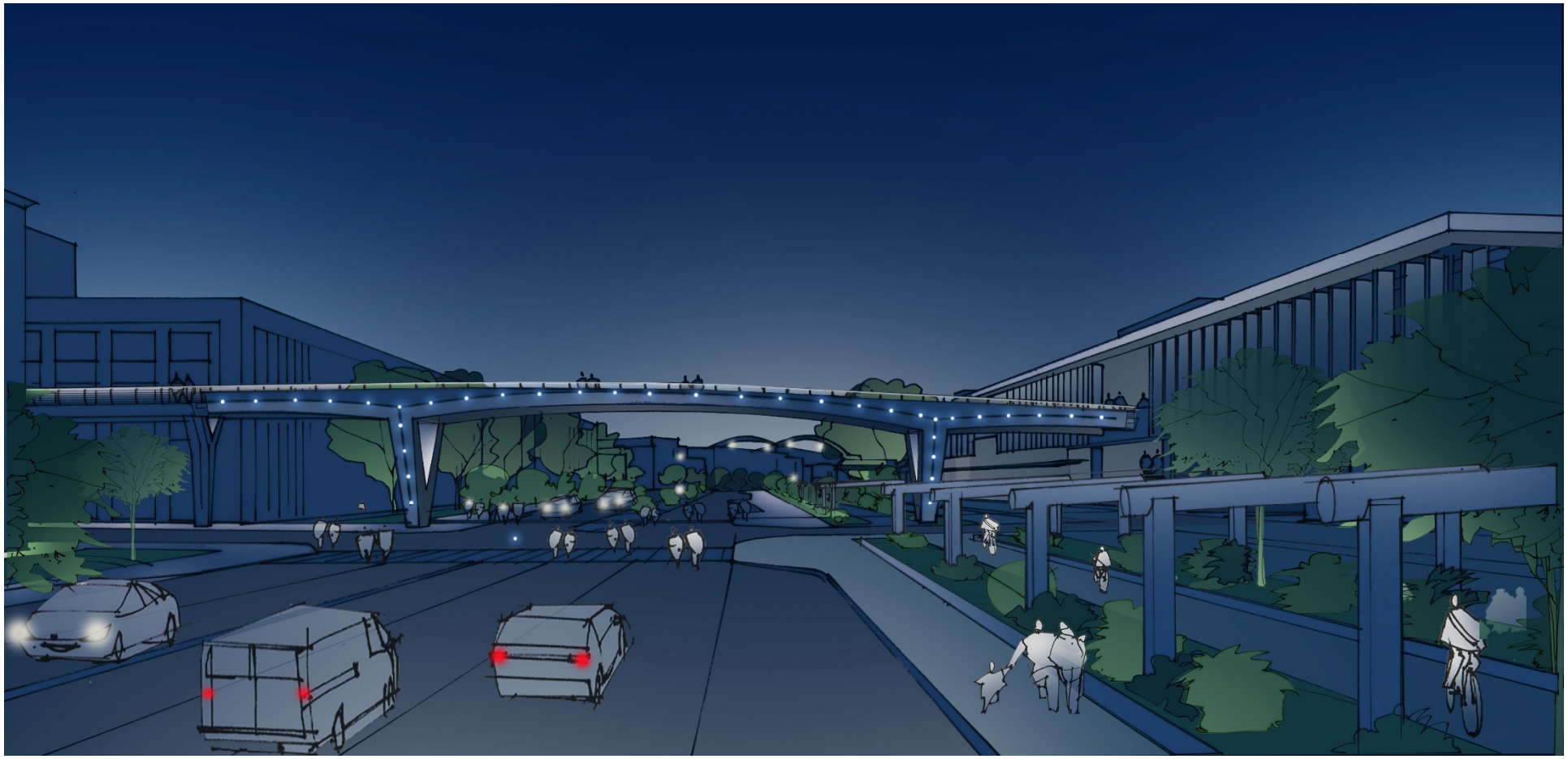
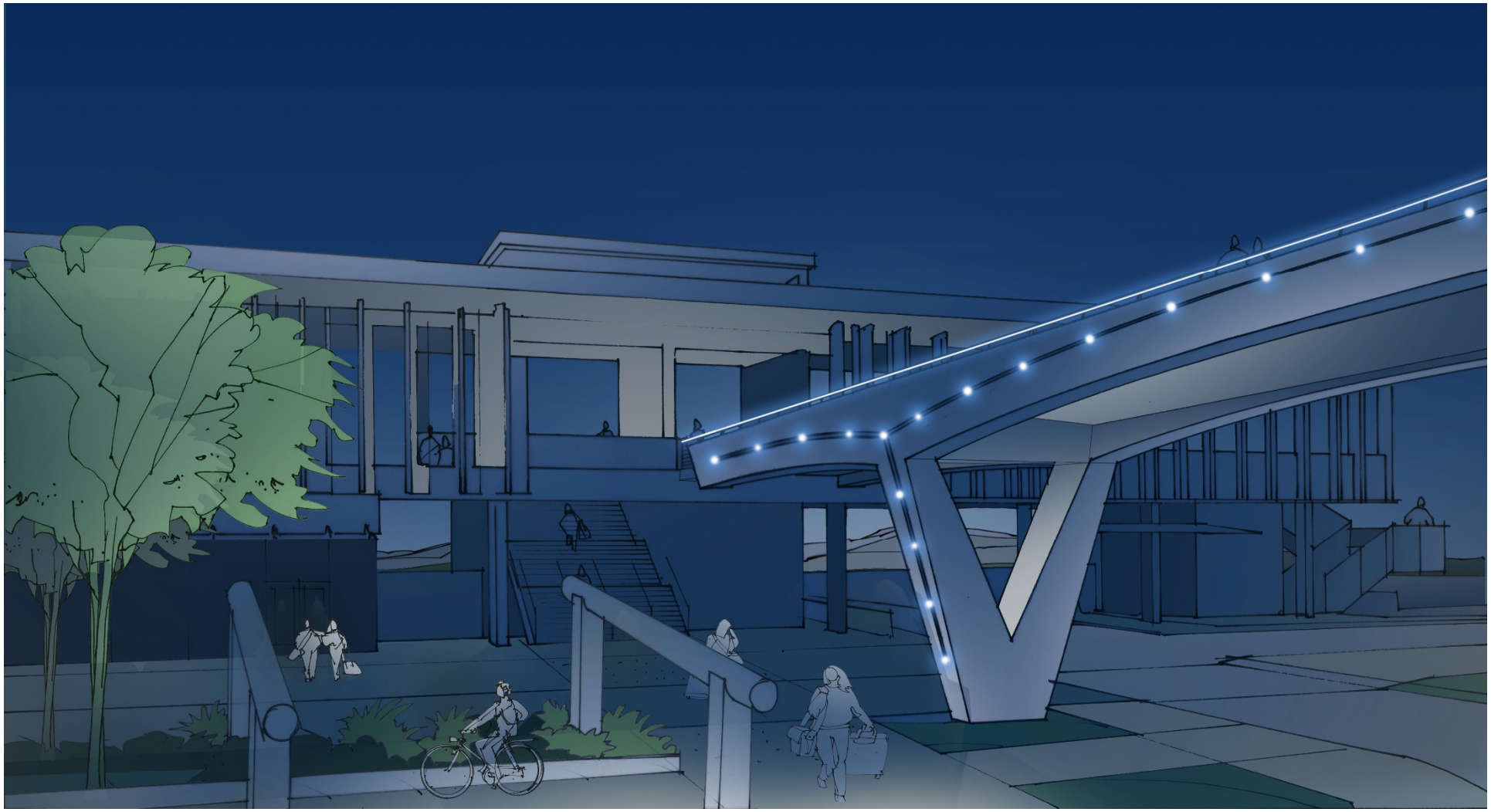


Stainless Steel Rail / Led Light Strip
SCALE: 3" = 1'

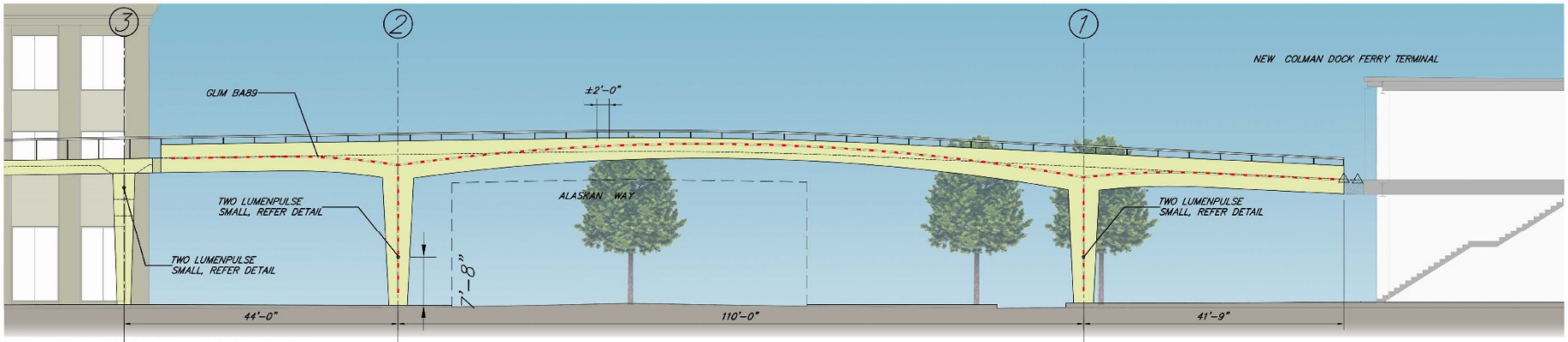
Lighting Design – Initial Design



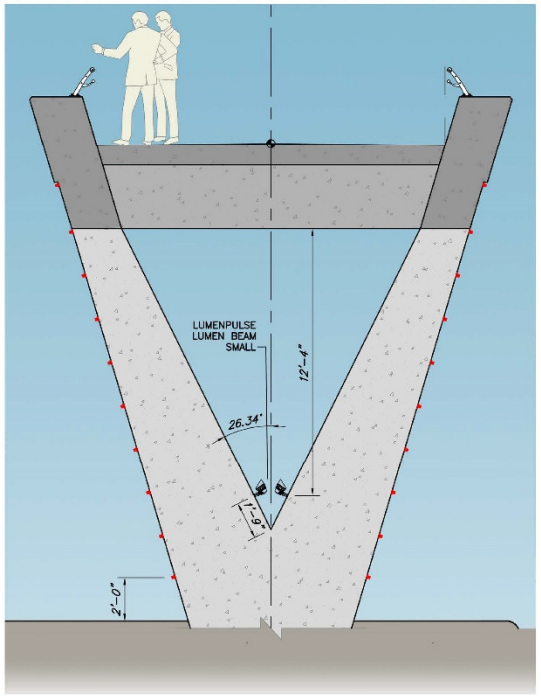
Lighting Design – Initial Design



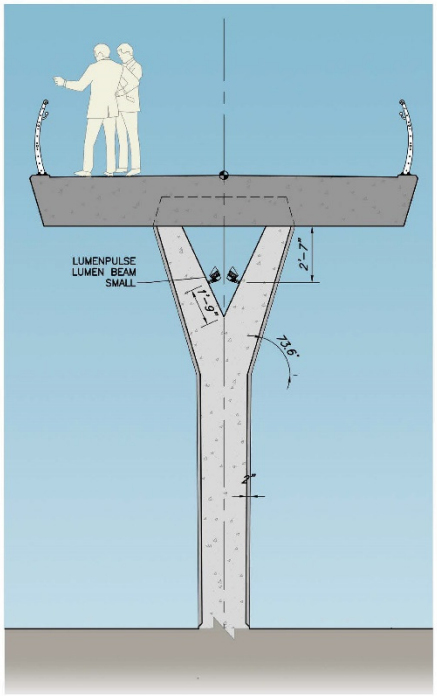
Lighting Design – option A



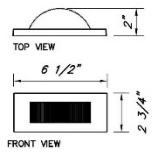
Elevation Lighting - Main Span
SCALE: 1 / 8" = 1'



Pier Lighting (Typical of two)
SCALE: 3 / 8" = 1'



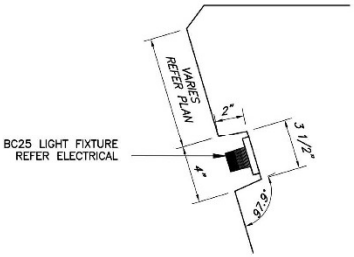
Ramp Pier Lighting (Typical of five)
SCALE: 3 / 8" = 1'



NOTES:
GLIM CUBE BC25

COLOR: RGB LED BLADE OF LIGHT OPTIC
FINISH: GREY
MOUNTING OPTION: WALL/CEILING MOUNTING

Reveal Light Fixture
SCALE: 3" = 1'



Reveal Lighting
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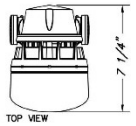
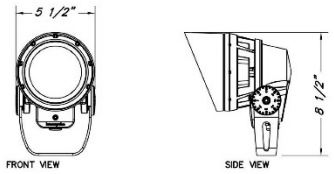
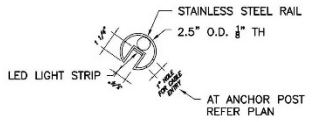


NOTES:
LUMENPULSE LUMENBEAM SMALL COLOR CHANGING

COLOR AND COLOR TEMPERATURE: ADDITIVE RGB
OPTICS: VERY NARROW 6°
FINISH: SILVER SANDTEX
OPTICAL ACCESSORY: VISOR

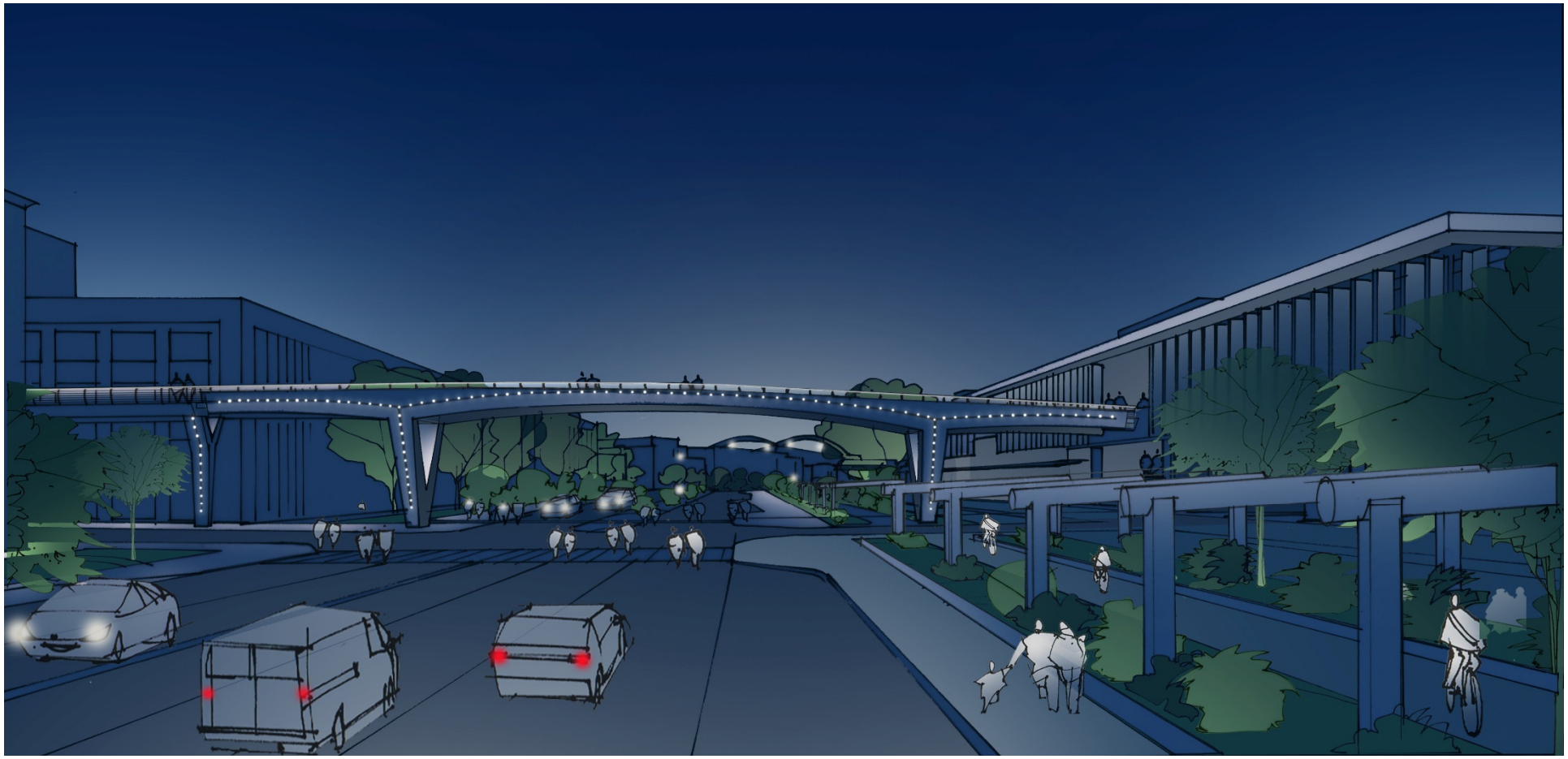


Pier Light Fixture
SCALE: 3" = 1'

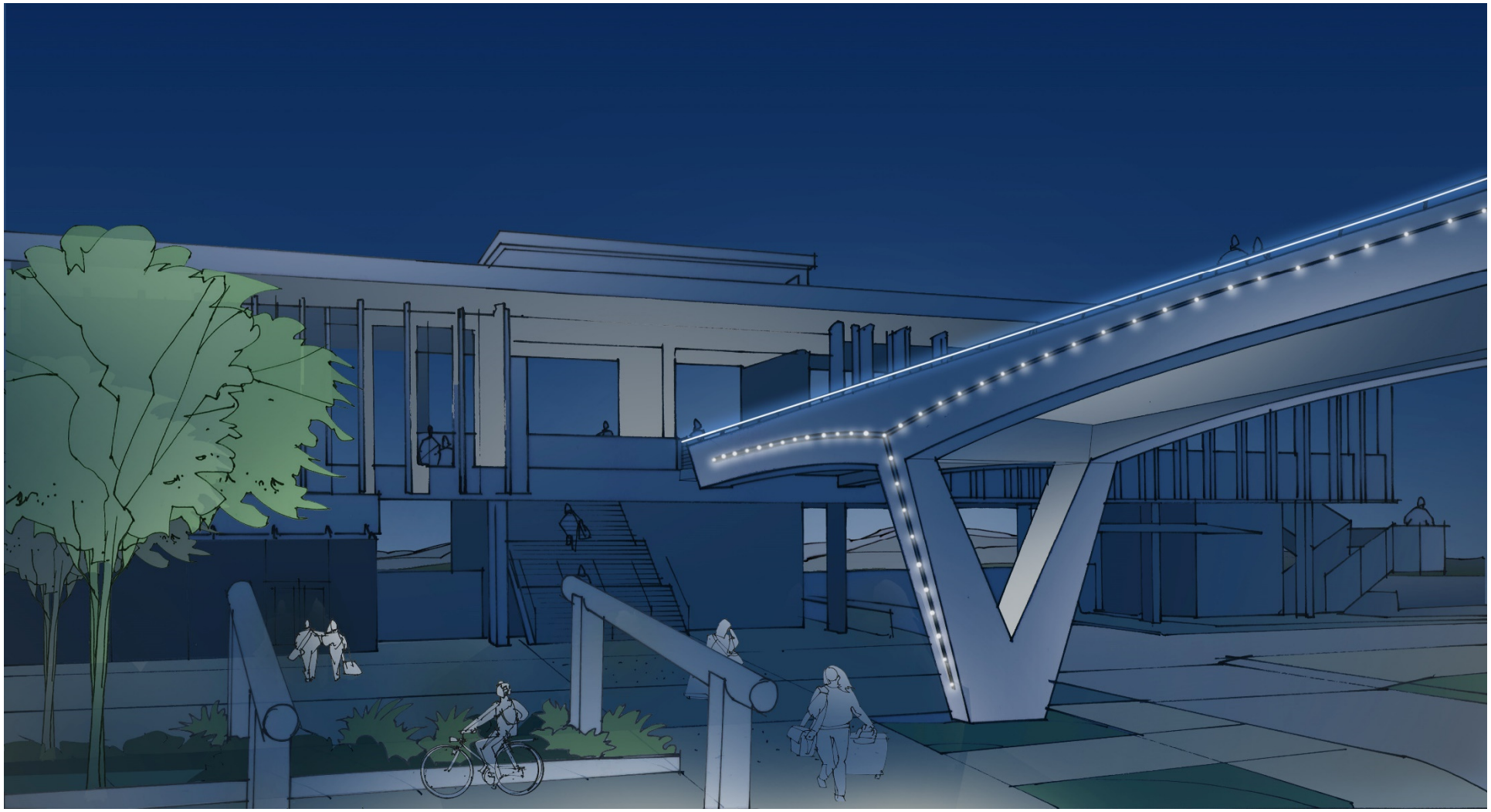


Stainless Steel Rail / Led Light Strip
SCALE: 3" = 1'

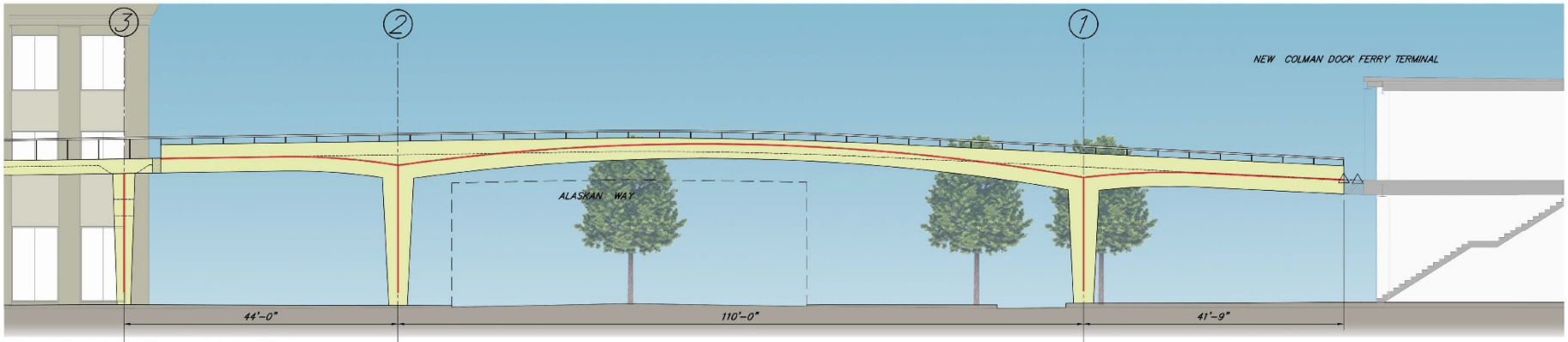
Lighting Design – option A



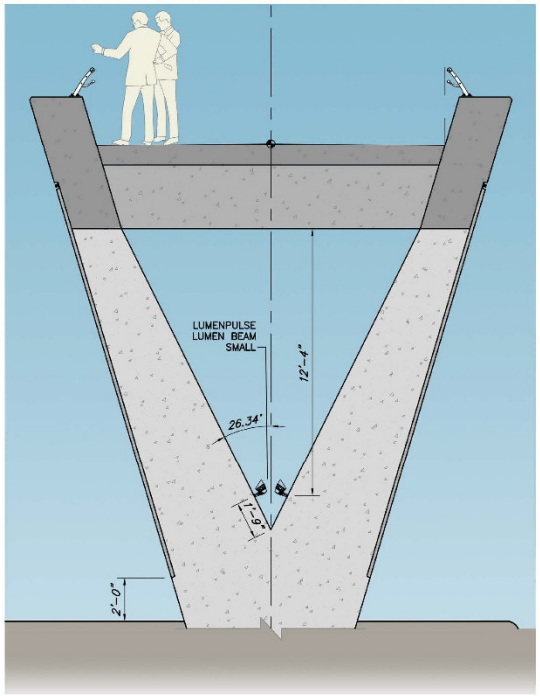
Lighting Design – option A



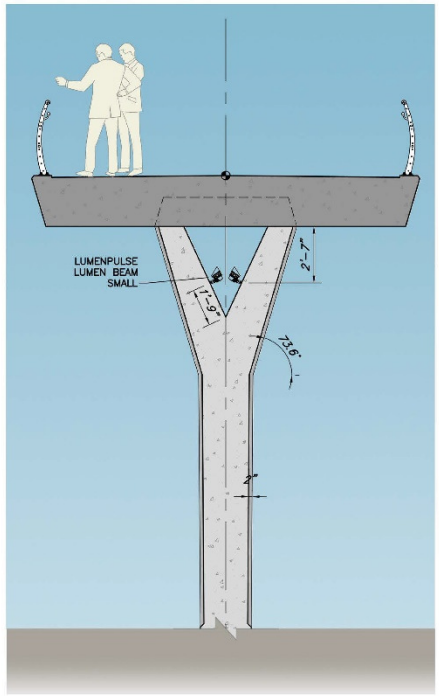
Lighting Design – option B



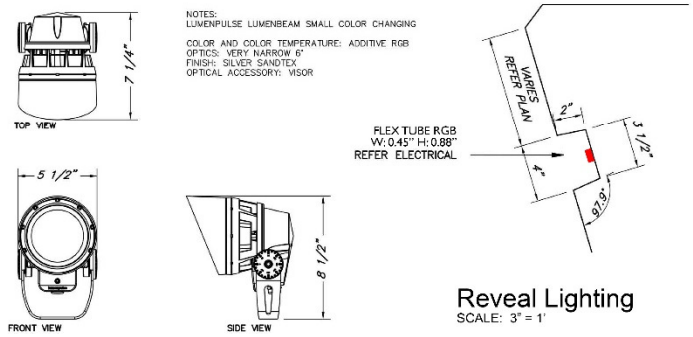
Elevation Lighting - Main Span
SCALE: 1 / 8" = 1'



Pier Lighting (Typical of two)
SCALE: 3 / 8" = 1'

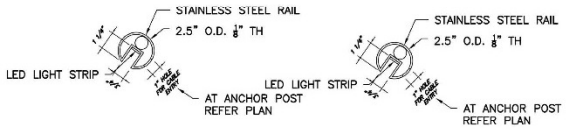


Ramp Pier Lighting (Typical of five)
SCALE: 3 / 8" = 1'



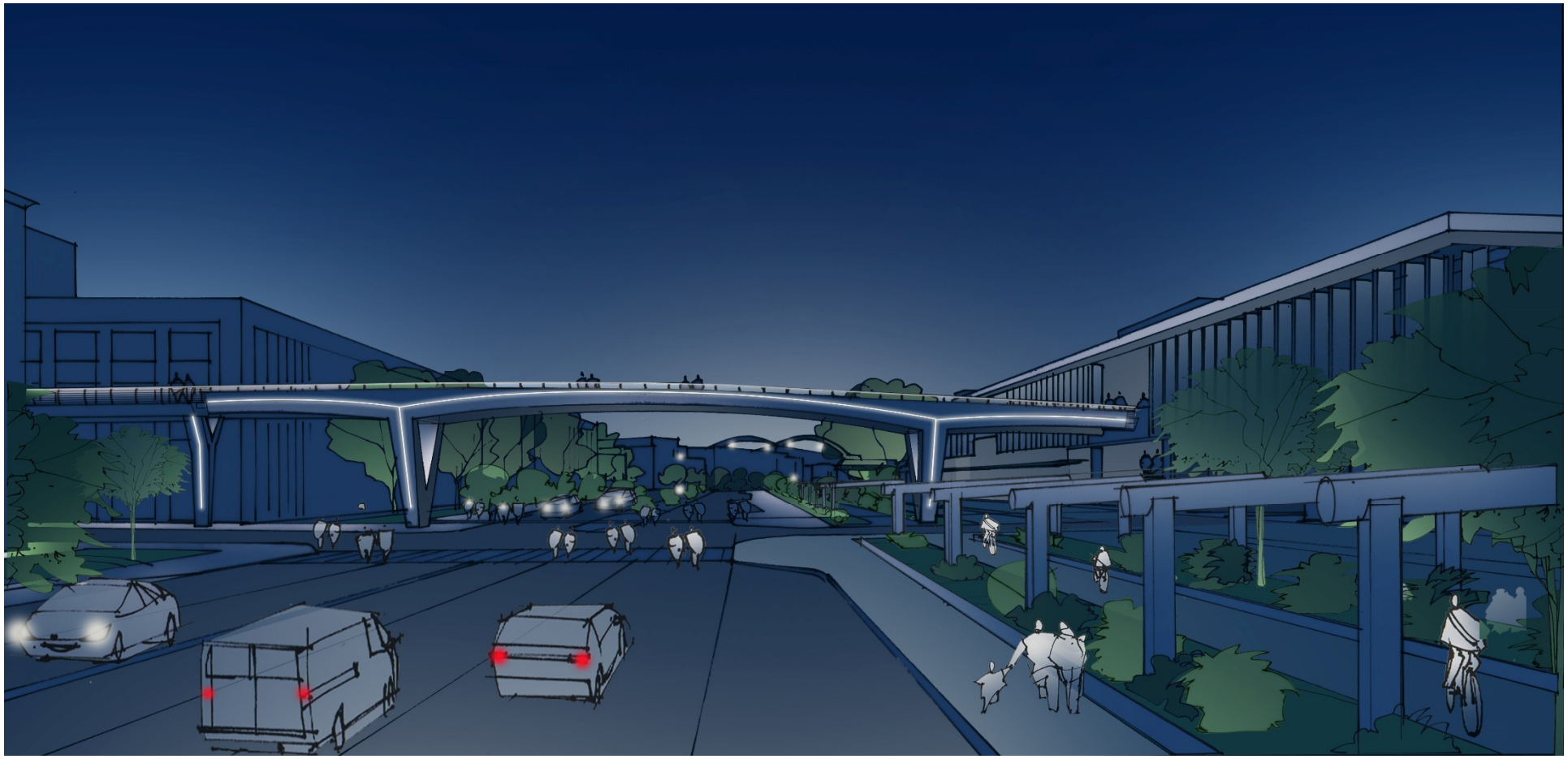
Pier Light Fixture
SCALE: 3" = 1'

Reveal Lighting
SCALE: 3" = 1'

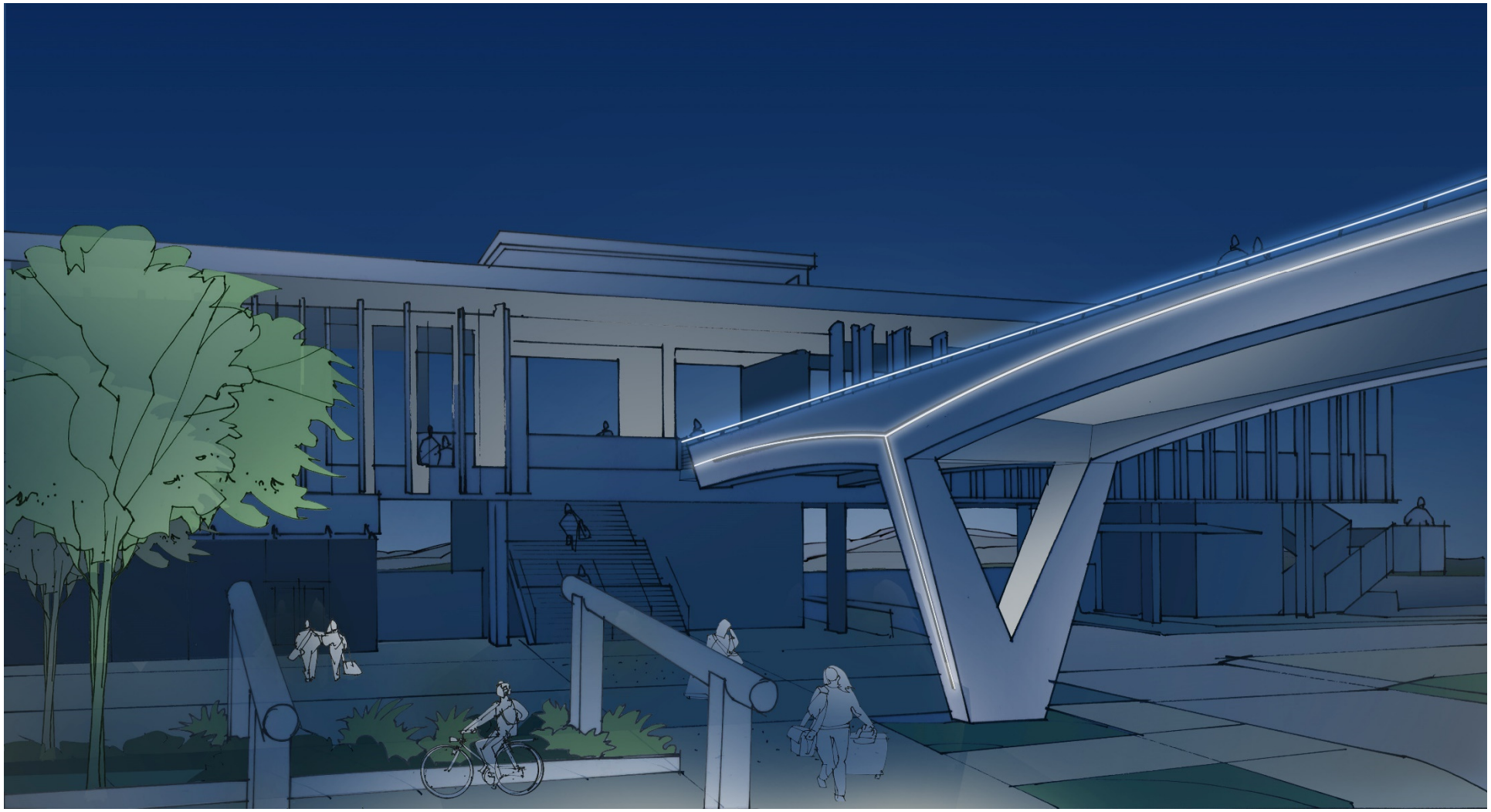


Stainless Steel Rail / Led Light Strip
SCALE: 3" = 1'

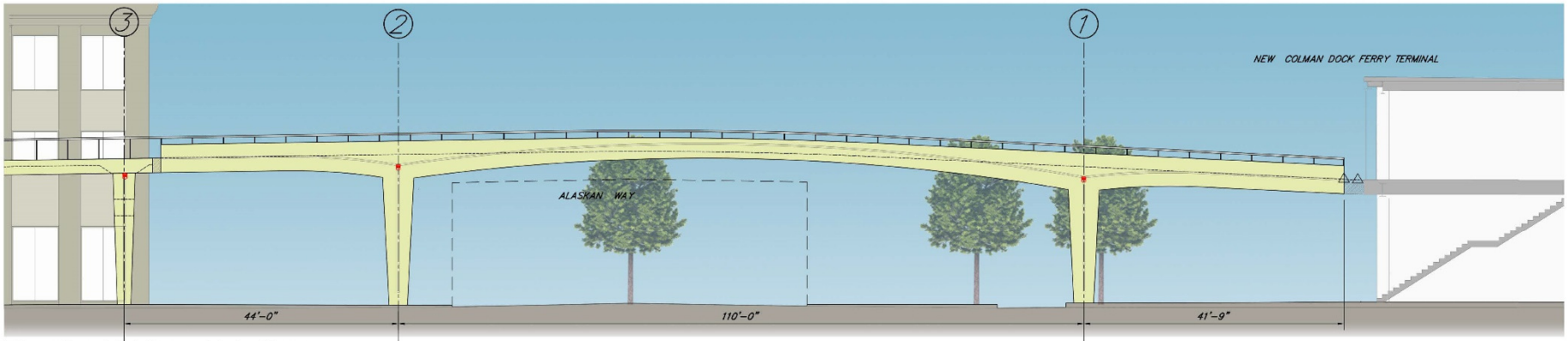
Lighting Design – option B



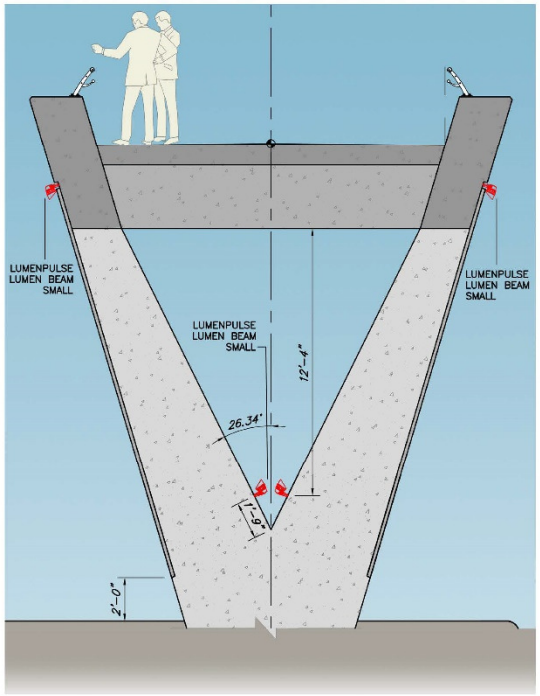
Lighting Design – option B



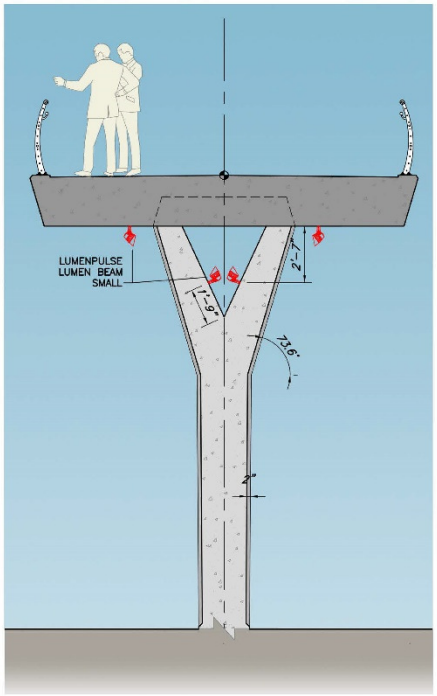
Lighting Design – option C



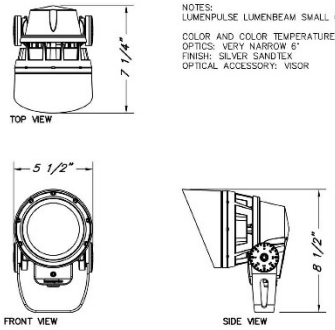
Elevation Lighting - Main Span
SCALE: 1 / 8" = 1'



Pier Lighting (Typical of two)
SCALE: 3 / 8" = 1'

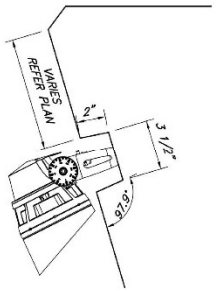


Ramp Pier Lighting (Typical of five)
SCALE: 3 / 8" = 1'

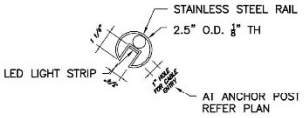


NOTES:
LUMENPULSE LUMENBEAM SMALL COLOR CHANGING
COLOR AND COLOR TEMPERATURE: ADDITIVE RGB
OPTICS: VERY NARROW 6°
FINISH: SILVER SANDTEX
OPTICAL ACCESSORY: VISOR

Pier Light Fixture
SCALE: 3" = 1'

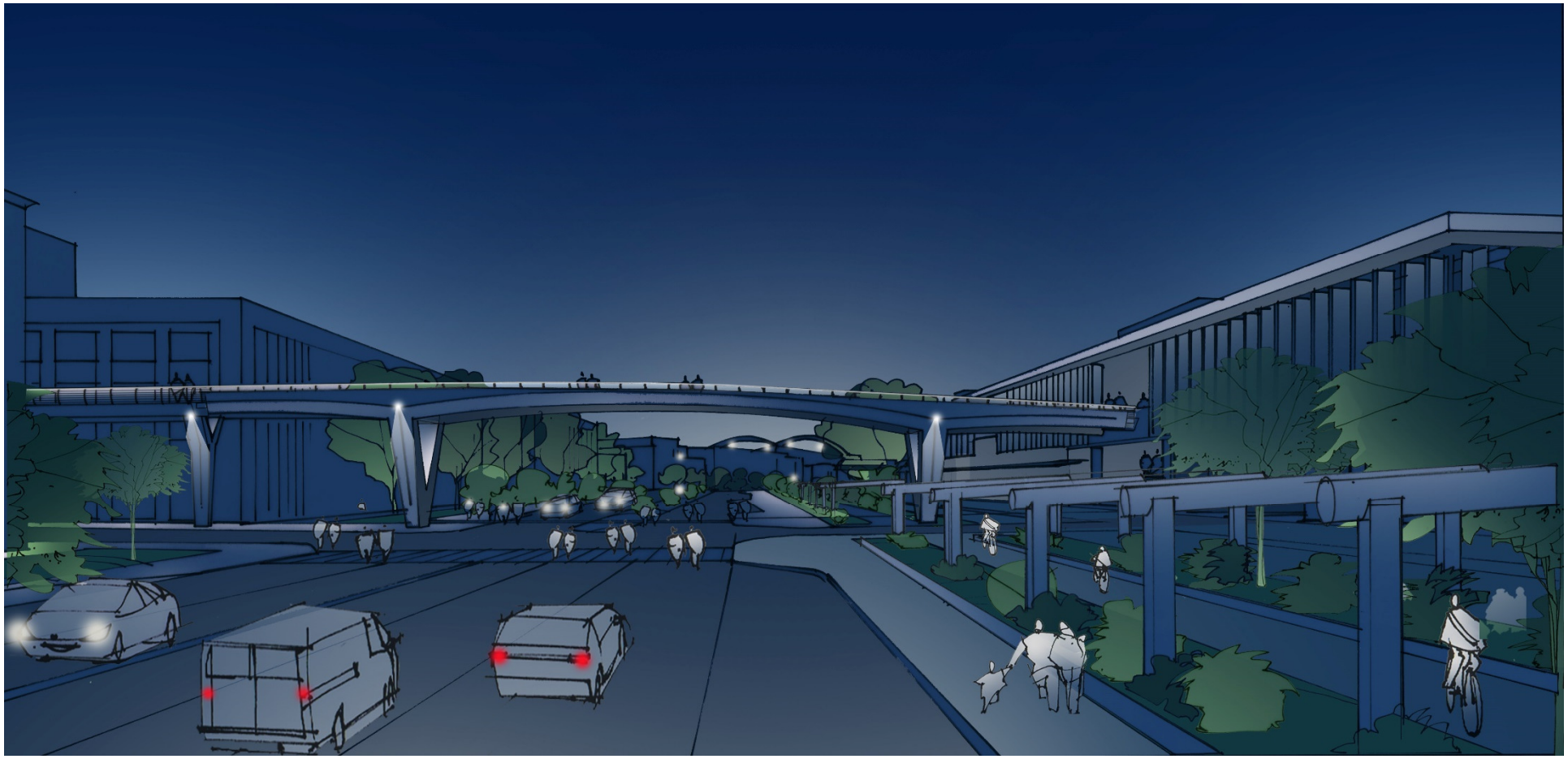


Reveal Lighting
SCALE: 3" = 1'

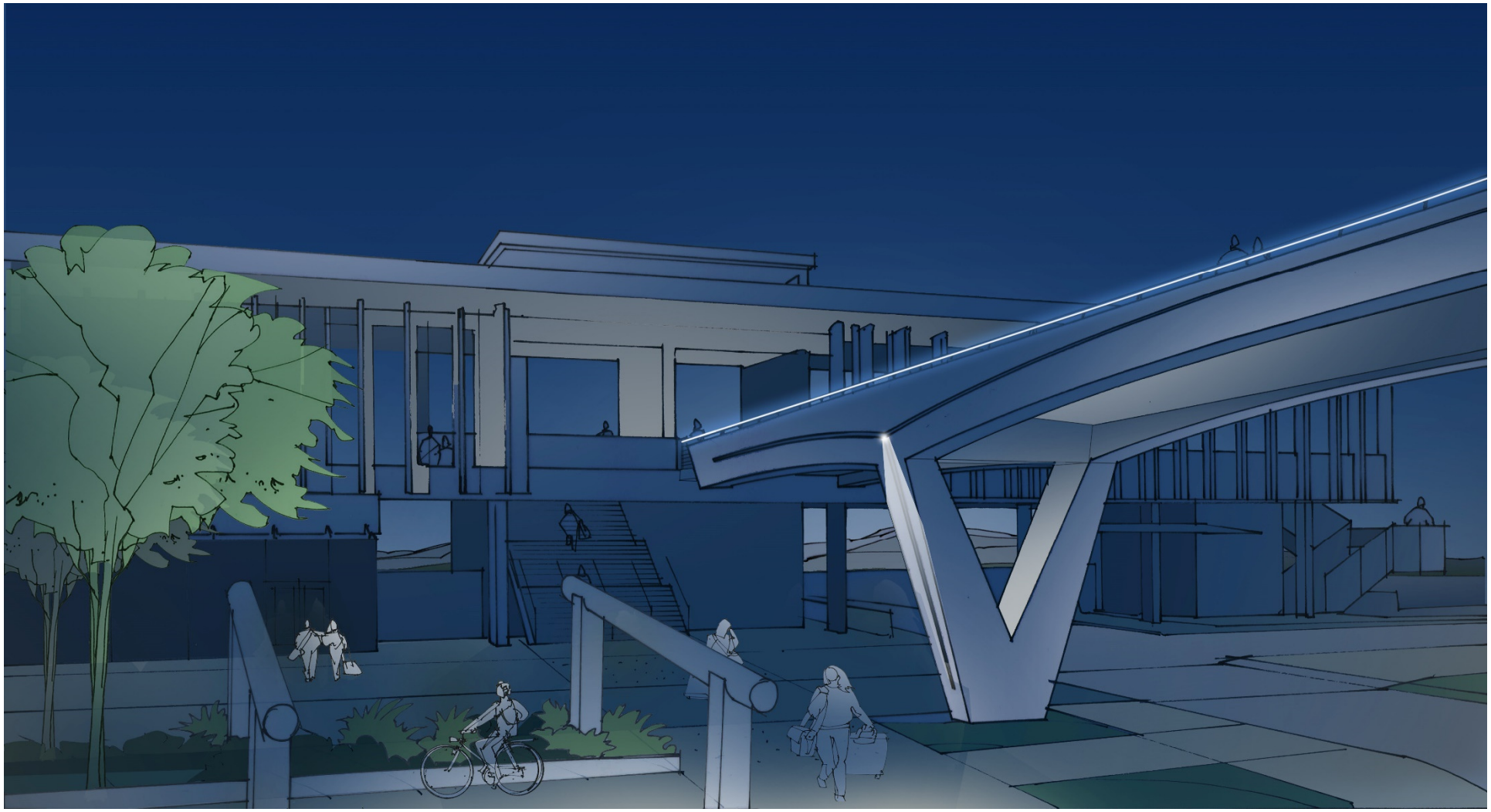


Stainless Steel Rail / Led Light Strip
SCALE: 3" = 1'

Lighting Design – option C

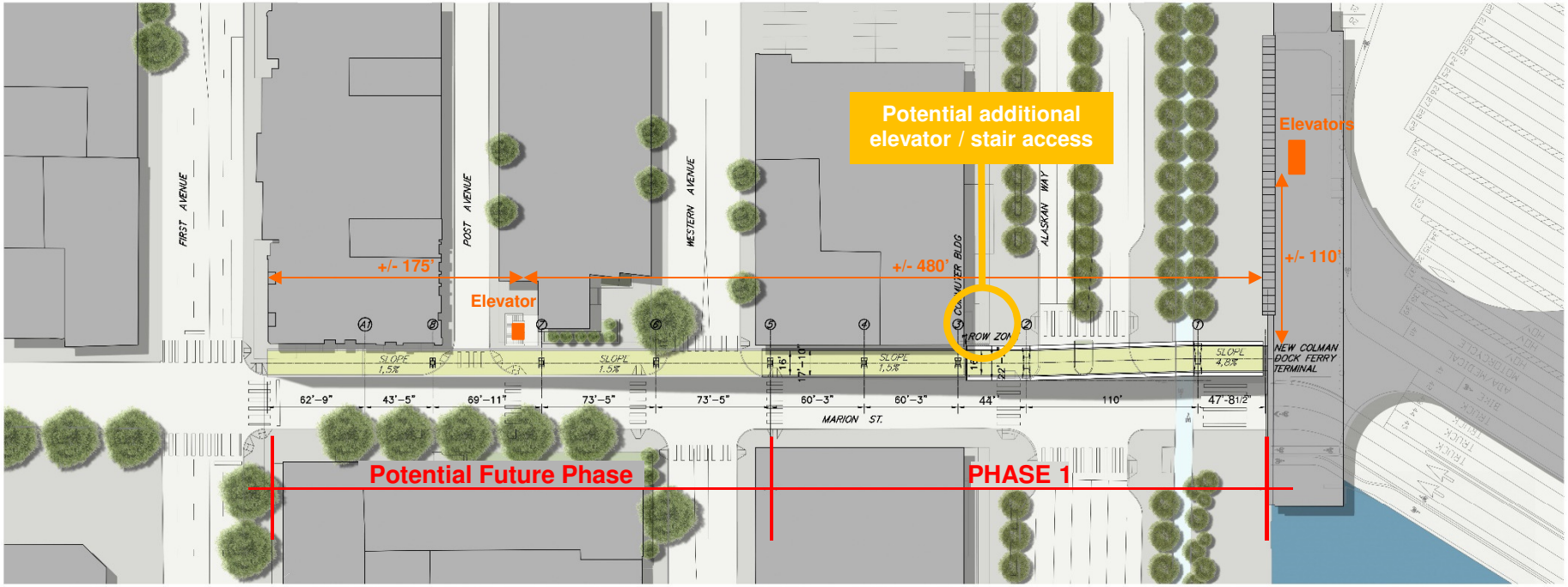


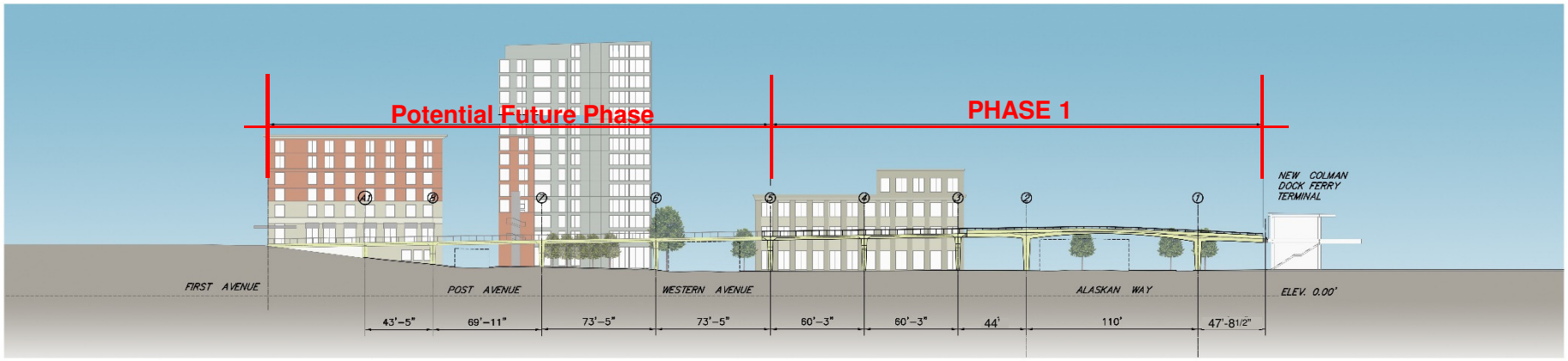
Lighting Design – option C



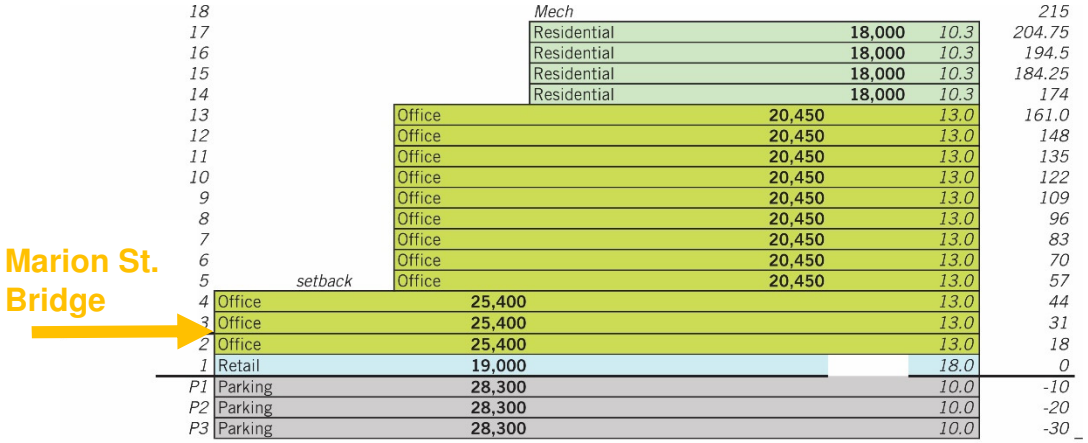
2. Vertical Circulation.

Vertical Circulation and Connectivity.
Stair and Elevator Access Signage.

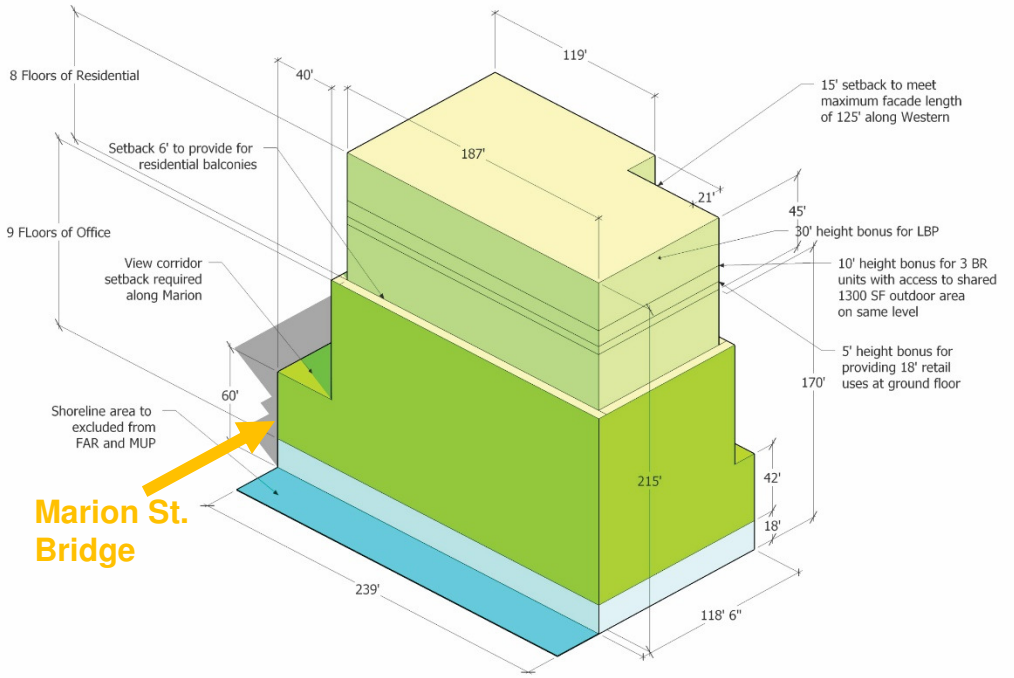




Vertical Circulation and Connectivity. Stair and Elevator Access Signage.

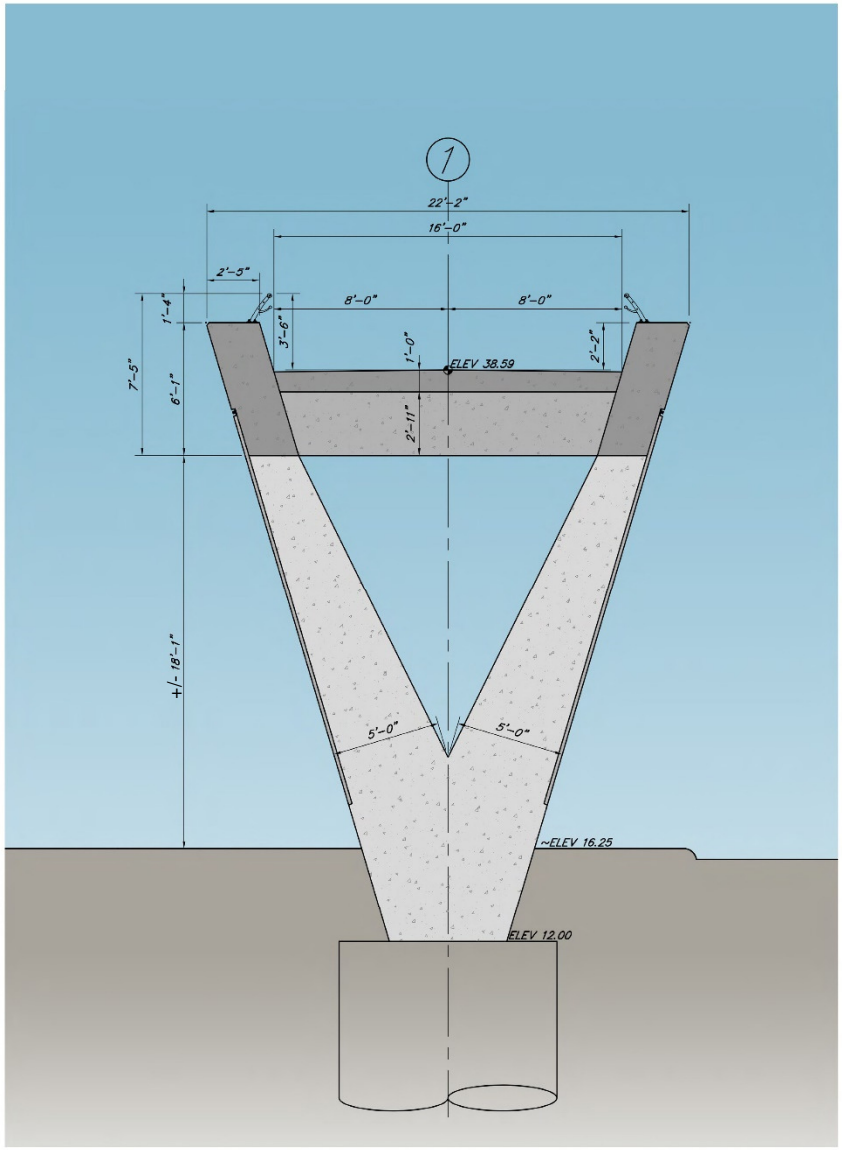


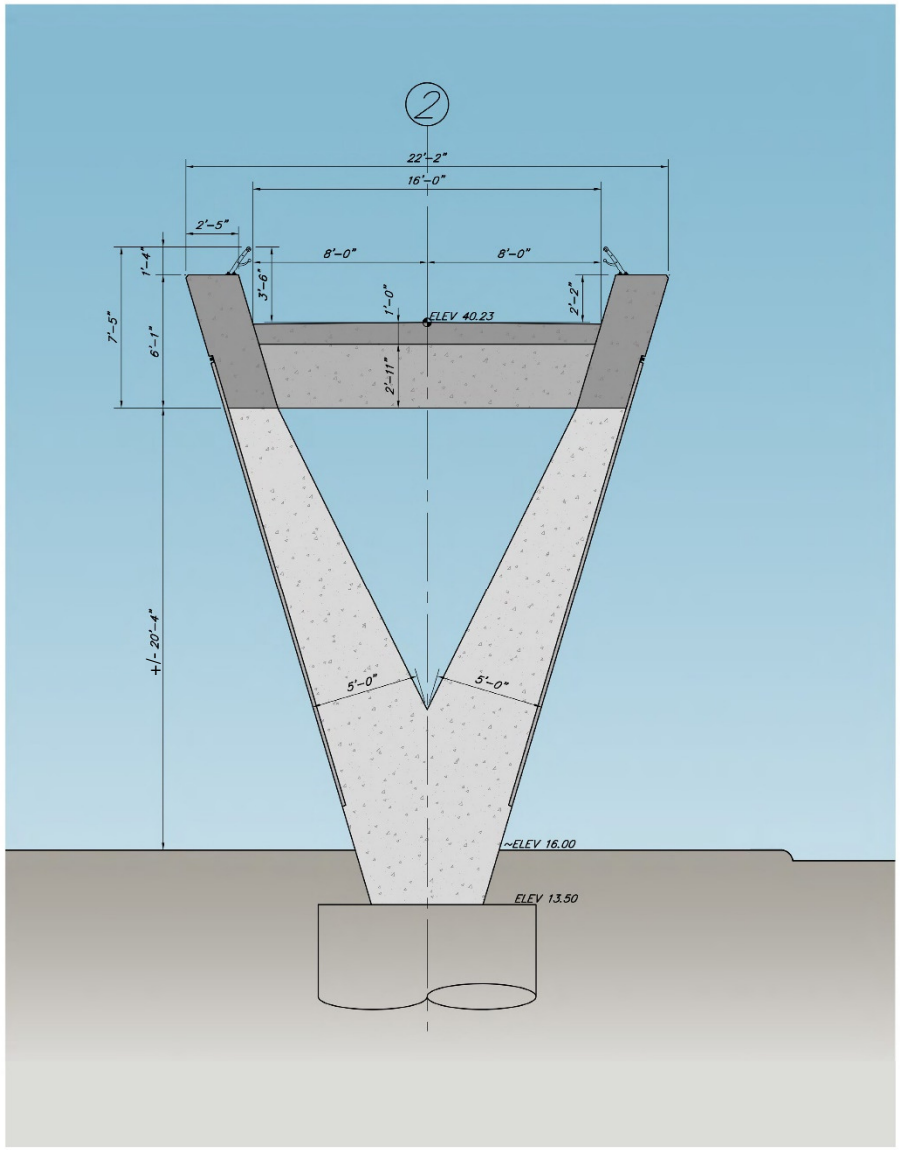
Potential Development



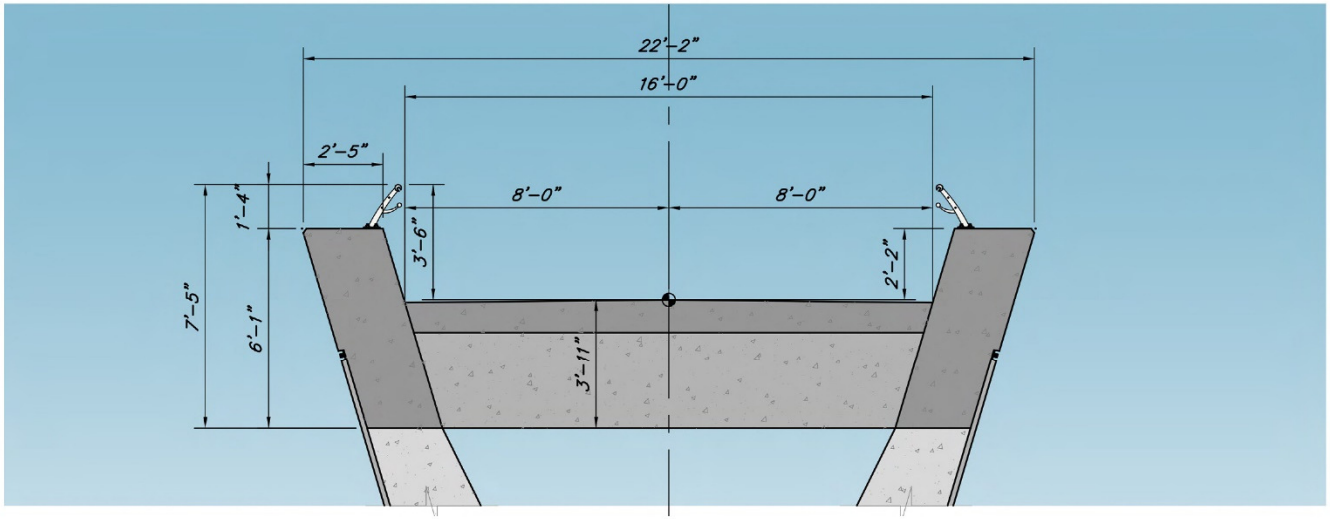
3. Approach Piers.

Architectural / Structural Piers - Main Span

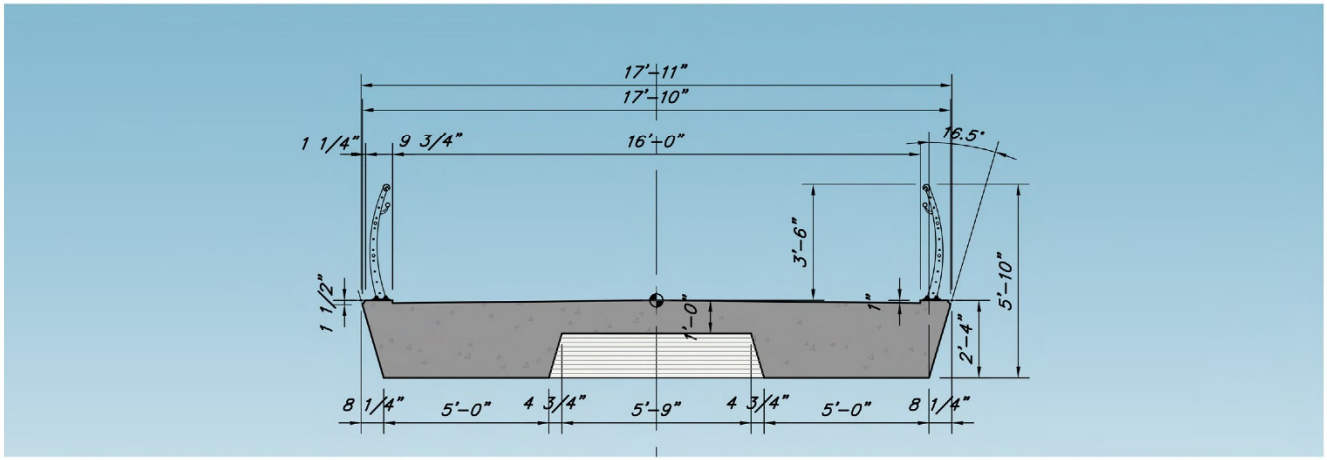




Architectural Sections - Main Span and Approach

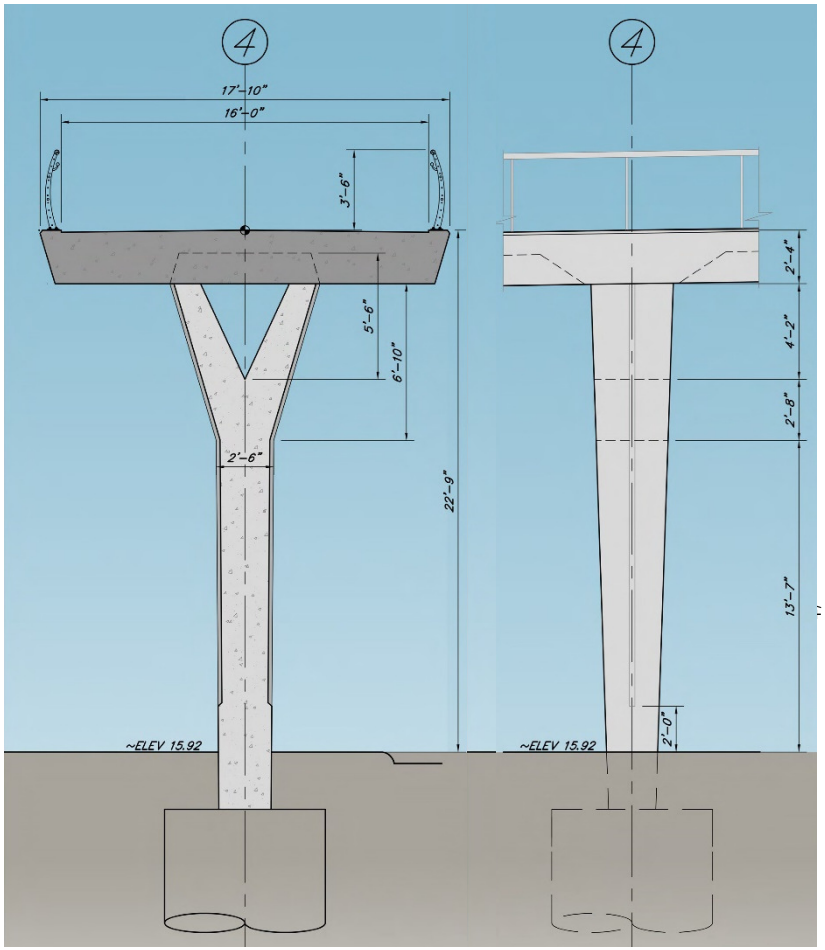


Main Span Section

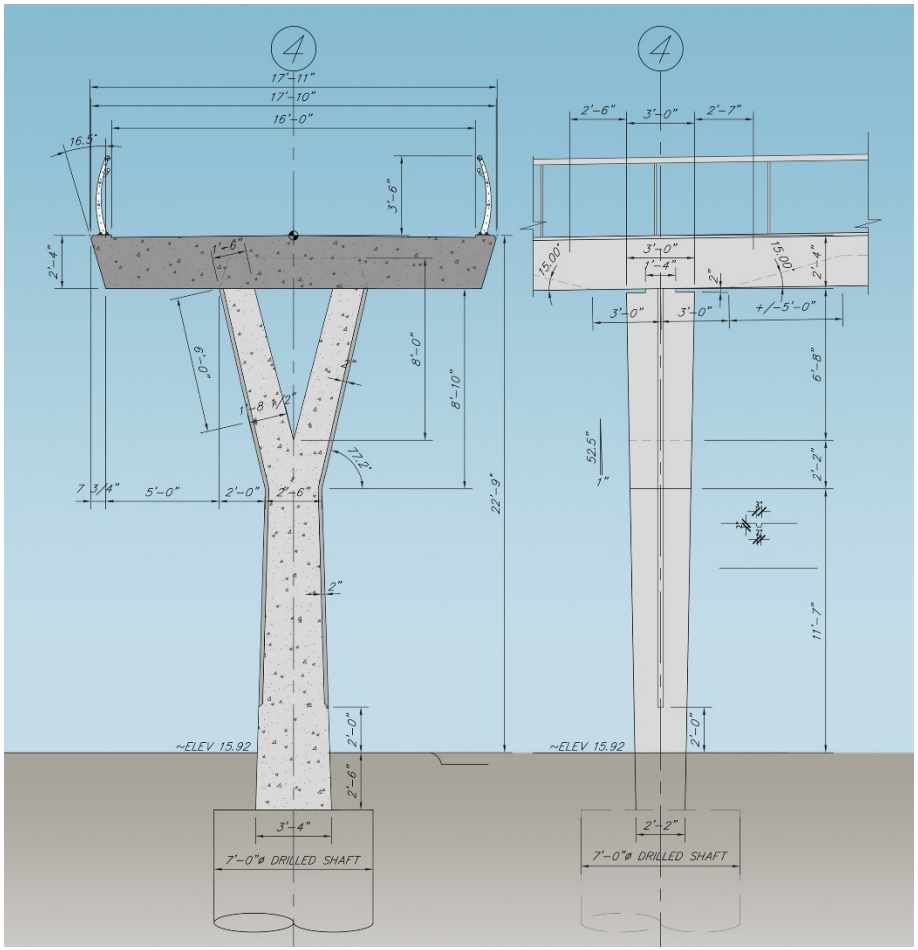


Approach Span Section

Architectural / Structural Piers – Approach Span

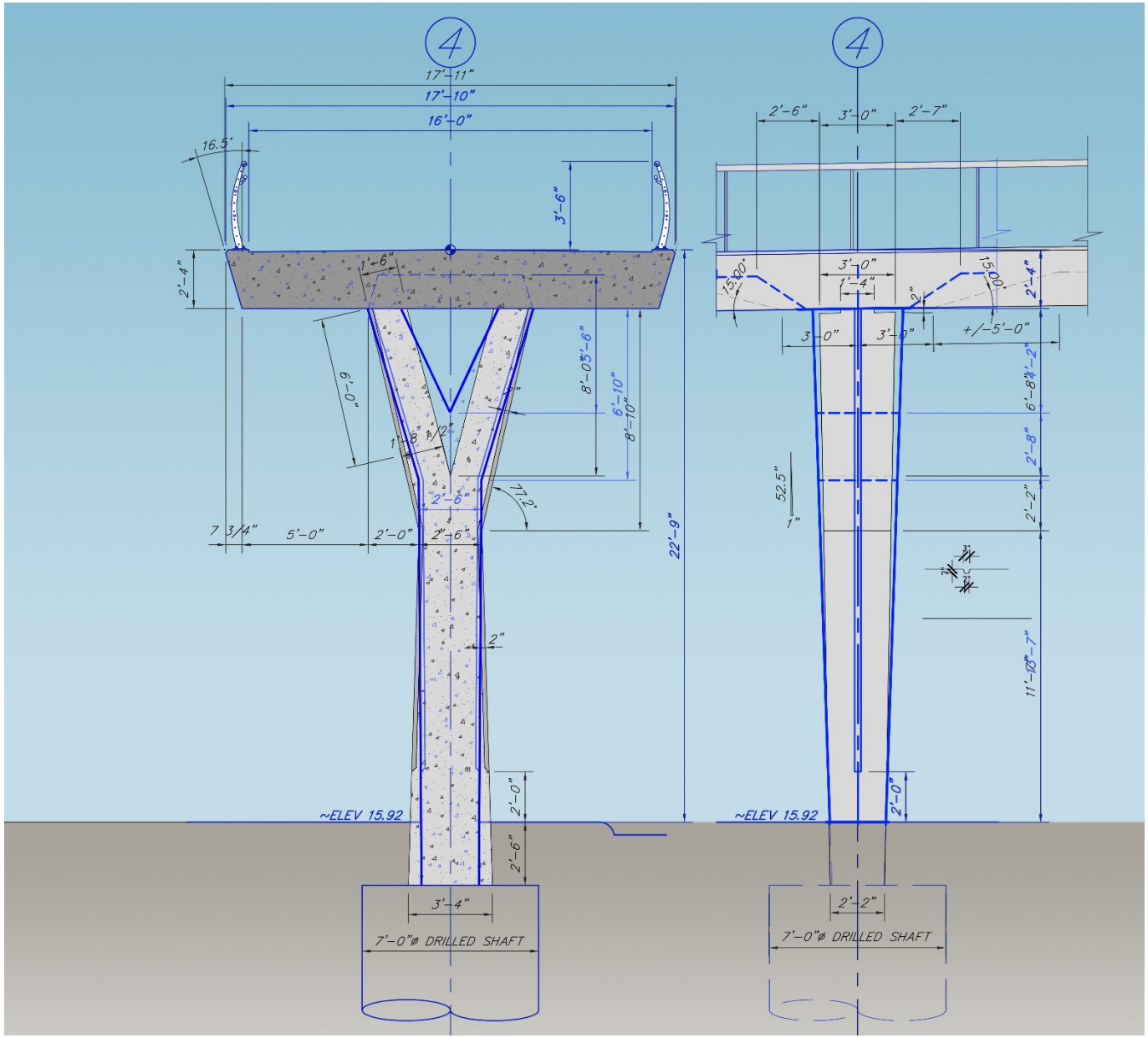


Before

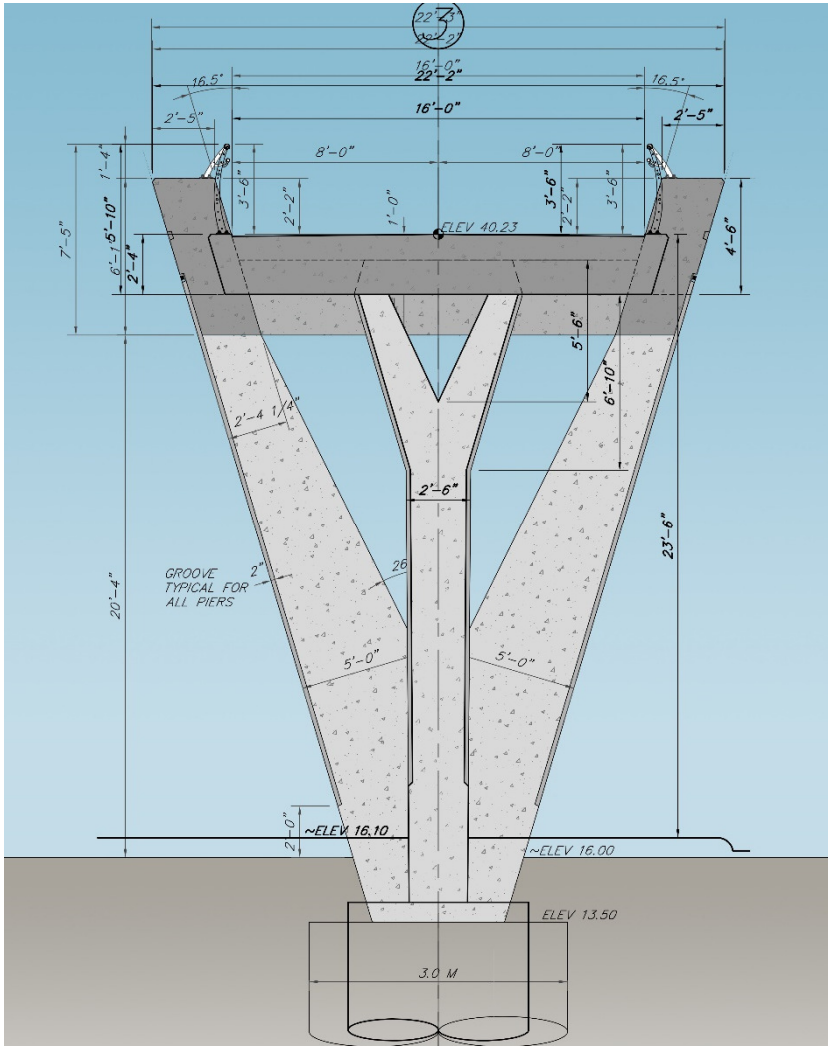


After

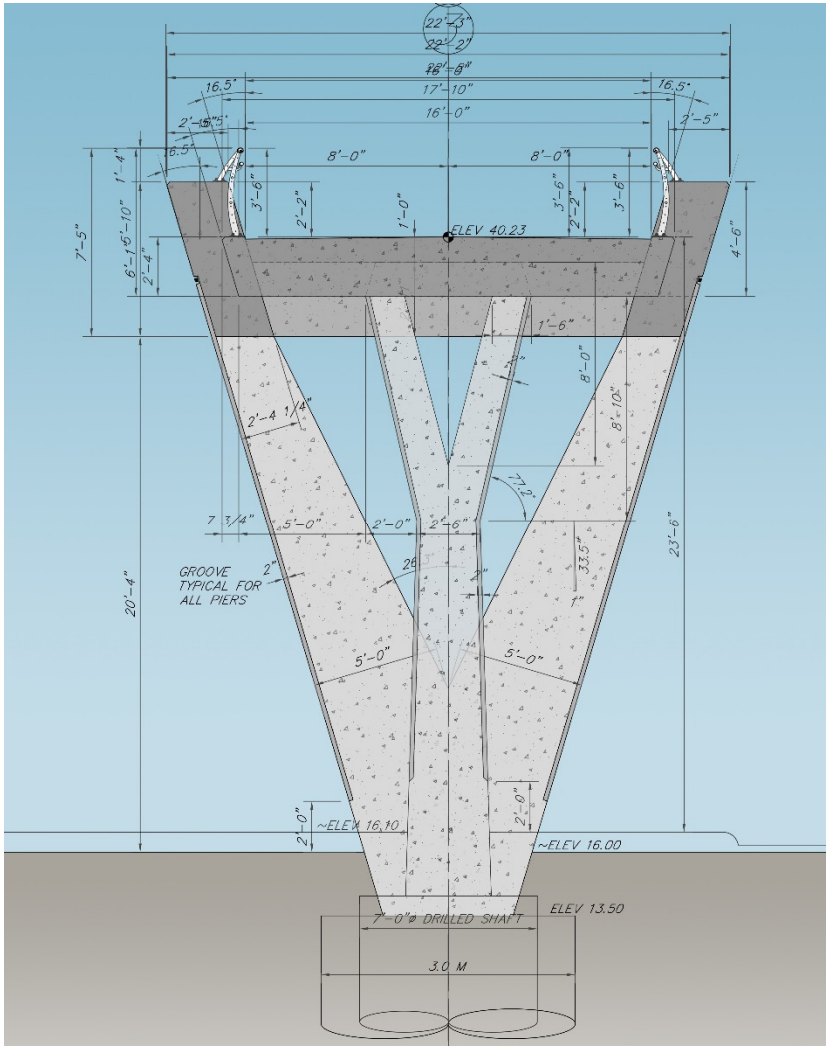
New and Previous “Y” Piers Concept Overlay



Promenade Level Column Placement. Overall Column Design and V Piers.

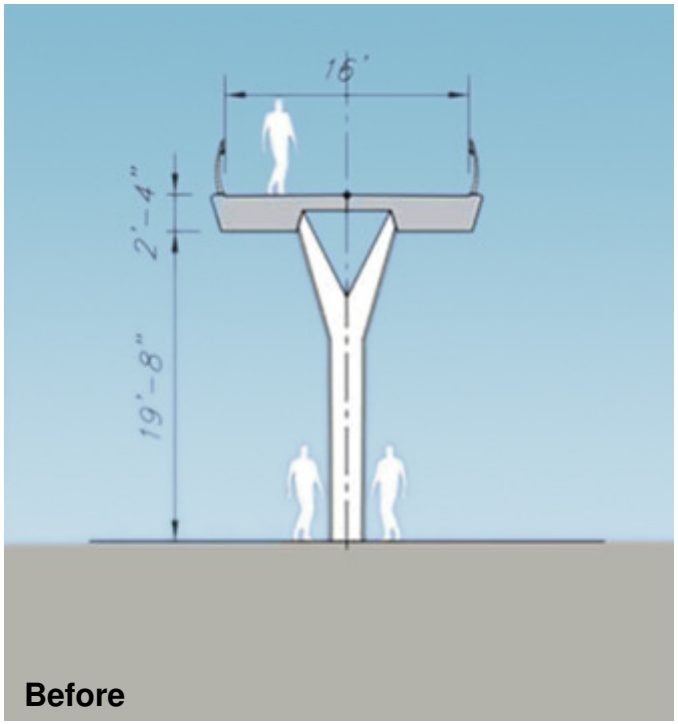


Before

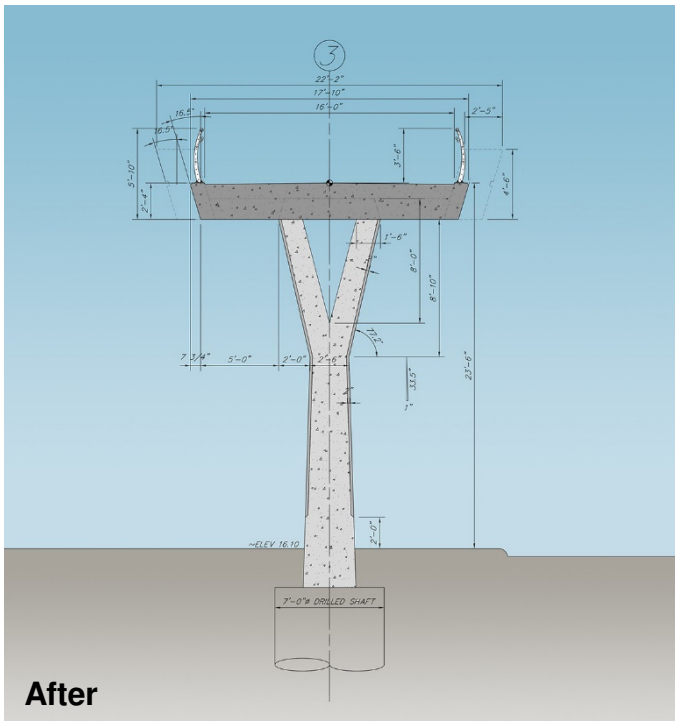


After

Pier Comparison.

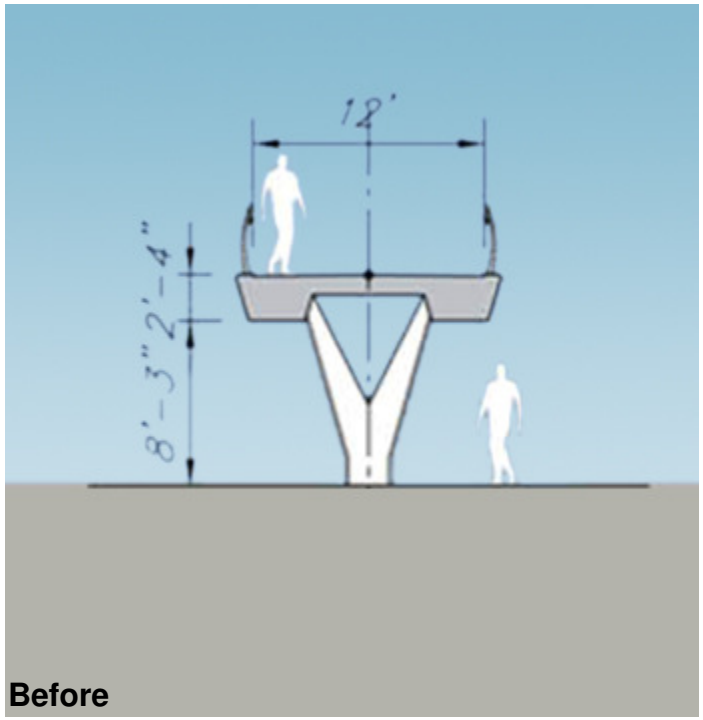


Before

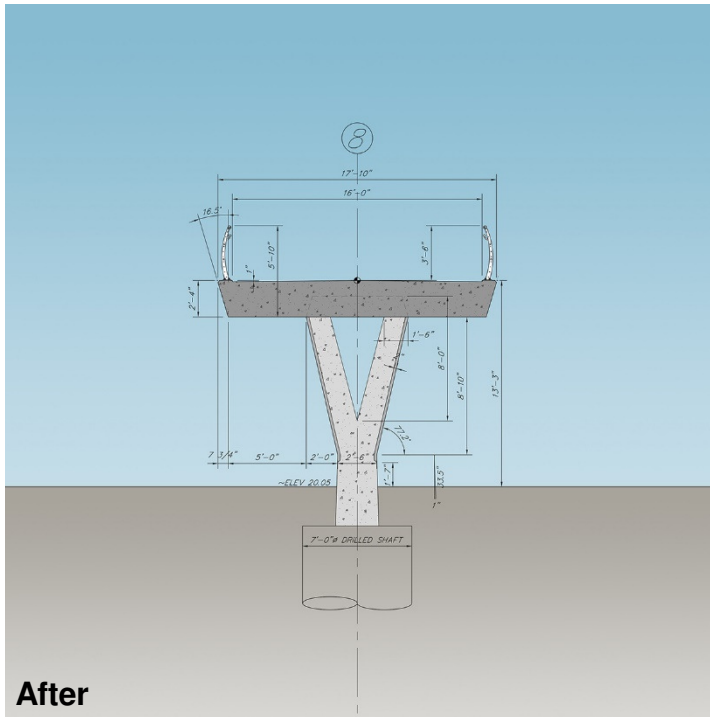


After

Pier Comparison.



Before



After

Pier Comparison.

Before

After

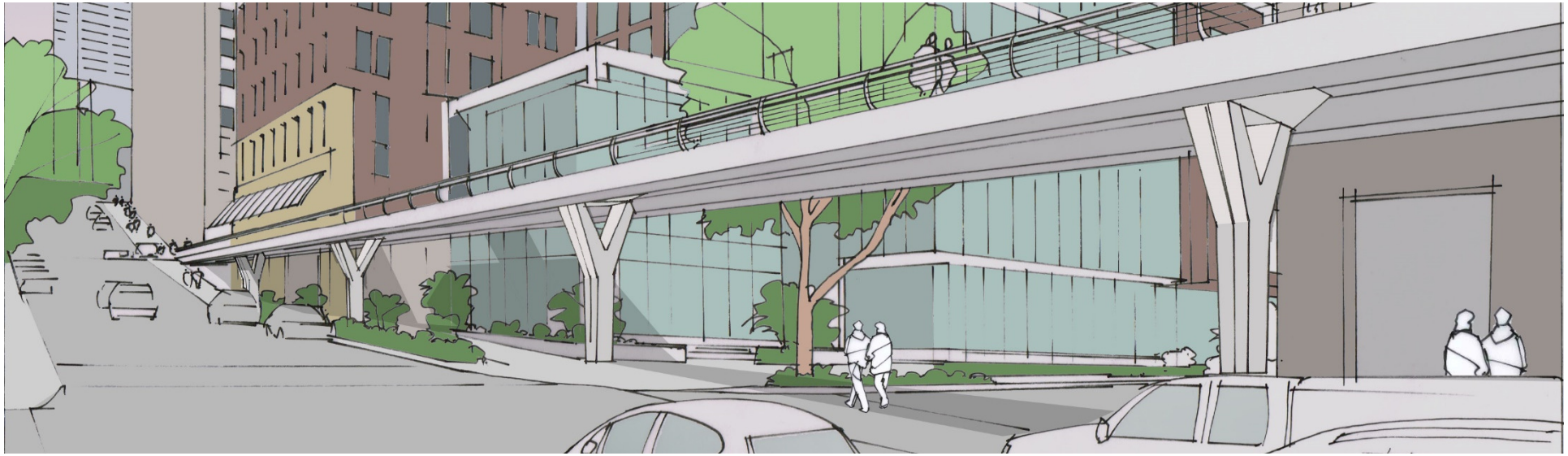
Pier Comparison.

Before

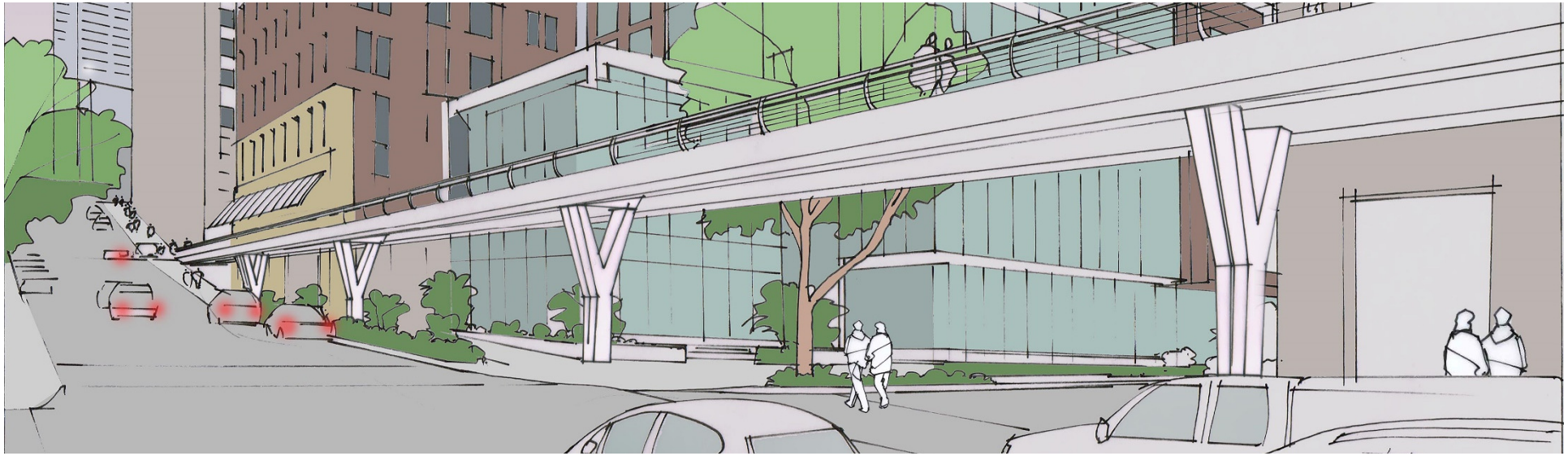
After

Pier Comparison.

Before

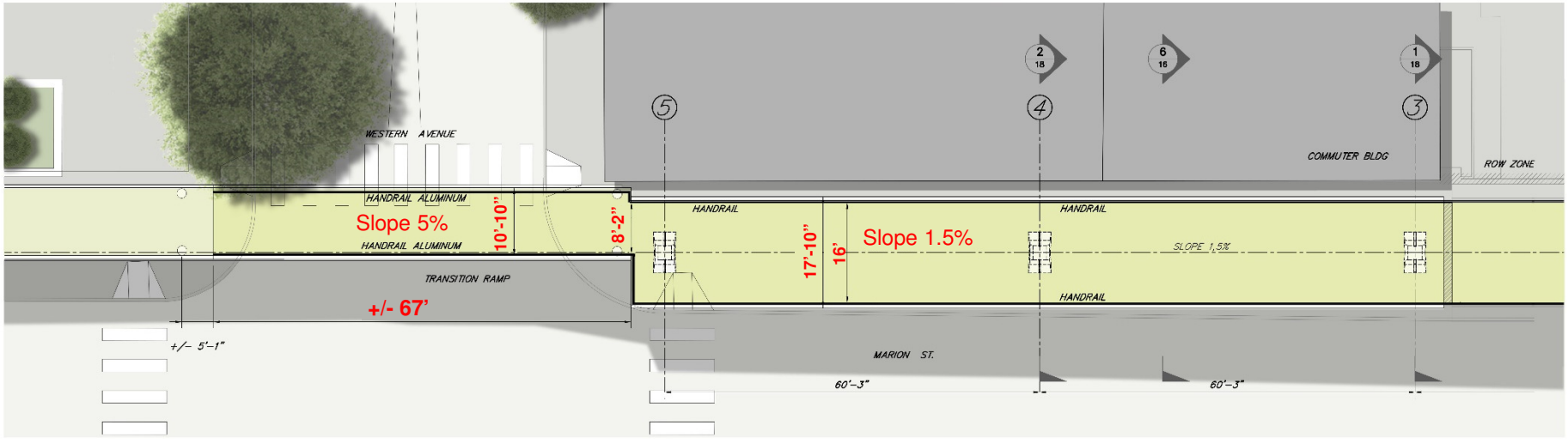


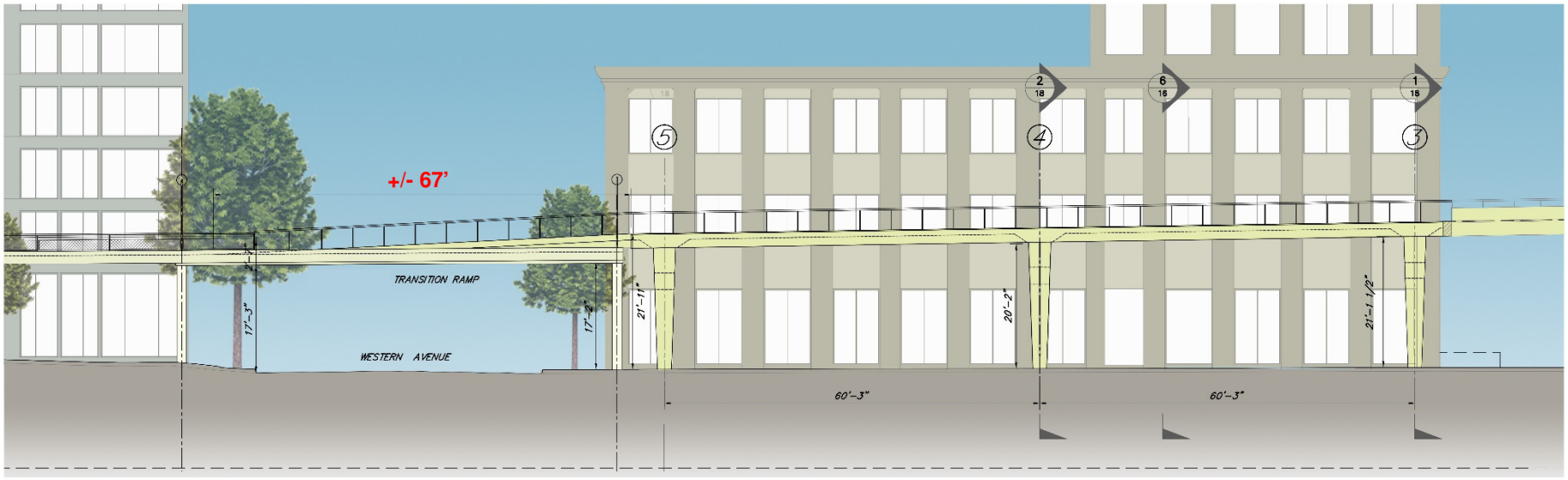
After



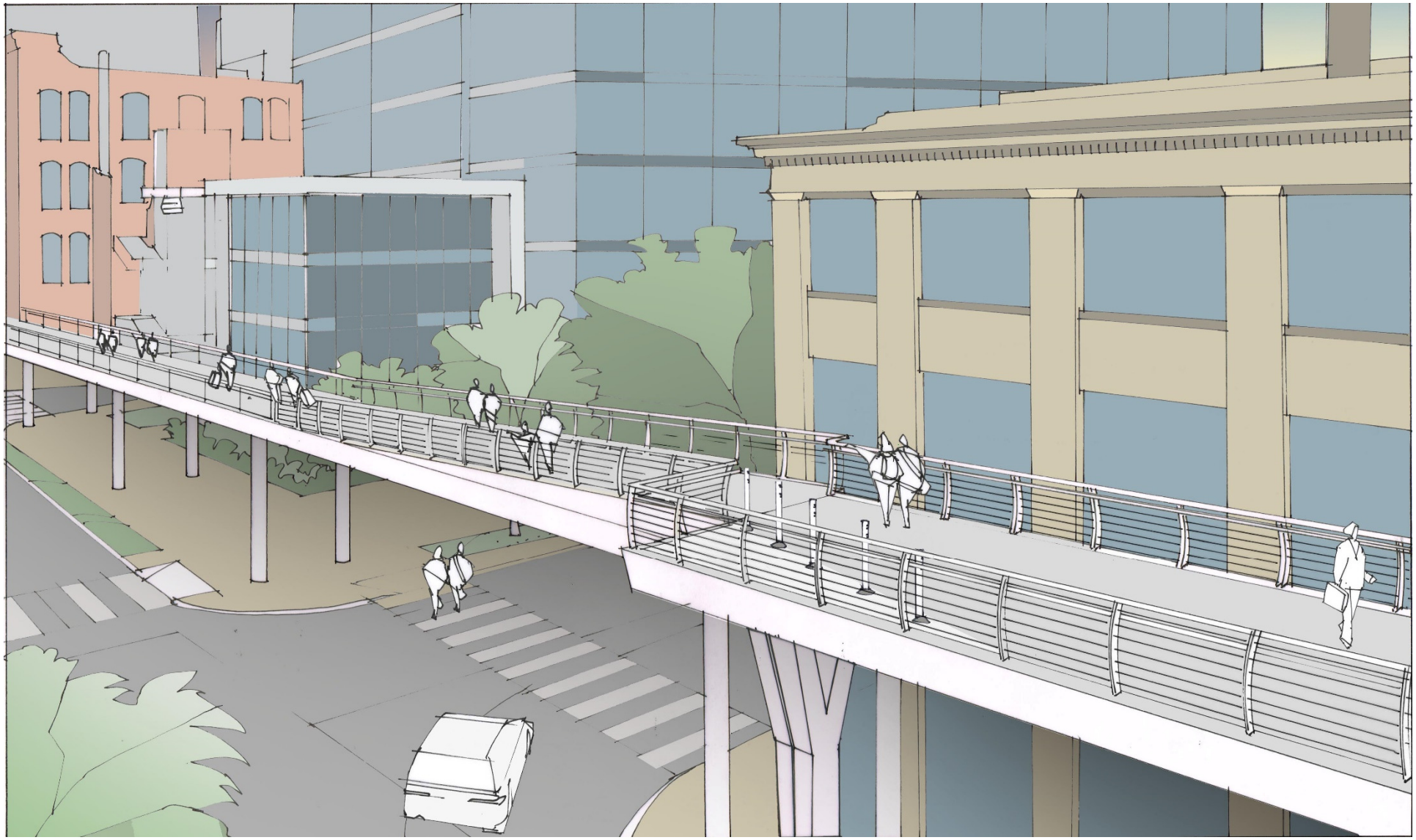
4. Interim Transition.

Transition Ramp – Plan and Elevation



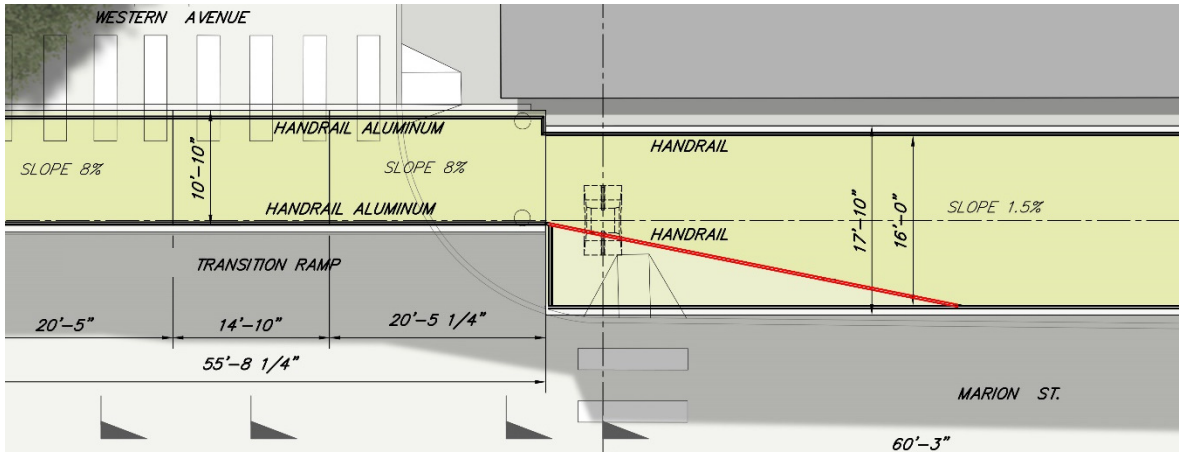


Transition Ramp

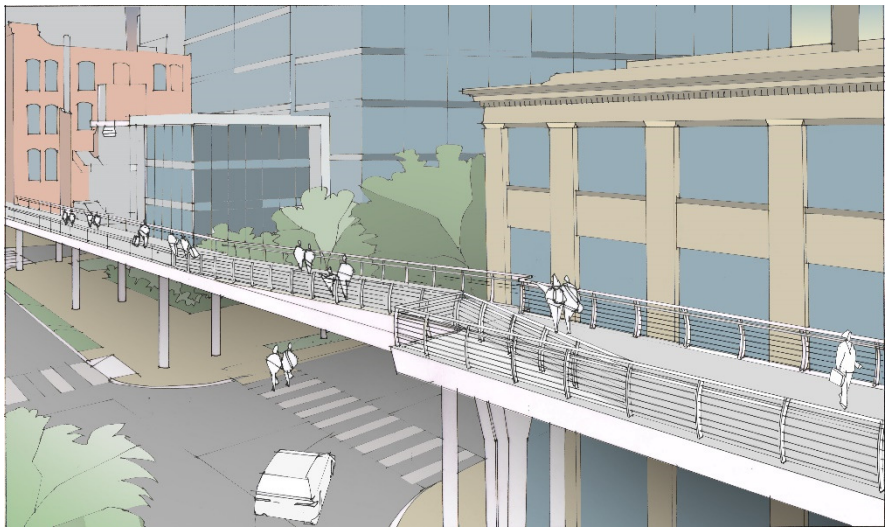


Transition Ramp

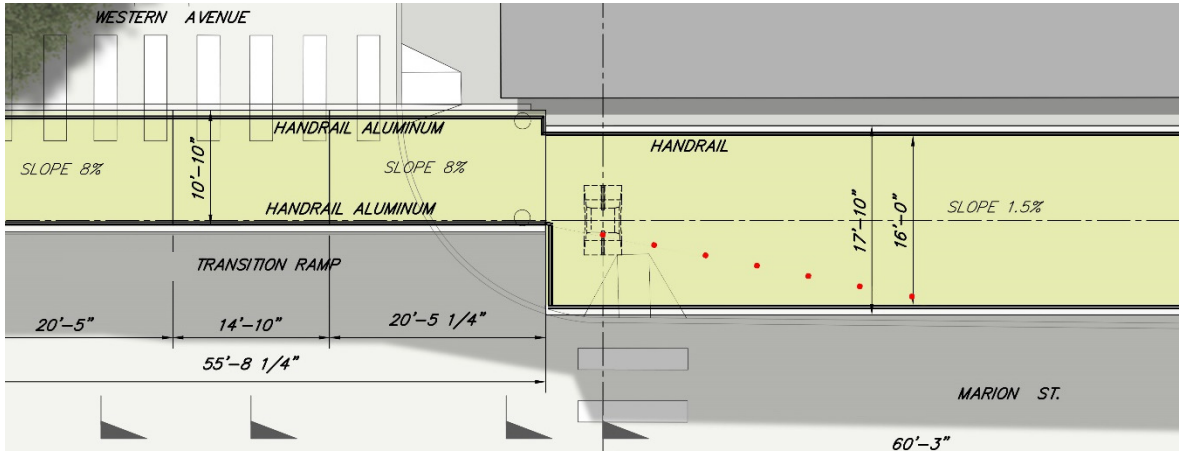
Interim Period Transition between Existing and New Bridge



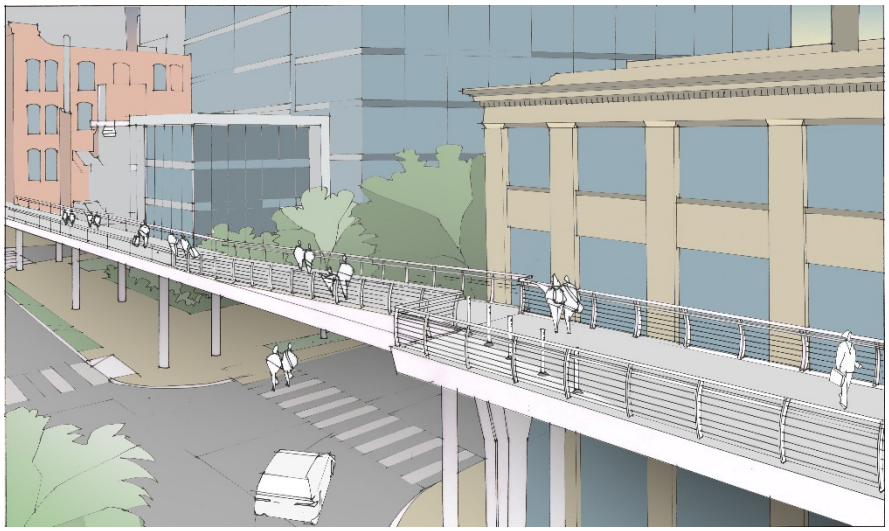
Option A – Additional Railing



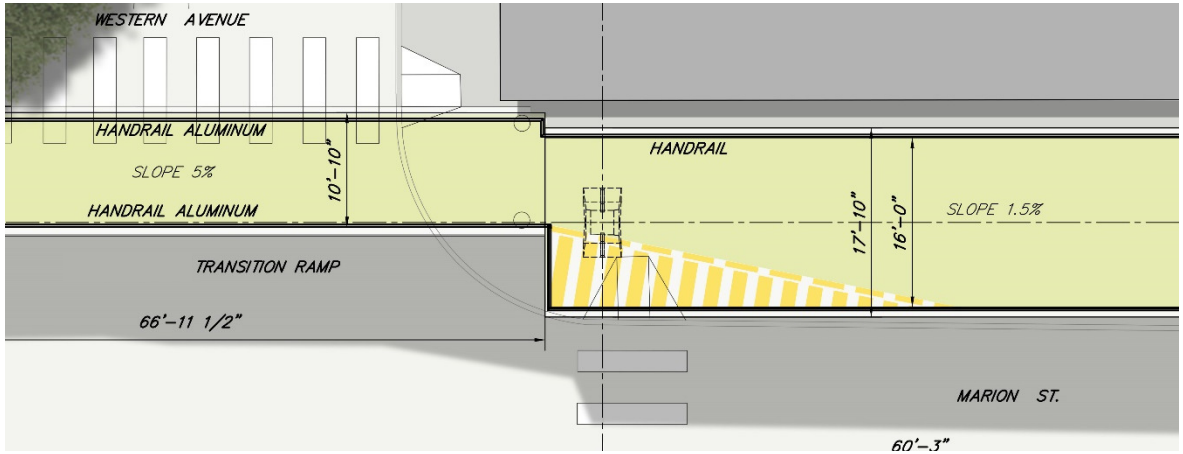
Interim Period Transition between Existing and New Bridge



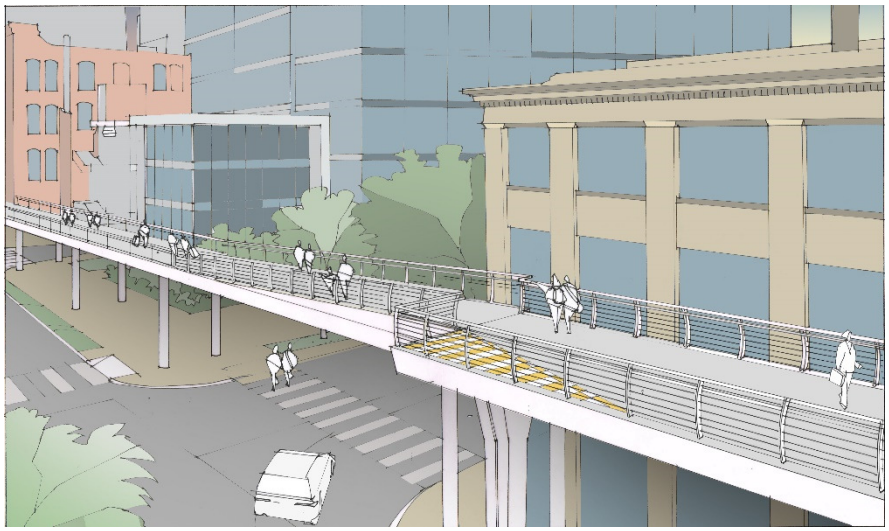
Option B – Temporary Bollards



Interim Period Transition between Existing and New Bridge

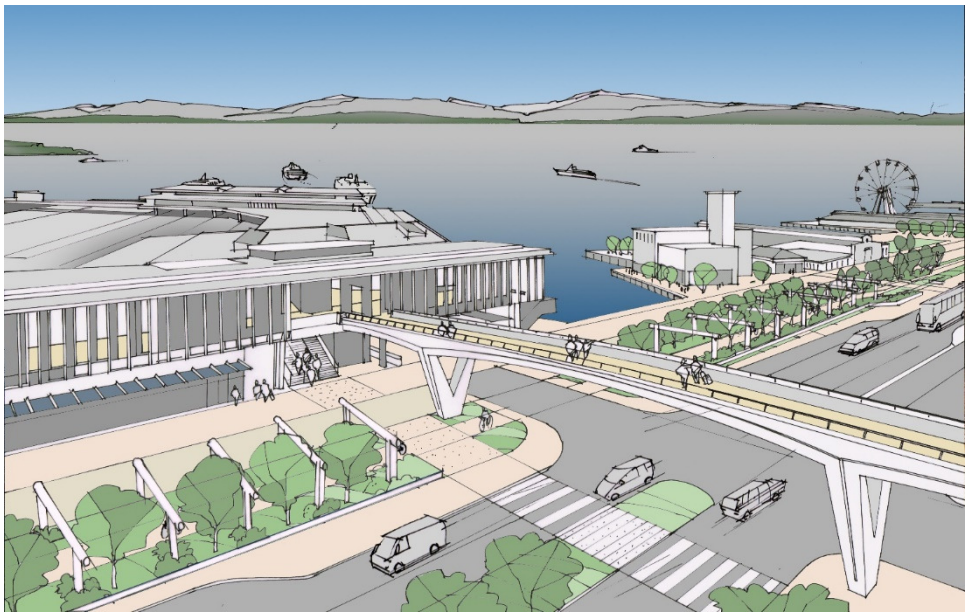


Option C – Pavement Markings

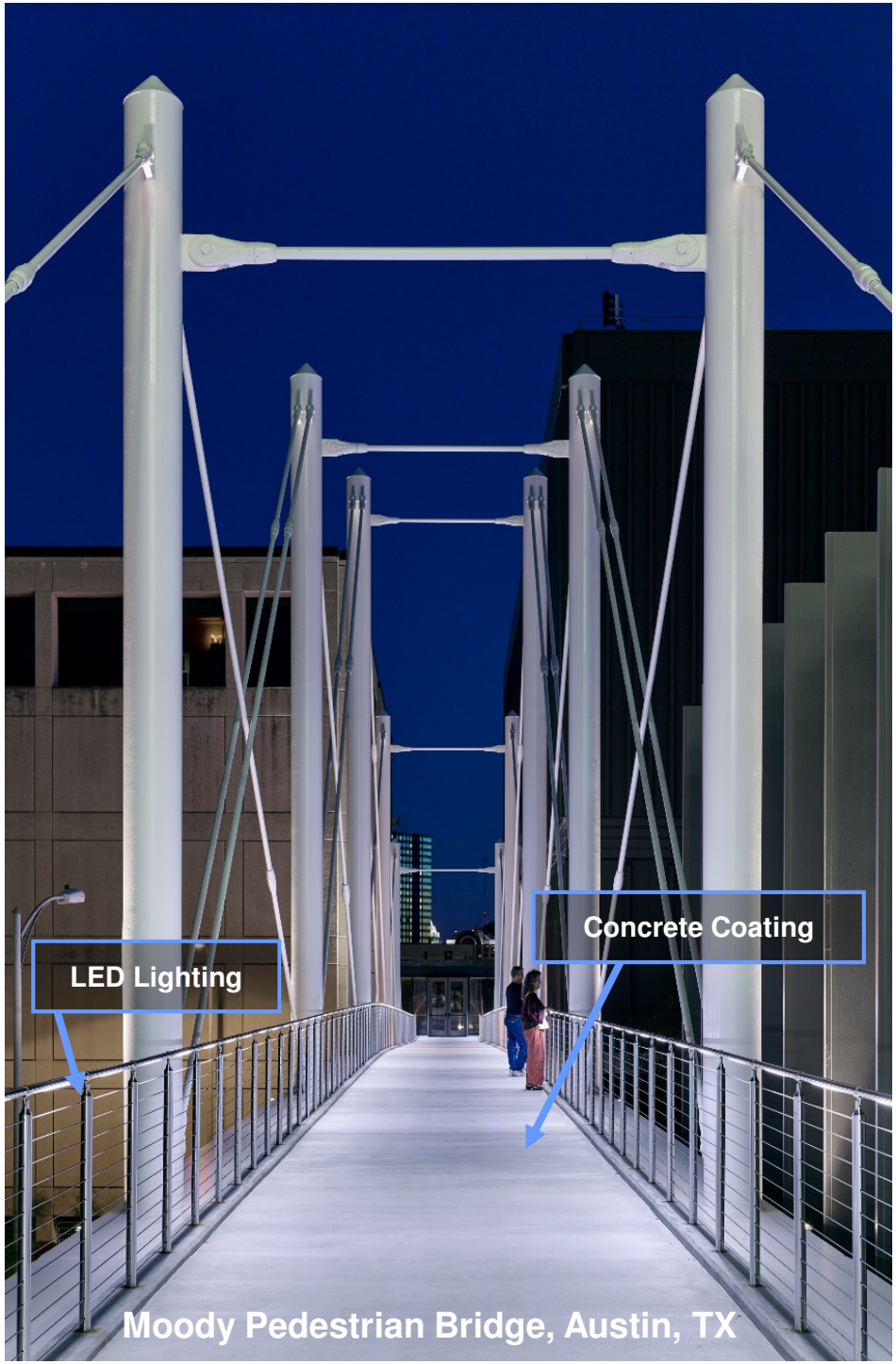


5. Sustainability Strategy.

Sustainability Strategy



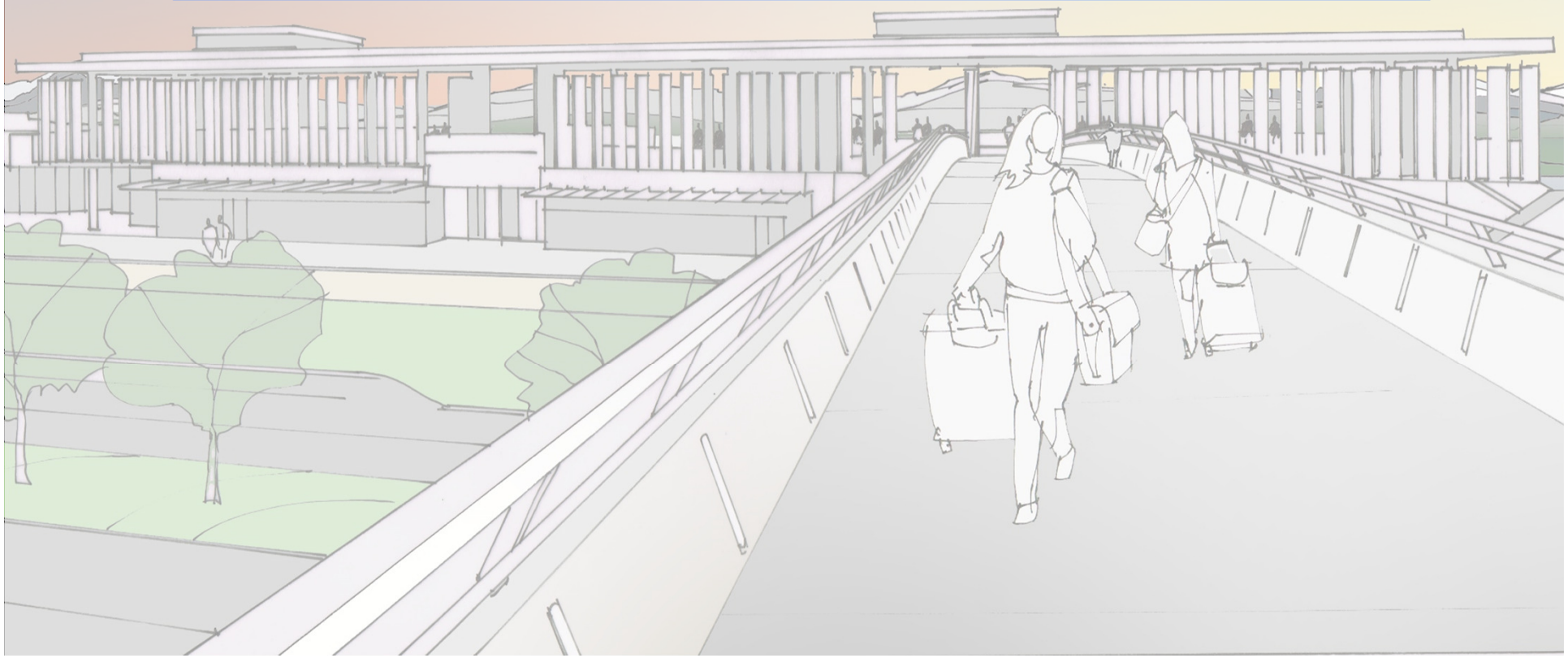
- MOBILITY:	Pedestrian bridge will create a more attractive, wider and sustainable link between the Ferry Terminal and Downtown. Promotes active transportation modes. Incorporation of ADA. Scenic viewpoints.
- MAINTENANCE:	Use of low maintenance materials and products like high strength concrete, stainless steel and LED lighting. Lowest life cycle cost and long life expectancy.
- ECONOMY:	Bridge design is very efficient minimizing the size of all elements as much as possible increasing constructability. Coordination with adjacent future projects to prevent repeat utility relocations.
- RE-USE/RECYCLE:	Will use SDOT standard practice recycling of demolished concrete/metal debris when existing bridge is removed


LED Lighting
Concrete Coating
Moody Pedestrian Bridge, Austin, TX

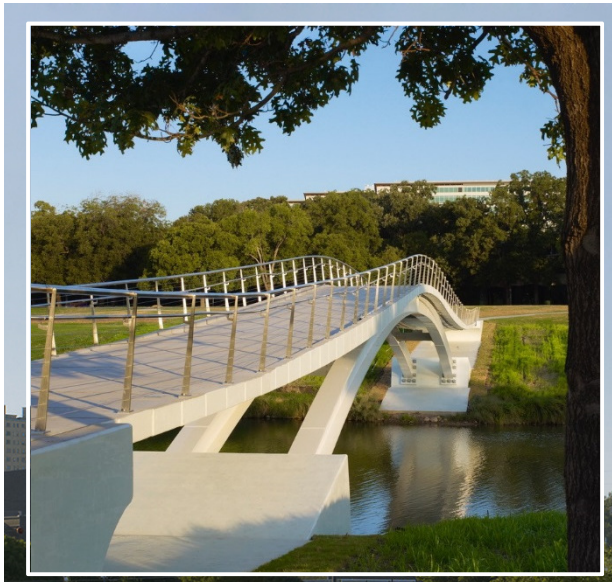

Sustainability Strategy
LED Lighting
Concrete Coating
Liberty Bridge, Greenville, SC

Walking Surface Concrete Coating

- Watertight Elastomeric Coating - Concrete Crack Bridging.
- Seattle Weather Resistant - Slip Resistant Finish/Easy to Walk Surface.
- Improved Visual Appearance.
- Outstanding UV Resistance and Non-Yellowing.



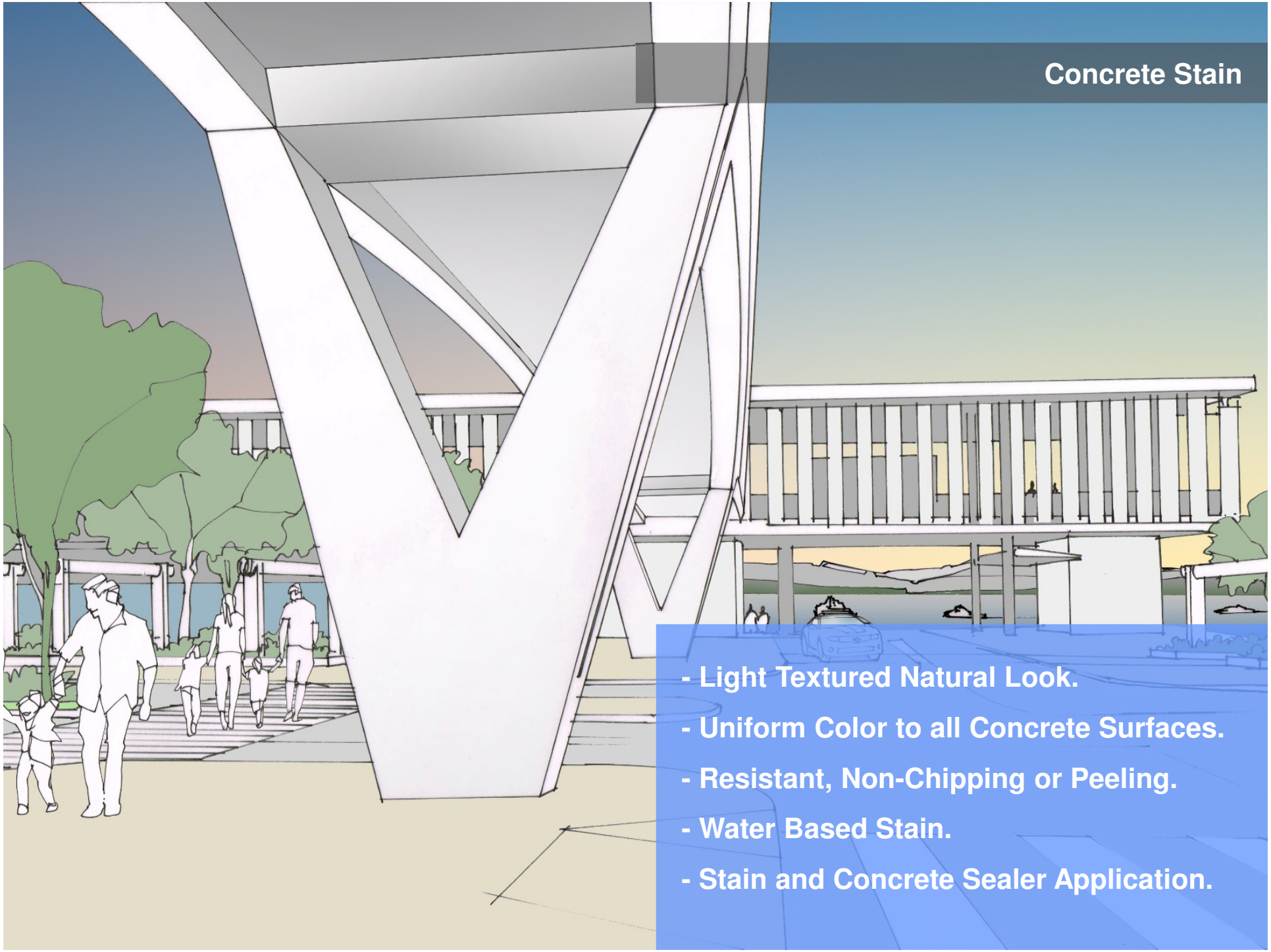
Concrete Stain



Concrete Stain

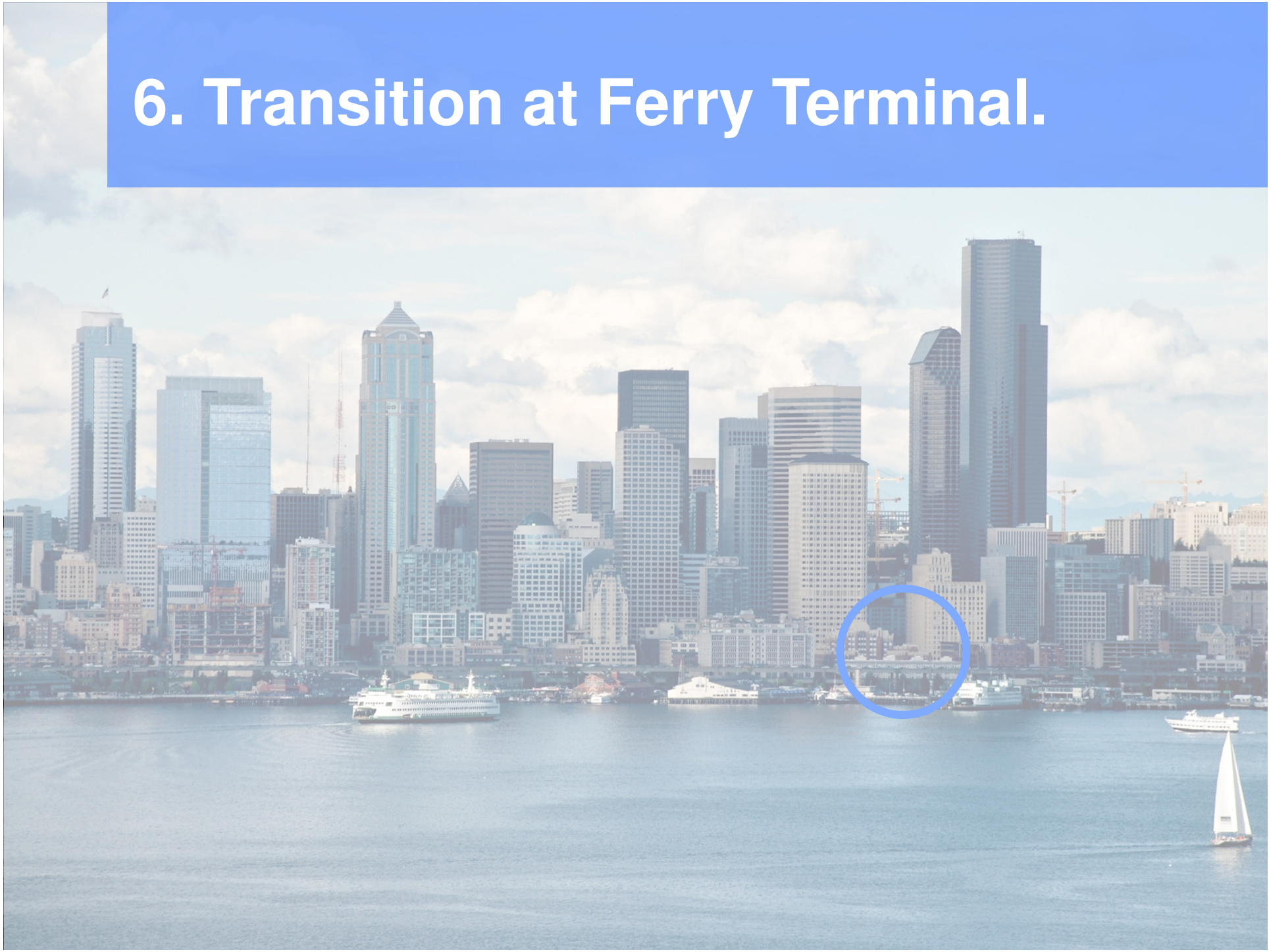
Phillys Tilley Memorial Pedestrian Bridge, Fort Worth, TX

Concrete Stain

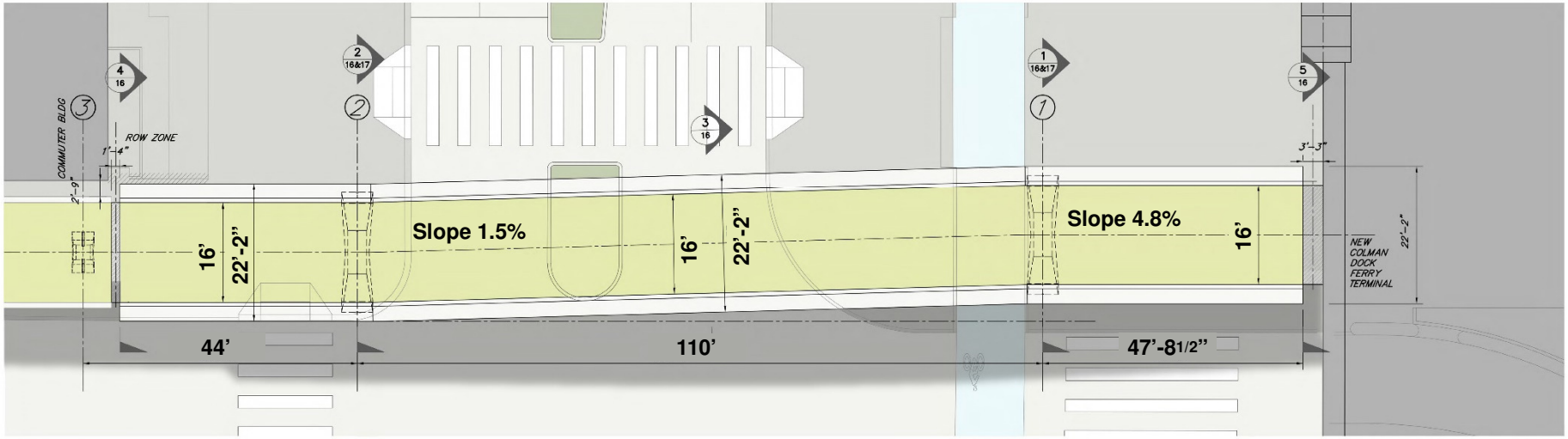


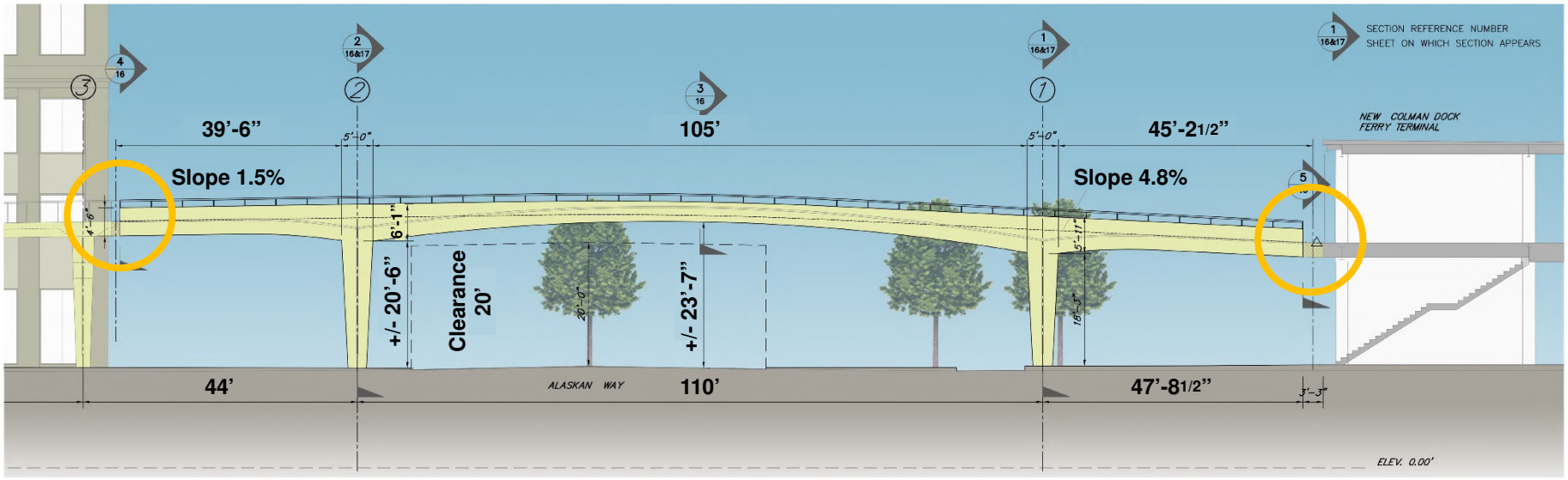
- Light Textured Natural Look.
- Uniform Color to all Concrete Surfaces.
- Resistant, Non-Chipping or Peeling.
- Water Based Stain.
- Stain and Concrete Sealer Application.

6. Transition at Ferry Terminal.



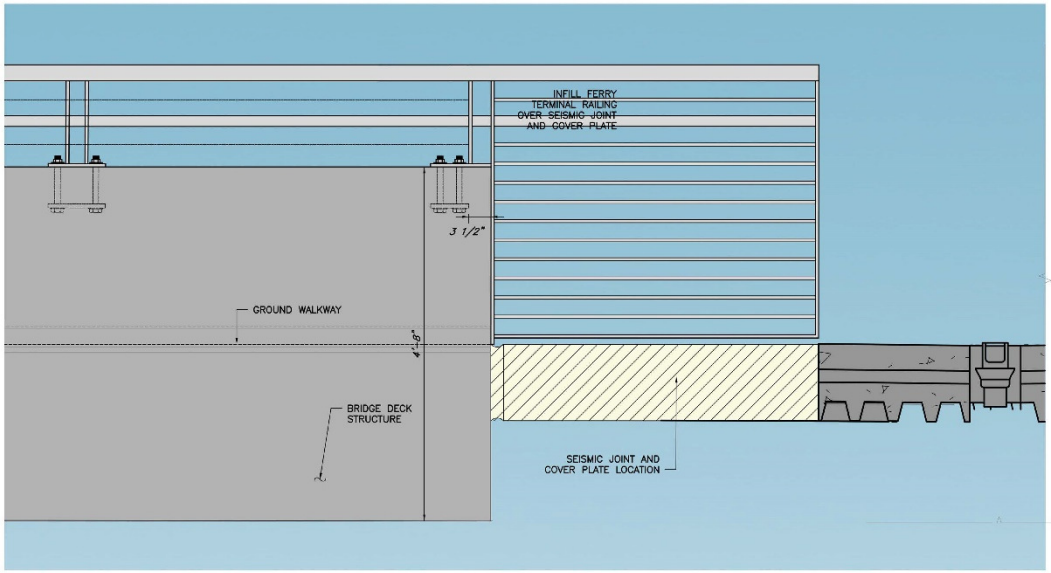
Bridge Railings Transitions



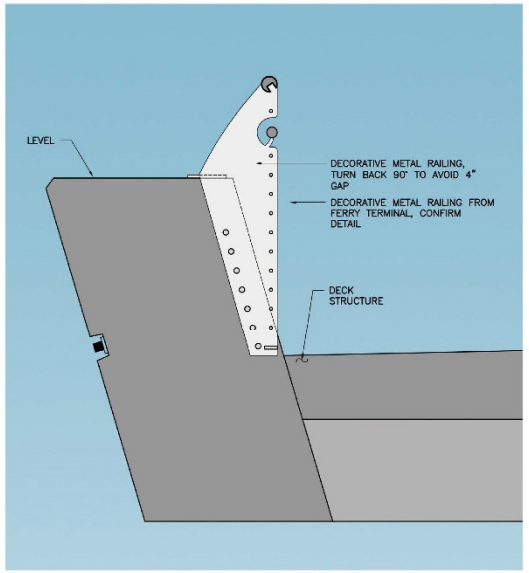


Bridge Railings Transitions

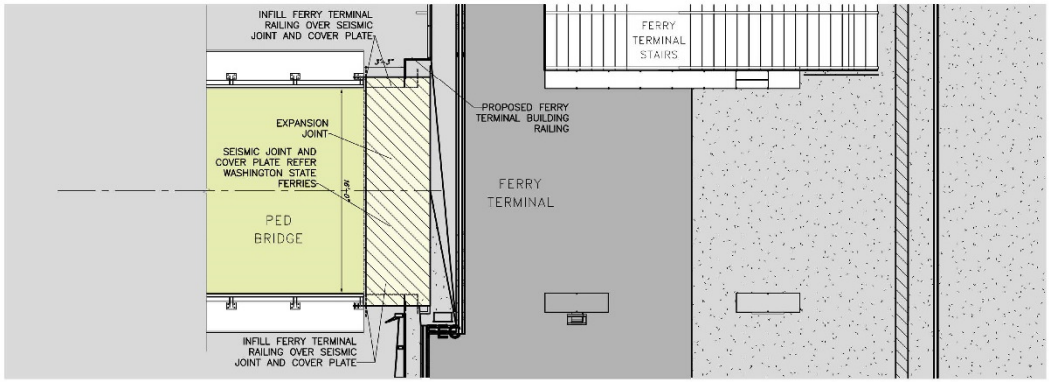
Transition at Colman Dock Ferry Terminal



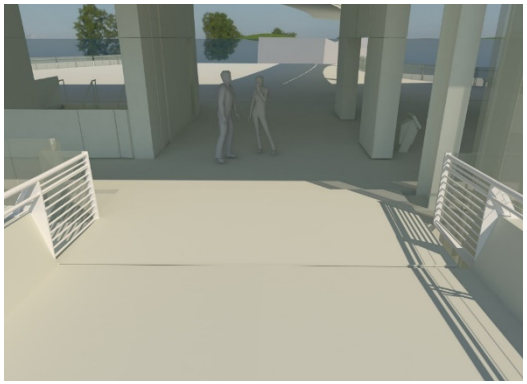
Railing Elevation at Ferry Expansion Joint
SALE: 1 - 1 / 2" = 1'



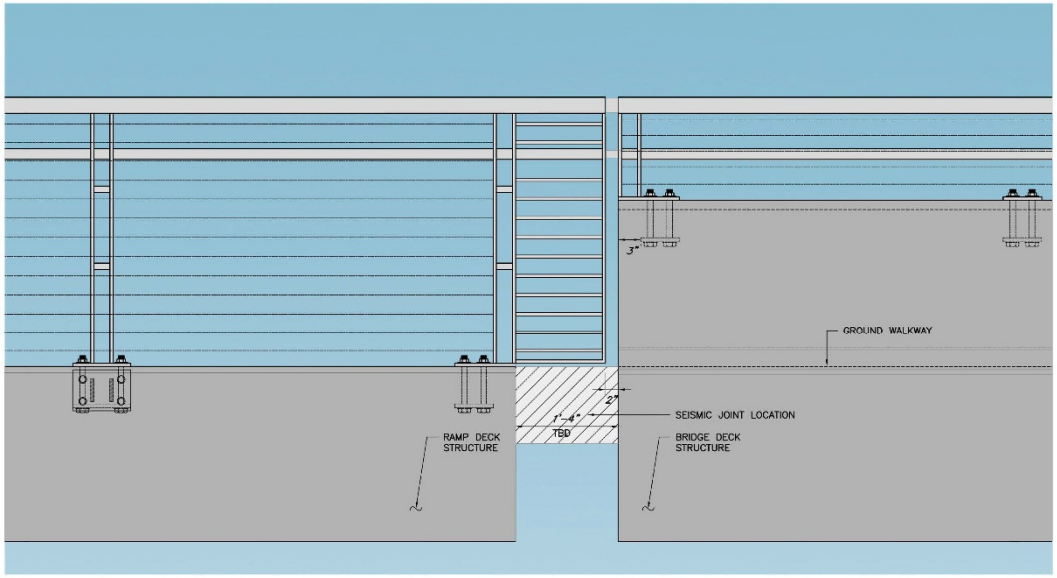
Railing Detail at Ferry Expansion Joint
SALE: 1 - 1 / 2" = 1'



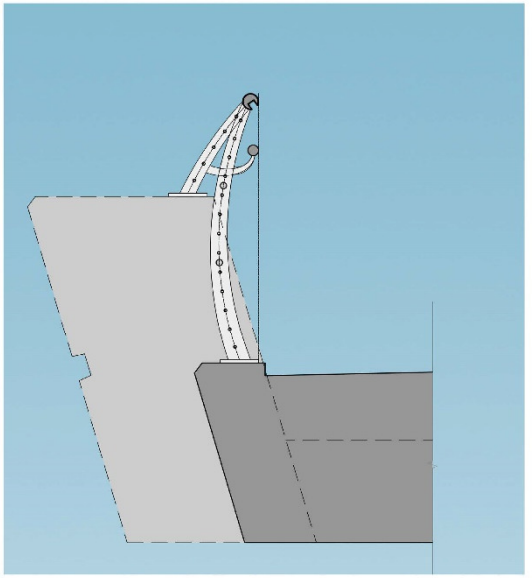
Railing Plan at Ferry Expansion Joint
SALE: 4" = 1'



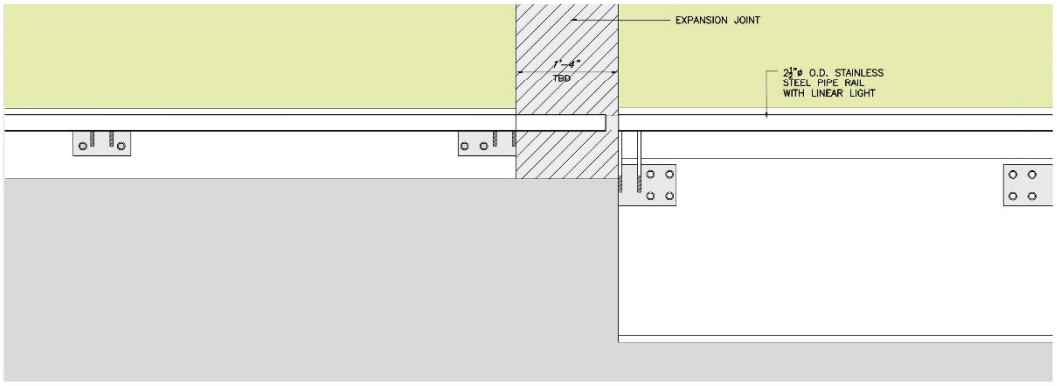
Transition at Commuter Building



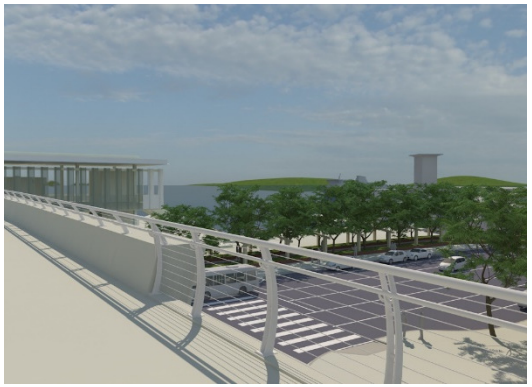
Railing Elevation at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



Railing Detail at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



Railing Plan at Ramp Expansion Joint
SALE: 1 - 1 / 2" = 1'



7. Intersection at 1st Ave.

Intersection at 1st Ave. and Marion St.

Marion Street Pedestrian Bridge

QUESTIONS AND ANSWERS