



Welcome



Community Design Advisory Group Meeting #5

Multnomah County Department of Community
Services Transportation Division

March 14, 2024

*All CDAG meetings are live-streamed,
recorded and available to the public.*



Agenda

1. Welcome & Opening Remarks
2. Introductions & Housekeeping
3. CDAG Guiding Principles Confirmation
4. Review of the Design Status
5. Public Comment Period
6. Next Steps & Closing Remarks



The background is a blue-tinted photograph of a city skyline. In the foreground, a large steel truss bridge spans across a body of water. The city buildings in the background are of various heights and styles, with some construction cranes visible. The overall scene is captured in a monochromatic blue color scheme.

Housekeeping

Virtual Participation Tips

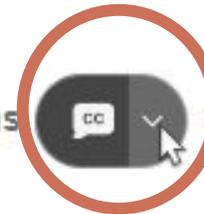
Closed captions in English are available in Webex and YouTube

1. In the bottom menu select "CC" or "closed captioning"
2. Select "view captioning and highlights"

Submit questions for response to burnsidebridge@multco.us



Closed caption options



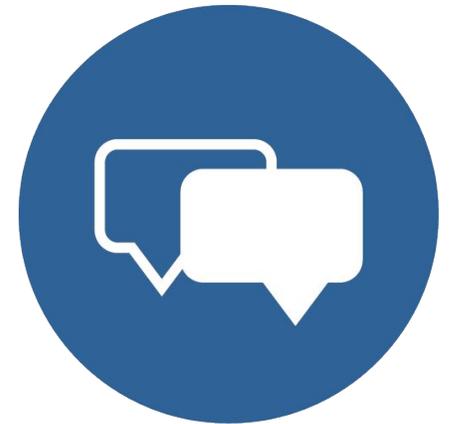
View captions and highlights.



Public Input Instructions

Public comments are welcomed as part of each CDAG meeting and can be shared in several ways:

- **In-Person Verbal Comments:** Attend and comment in-person at Multnomah Building (Board Room, 1st Floor) - 501 SE Hawthorne Blvd, Portland, OR, 97214. Sign-up for comment at the sign-in table.
- **Virtual Verbal Comments:** Request link to provide virtual comments 24 hours before the meeting by sending an email with subject line “CDAG Comments” to: burnsidebridge@multco.us. A project team member will contact you with instructions.
- **Written Comments:** Send an email to be included in the groups meeting packet 48 hours before the meeting by sending an email with subject line “CDAG Comments” to: burnsidebridge@multco.us.



SAFETY BRIEFING & MEETING PROTOCOLS

Safety

- Evacuation location: Parking lot on the SE corner of 6th and Hawthorne (cross at light at SE 7th Ave)
- Emergency exits
- Restrooms outside the door

Meeting Protocols

- Question or comment: raise your hand or turn your table tent on the short end
- Speak clearly and toward the microphones
- Limit multitasking, side conversations and noise that could be picked up by the microphones
- All meetings are live to the public and recorded



MEETING PROTOCOLS

- **Be curious** and willing to learn.
- **Ask questions** to gain clarity and understanding.
- Express **preferences, interests, and outcomes** you wish to achieve.
- **Listen respectfully** to understand the needs and interests of others.
- **Be concise with comments and questions.**
- Focus on the **scope of the discussion.**
- **Attend all meetings** in a timely manner.
- Respect the **role of the facilitator** to guide the group process.
- Seek **common ground.**





Introductions & Roll Call

- **Aaron Whelton**, *Portland State University*
- **Anthony Jackson**, *Community Member*
- **Brian P. Kimura**, *Japanese American Museum of Oregon*
- **Carol Gosset**, *Oregon Museum of Science & Industry*
- **Erik Swenson**, *Portland Saturday Market*
- **Fred Cooper**, *Laurelhurst Neighborhood Association & Native American Youth and Family Center*
- **Gabe Rahe**, *Burnside Skatepark*
- **Guenevere Millius**, *Sunnyside Neighborhood Association*
- **Ian Sieren**, *Community Member*
- **Jackie Tate**, *Community Member*
- **Jason Halstead**, *Community Member*
- **Neil Jensen**, *Gresham Chamber of Commerce*
- **Paddy Tillett**, *Architect/Design Professional*
- **Patrick Sullivan**, *SERA Architects*
- **Robert Hastings**, *Willamette Light Brigade*
- **Sarah Lazzaro**, *Community Member*
- **Sharon Wood Wortman**, *Historian*
- **Ed Wortman**, *Community Member*
- **Susan Lindsay**, *Buckman Neighborhood Association*
- **Valerie Schiller**, *Multnomah County Bike/Ped Citizen Advisory Committee*
- **Todd DeNeffe**, *Central Eastside Industrial Council*



Guiding Principles



CDAG Guiding Principles

CONFIRMATION



Multnomah County is creating an earthquake-ready downtown river crossing.

Guiding Principles for the Design of the Burnside Bridge

Community Design Advisory Group – March 14, 2024

The following document is intended to be a summary of overarching design principles and approach for the new Burnside Bridge replacement. The guiding principles are proposed to capture key aspirations that relate to the bridge design, regardless of the structural types. They are intended to be high level, holistic, and concise, rather than citing specifics or details of design. They describe the “what” rather than the “how.”

The principles have been derived from discussions and notes of the Community Design Advisory Group (CDAG). This draft is based on prior content from the Preliminary Type Selection Evaluation Criteria, an Urban Design and Aesthetics Working Group (UDAWG) document. The prior document was used as a discussion guide when making recommendations about bridge type during the Environmental Review Phase. Using a similar format of the UDAWG document, the guiding principles topic headings pose a qualitative question, while the subsequent outline statements address design principles and user experience without limiting opportunities of the bridge designers.

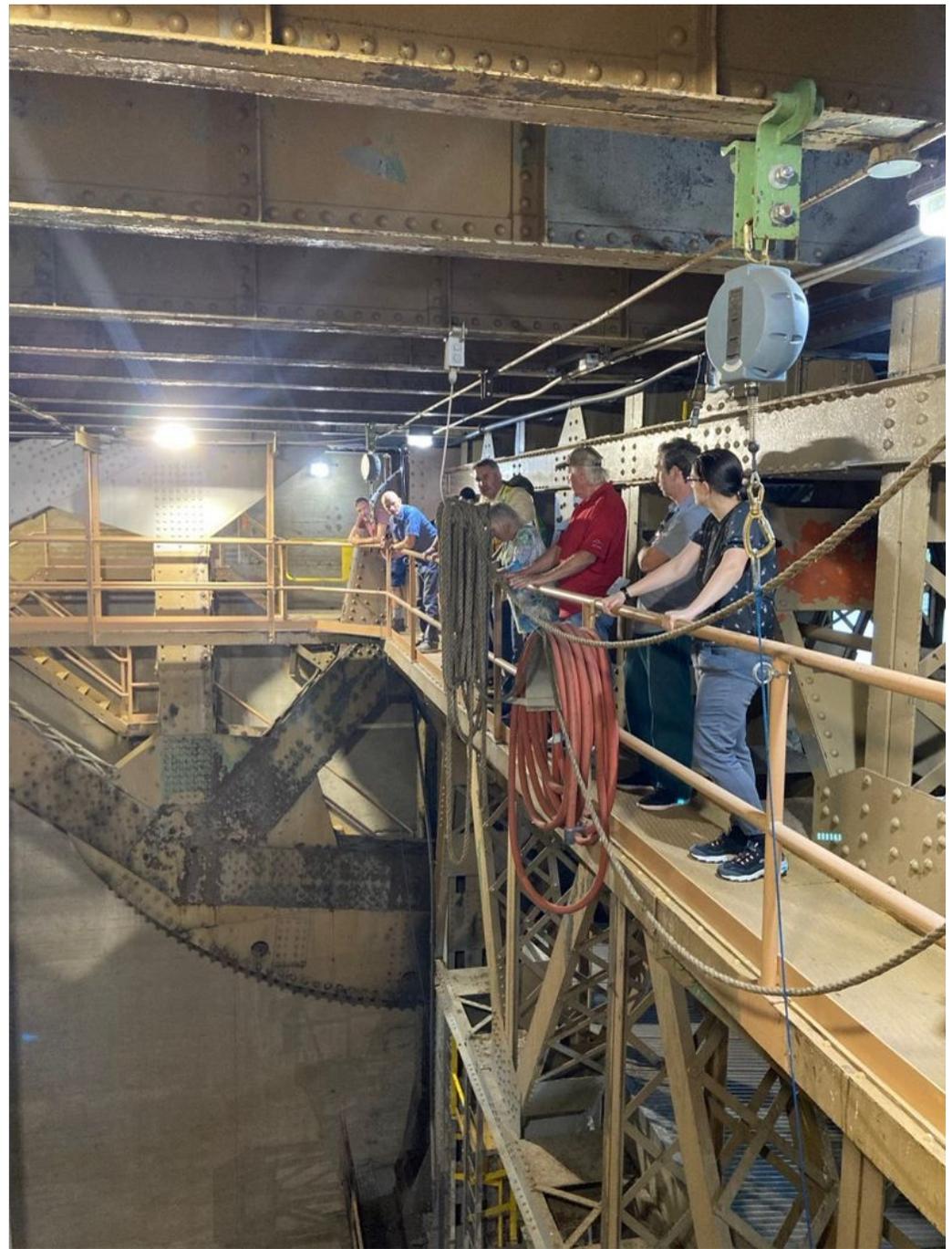
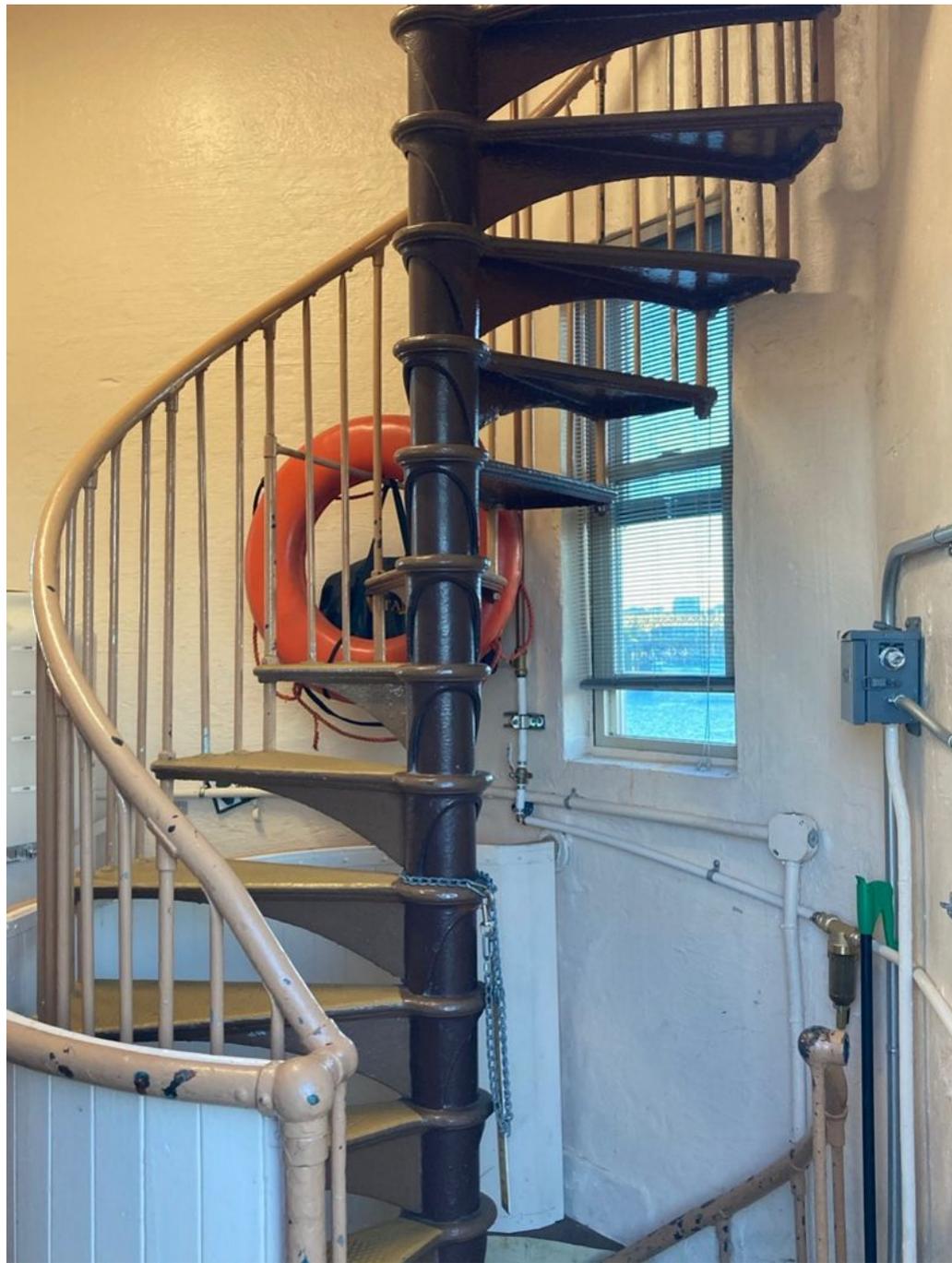
This document is intended to be a guide for the CDAG when making recommendations about the bridge’s design and aesthetics during the Design Phase.

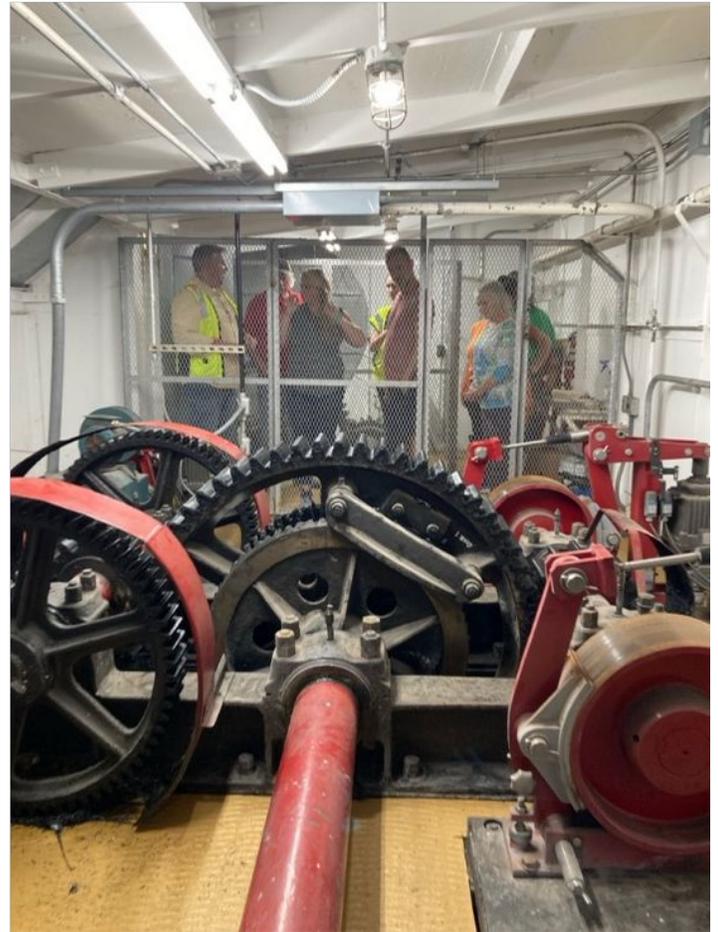
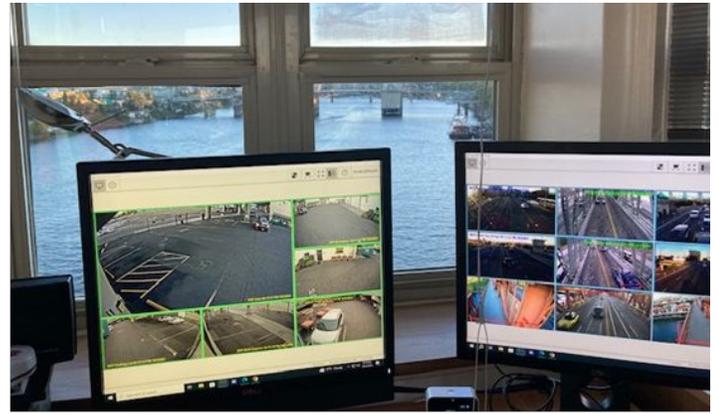
1. Urban/Site Context and User Experience

- A. On-bridge Experience:** How well does the bridge provide public benefits for all users?
- Provide clear and/or curated views from the bridge deck of:
 - The bridge itself—its structure, details and form.
 - The cityscape, including downtown and the Eastside.
 - Distant landscapes and geographic features such as the West Hills, Willamette River, Mt. St. Helens, and open skies.
 - Adjacent up- and down-river bridges.
 - Other key views such as the Portland Oregon sign, Tom McCall Waterfront Park, the US Bank Tower, the Moda Center, the Oregon Convention Center, and the Lloyd District towers.
 - Ensure that a portion of the bridge deck functions as a flexible open space for public events, such as the Rose Festival Grand Floral Parade and other civic gatherings.
 - Create civic-scaled and/or human-scaled gateways and an enhanced sense of arrival.
 - Recognize the bridge as the geographic center of the city and a destination for pedestrians.
- B. Below-bridge Experience:** How well does the bridge respond to the user experience of public spaces, transportation, parks and natural environments under or adjacent to the bridge?









CDAG Guiding Principles

- Key questions
- Values & character
- Common language



Multnomah County is creating an earthquake-ready downtown river crossing.

Guiding Principles for the Design of the Burnside Bridge

Community Design Advisory Group – March 14, 2024

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This document is intended to be a guide for the CDAG when making recommendations about the bridge’s design and aesthetics during the Design Phase.

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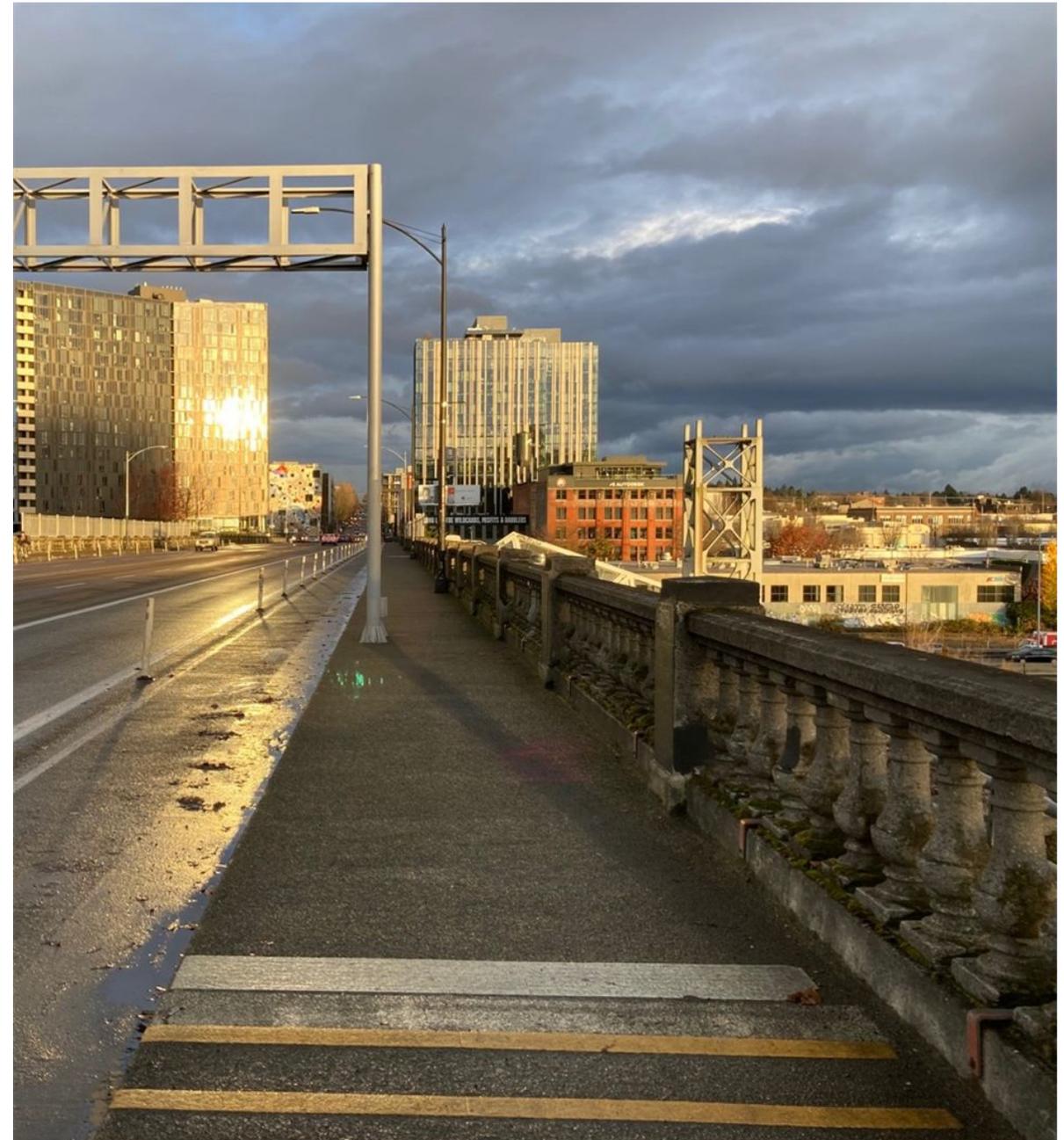
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1. Urban/Site Context & User Experience

A. On-bridge Experience

B. Below-bridge Experience

C. Urban Context with
Surroundings



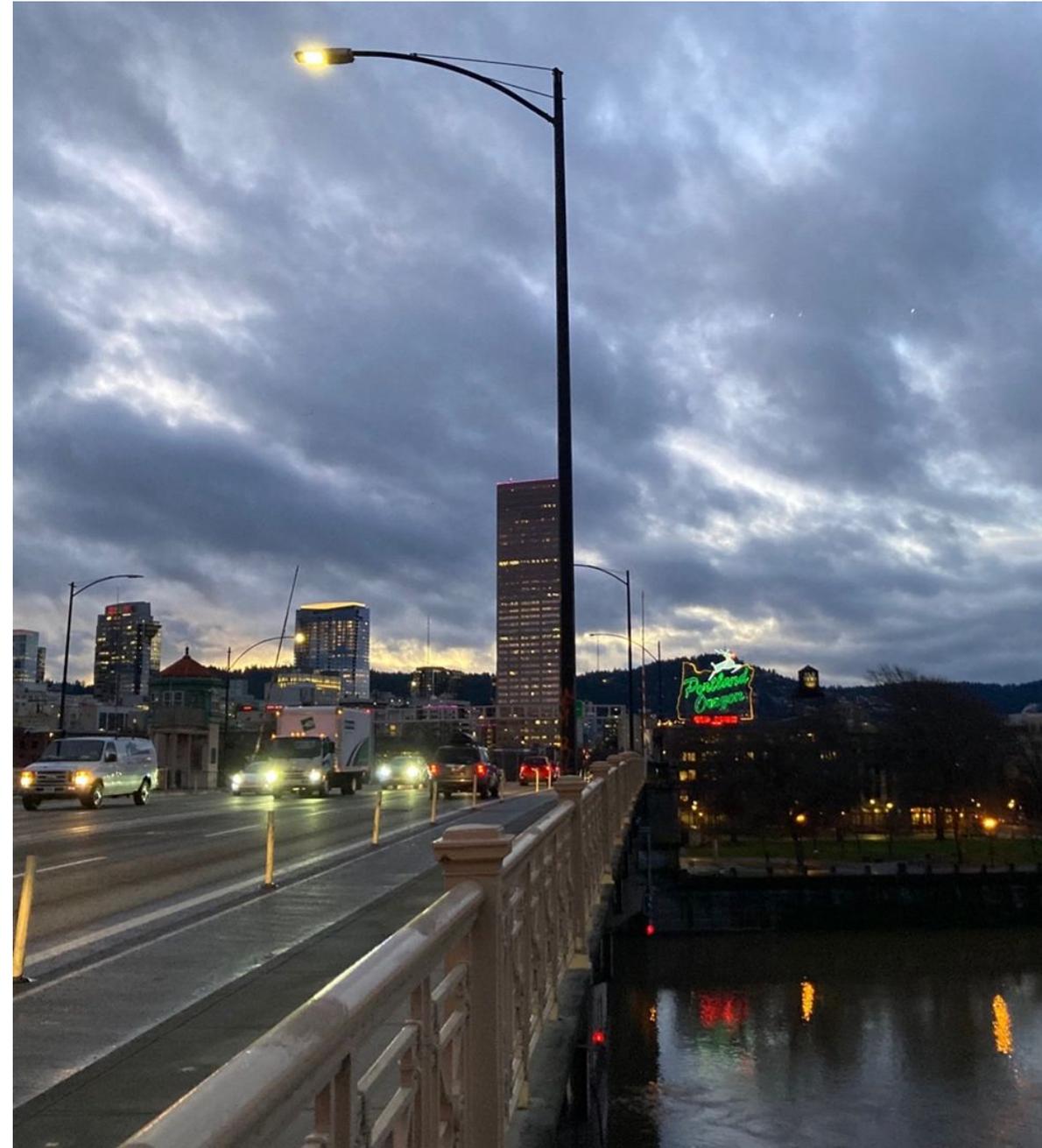
2. Visual Character & Aesthetics

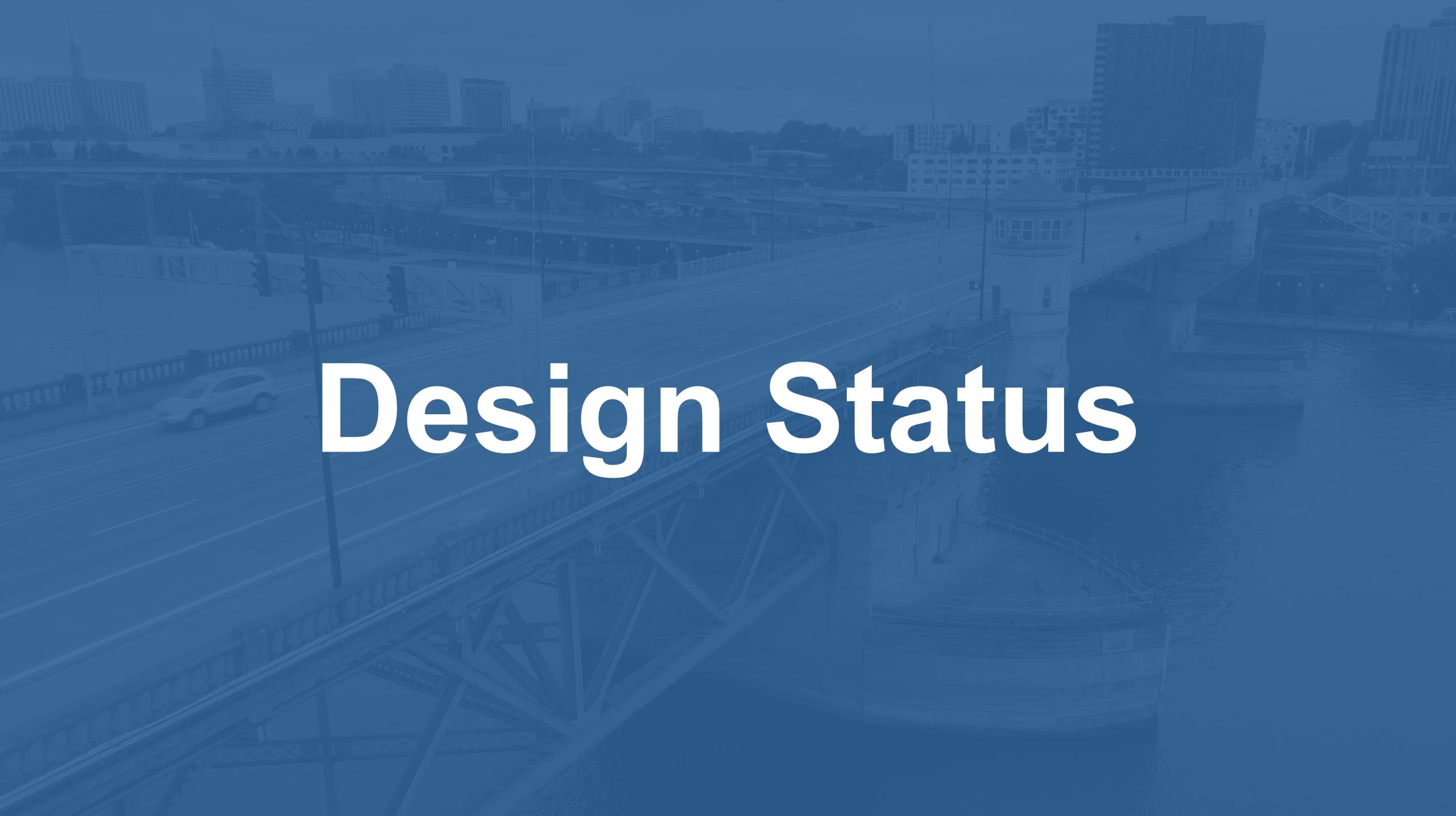
A. Bridge Visual Coherence

B. Bridge Form & Style

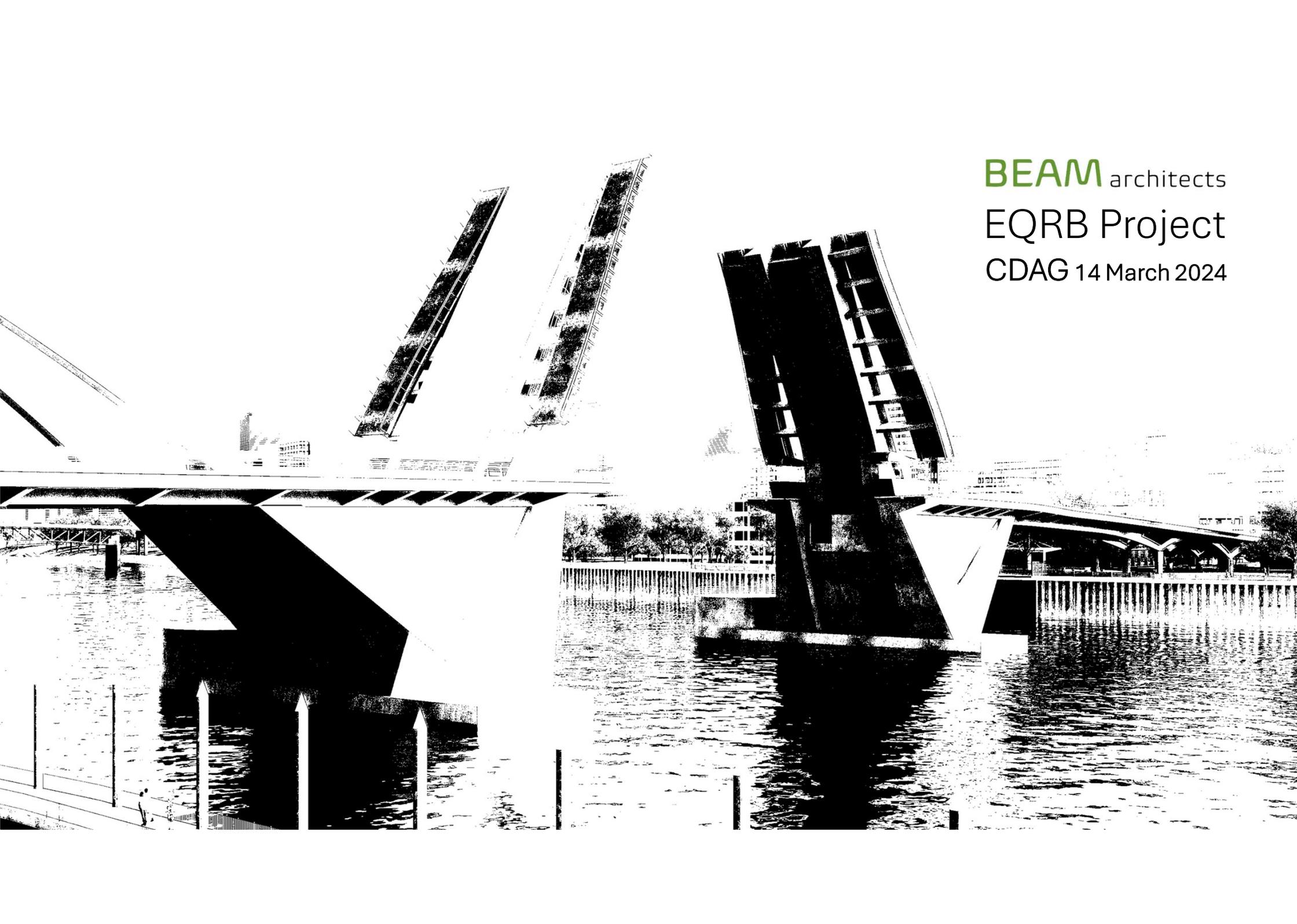
C. Bridge Aspirations &
Design Flexibility

D. Ped & Cyclist Connectivity



An aerial photograph of a city bridge spanning a river, overlaid with a semi-transparent blue filter. The bridge features a prominent tower with a circular observation deck. In the background, a city skyline with various skyscrapers is visible. The text 'Design Status' is centered in a large, white, sans-serif font.

Design Status



BEAM architects

EQRB Project

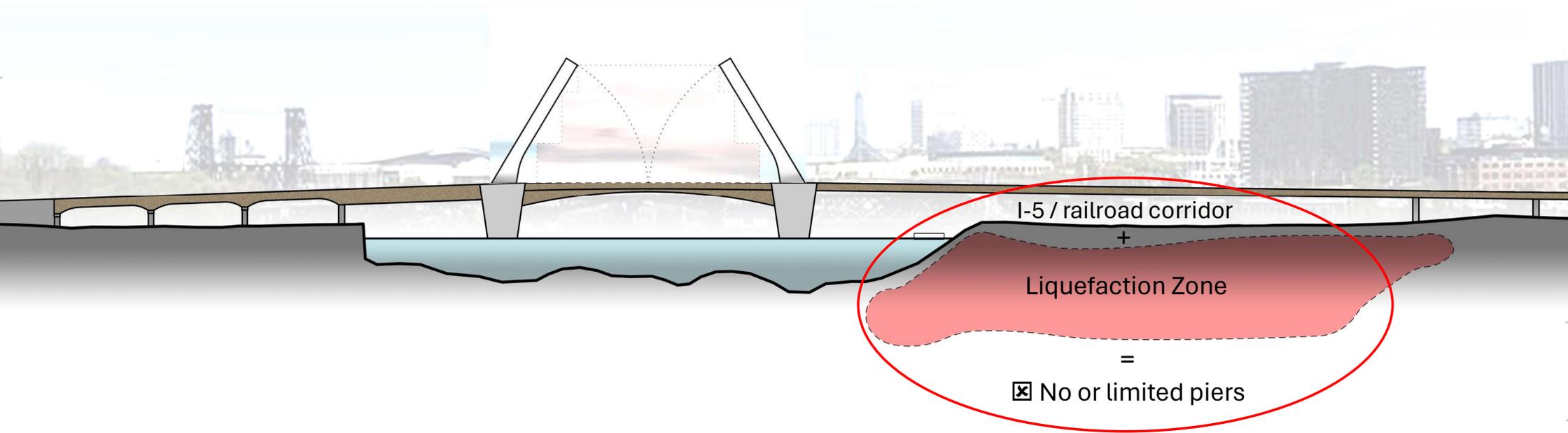
CDAG 14 March 2024

Western Approaches

Opening Bridge (Bascule)

East Bridge

Eastern Approaches

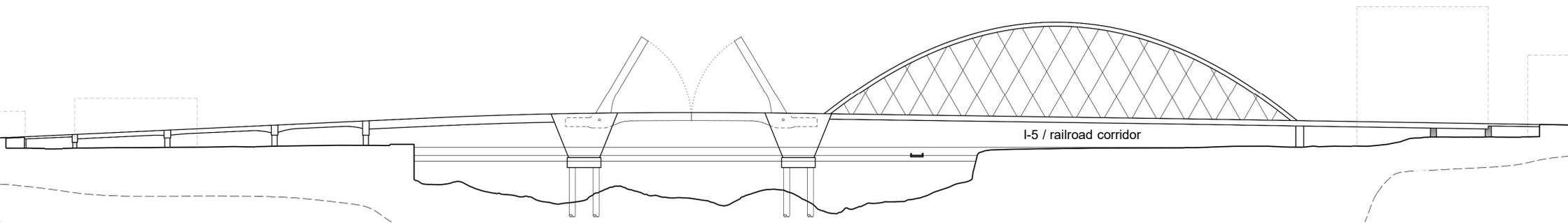


Fundamental Constraints (view north)

Short Spans

Opening Span

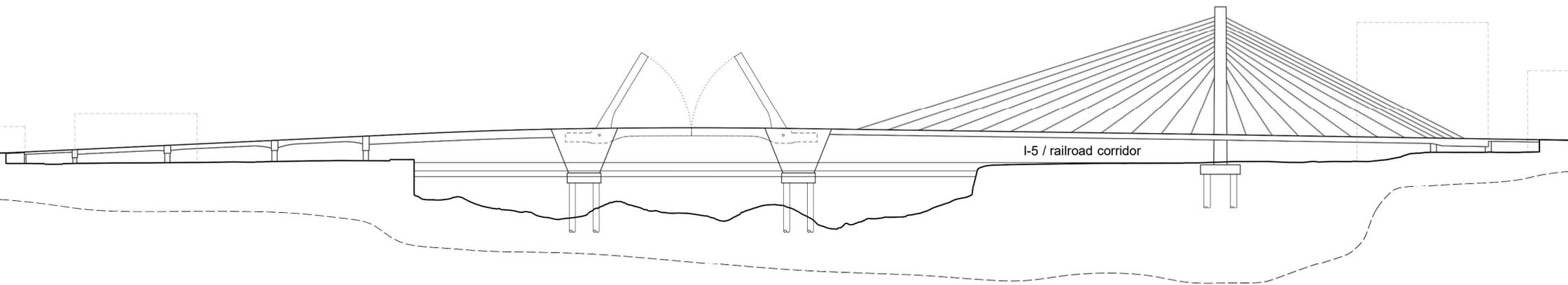
Long Span



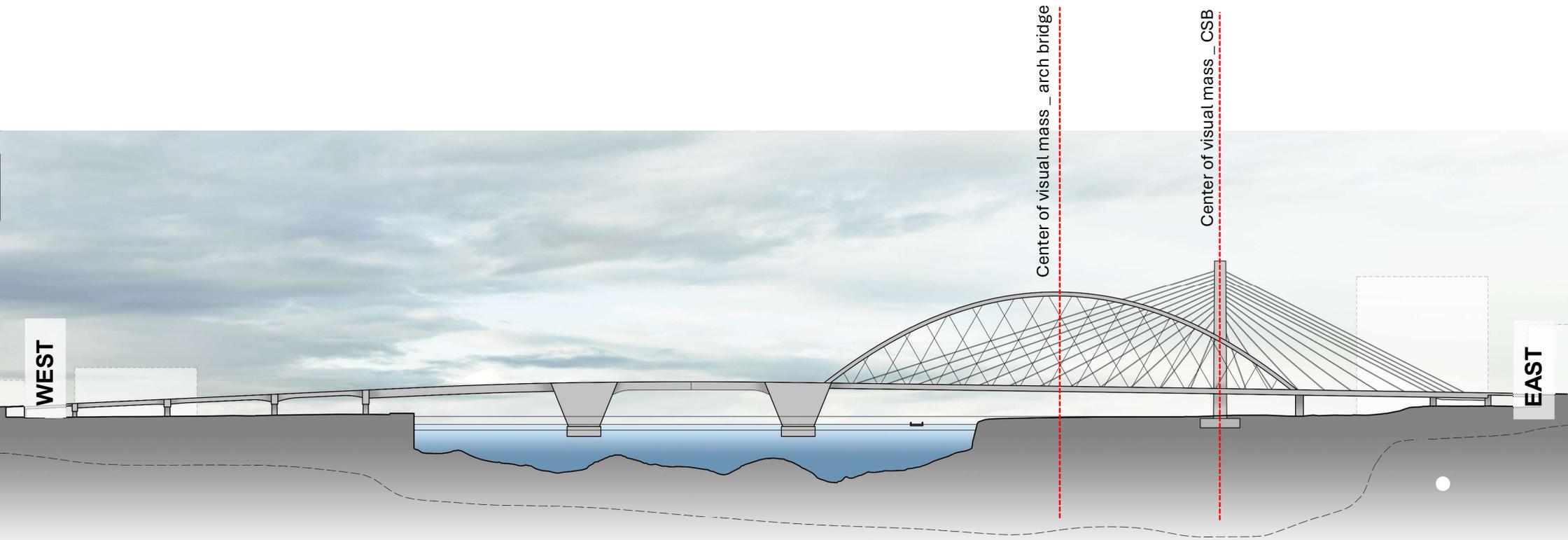
Generic arrangement with arched long-span bridge

WEST

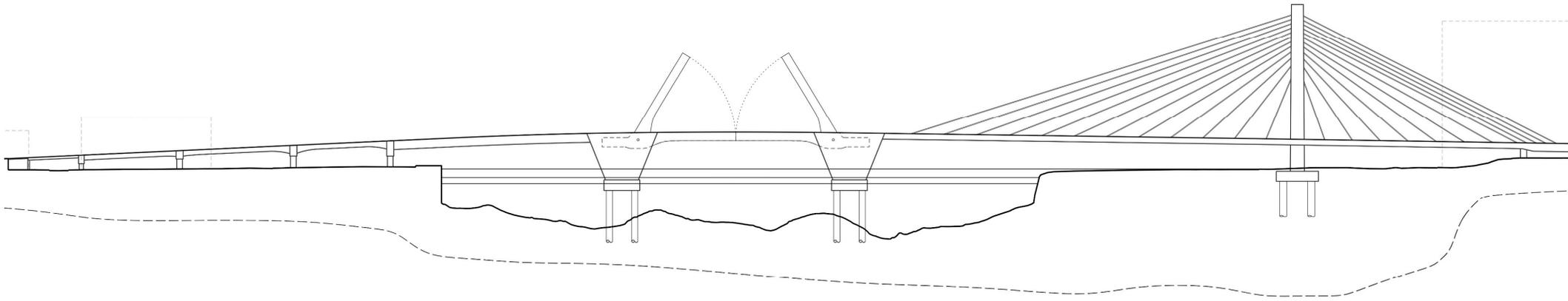
EAST

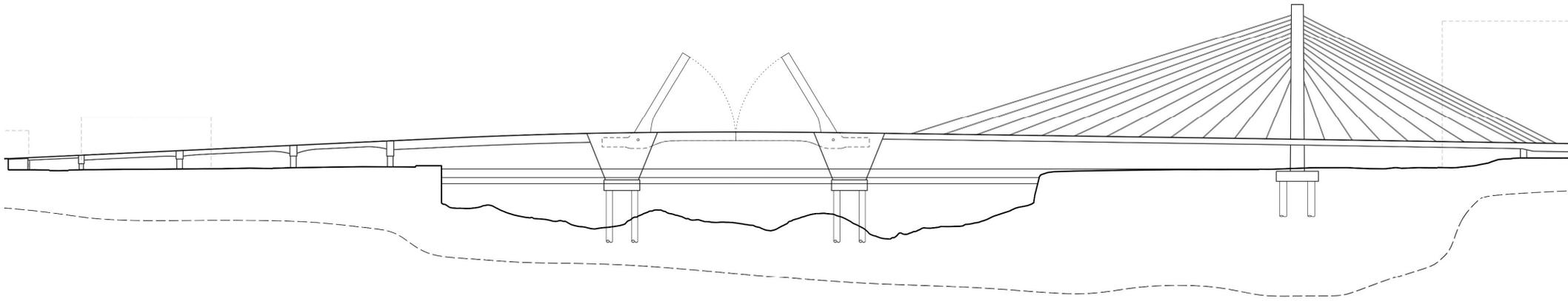


Generic arrangement with cable-stayed long-span bridge

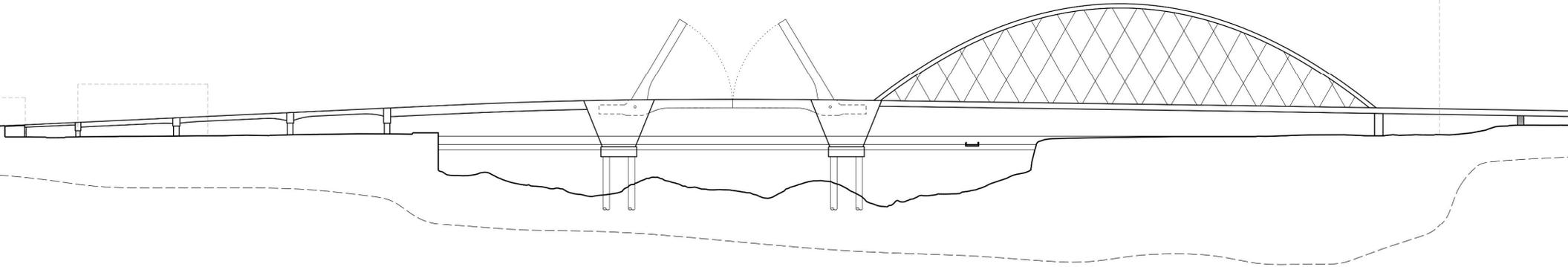


Comparative profiles of generic arch and cable-stayed bridges

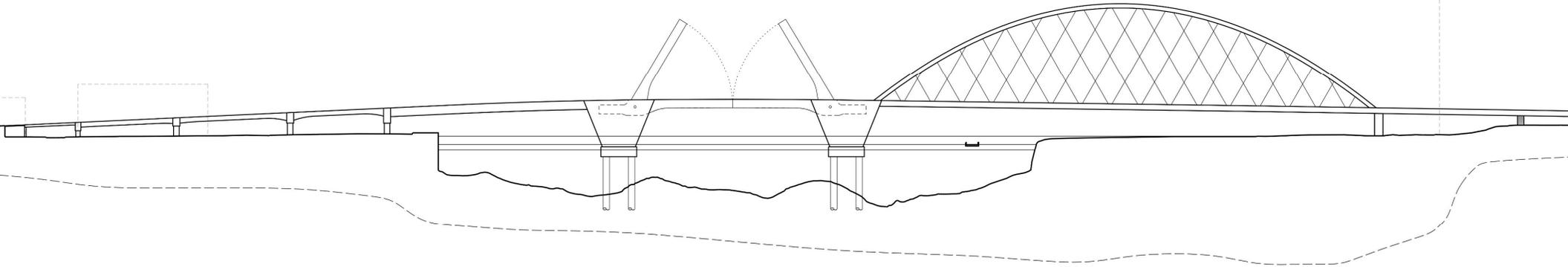


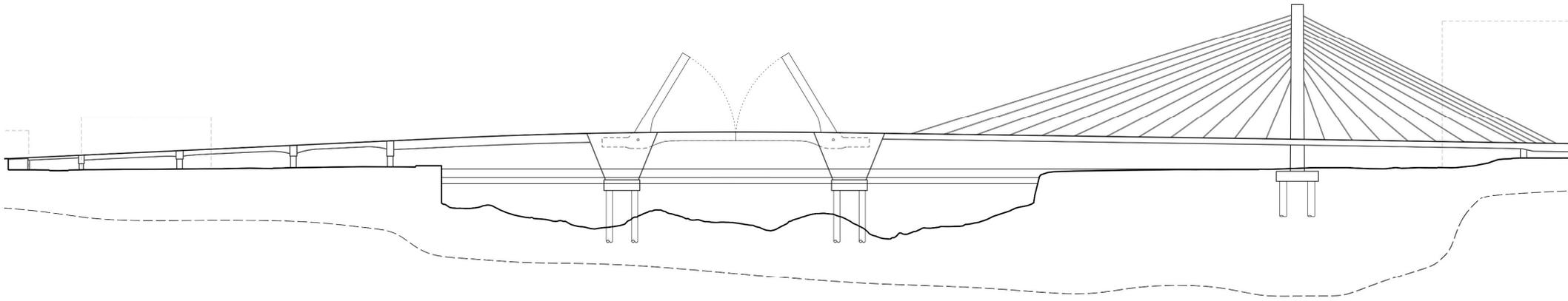


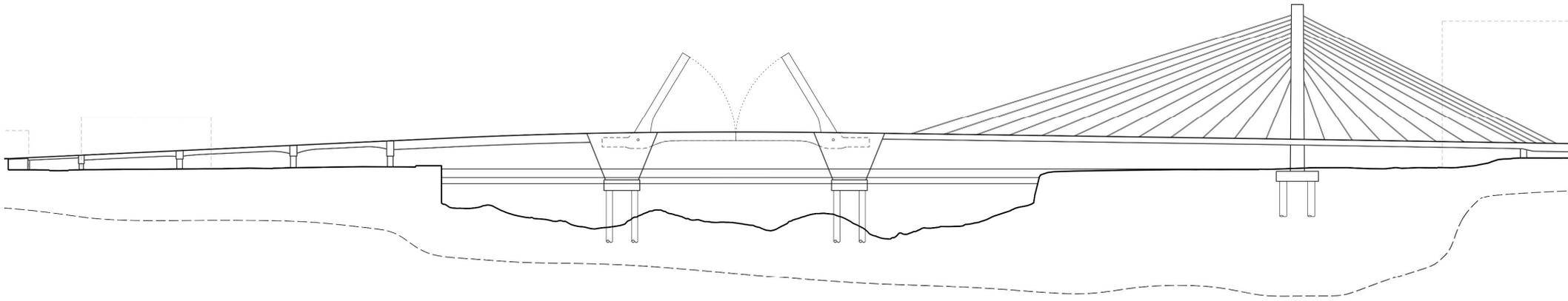
BEAM

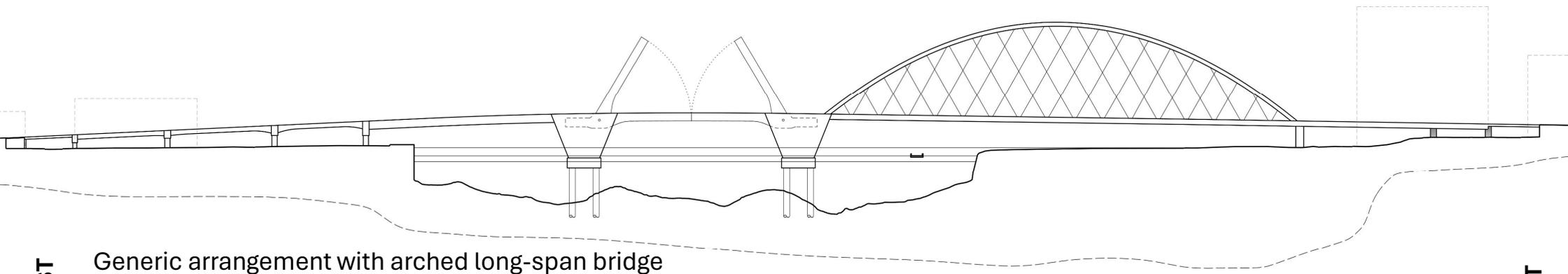


BEAM





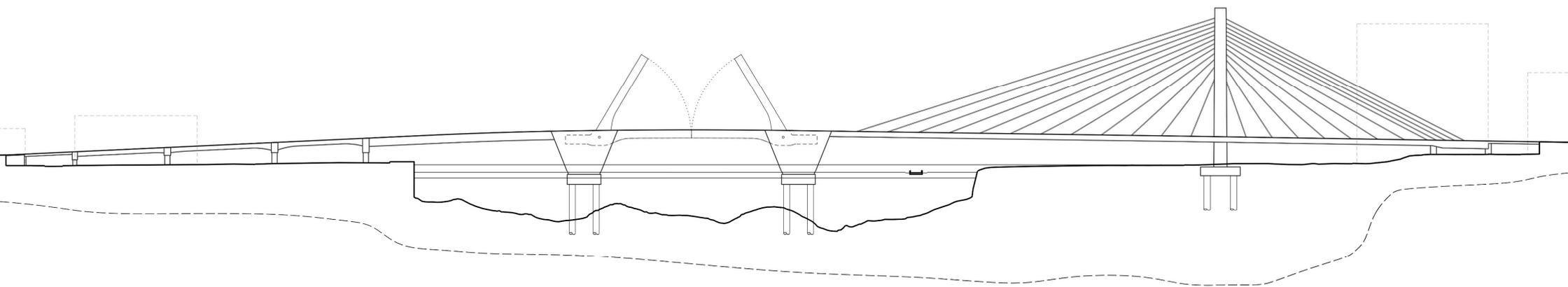




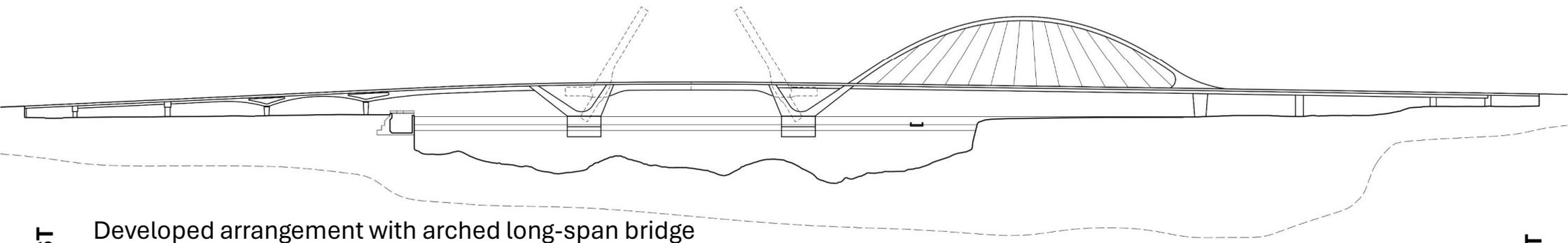
Generic arrangement with arched long-span bridge

WEST

EAST



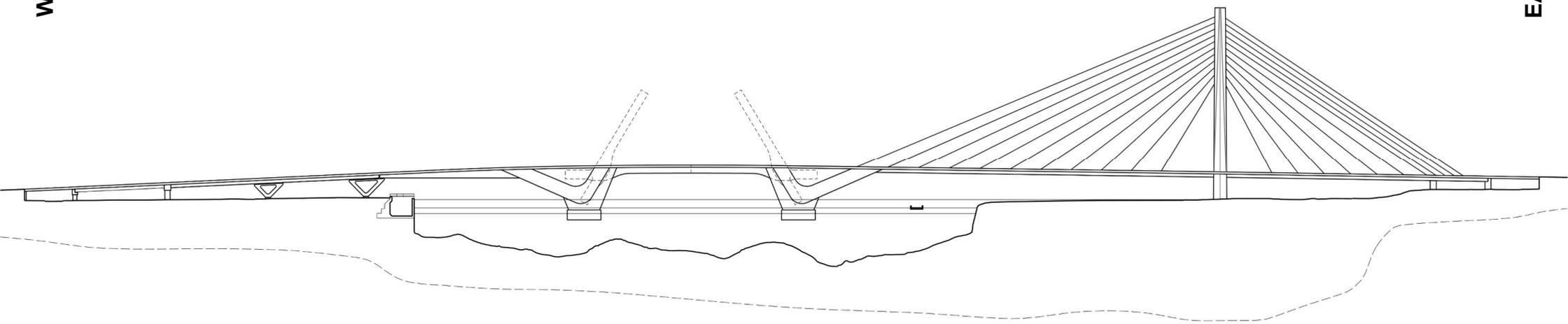
Generic arrangement with cable-stayed long-span bridge



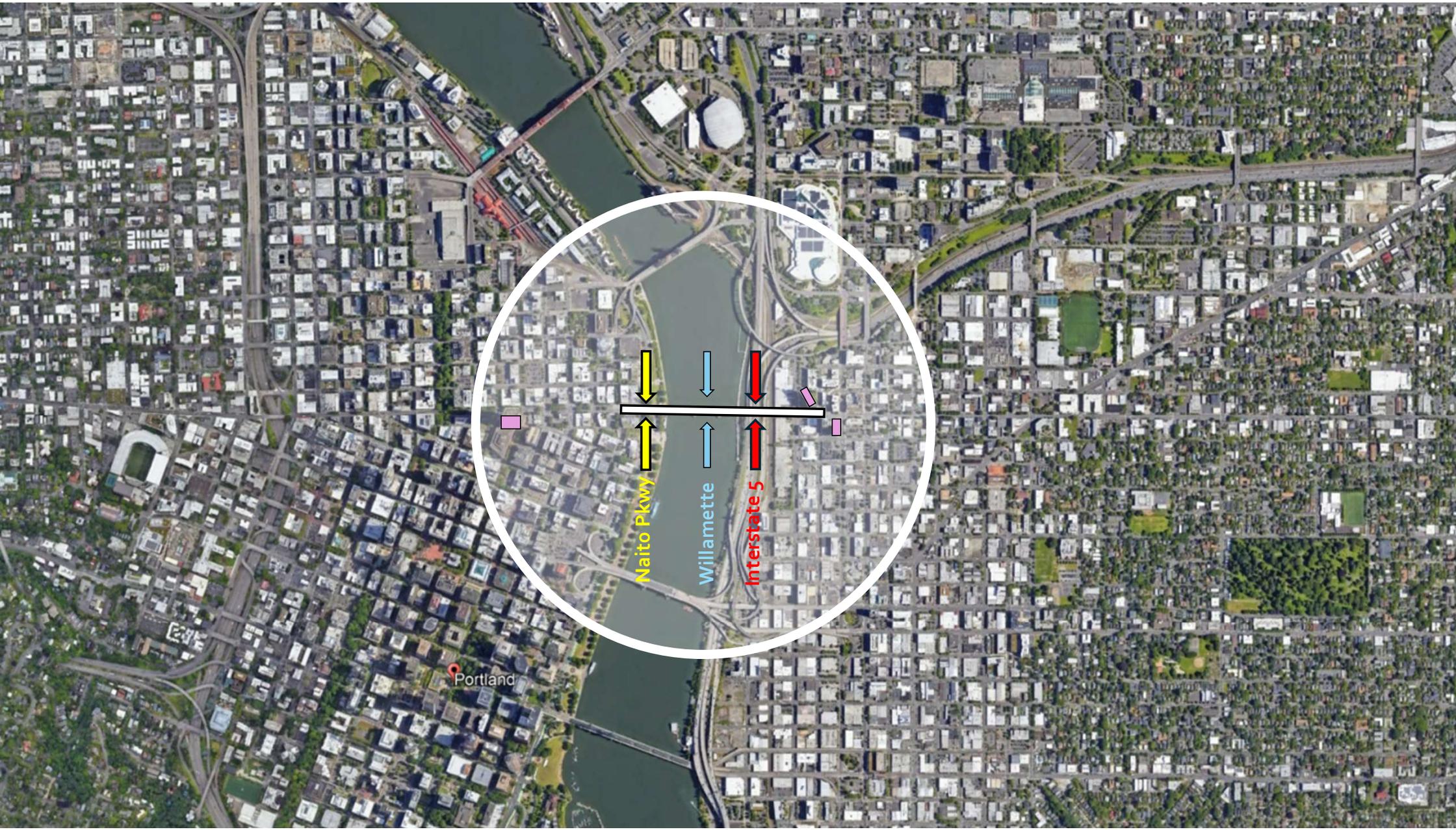
Developed arrangement with arched long-span bridge

WEST

EAST



Developed arrangement with cable-stayed long-span bridge



Portland

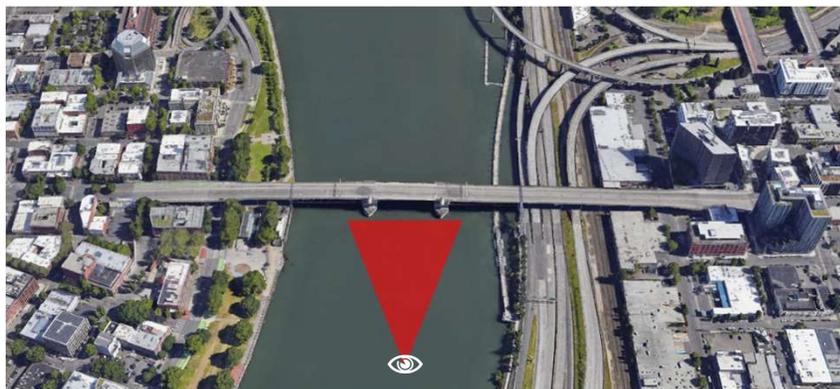
Naito Pkwy

Willamette

Interstate 5



View north on Naito Pkwy/Waterfront



View north on CL of river orthogonal to bridge



View northwards on I-5



View northwards on Naito Parkway
Cable Stayed Bridge



View northwards on Willamette



View northwards on I-5



View northwards on Naito Parkway
Arch Bridge



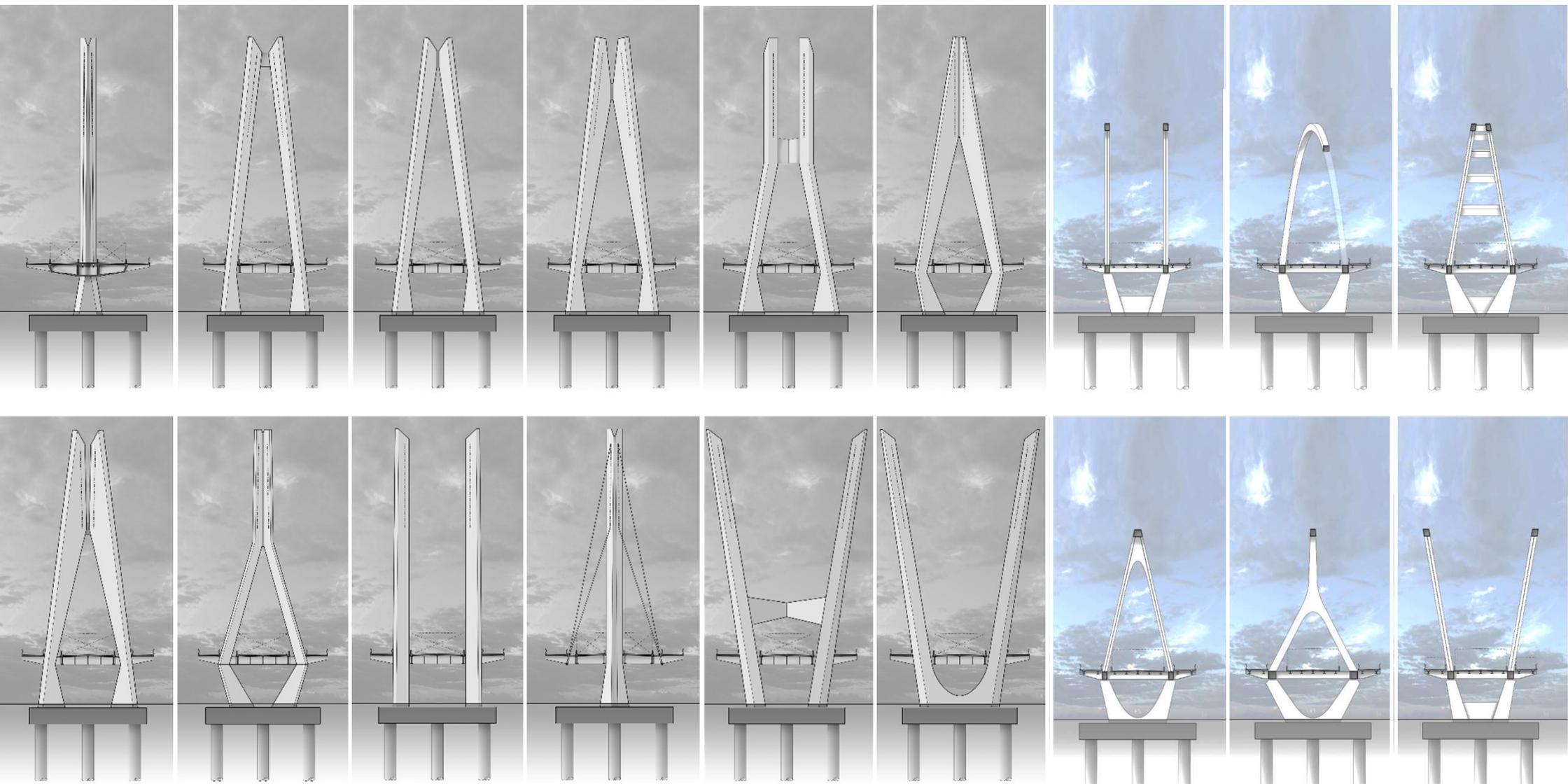
View northwards on Willamette



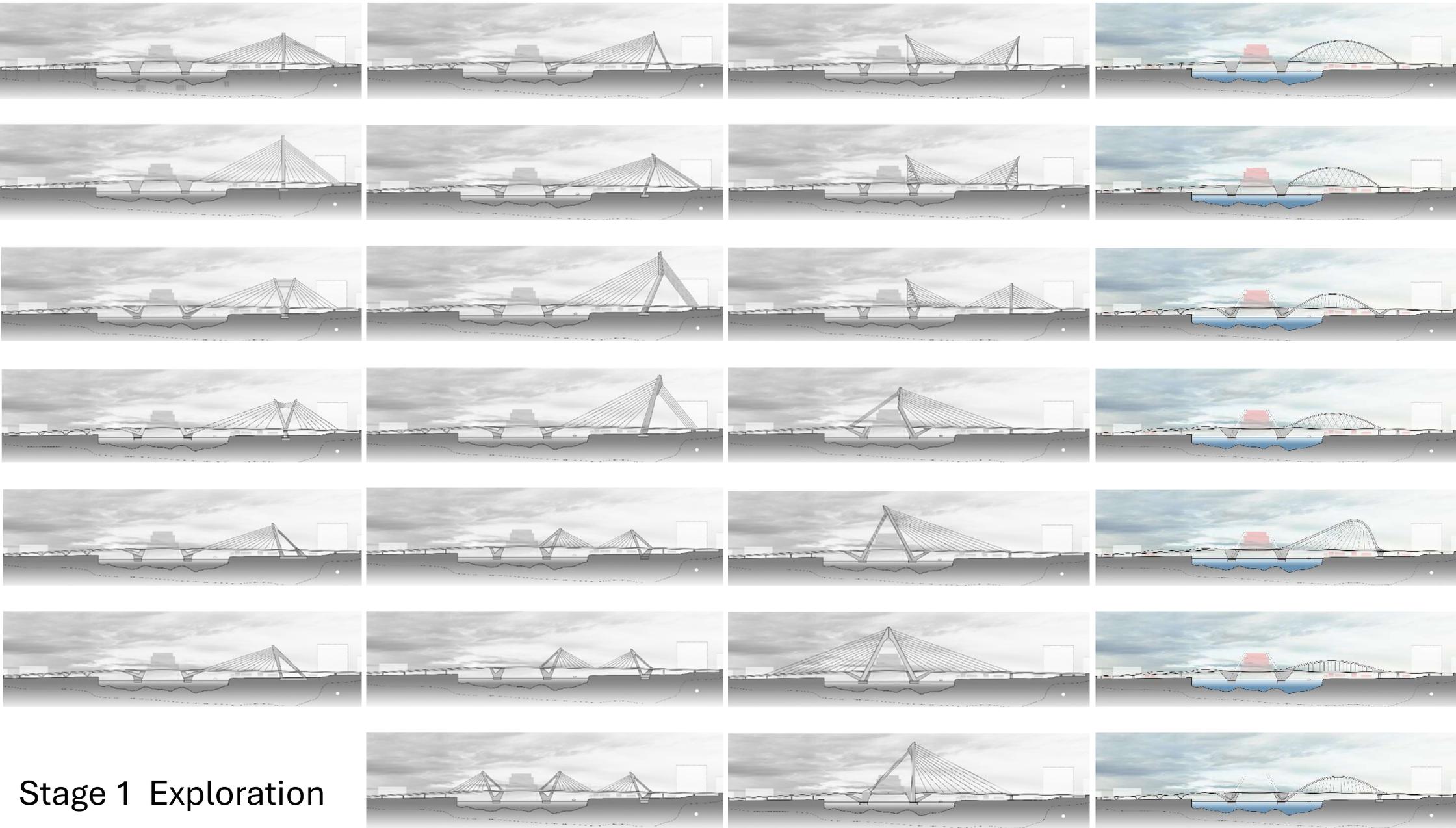
View northwards on I-5



Process

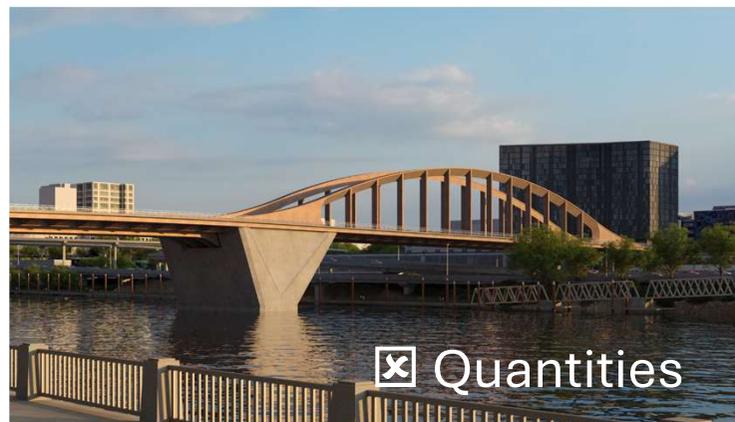
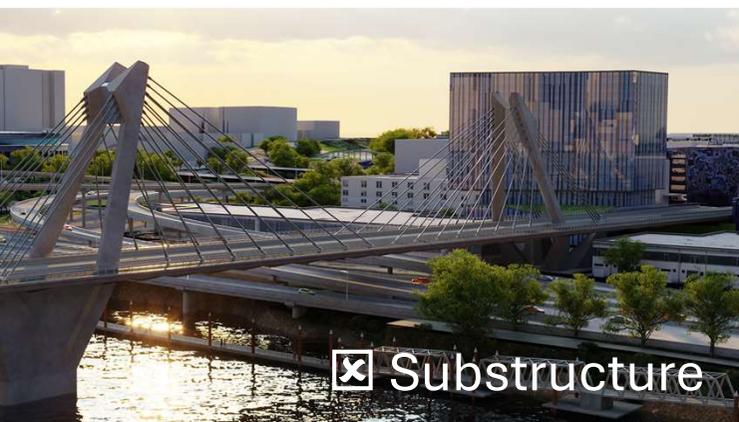


Stage 1 Exploration

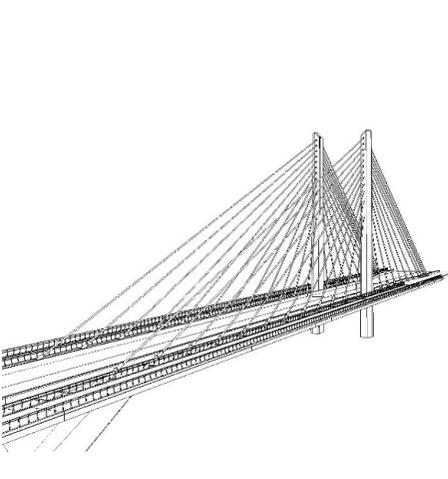


Stage 1 Exploration

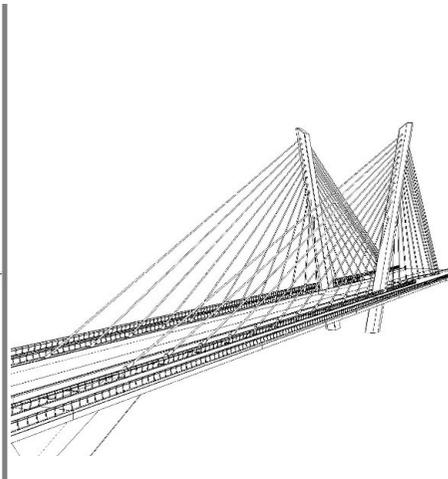
BEAM



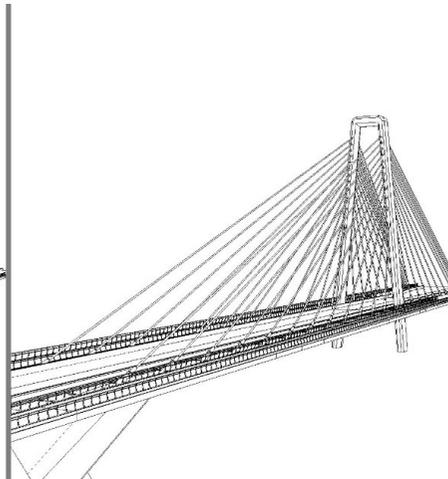
Stage 2 Screening



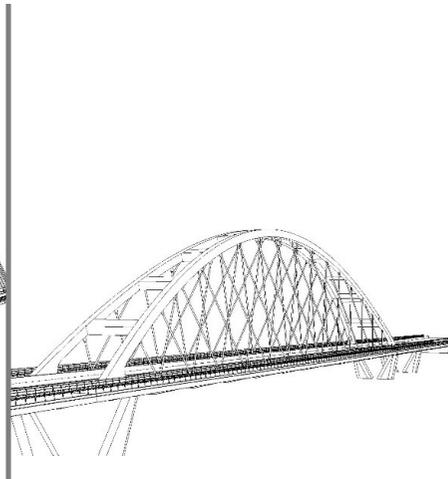
Goalpost cable stayed tower



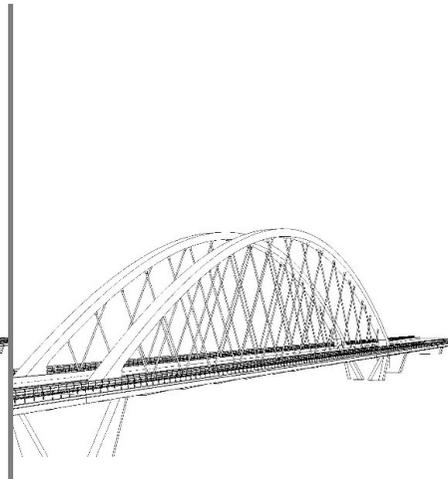
Valley cable stayed tower



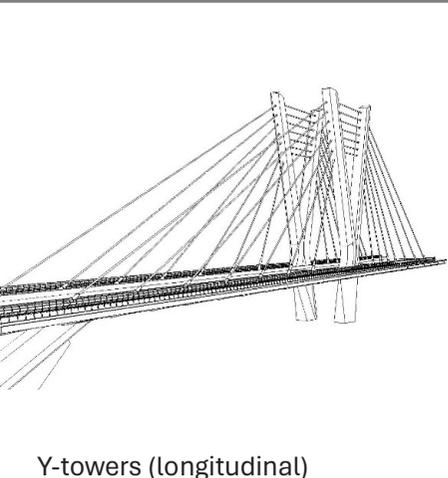
Hooped cable stayed tower



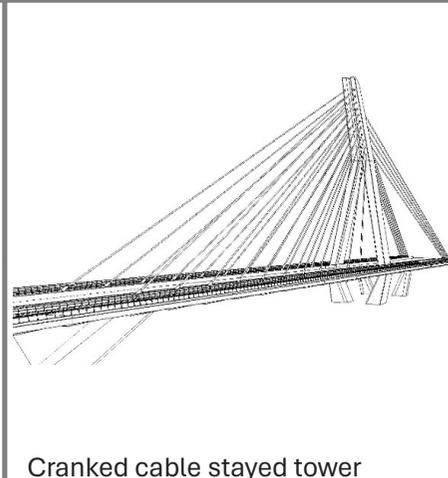
Braced basket-handle arches



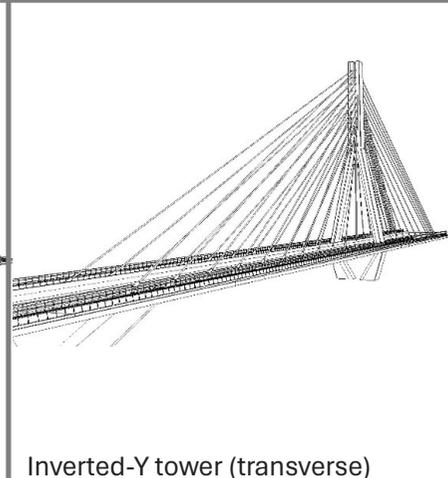
Unbraced through-arches



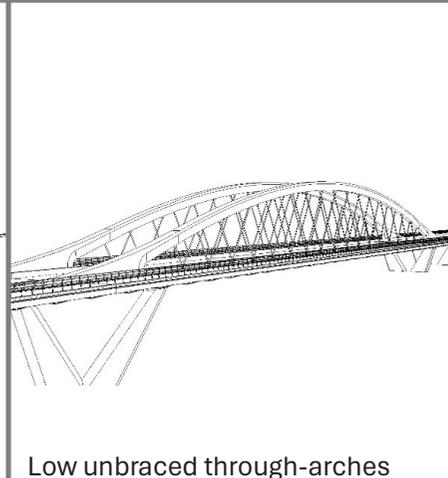
Y-towers (longitudinal)



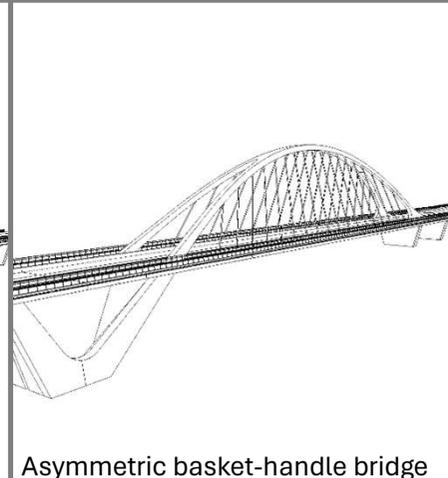
Cranked cable stayed tower



Inverted-Y tower (transverse)



Low unbraced through-arches



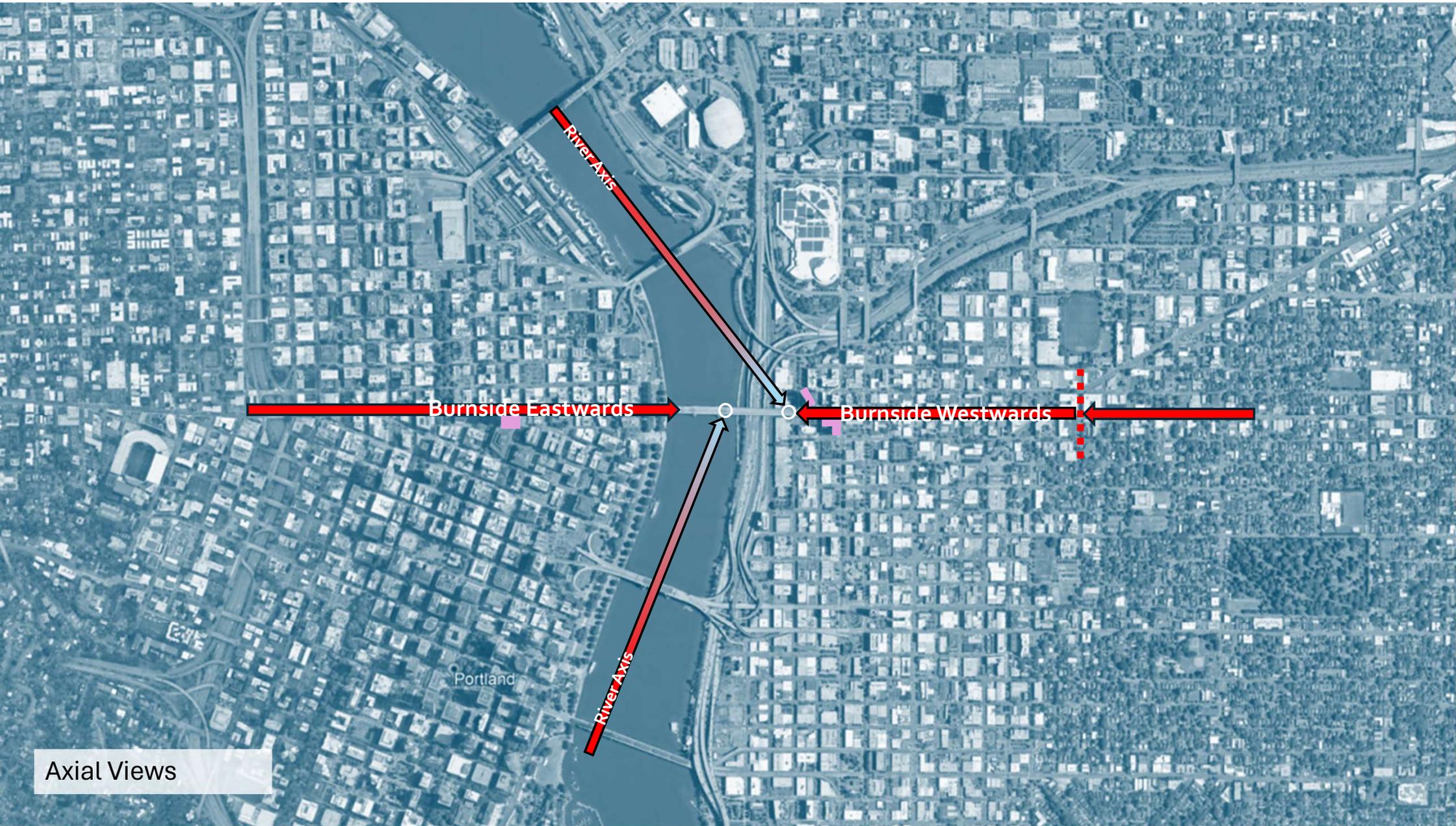
Asymmetric basket-handle bridge

Stage 3 Evaluation

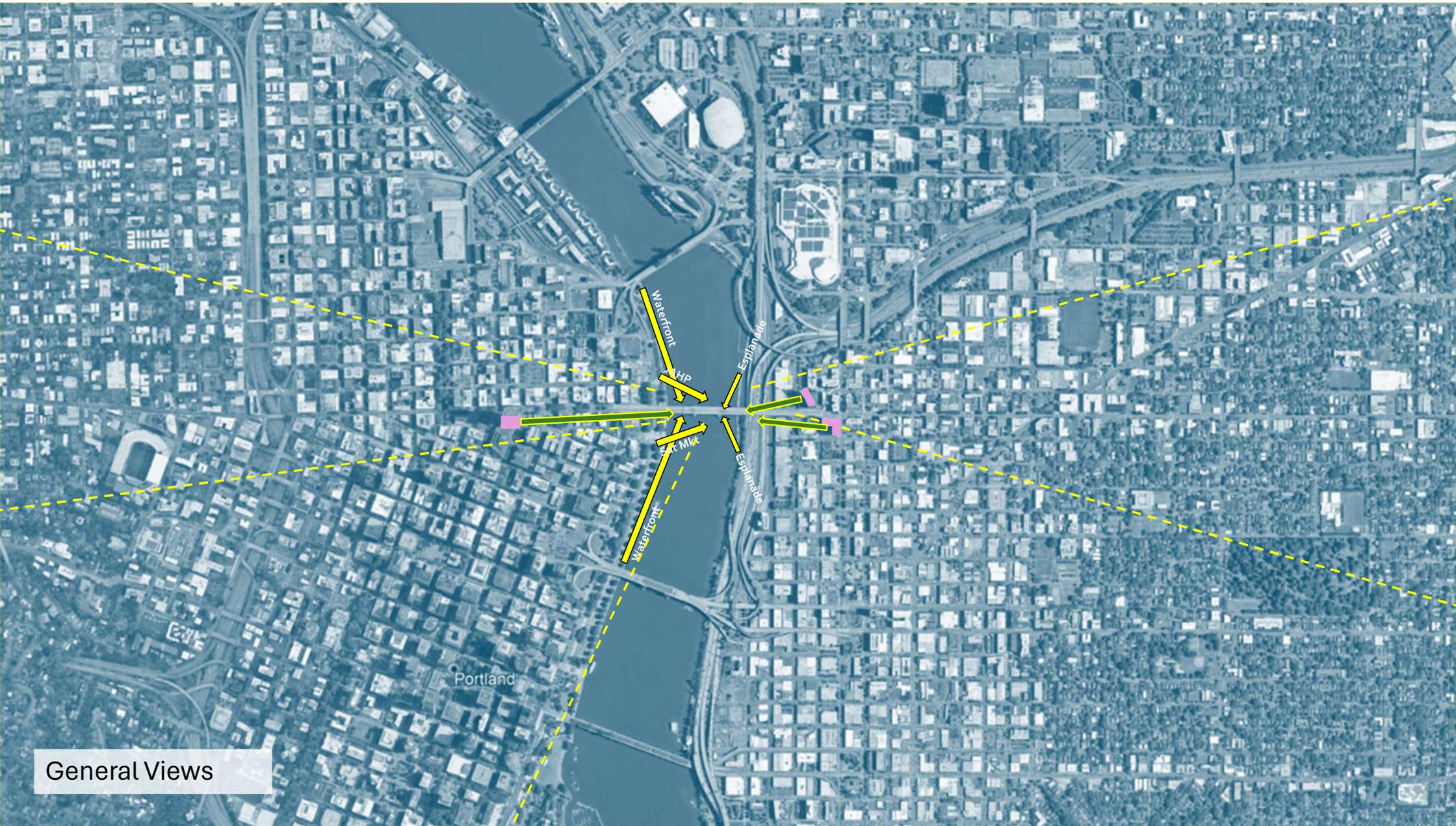
Views



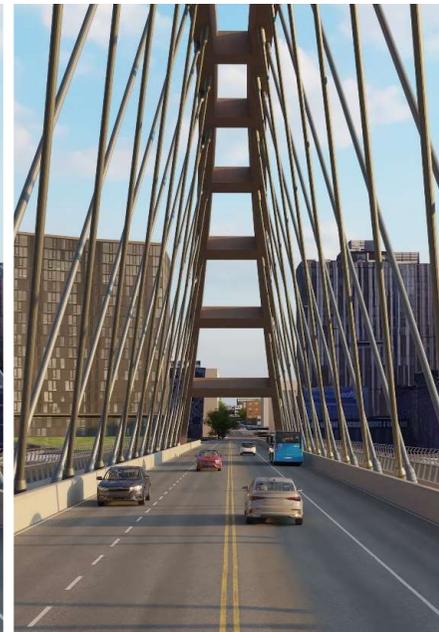
Orthogonal Views



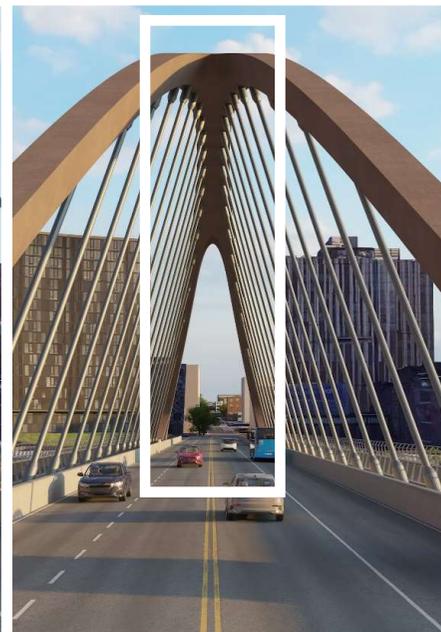
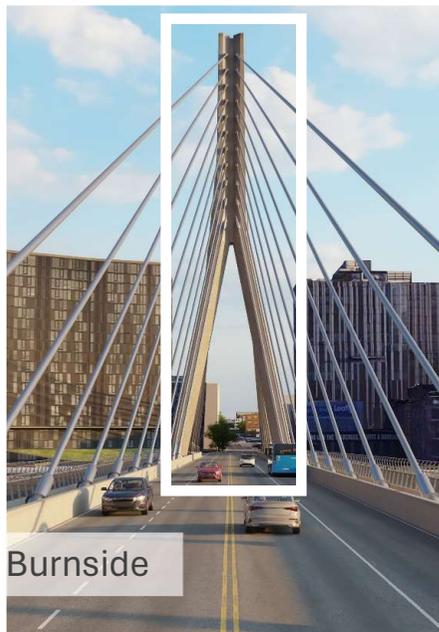
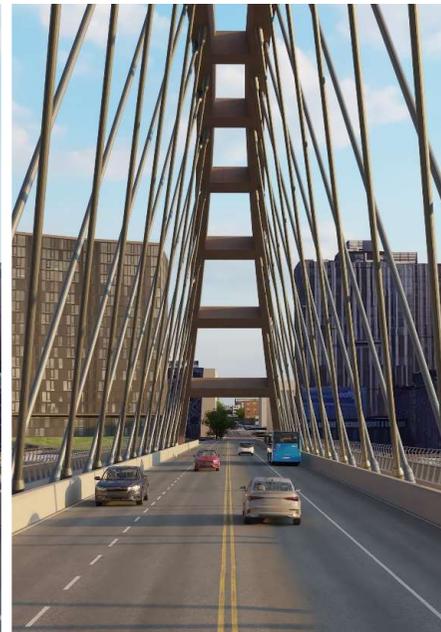
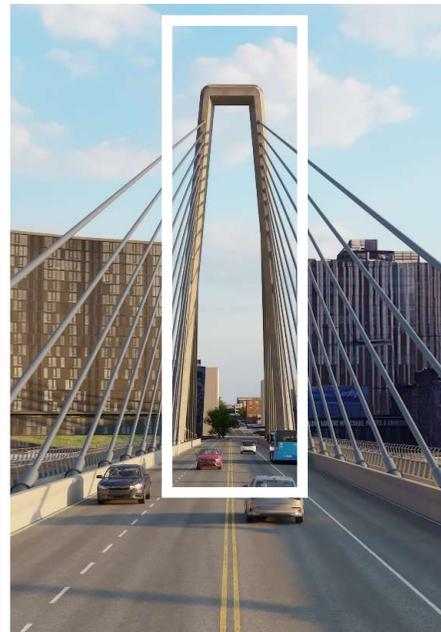
Axial Views



General Views



Axial view eastwards on Burnside



Axial view eastwards on Burnside



Axial view eastwards on Burnside

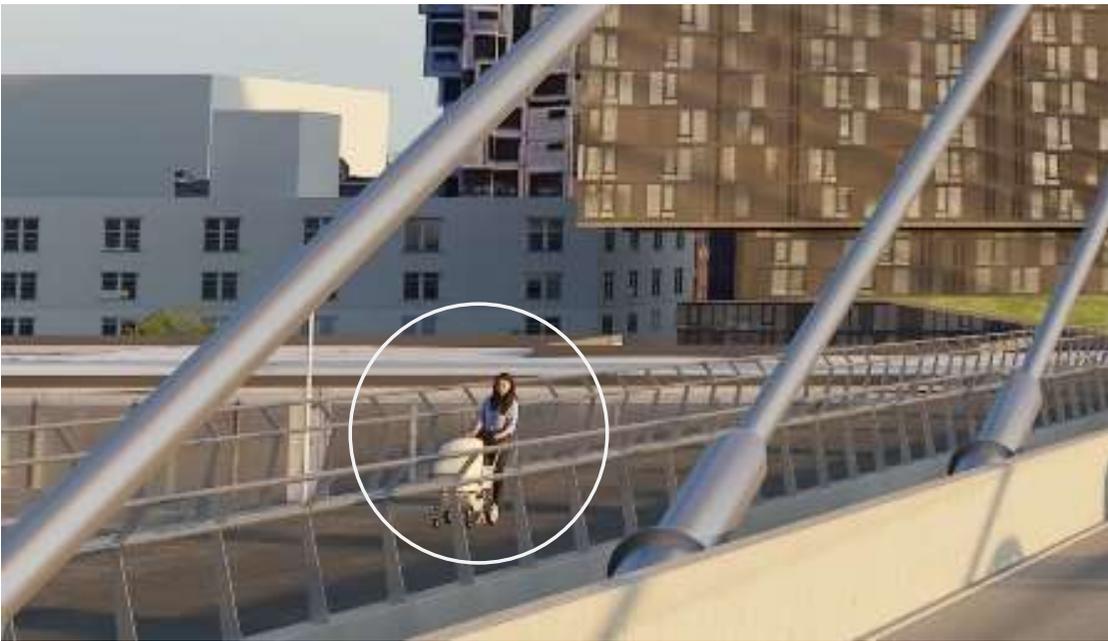


CONCRETE BRIDGE TOWER

Axial view eastwards on Burnside



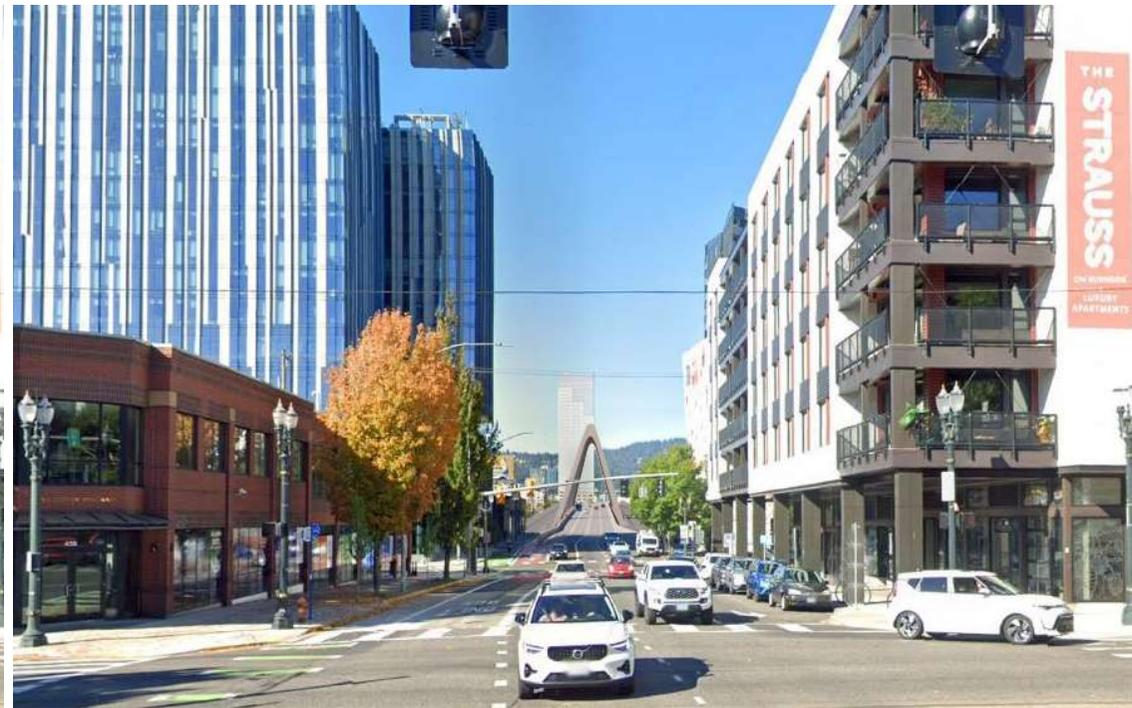
WEATHERING STEEL ARCH



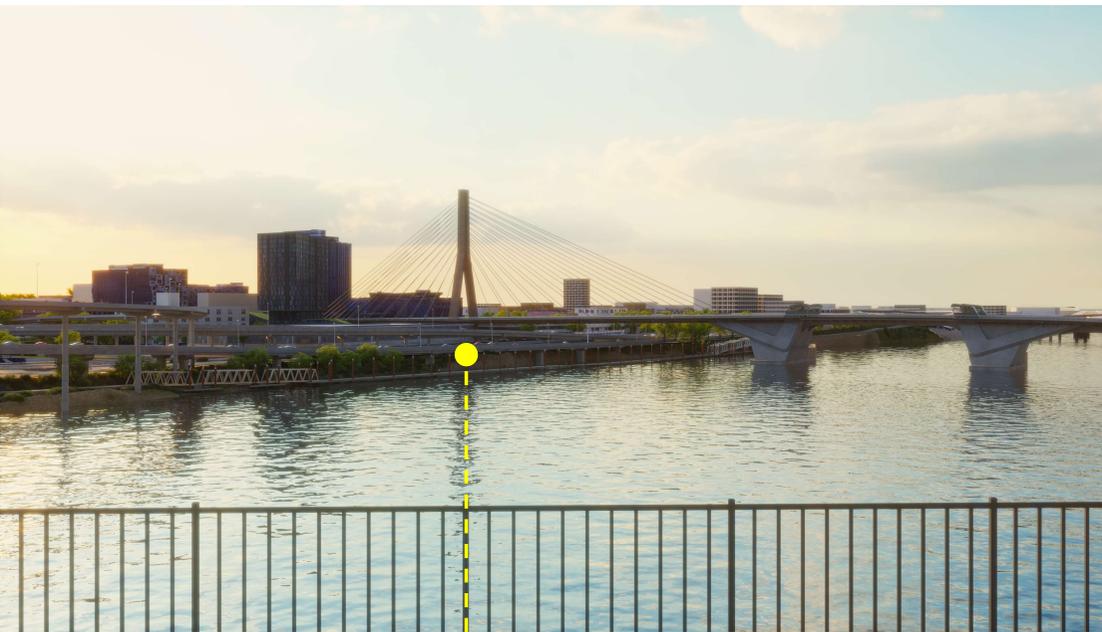
Axial view eastwards on Burnside



Axial view eastwards on bike/ped way



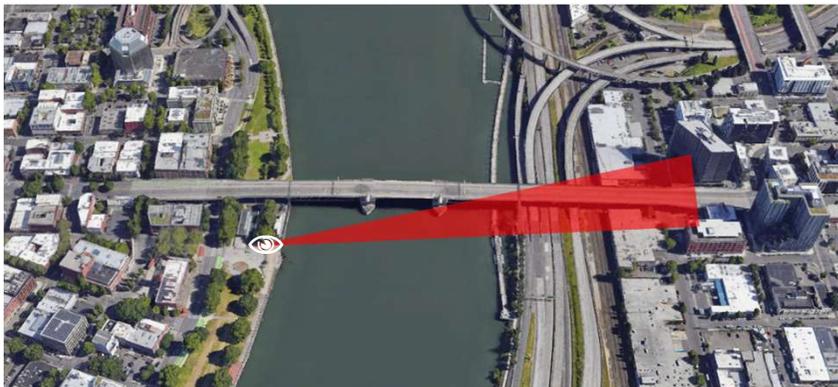
Axial view westwards on Burnside



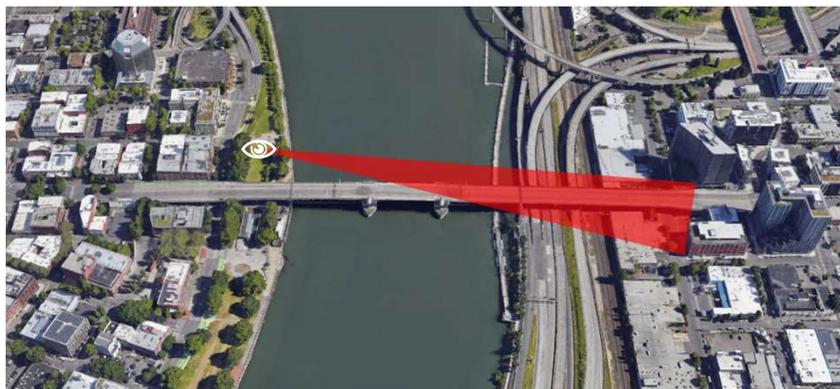
Axial river view southwards from CL of downstream bridges



Orthogonal view north on Tom McCall Waterfront Park



General view eastwards from Saturday Market /Tom McCall Waterfront Park
(south of Burnside)



General view eastwards from Japanese American Heritage Plaza
(north of Burnside)



General view westwards from Esplanade
(north of Burnside)



General view westwards from Esplanade
(north of Burnside)

TIED-ARCH BRIDGE



CABLE STAYED BRIDGE







**BURNSIDE
BRIDGE PARTNERS**

STACY AND WITBECK / TRAYLOR BROS. / AMERICAN BRIDGE

Current project stage

- 15% design
- Bridge type analysis & selection

BBPs Role

- Cost certainty
- Constructability
- Schedule

Today's Discussion

- Cost estimating considerations





Considerations

Risk

- Joint risk register
- Evaluate potential cost driving components
- Located in the final pricing

Escalation

- Evaluation of historic cost increases
- Recent history has had unprecedented increases

Subcontractors & Suppliers

- Sub vs self-perform
- Market availability
- Disadvantaged Business Enterprise (DBE)

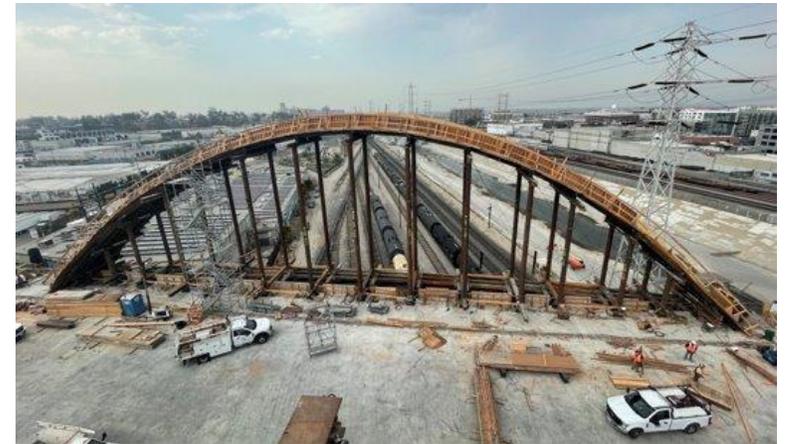
Right of Way (ROW)

- What space is needed?
- How long do we need this space?

Temporary Works

Cost Drivers

- Public & Workers Safety
- Access
- Formwork
- Schedule

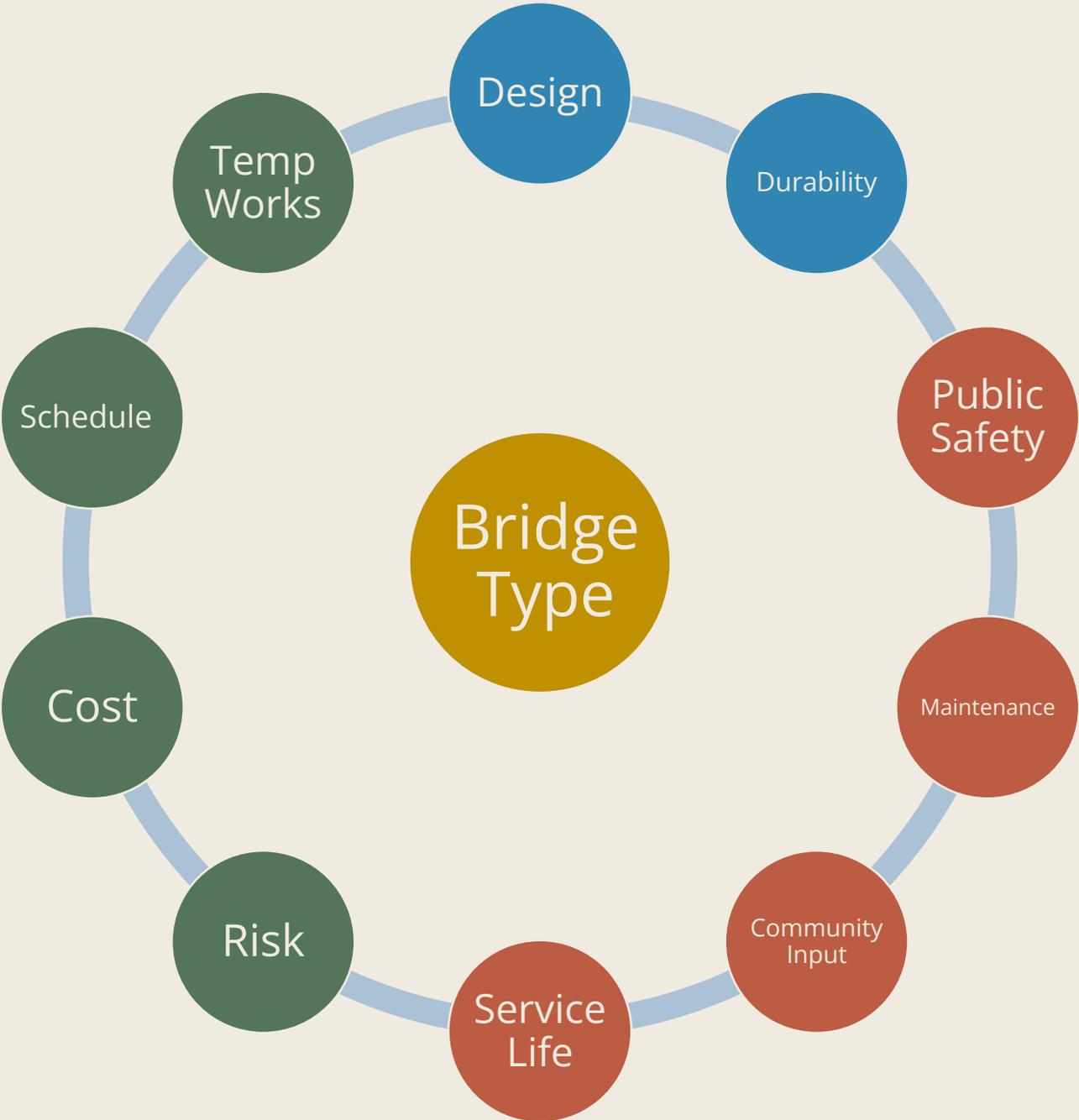




Estimating Process

- Break work down into activities (via WBS)
- Quantify the work within the WBS
- Pricing according to market
- How does this tie into the project schedule?
- Reconcile quantities and cost with ICE

Takeaway



A&E

County

BBP

Public Comment



Public Comment

- State your first and last name
- Speak clearly and concisely
- Limit your comment to three minutes



If you have questions that you would like a response to, please submit them to burnsidebridge@multco.us.



Next Steps & Closing Remarks



Closing Remarks

An aerial photograph of a city bridge spanning a river, with a blue overlay. The bridge has a prominent tower structure. In the background, a city skyline with various buildings is visible. A car is driving on the bridge. The text "Thank you" is centered in white.

Thank you