



Working Group Meeting #3

Rourke Bridge Replacement Project

Lowell, MA | January 31, 2023 | 2:00pm

MassDOT #607887



Working Group Meeting Notes and Procedures

Notification of Recording

- This virtual meeting will be recorded. The Massachusetts Department of Transportation will retain and distribute the video, still images, audio, and/or chat transcript, as appropriate. Meeting recordings are typically posted on project websites for those who cannot attend.
- By continuing attendance with this virtual meeting, you are consenting to participate in a recorded event.
- All recordings and chat transcripts will be considered a public record.
- If you are not comfortable being recorded, refrain from chatting in the transcript box or asking questions via Q&A, or you may choose to excuse yourself from the meeting.

Other Important Notes

- This is a working session for the project working group and is intended to advance the group's deliberation to provide input to MassDOT. The meeting will be open to public questions and answers at the end of the presentation, as time permits.
- There are other opportunities to submit comments and questions, such as the project inbox, which can be accessed on the project website (www.mass.gov/rourke-bridge-replacement-project). There is also a public information meeting scheduled for February 7.
- Please state your name prior to asking a question or commenting whether written or verbal.
- We will take one initial comment or question from each person, time permitting. Please keep your initial comment/question to 2 minutes.
- We will provide a chance for additional comments and questions, as time permits.



Working Group Rules of Engagement

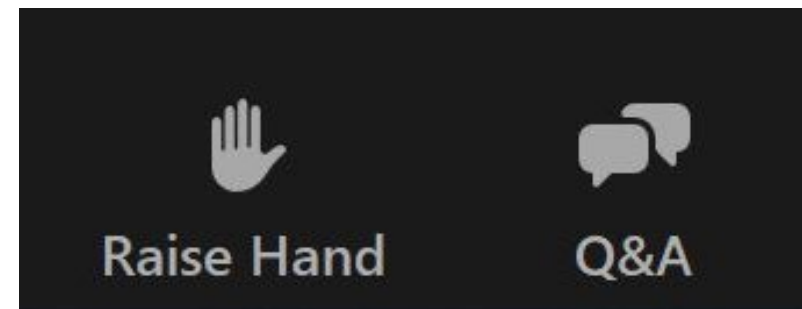
- Please be respectful of established timeframes and others' opinions.
- Please focus your comments on the agenda topic under discussion at the time.
- Please use the Raise Hand or **Q&A** feature for questions or comments.
- Participants are encouraged to provide additional feedback online using the project feedback links on the website: <https://www.mass.gov/rourke-bridge-replacement-project>



Questions and Answers

Instructions

- During the Q&A portion of the presentation, working group participants may indicate they would like to submit a verbal question by using the **“Raise Hand”** button (see below). Kindly wait for the moderator to recognize and call on you before speaking, you will be unmuted at this time.



- If you prefer to type your question, you can use the **“Q&A”** button at any point throughout the presentation (see above). Written questions will be answered in the order received and read out by the moderator to the project team.
- To ask a question via phone, dial *9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn.

Please share only one question or comment at a time, limited to 2 minutes, to allow others to participate.



Notice of MassDOT's policy on diversity and civil rights:

- All MassDOT activities, including public meetings, are free of discrimination.
- MassDOT complies with all federal and state civil rights requirements preventing discrimination based on sex, race, color, ancestry, national origin (limited English proficiency), religion, creed, gender, sexual orientation, gender identity or expression, or veteran's status.
- We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit <https://www.mass.gov/nondiscrimination-in-transportation-program> to reach the Office of Diversity and Civil Rights.

Thank you for joining our meeting. We appreciate your participation!



Agenda

- Project Recap and Updates (**Steve McLaughlin**) (5min)
- Discussion of On-Going Design Development (22min total)
 - Bicycle and Pedestrian Accommodations (**Dan Barbosa**) (5min)
 - Landscape Design Elements (**Deneen Crosby**) (5min)
 - Bridge Structure (**Shaun St. Hilaire**) (2min)
 - Bridge Aesthetics (**Etty Padmodipoetro**) (5min)
 - Bridge Lighting (**Domingo Gonzalez**) (5min)
- Cost and Schedule Update (**Steve McLaughlin**) (2min)
- Q & A using Raise Hand Feature
- Meeting Adjourn





Project Update

Project Purpose - Recap



- Bridge Replacement



- Enhance safety and connectivity for Pedestrians, Bicycles, Emergency Vehicles and Watercraft



- Improve Traffic Operations at the Wood Street intersections with Pawtucket Boulevard, Middlesex Street, and Princeton Boulevard



Progress To-Date

- Selected Alignment
- Selected Bridge Type and Layout
- Confirmed and selected 4-lane roadway configuration
- Identified Preferred Bike and Pedestrian Path configuration





Proposed Bicycle and Pedestrian Connections

What are the important features for crossing the bridge as a bicyclist or pedestrian?

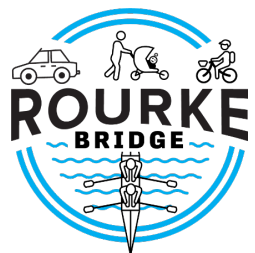
Flexibility in the path use

Separation of bicyclists and pedestrians

Simple wayfinding connections

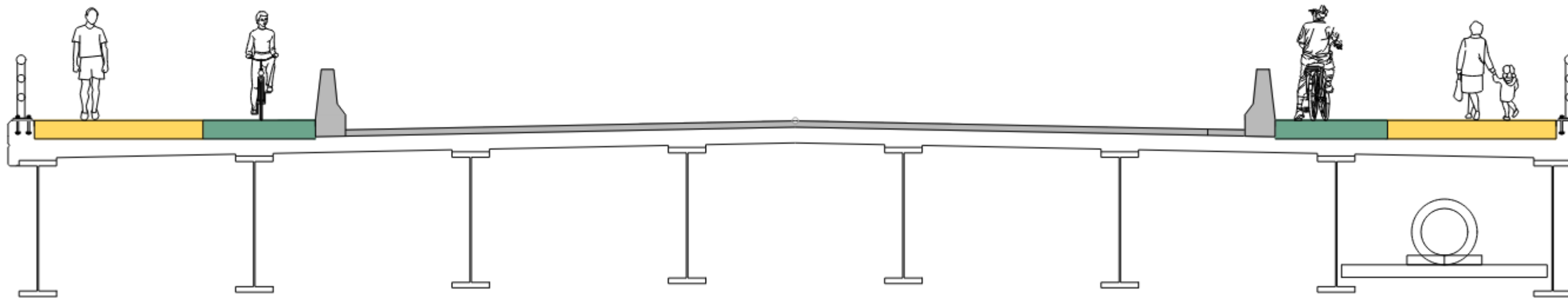
Space for furniture lighting and signing

Equal use for northbound and southbound



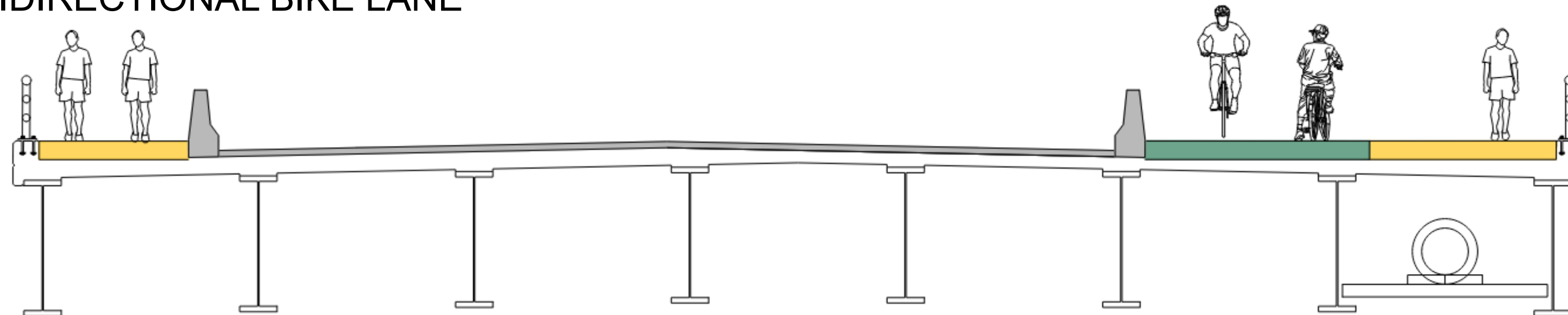
Previous Rourke Bridge Path Options

ONE WAY SEPARATED BIKE LANE



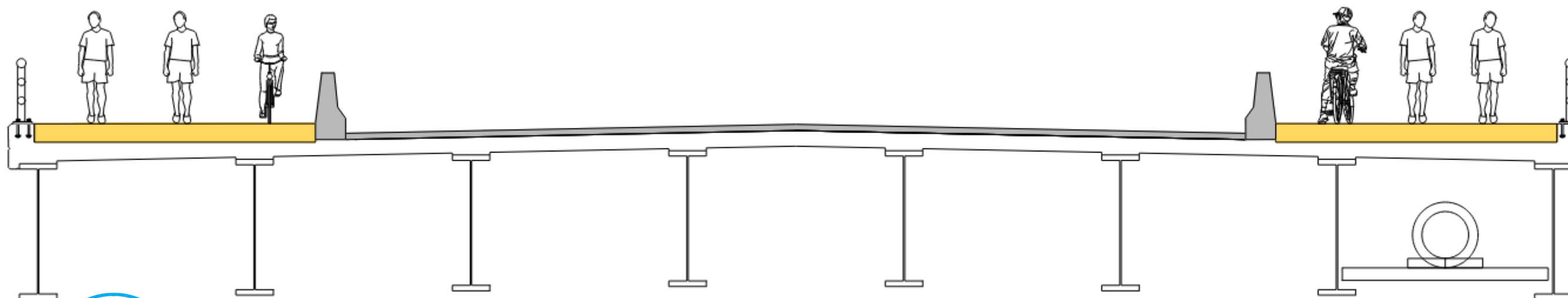
- Narrow sidewalk buffers
- Low flexibility for changes in use
- Could result in wrong way bicycles
- Less bicycle/pedestrian conflict.

BIDIRECTIONAL BIKE LANE



- Wider sidewalk buffer
- Mild flexibility for changes in use
- Bicycles on Southbound sidewalk would comingle with pedestrians.

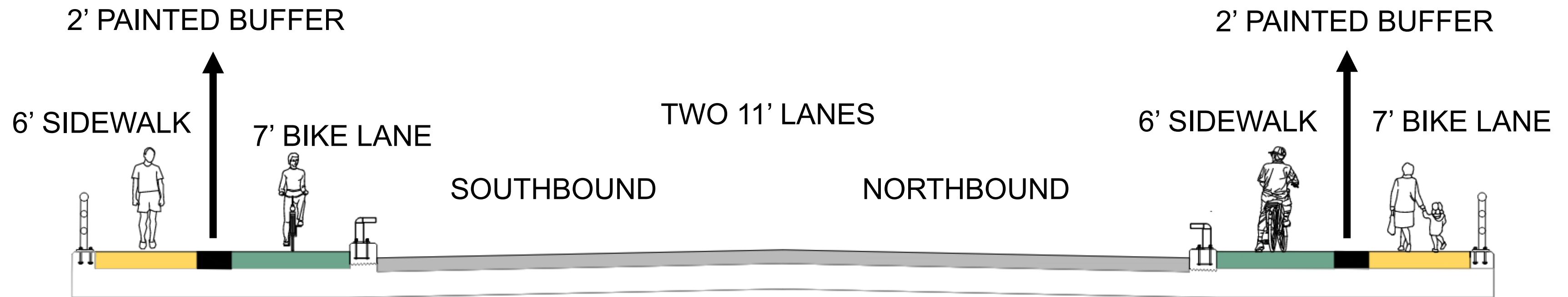
SHARED USE PATH



- Most flexibility for change in use.
- Equal use and width for Northbound and southbound.
- Bicycles and pedestrians would comingle.



Proposed Rourke Bridge Roadway and Path Configuration

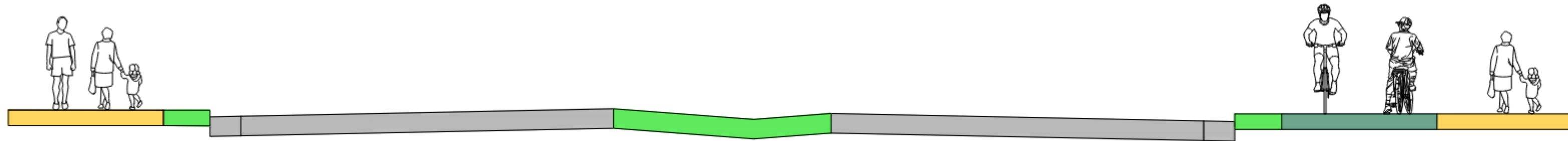


- Provides less bicycle/pedestrian conflict
- More flexibility for changes in use

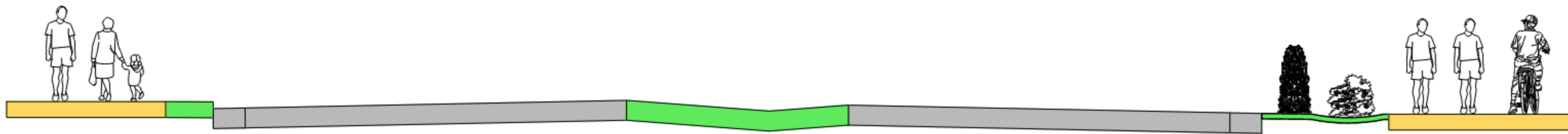


Pawtucket Boulevard – Previous Approach Roadway Cross-Section Options

BIDIRECTIONAL SEPARATED BIKE LANE AND SIDEWALKS

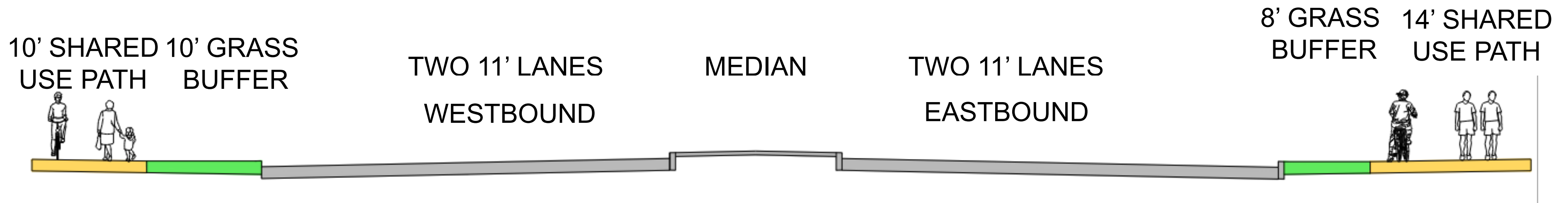


SHARED USE PATH ON BOTH SIDES



- Both options provide great connectivity to the proposed Rourke Bridge Section
- Shared Use option has less of an impact

Pawtucket Boulevard – Proposed Approach Roadway Cross-Section



- Provides less impact to Right of Way and Environmental
- Less pavement, more opportunity for landscape features



Landscape Architectural Elements

Landscape Architectural Goals

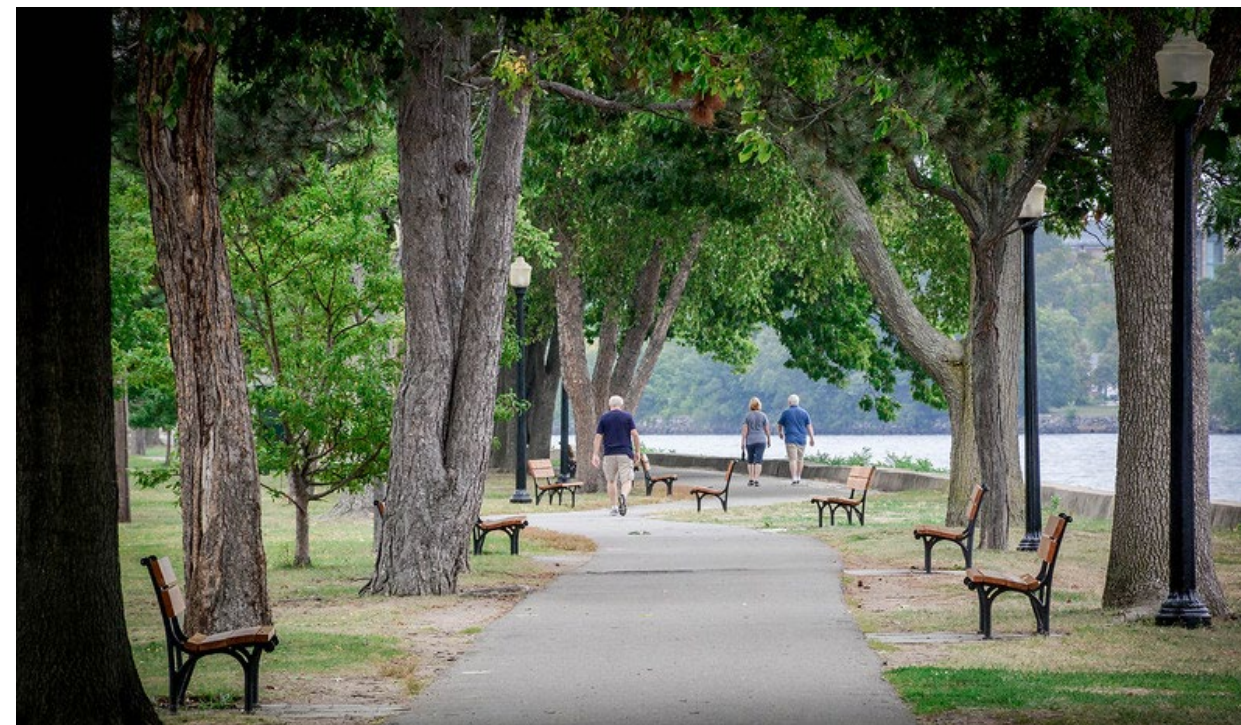
- City and Neighborhood Character and Image: Bridge is set into the landscape – design is to restore riverbanks and maximize recreational use
- Safe and Effective Modes for all Users: Pedestrian and Bicyclist Focus – design to provide connections in all directions
- Open Space: Design to bring improvements and better access to existing open space and to further environmental goals
- City Vitality: Design to encourage improved river use and engagement with the river – better boating, better viewing and more access for residents



Landscape Character

North Side:

- River edge and Pawtucket– parkland to the east and wooded to the west of existing bridge
- Riverfront access and recreational use to the east of existing bridge
- Pawtucket north side – developing, street trees at back of sidewalk typical, at curb near new development



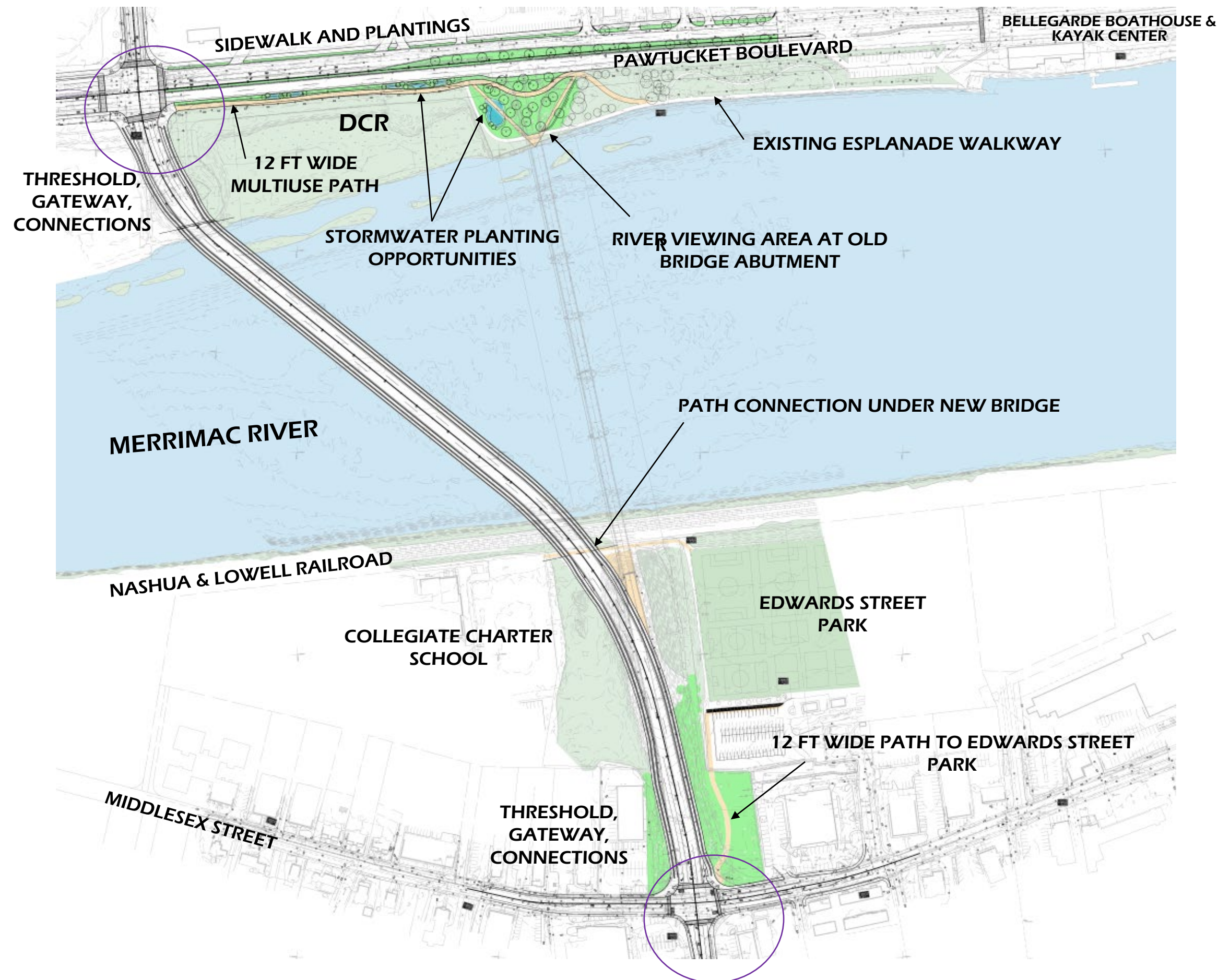
Landscape Character

South Side:

- Edwards Street Park and Collegiate Charter School – destinations on both sides of bridge landing
- “Strip-like” character of Wood and Middlesex Streets
- Railroad is barrier to river access from adjacent neighborhood



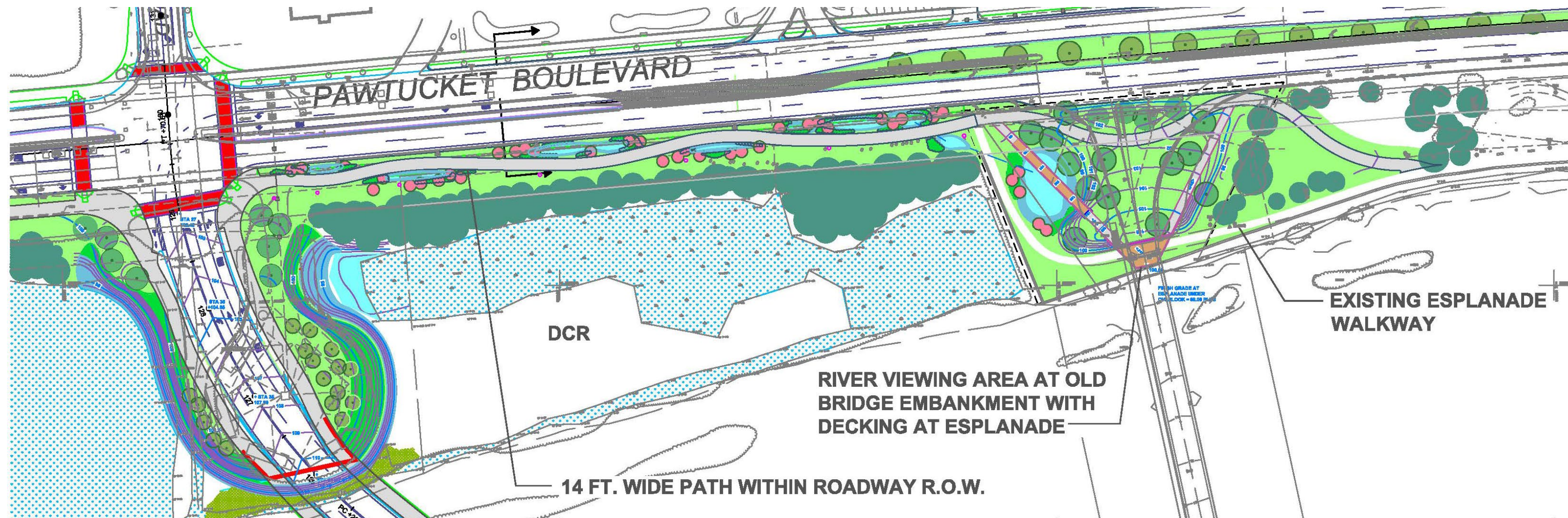
Opportunities



- Restore riverbanks and maximize recreational use
- Provide bicycle and pedestrian connections in all directions
- Evaluate potential for better access to existing open space and further environmental goals
- Encourage engagement with the river –better viewing and more access for residents

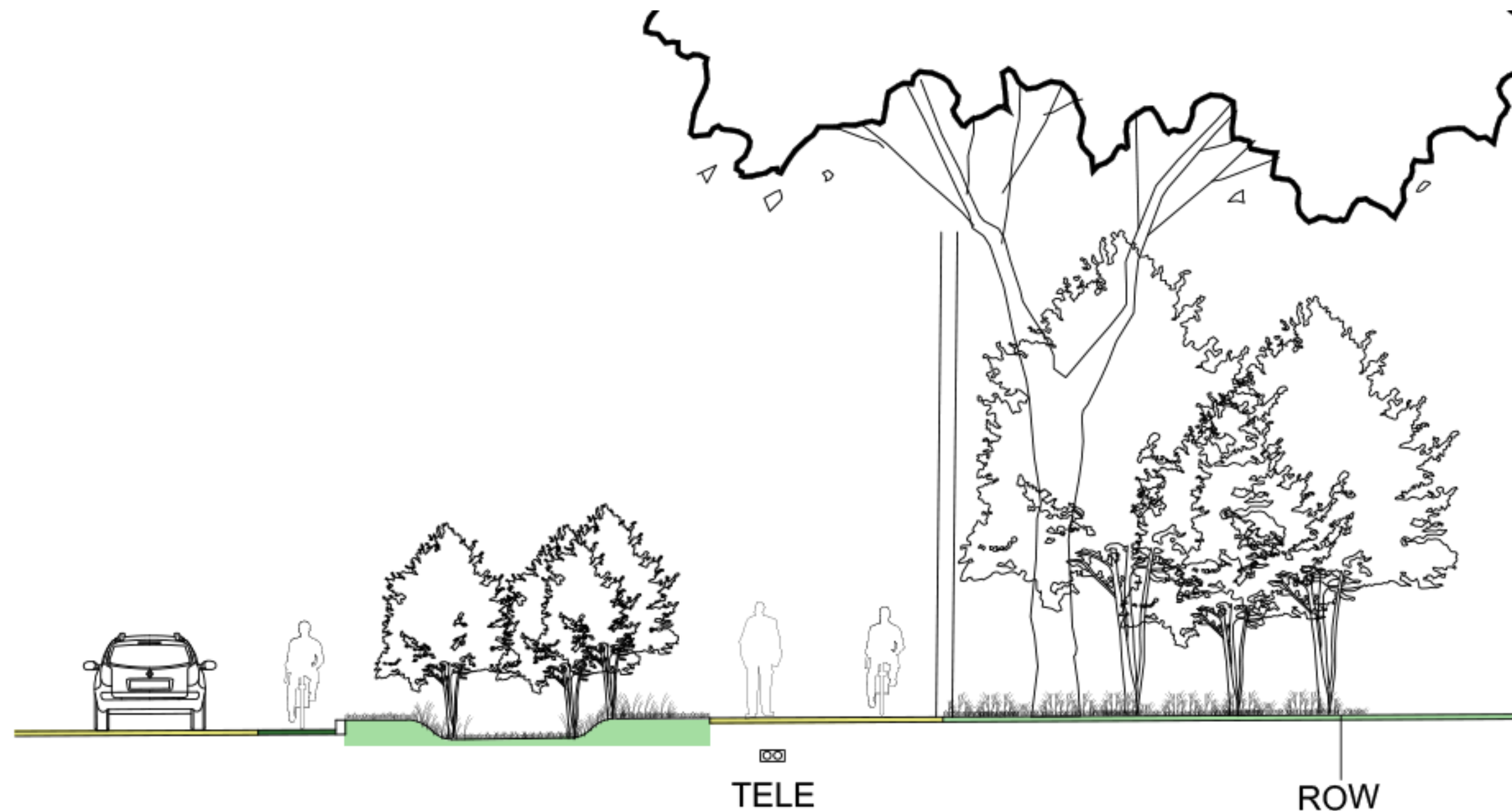
North Side Opportunities

- Placemaking opportunity at old abutment
- Stormwater opportunities and planting consistent with creating planted buffers at the Merrimack River
- Multi-use Path along Pawtucket and connection to Esplanade Path to east
- Bridge threshold and ped/bike connections



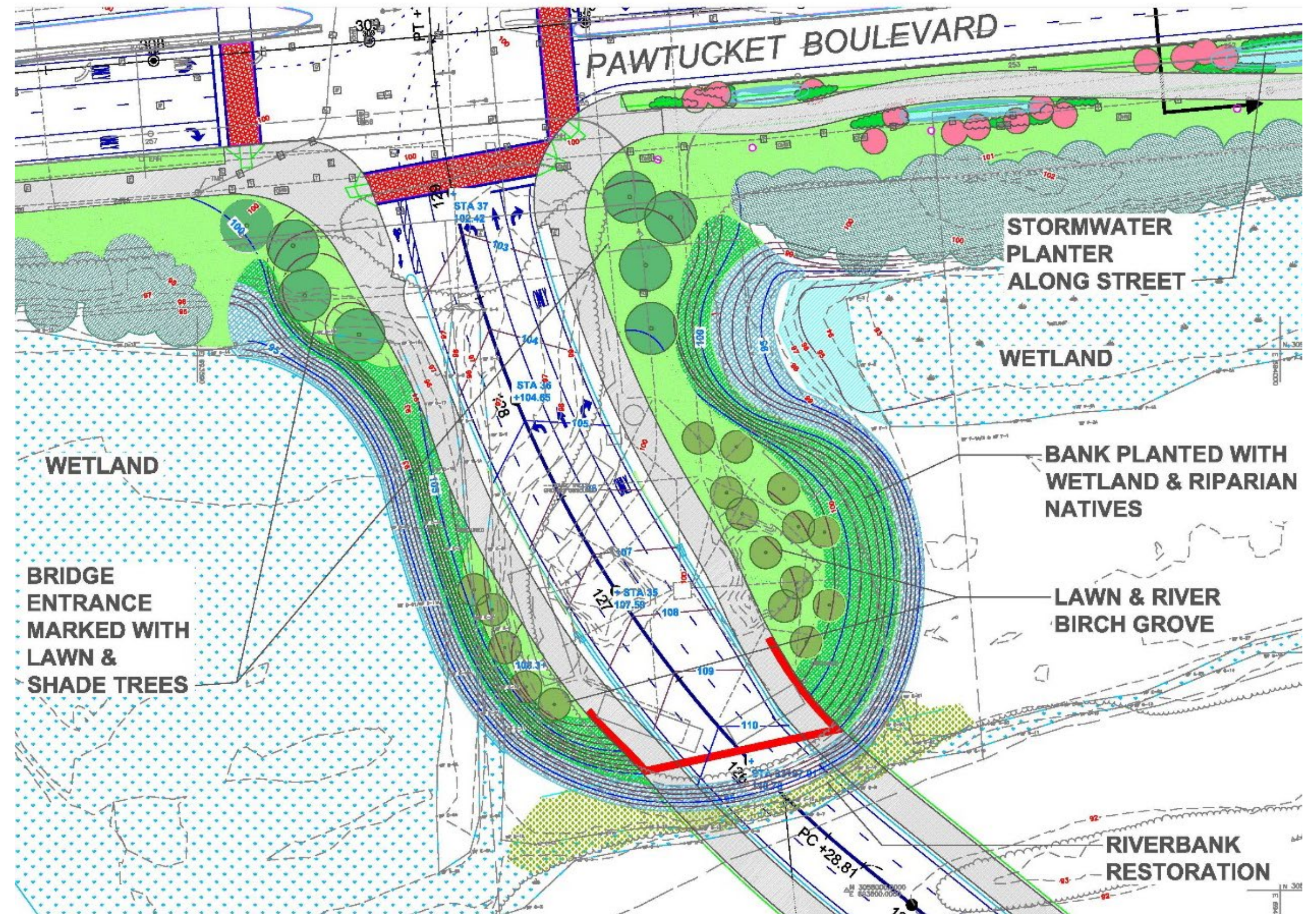
North Side

4'-19' buffer along Pawtucket Blvd. and a curving 12'-0" wide Multi-Use Path. Path is above Telecom line in places, and meanders under the Overhead Utility Poles in areas.



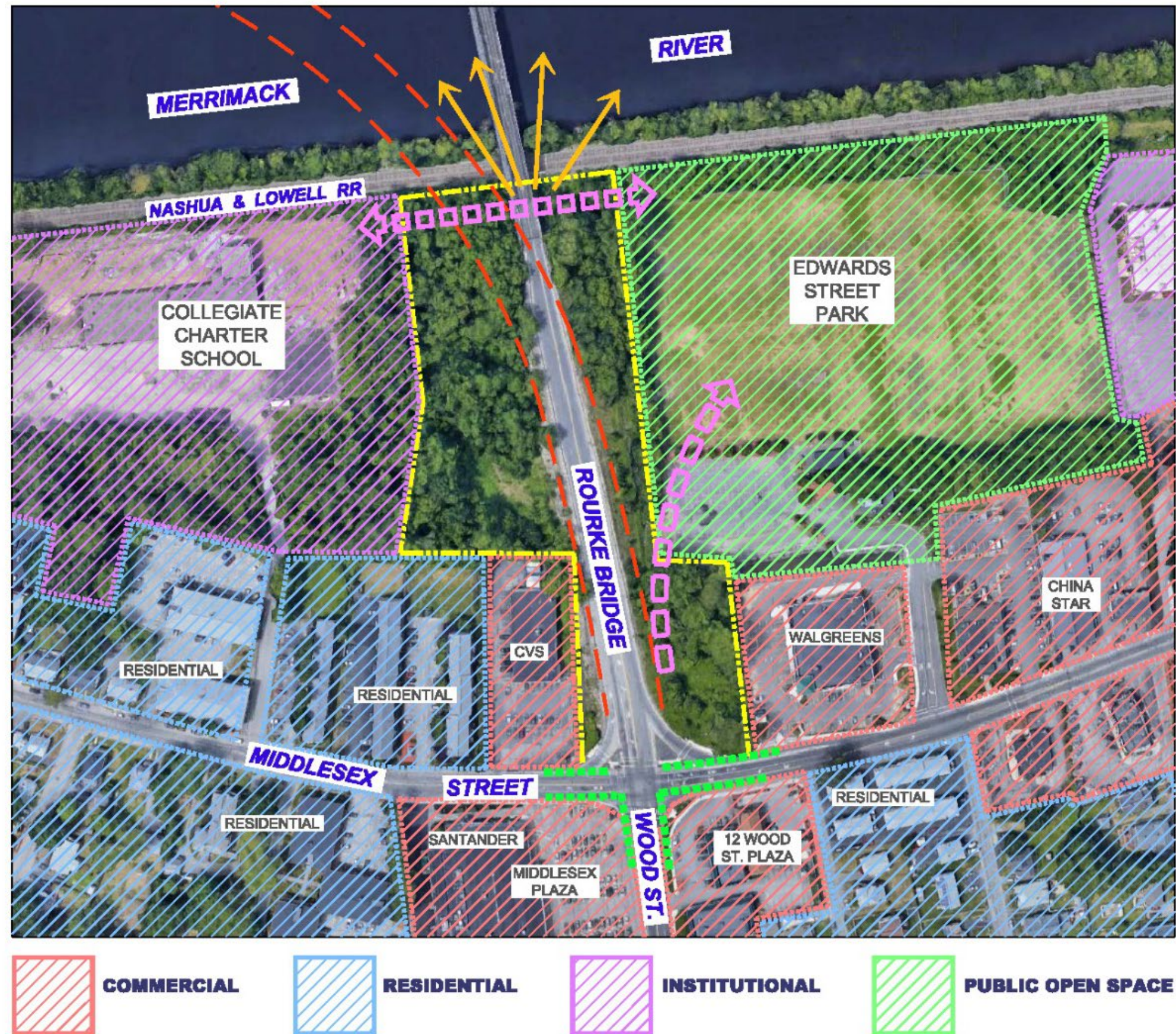
North Side - Threshold

- Distinct plantings at entrance mark north and south bridge entrances
- Level area adjacent to bridge on east and west sides allows for grove at threshold
- Native plantings – creation and restoration of river and wetland banks



South Side Opportunities

- Evaluate placemaking opportunity/overlook at old bridge abutment
- Evaluate path connection under new bridge between Collegiate Charter School and Edwards Street Park
- Evaluate connection to Edwards Street Park from the bridge
- Bridge threshold and Bike/Ped connections to existing streets



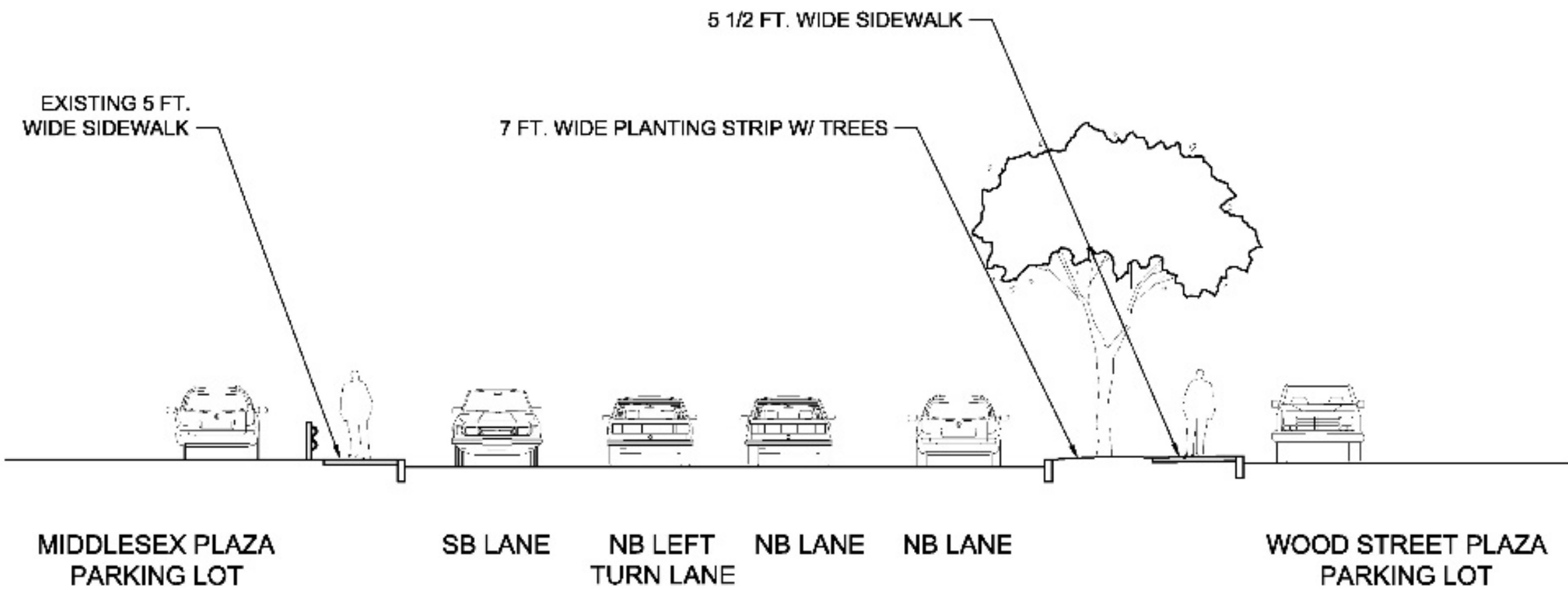
South Side

- Potential path connecting school and park
- Potential connection to Edwards Street Park from bridge multi-use paths
- Bridge threshold gateway plantings and ped/bike connections
- Potential street tree plantings

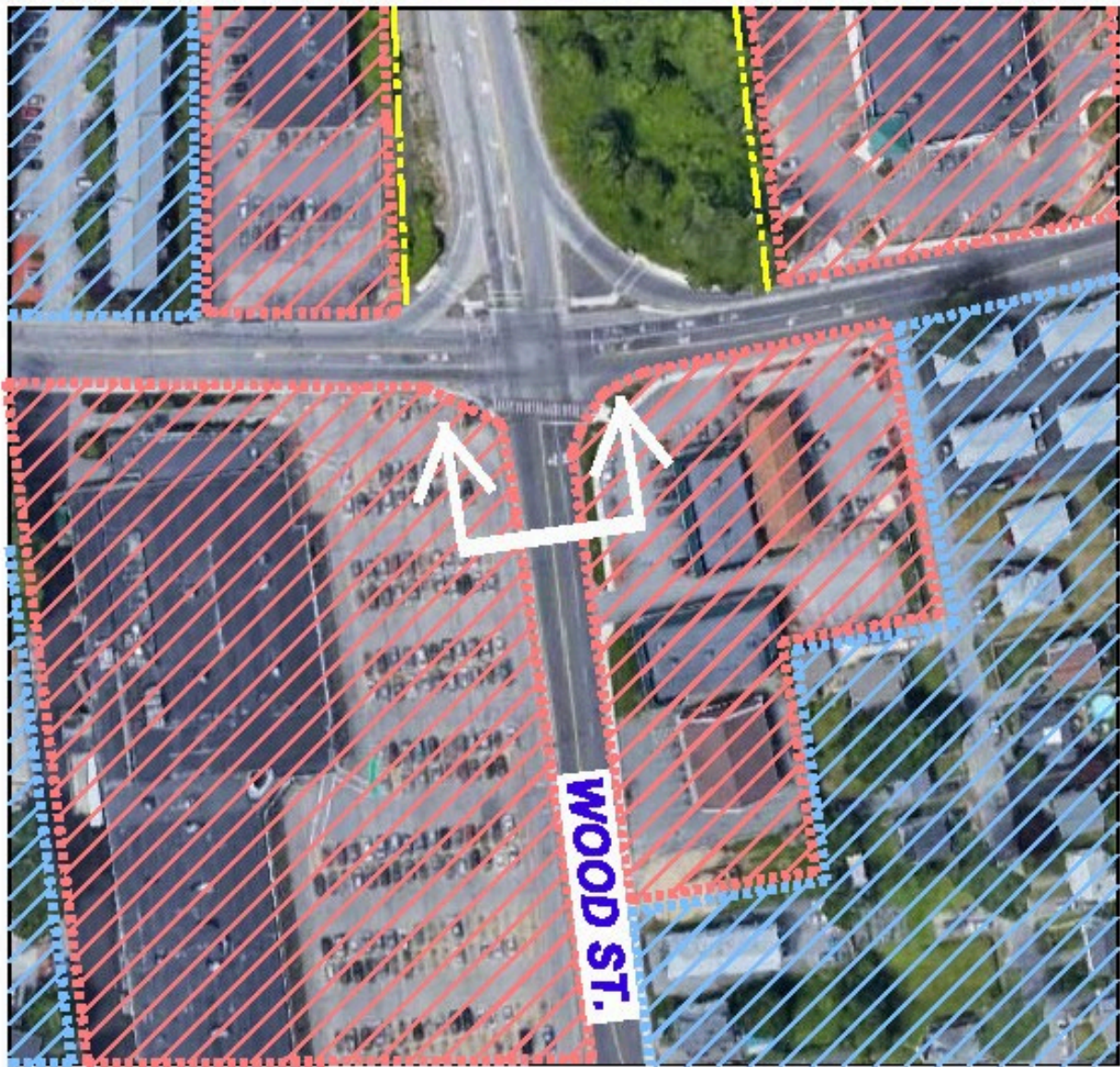


South Side: Street Connections – Wood

- Develop tree plantings in lawn on east side



SECTION - WOOD STREET FACING NORTH

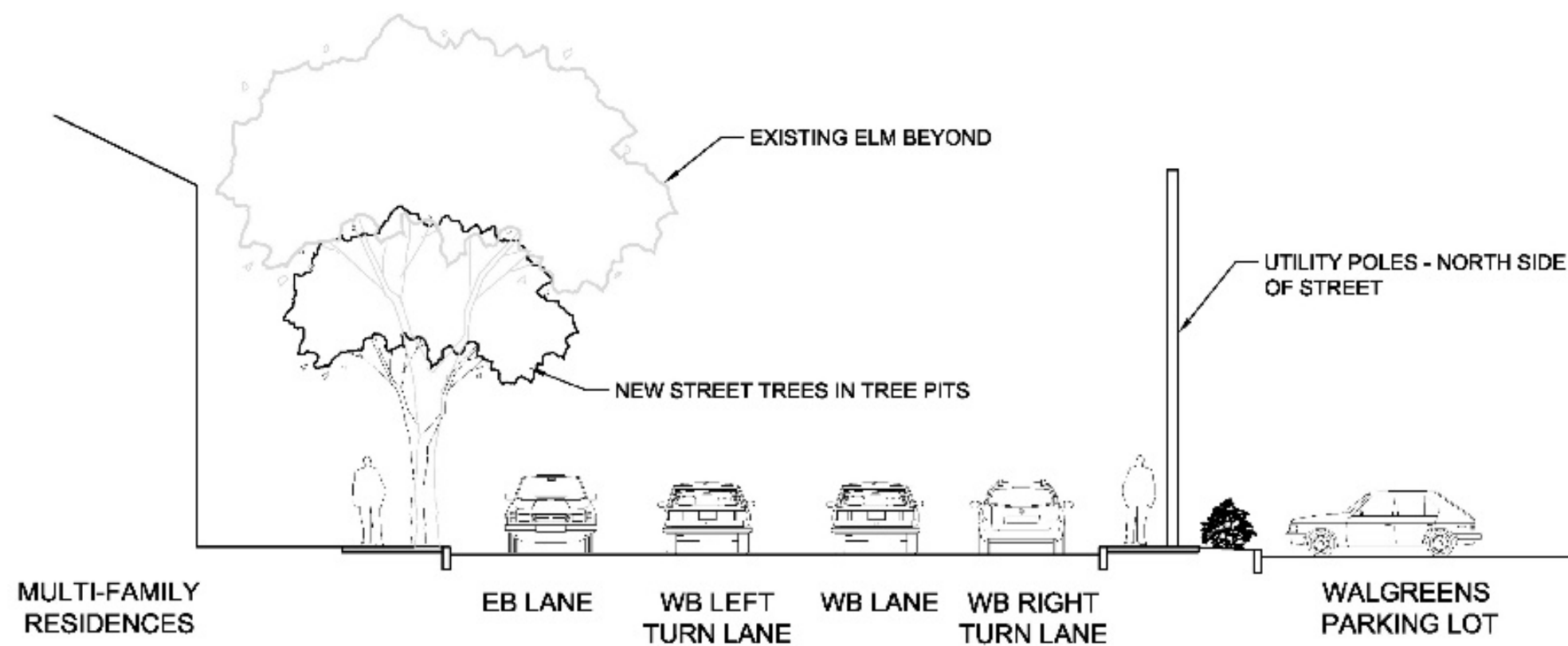


 **COMMERCIAL**

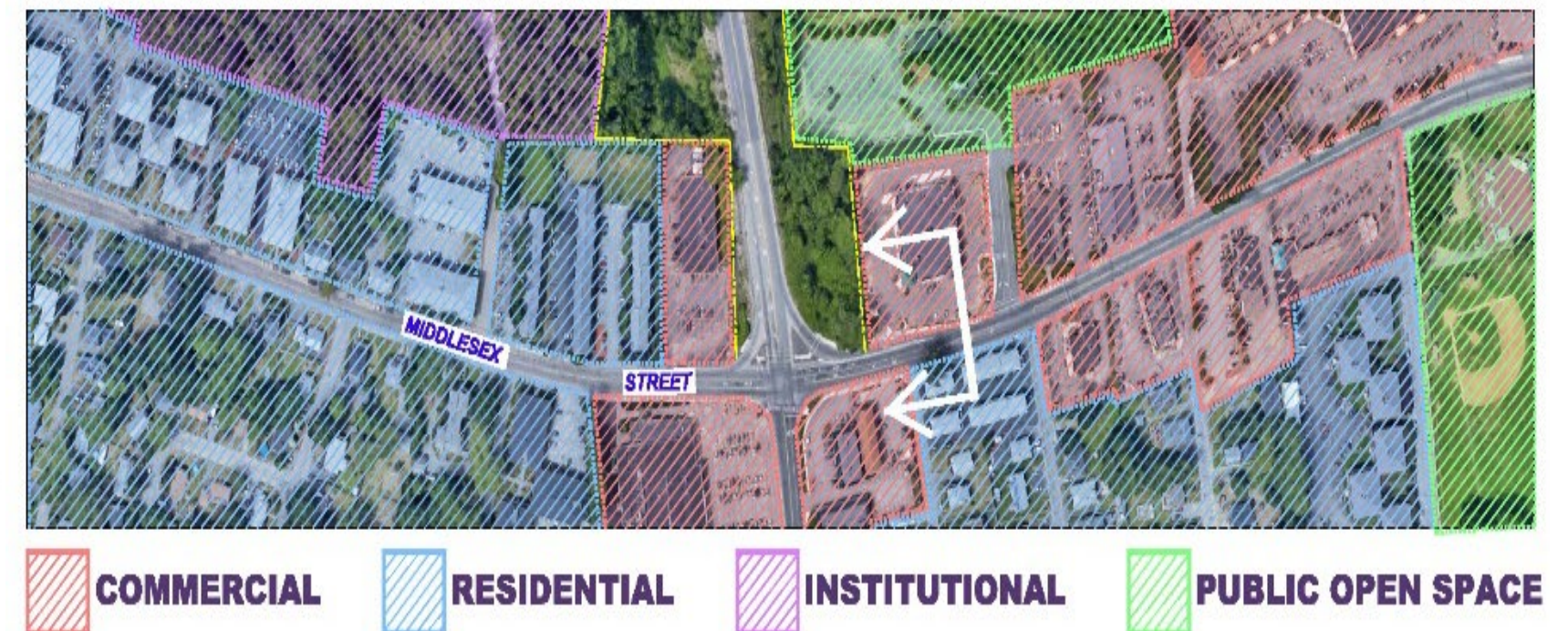
 **RESIDENTIAL**

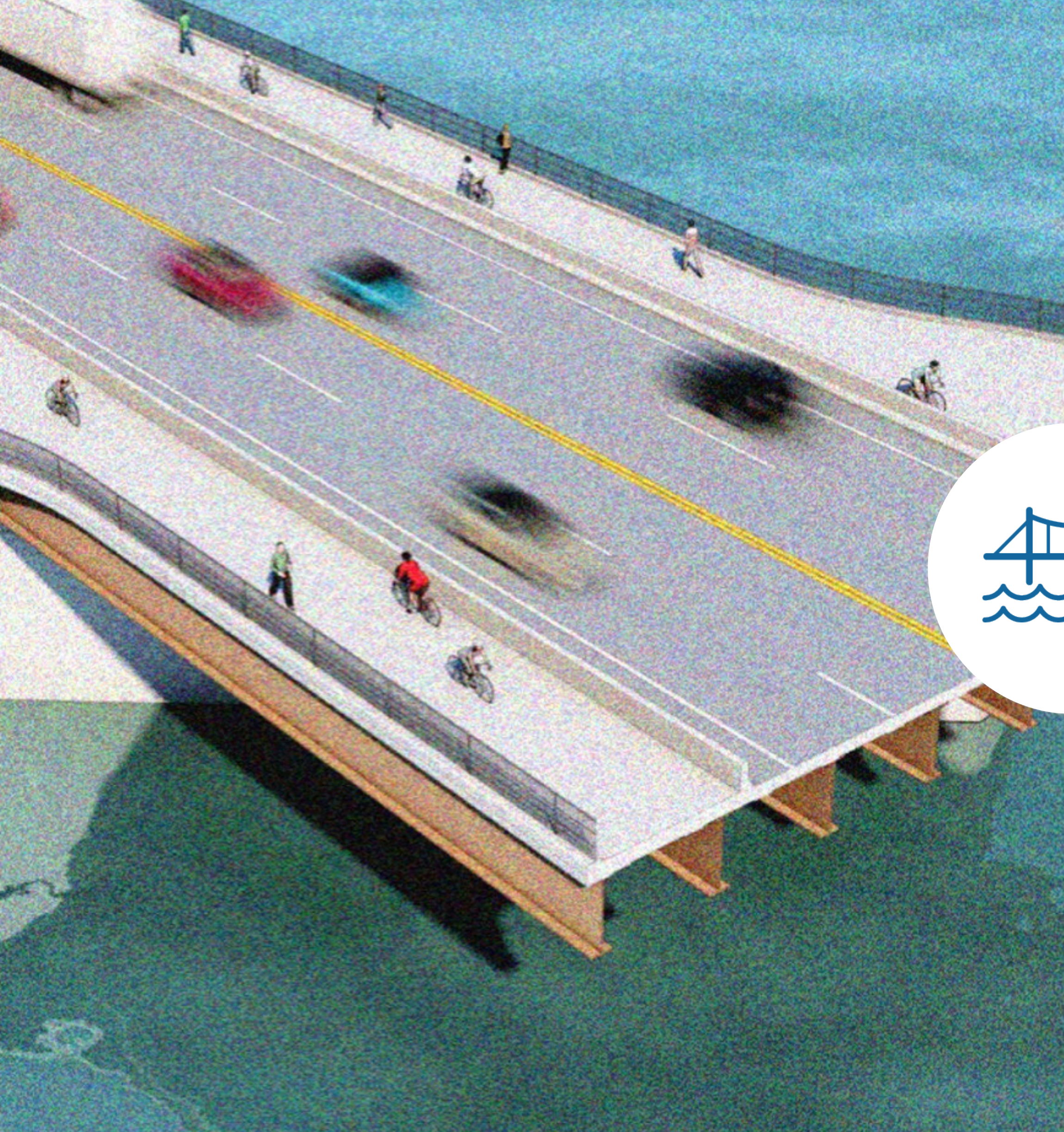
South Side: Street Connections – Middlesex

- Develop tree plantings particularly on south side
- Opportunity for tree plantings at bridge threshold



Section – Middlesex Street Facing West





Bridge Architecture and Lighting

Key Bridge Design Metrics Overview

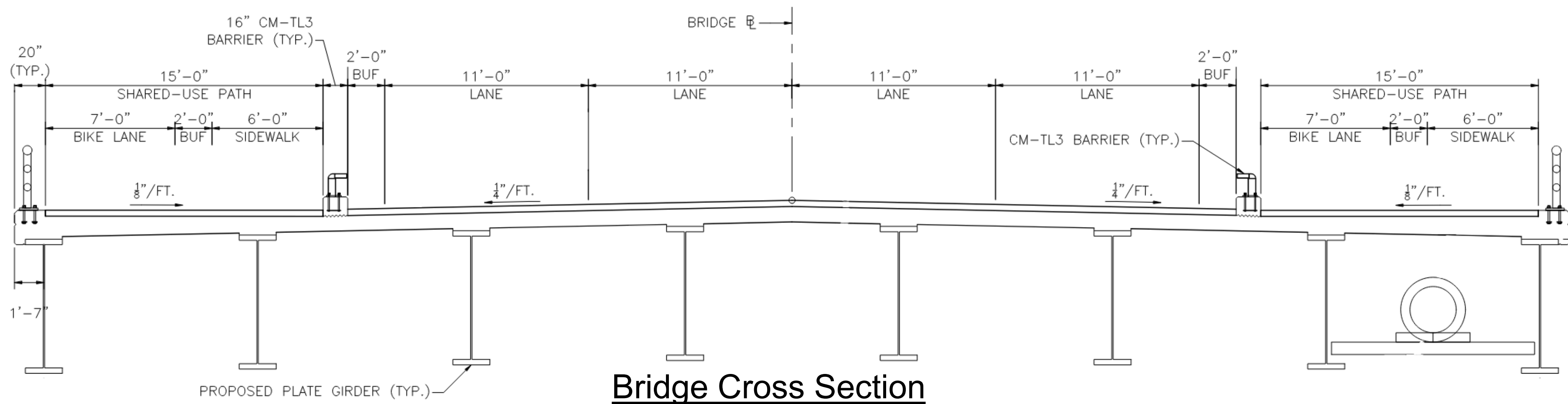
- Pedestrian/Bike Functionality and Recreation
- Water Recreation & Rowing Events
- Views to/from Bridge
- Constructability
 - Staging
 - Construction Duration
 - Time of Bridge Opening
- Vertical clearance
- Optimize Pier Locations:
 - Maximize width of usable riverway



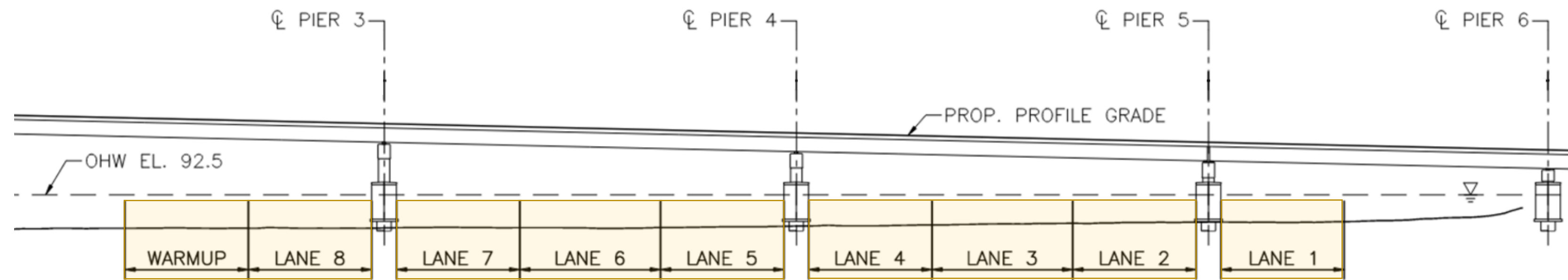
Proposed Old Ferry Rd Roadway Alignment



Proposed Bridge Configuration

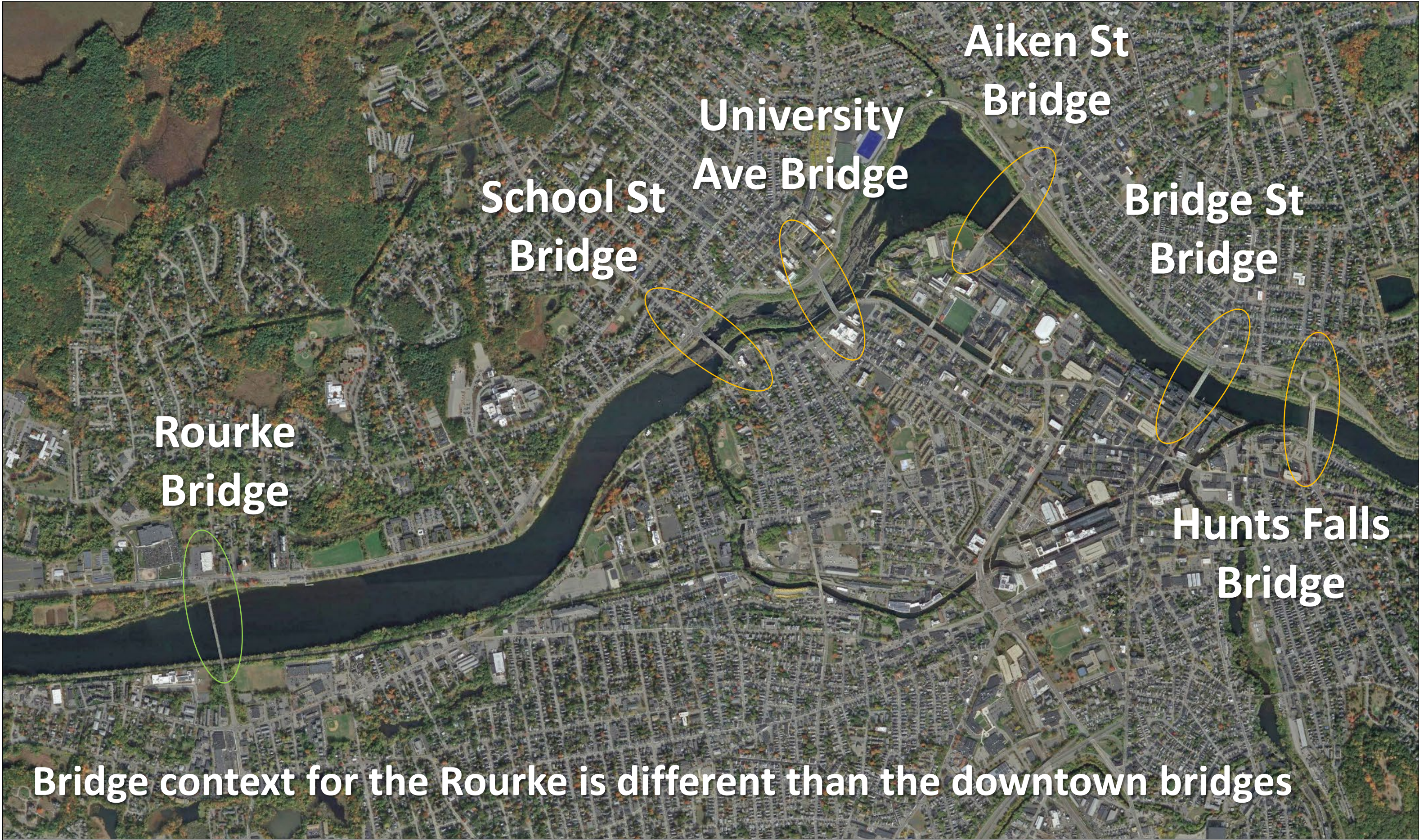


Bridge Cross Section



9-Race Lane Configuration & Roadway Profile





Architecture – Views *from* the Bridge

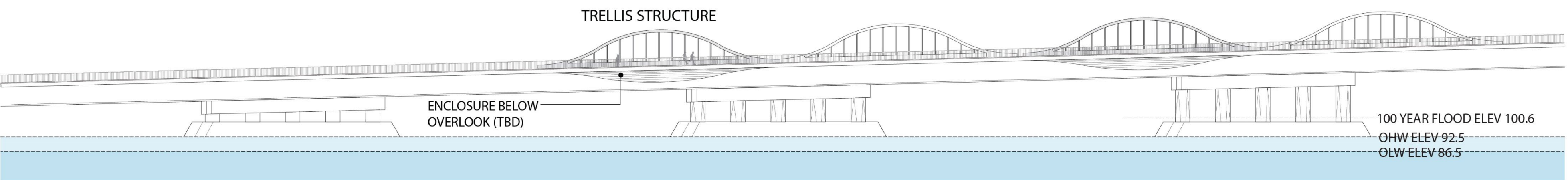
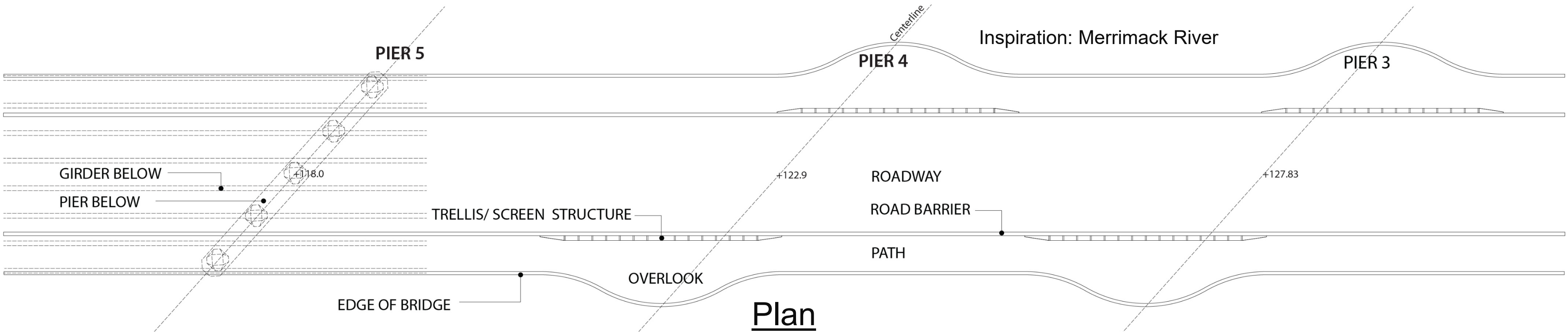


Up River Views

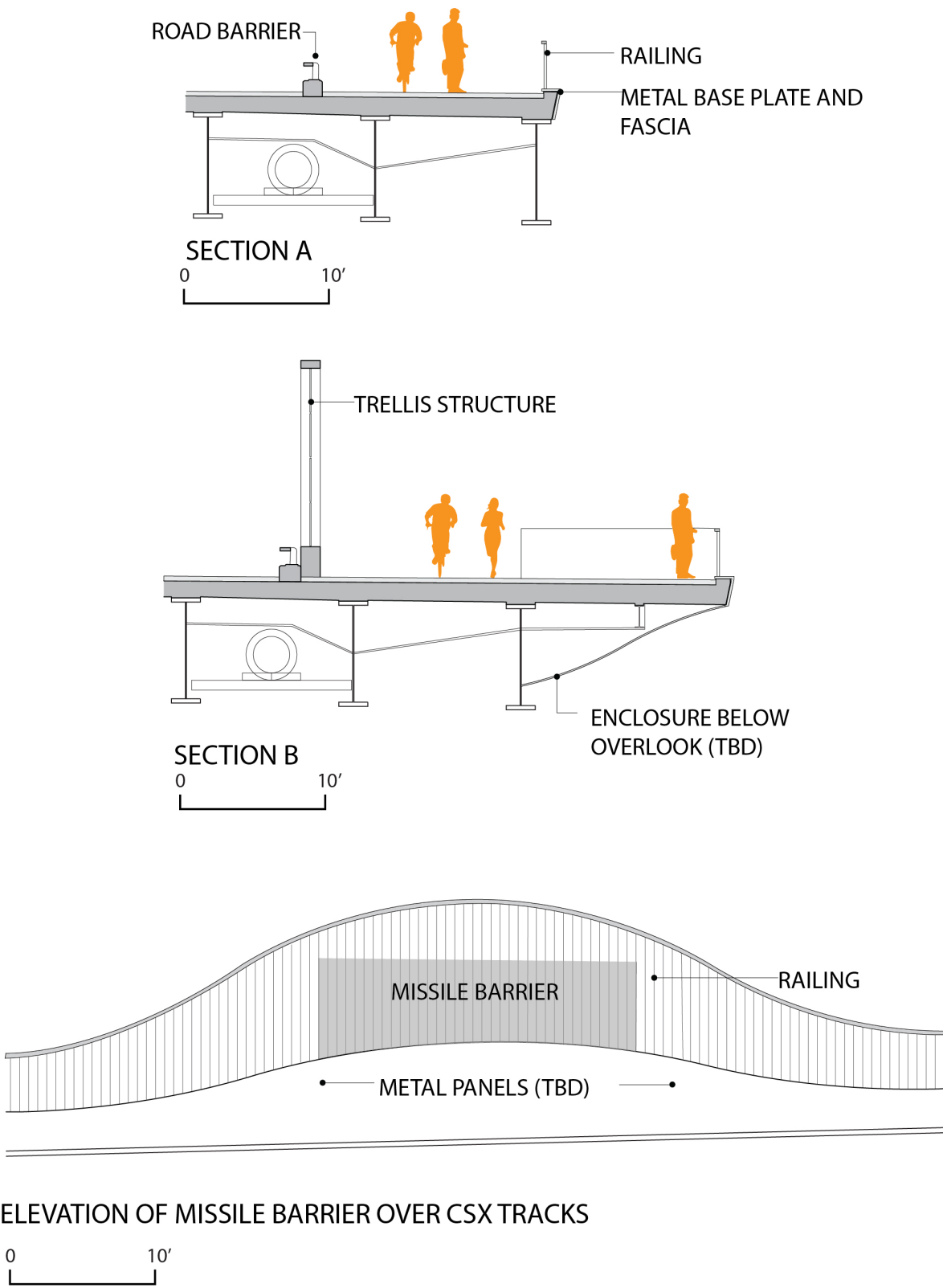
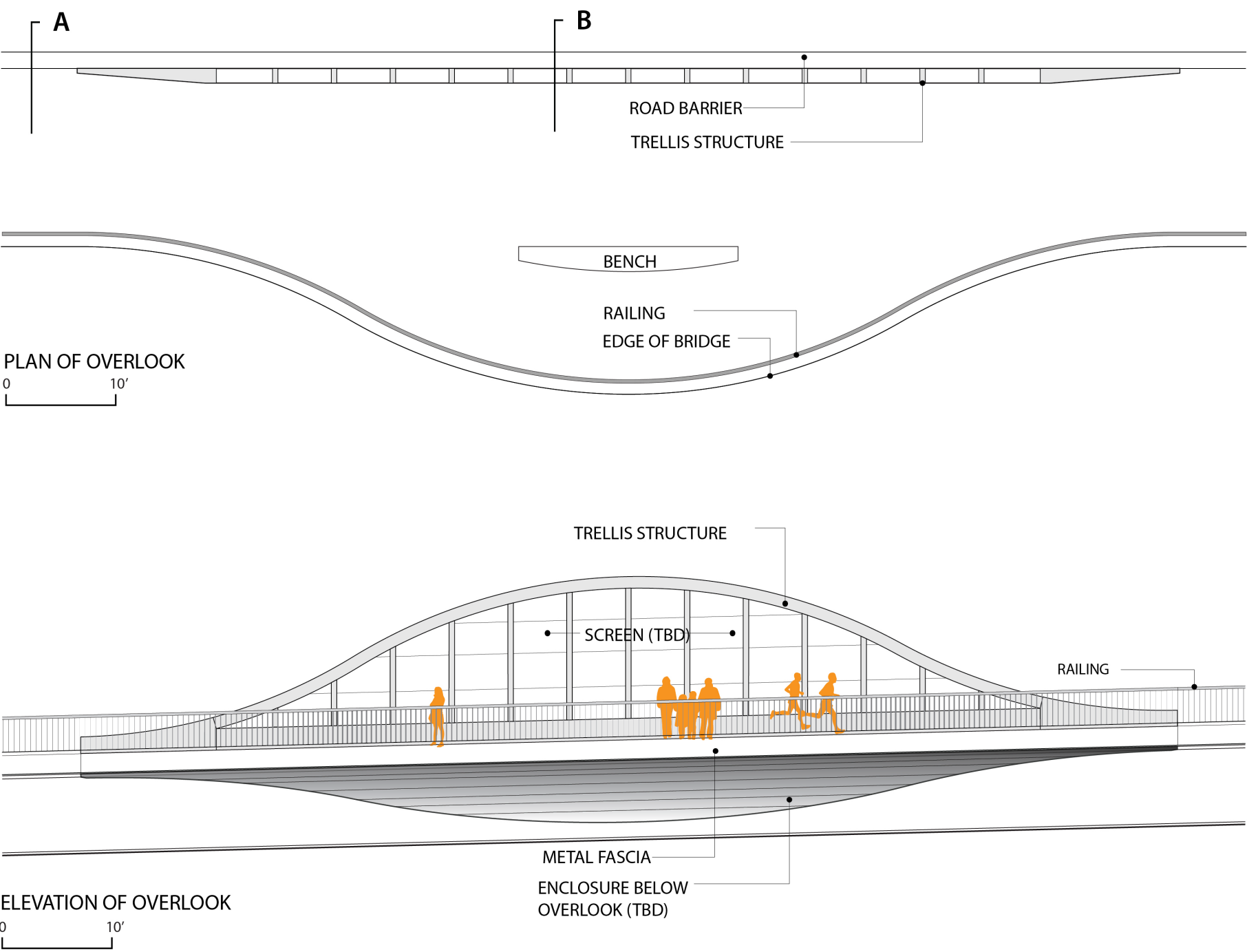
Down River Views



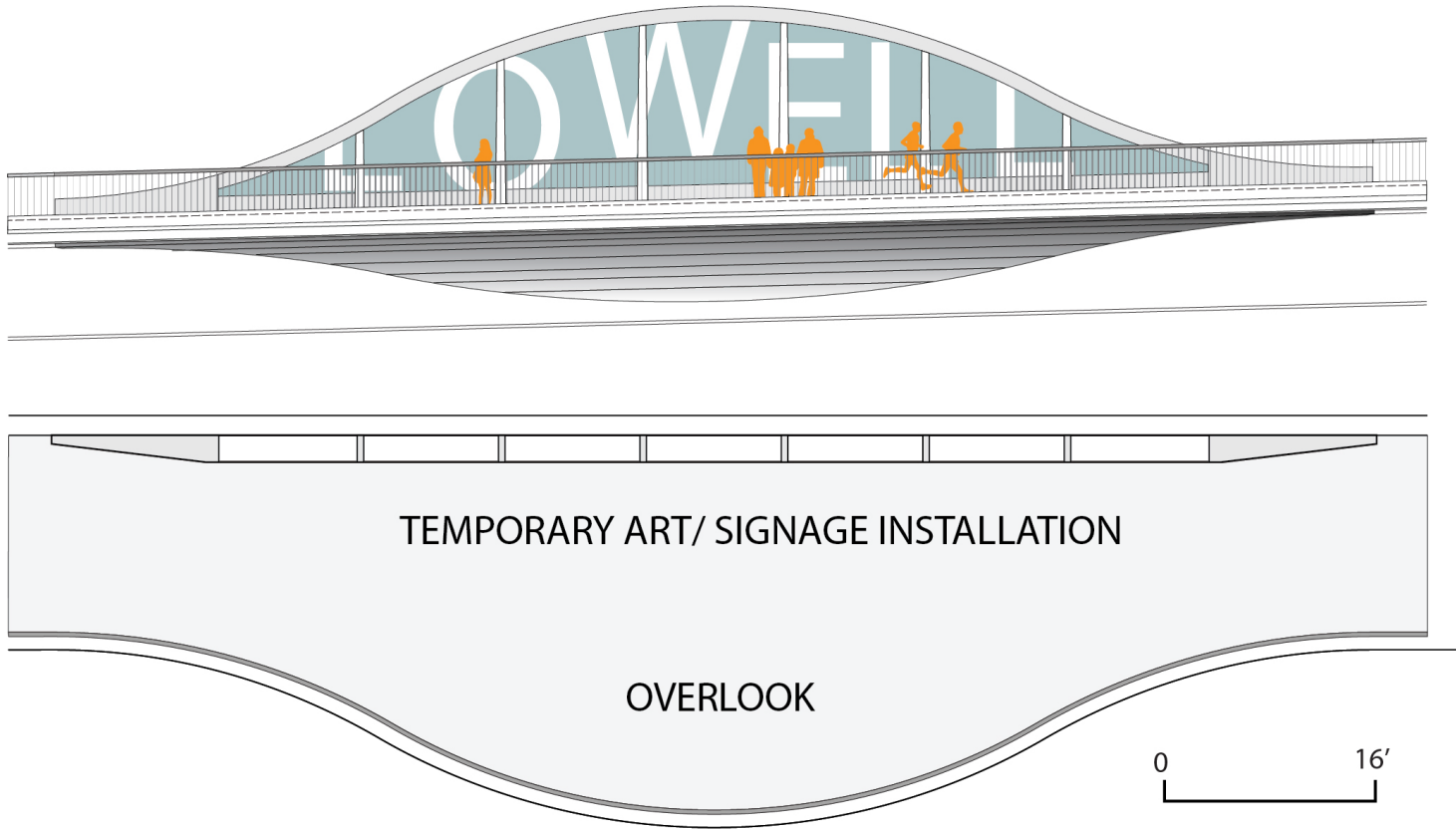
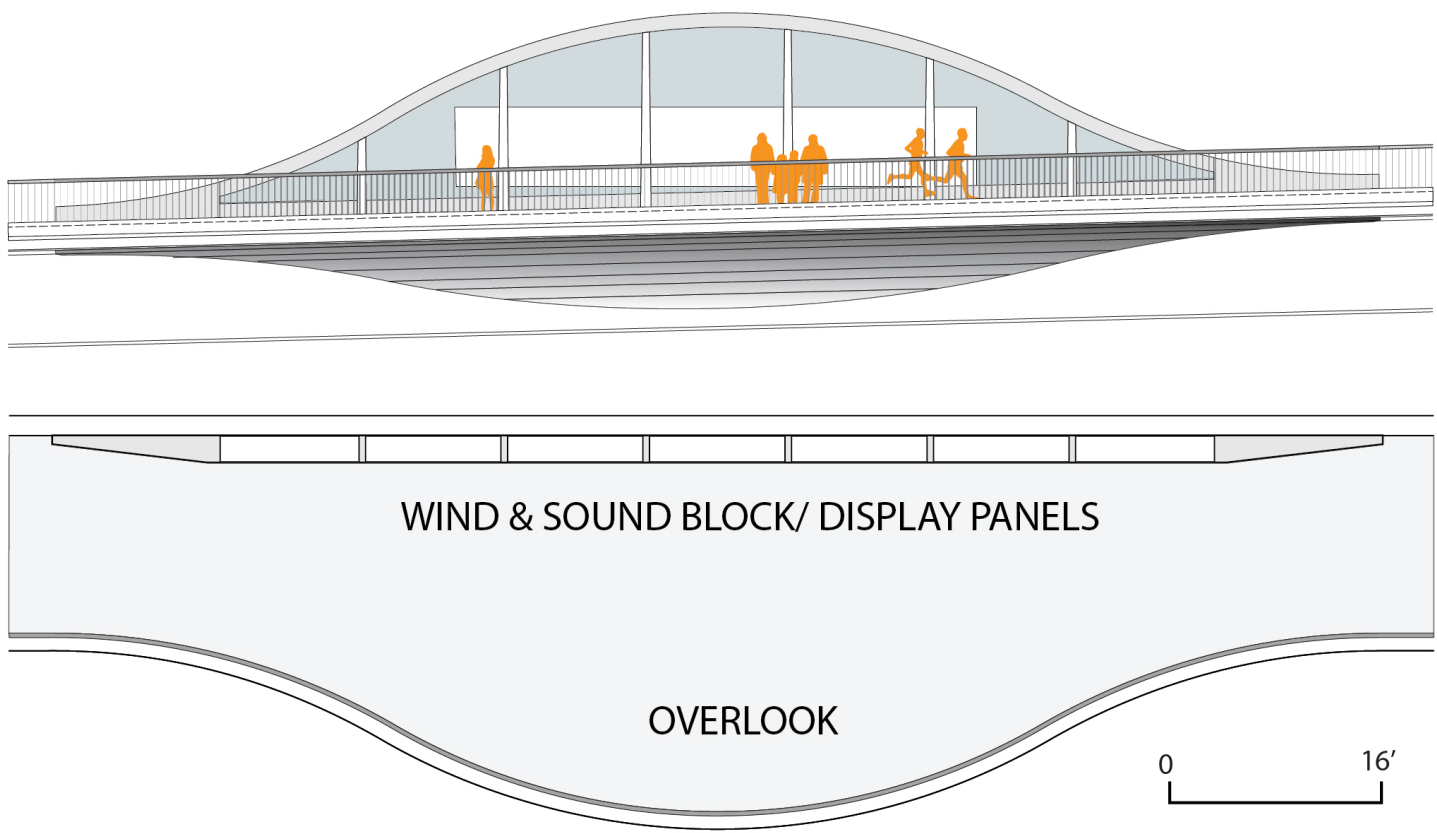
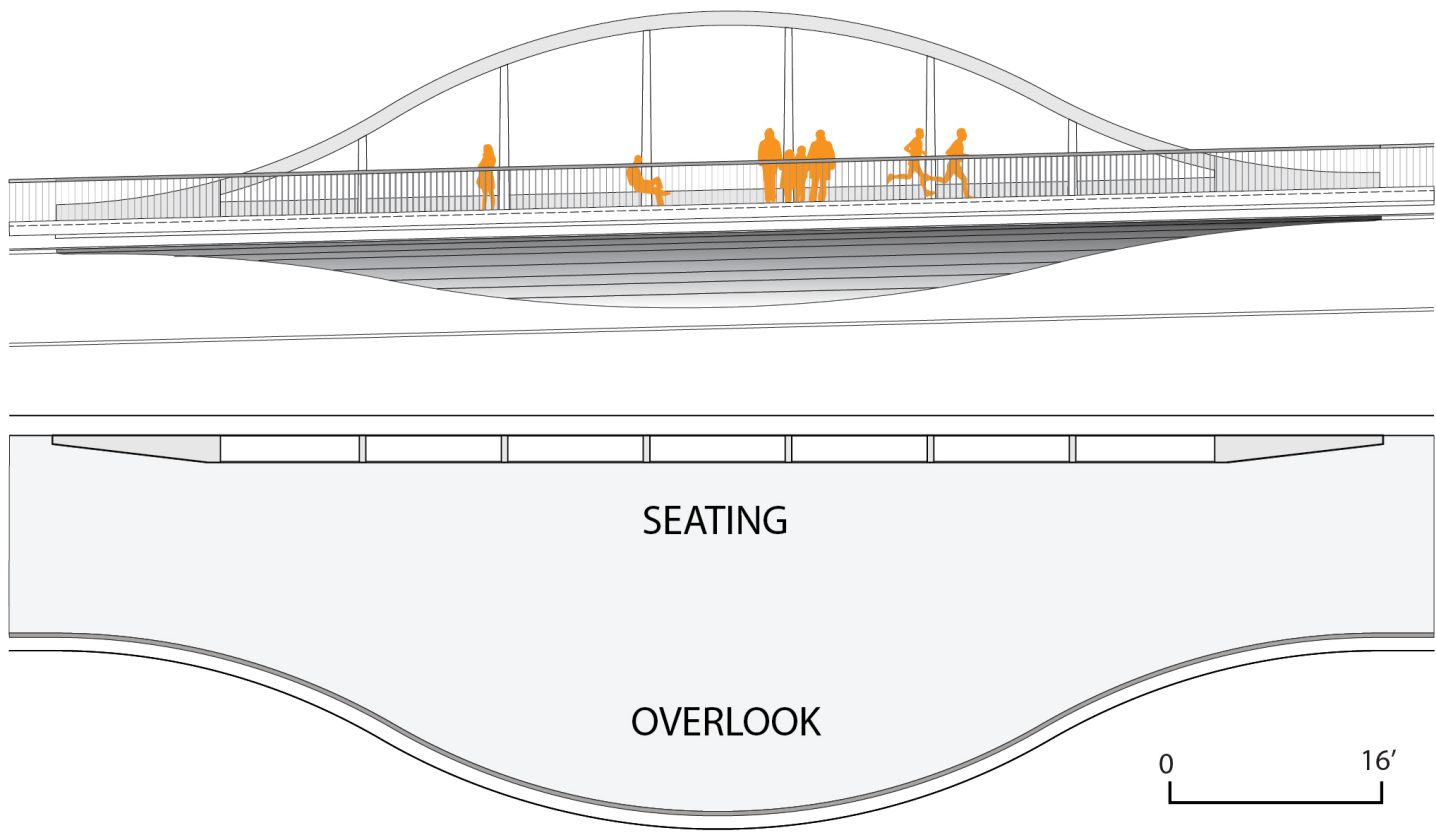
Architecture – Views from the Bridge



Architecture – Overlook



Architecture – Overlook



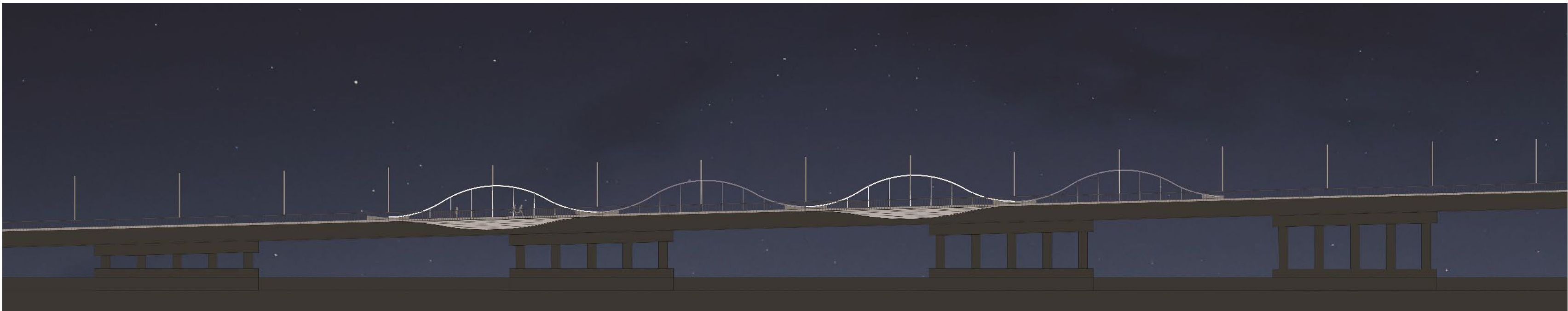
Architecture – Bridge at Night



OPTION 1

LIGHTING OF TRELLIS AND RAILING

0 20'

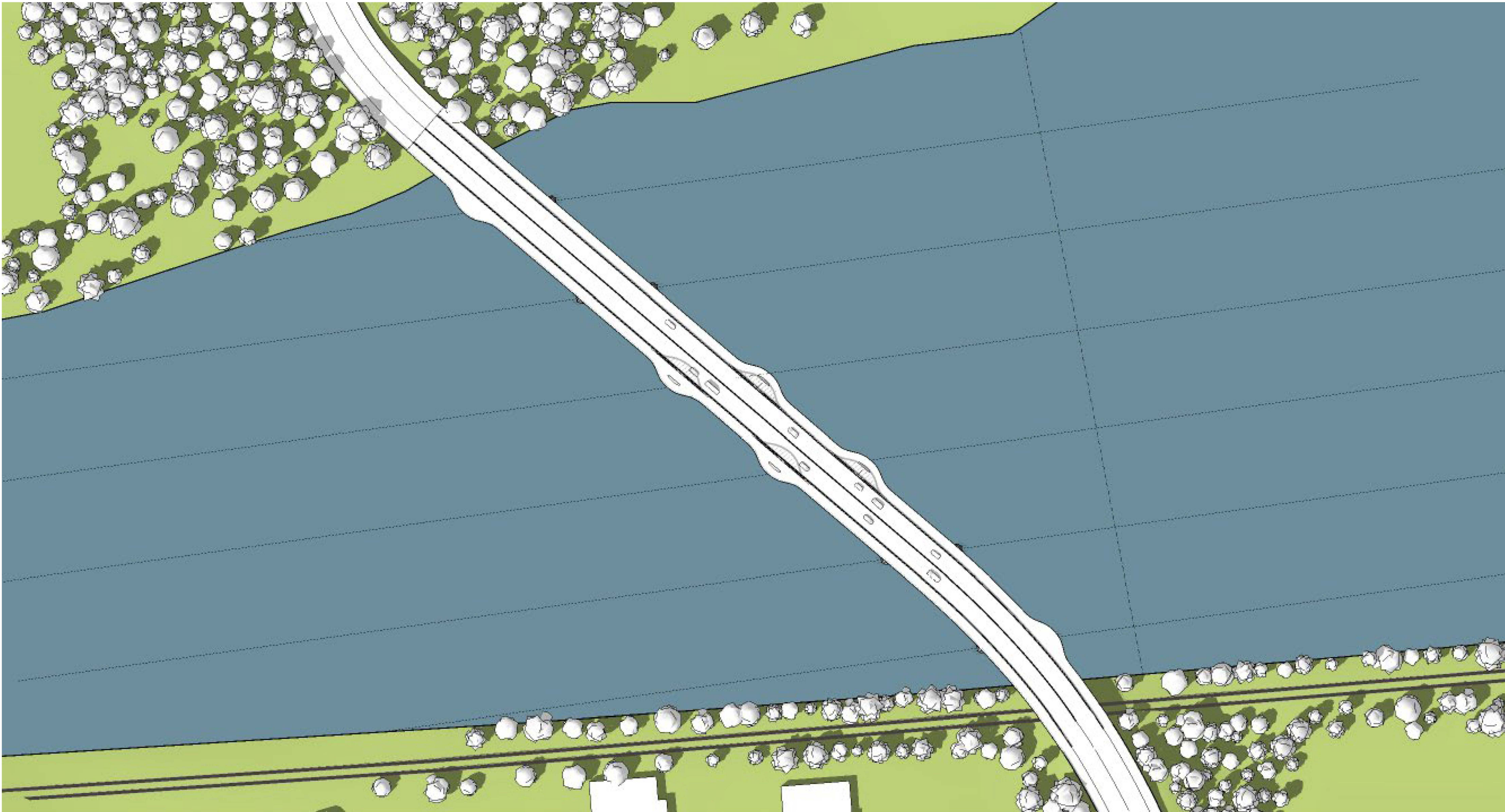


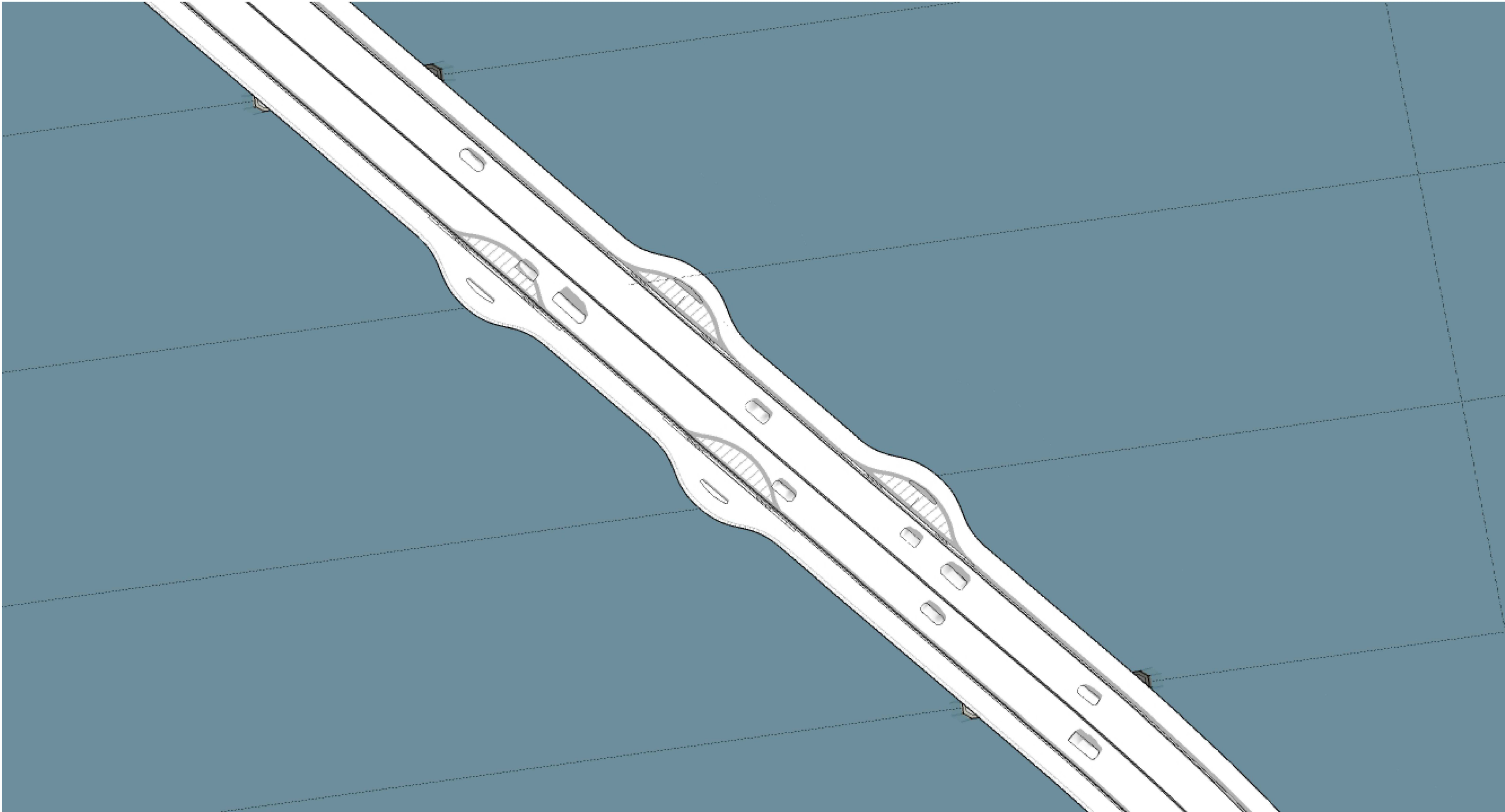
OPTION 2

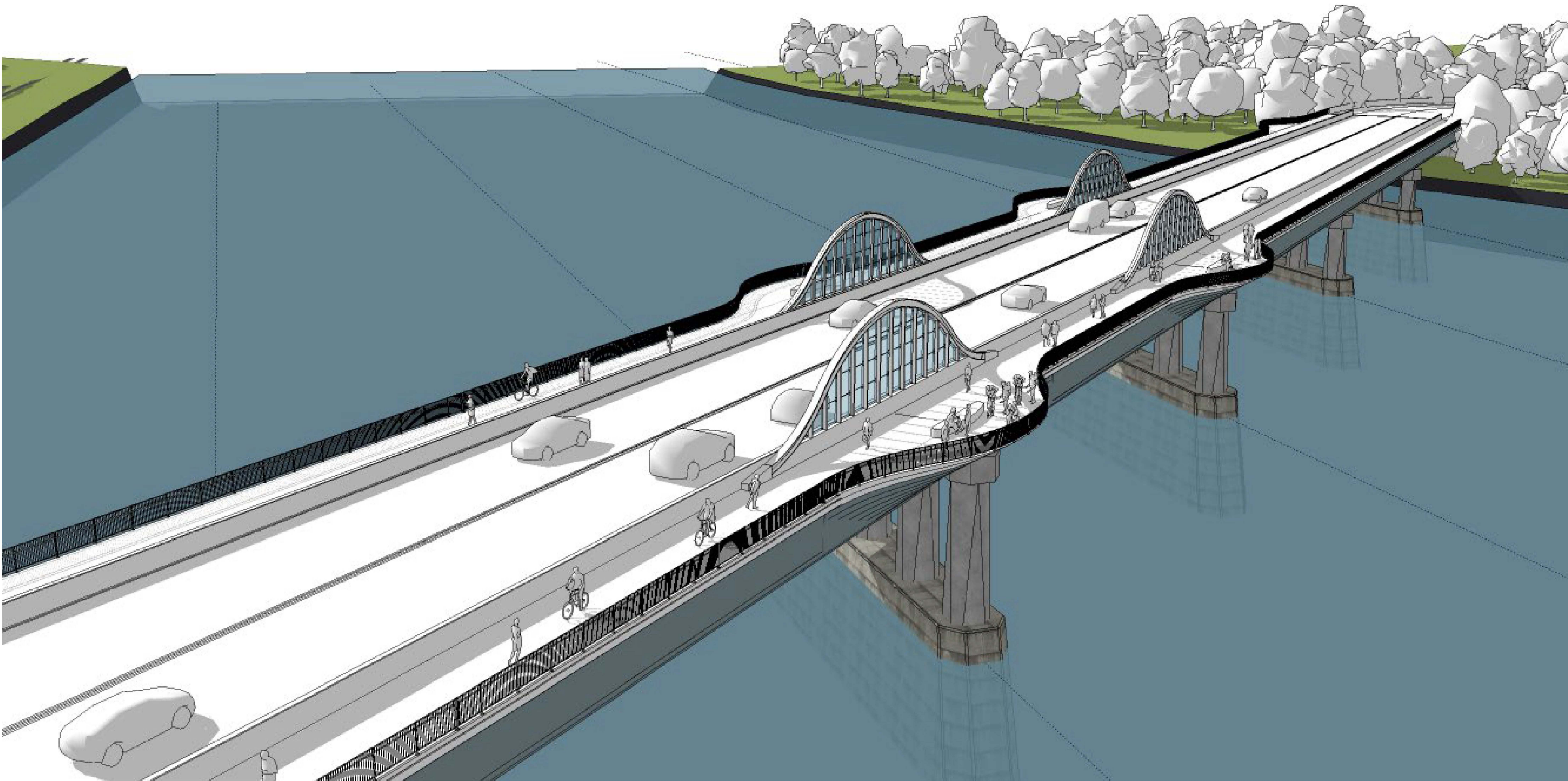
LIGHTING OF TRELLIS AND UNDERSIDE OF BELVERDERE

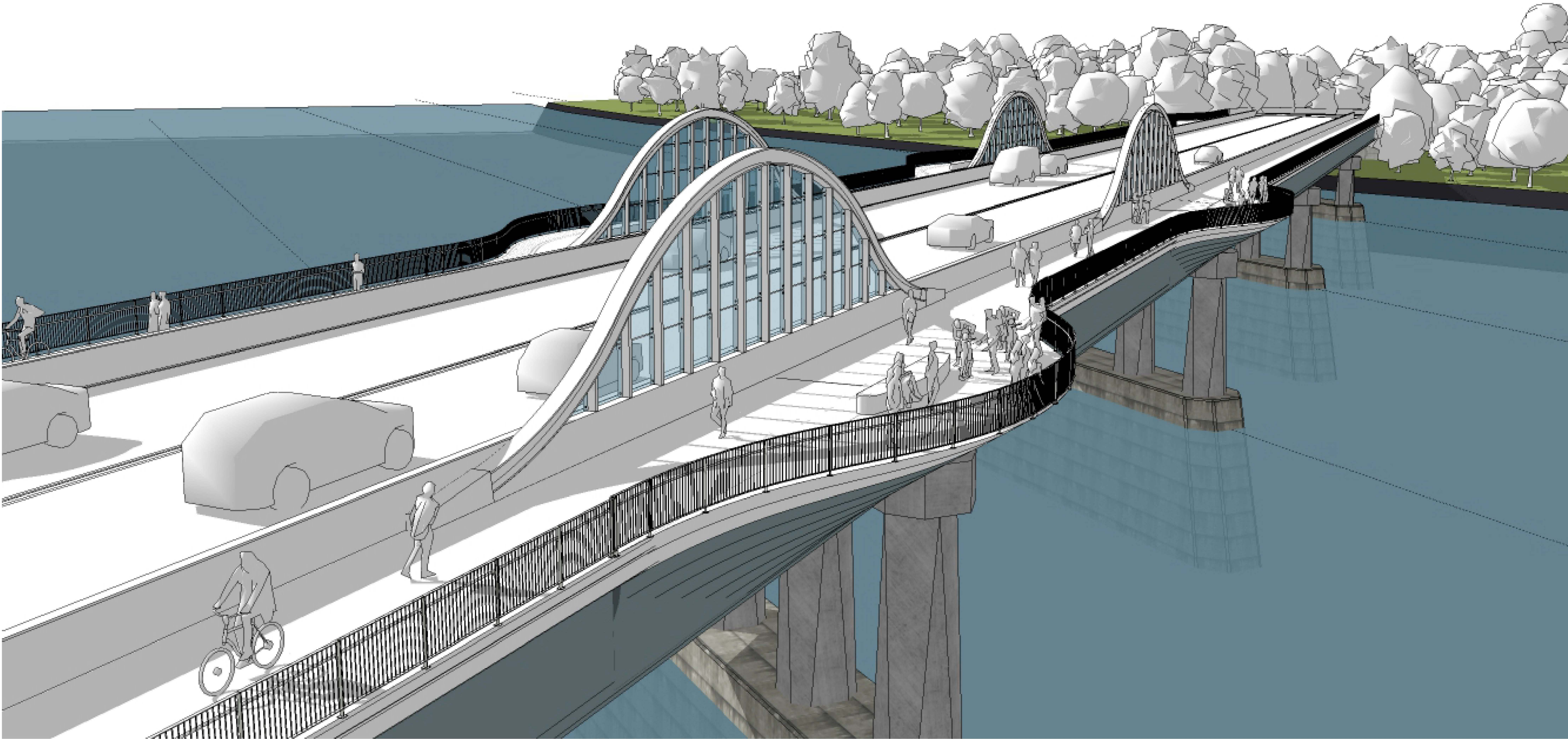
0 20'

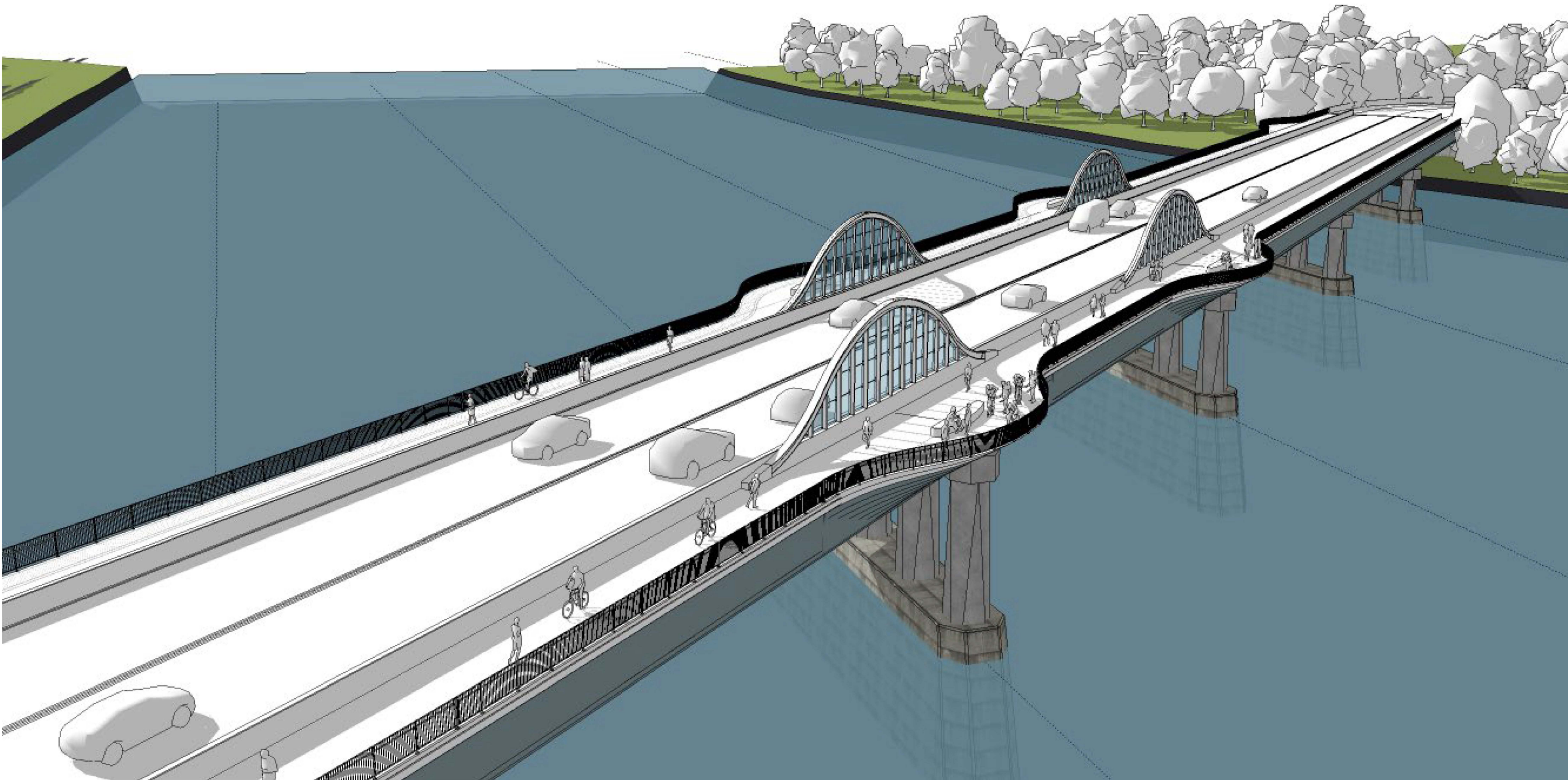


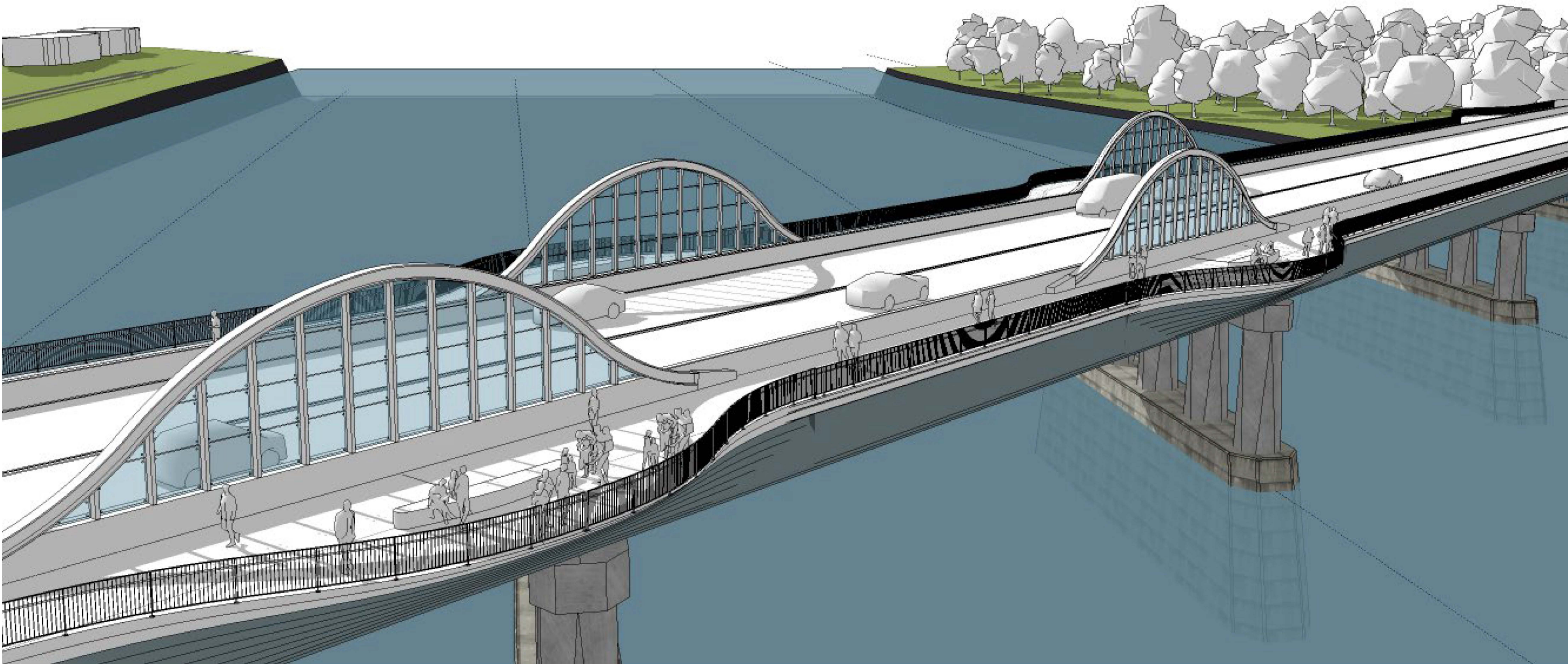


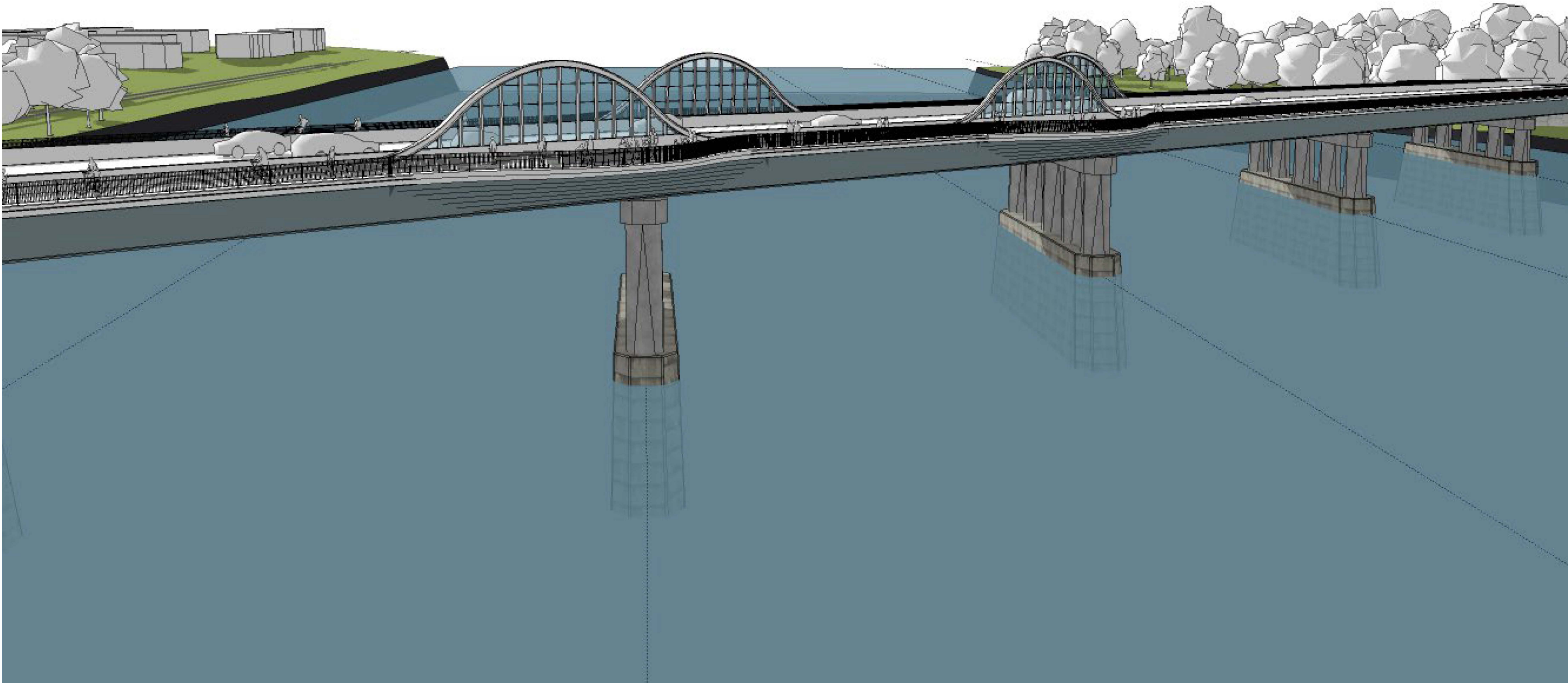


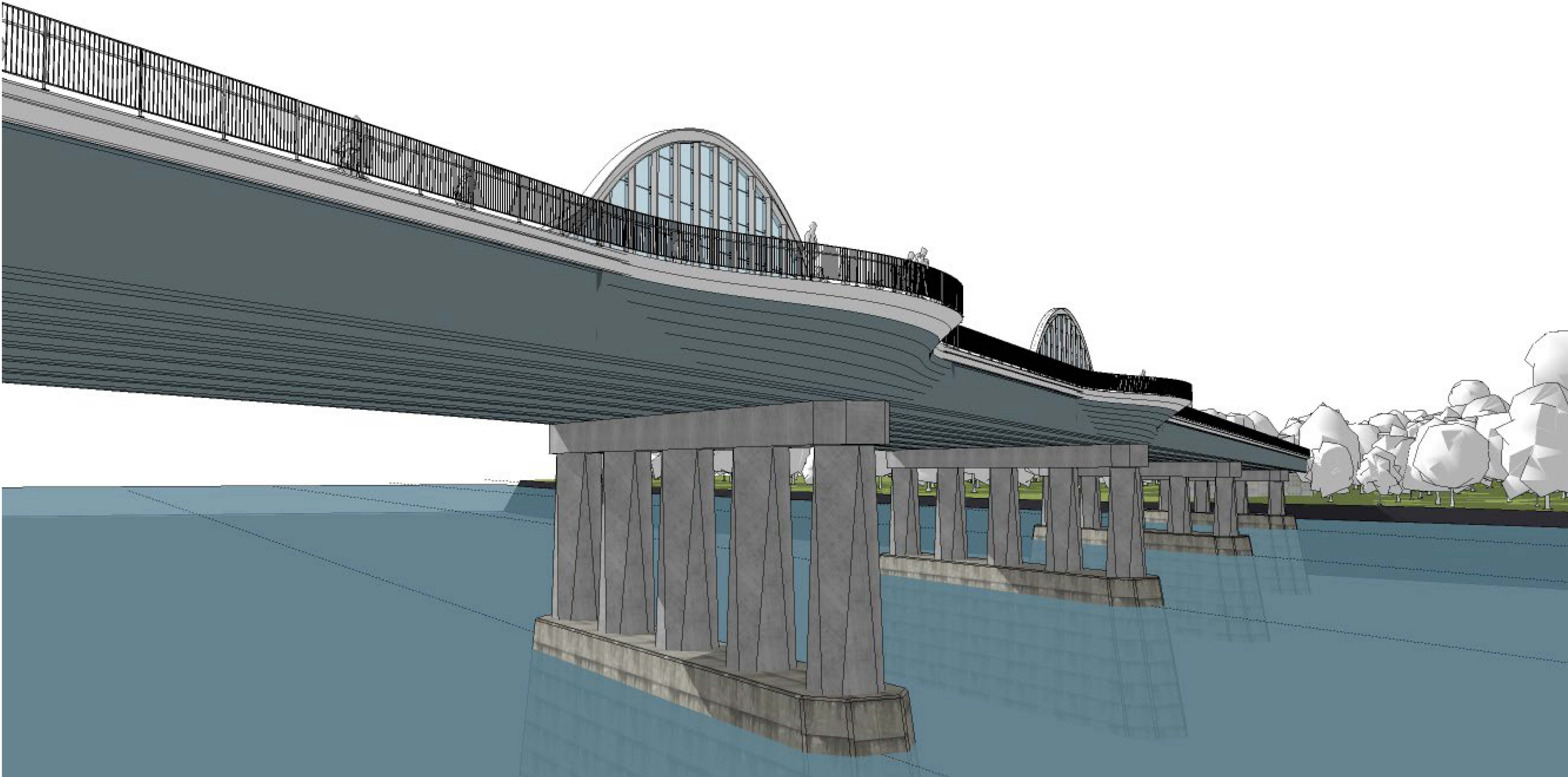


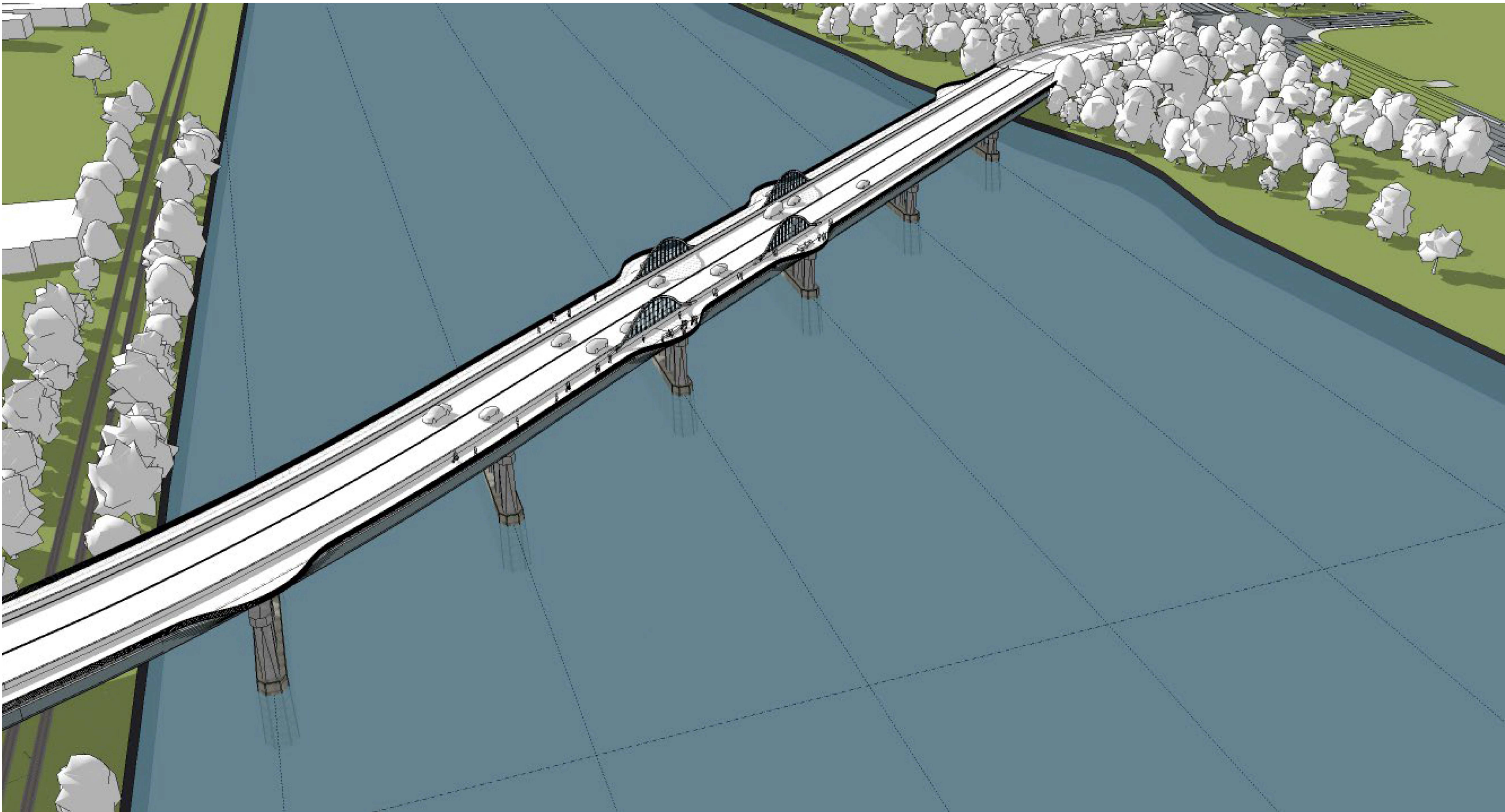


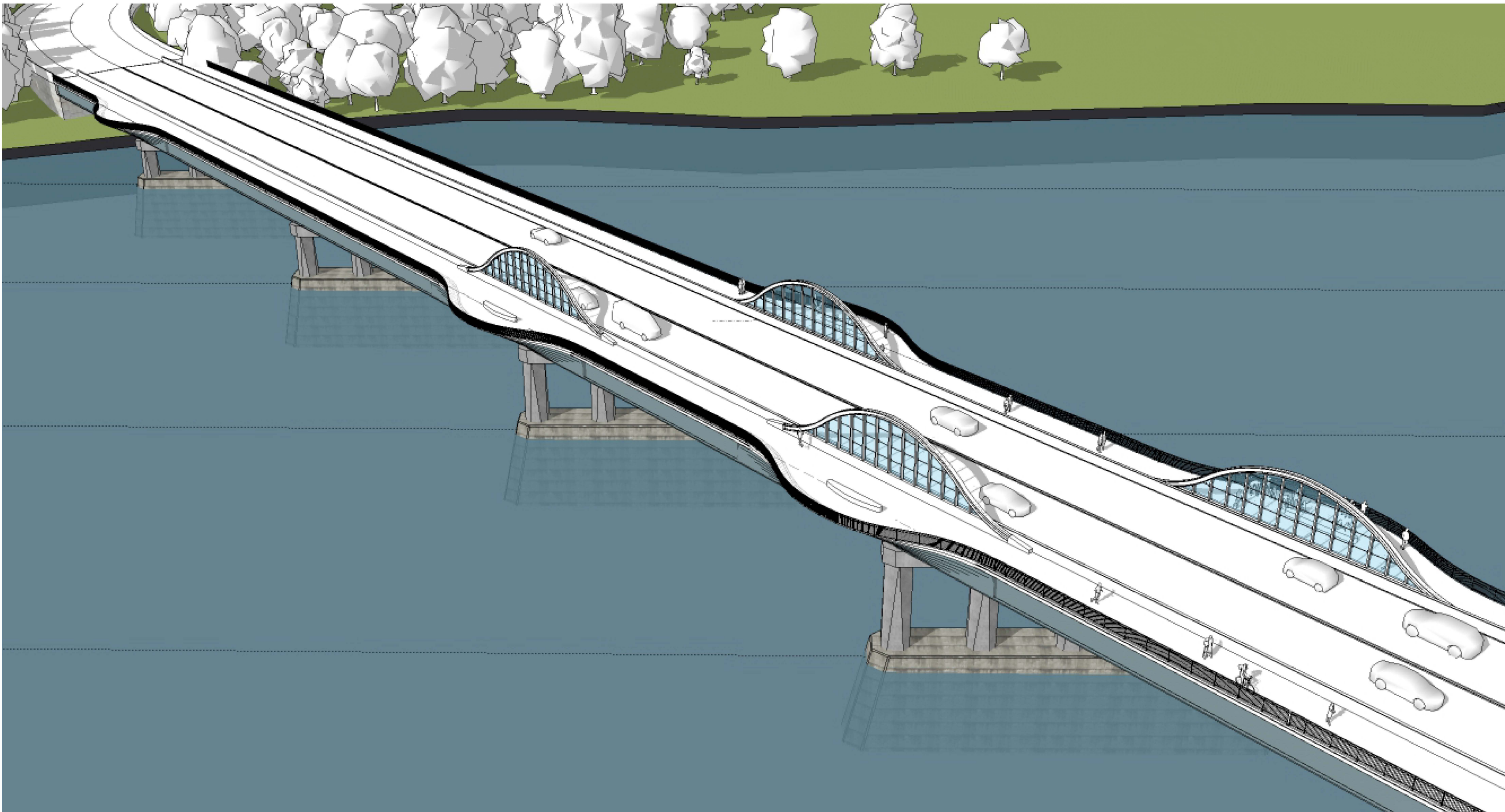














Examples of Bridge Handrails

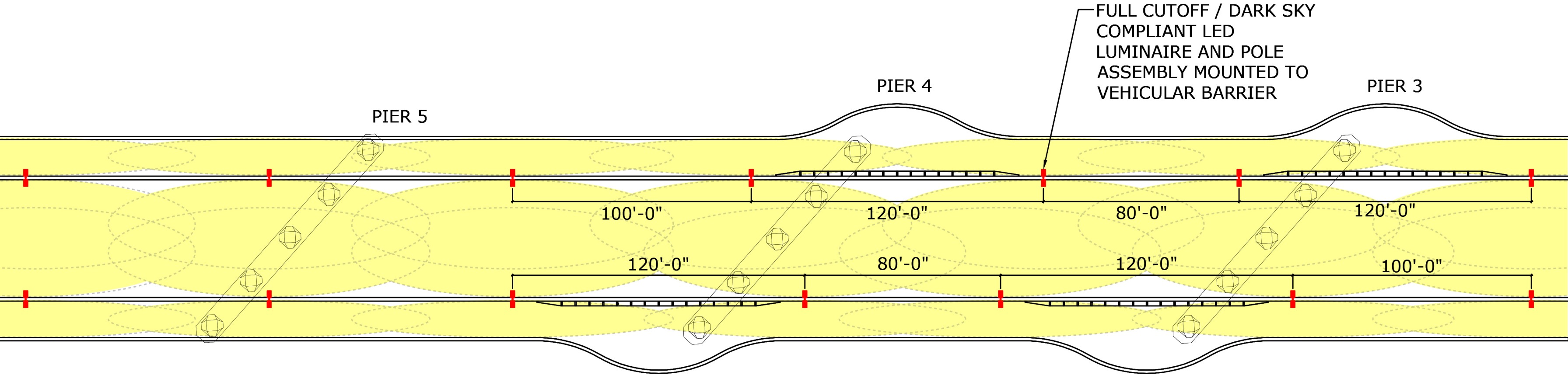




Examples of Signage and Interpretive Panels



Lighting Plans – Light Poles



Bridge Plan



Option 1 – Modern Pole & Luminaire at Road Barrier



Roadway Luminaire



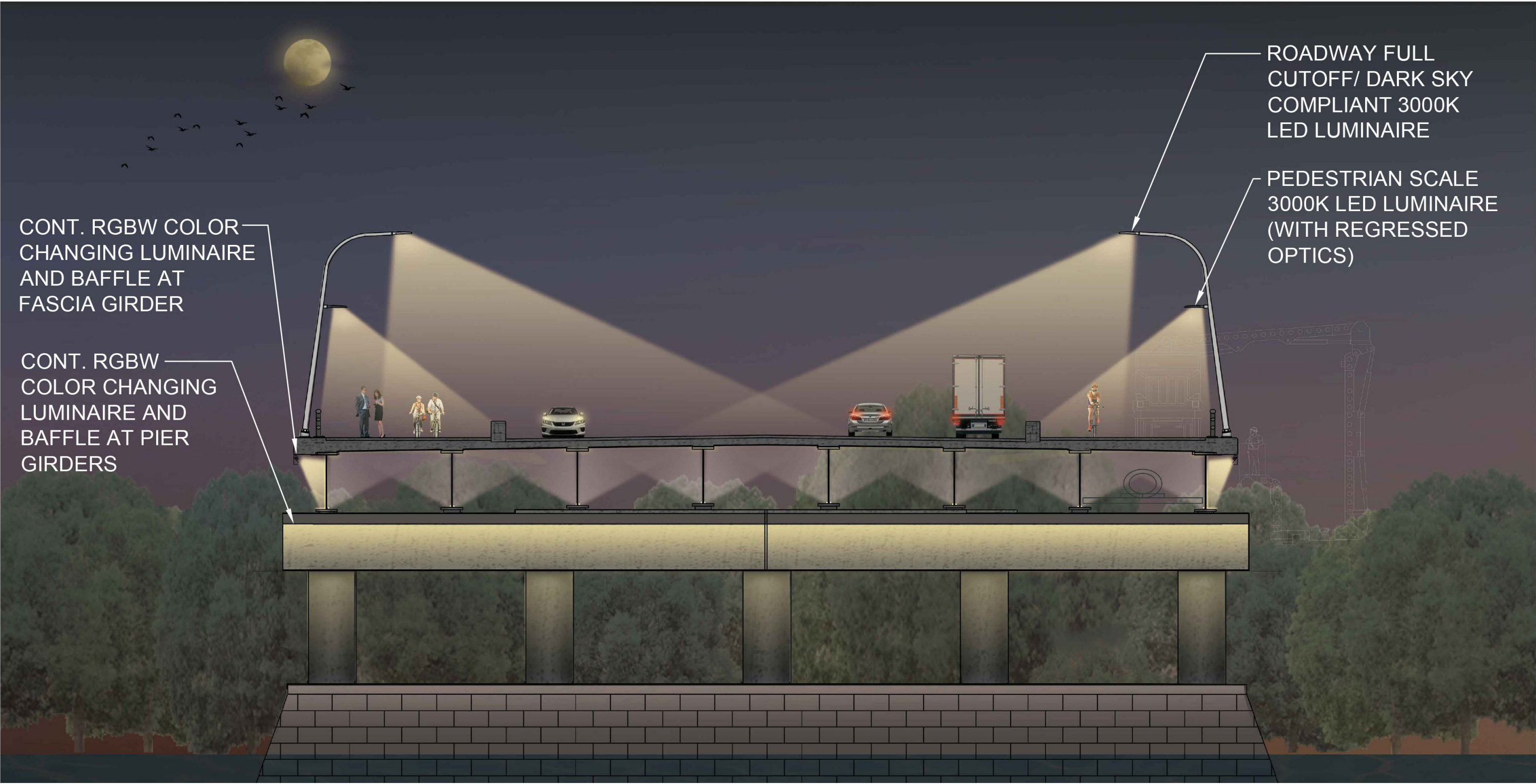
Pedestrian Scale Luminaire



Cross Section



Option 2 – Modern Sloping Davit Pole & Luminaire Outboard of Railing



Roadway Luminaire



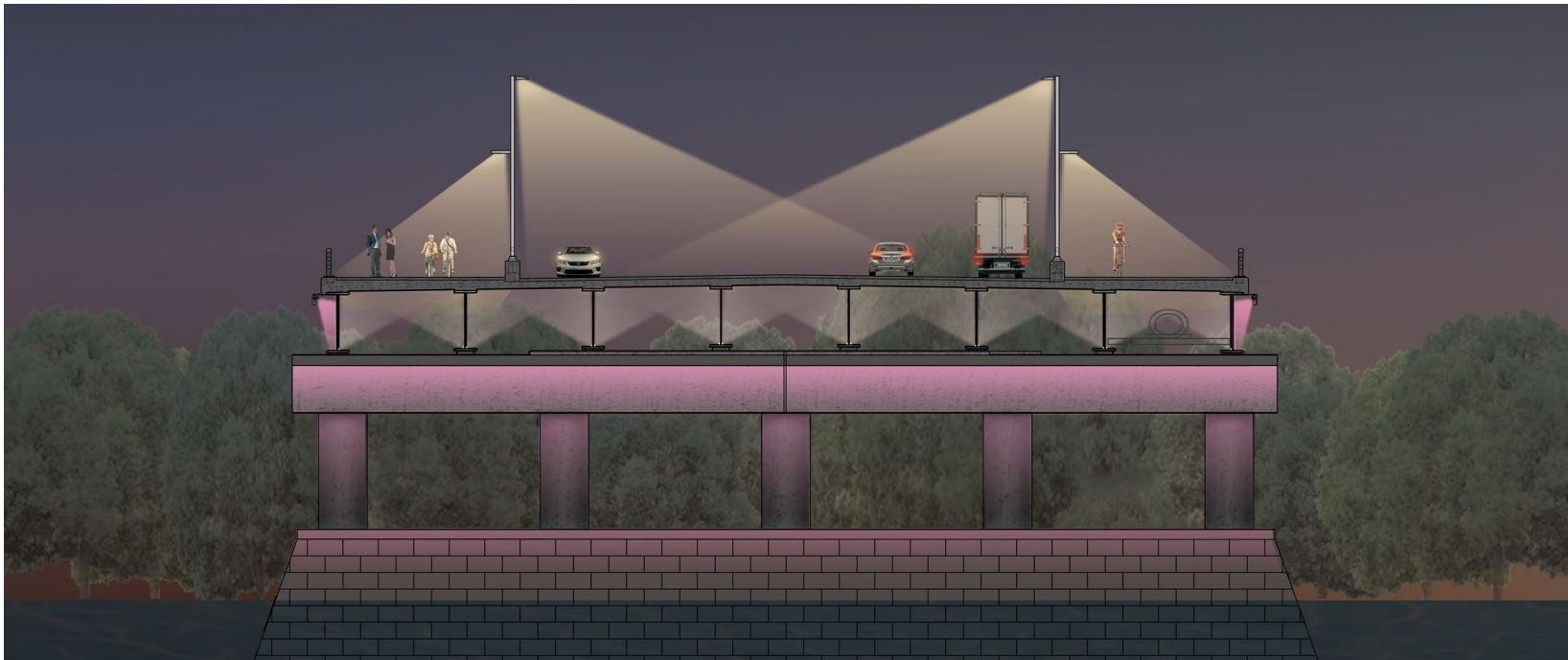
Pedestrian Scale Luminaire



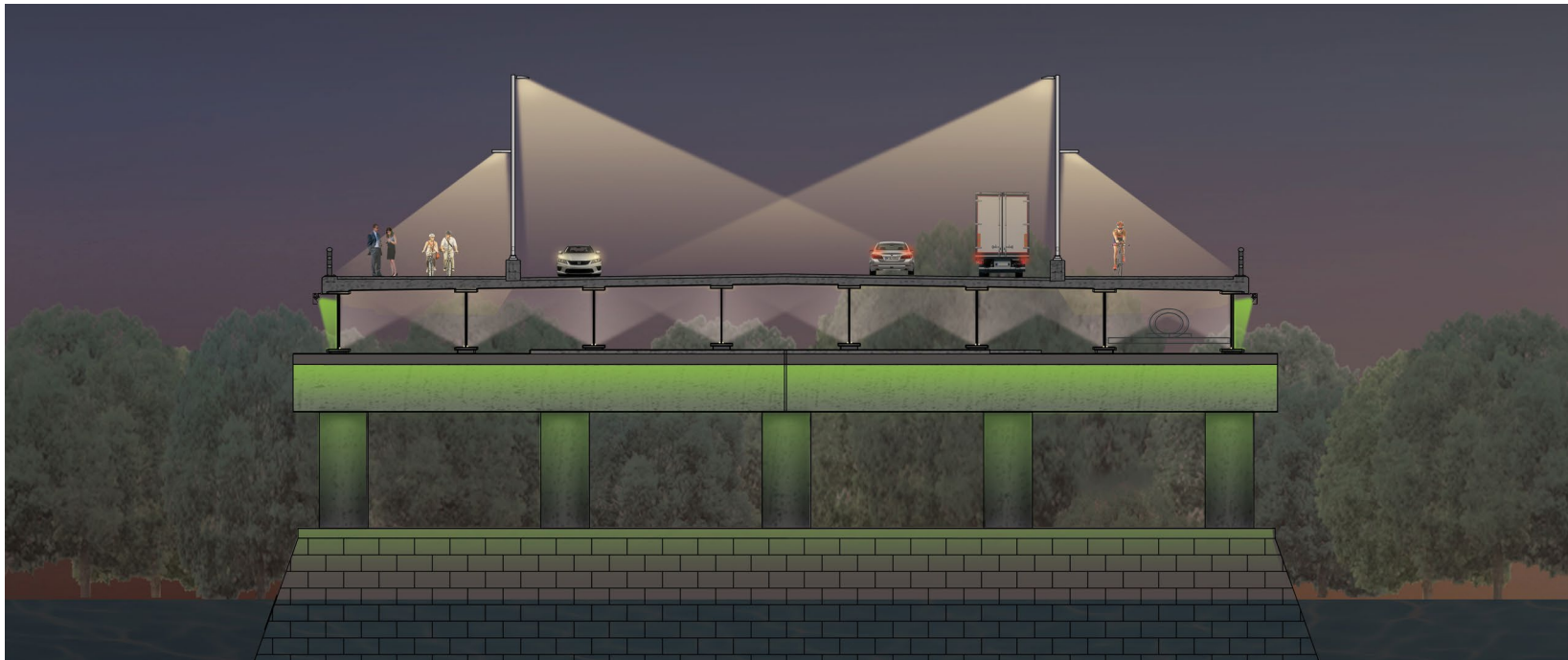
Cross Section



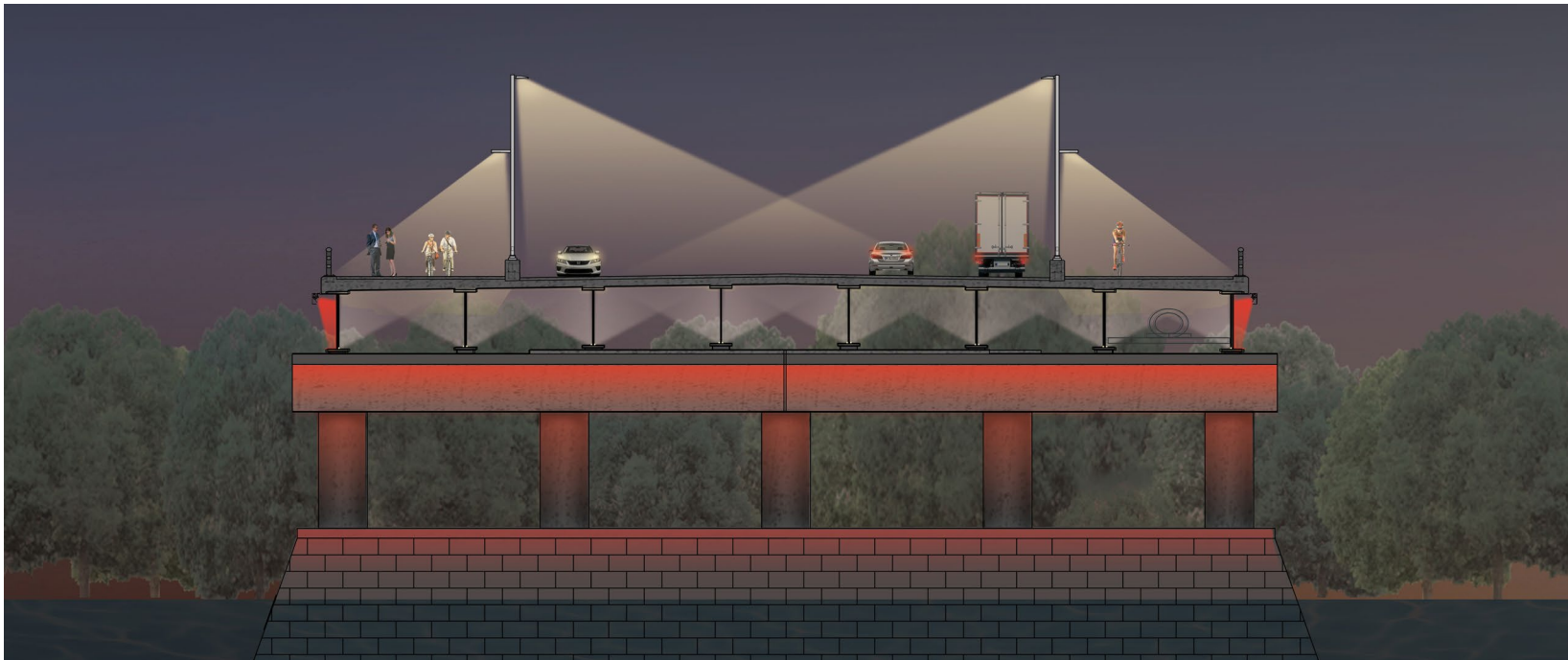
Modern Pole & Luminaire at Road Barrier [Color Options]



Breast Cancer Awareness - Color Changing LED in Pink



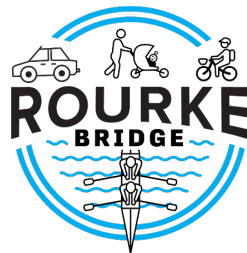
Saint Patrick's Day - Color Changing LED in Green



Valentine's Day - Color Changing LED in Red



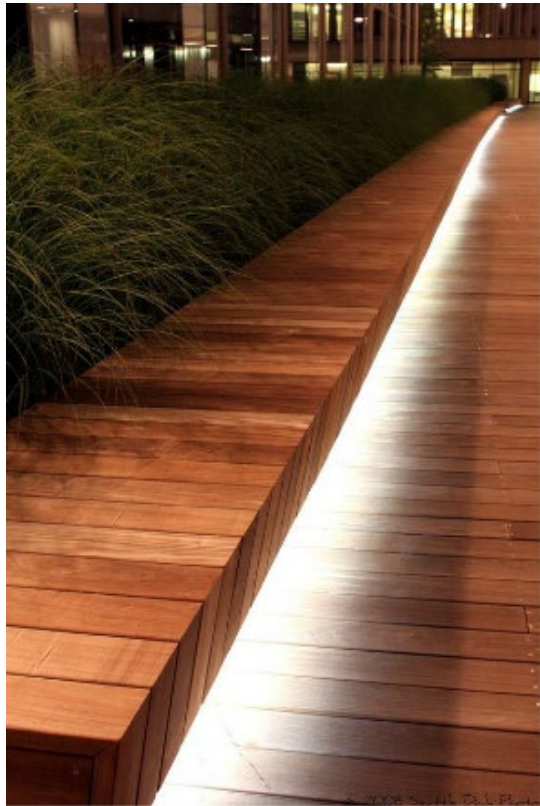
Police Memorial Week - Color Changing LED in Blue



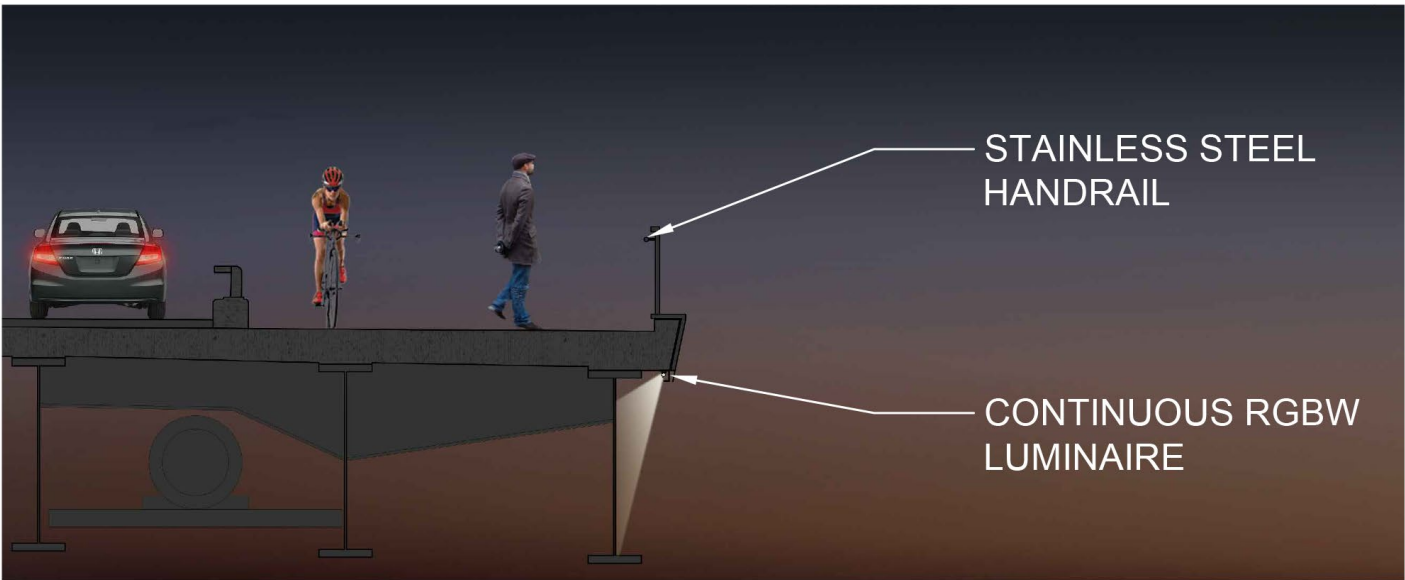
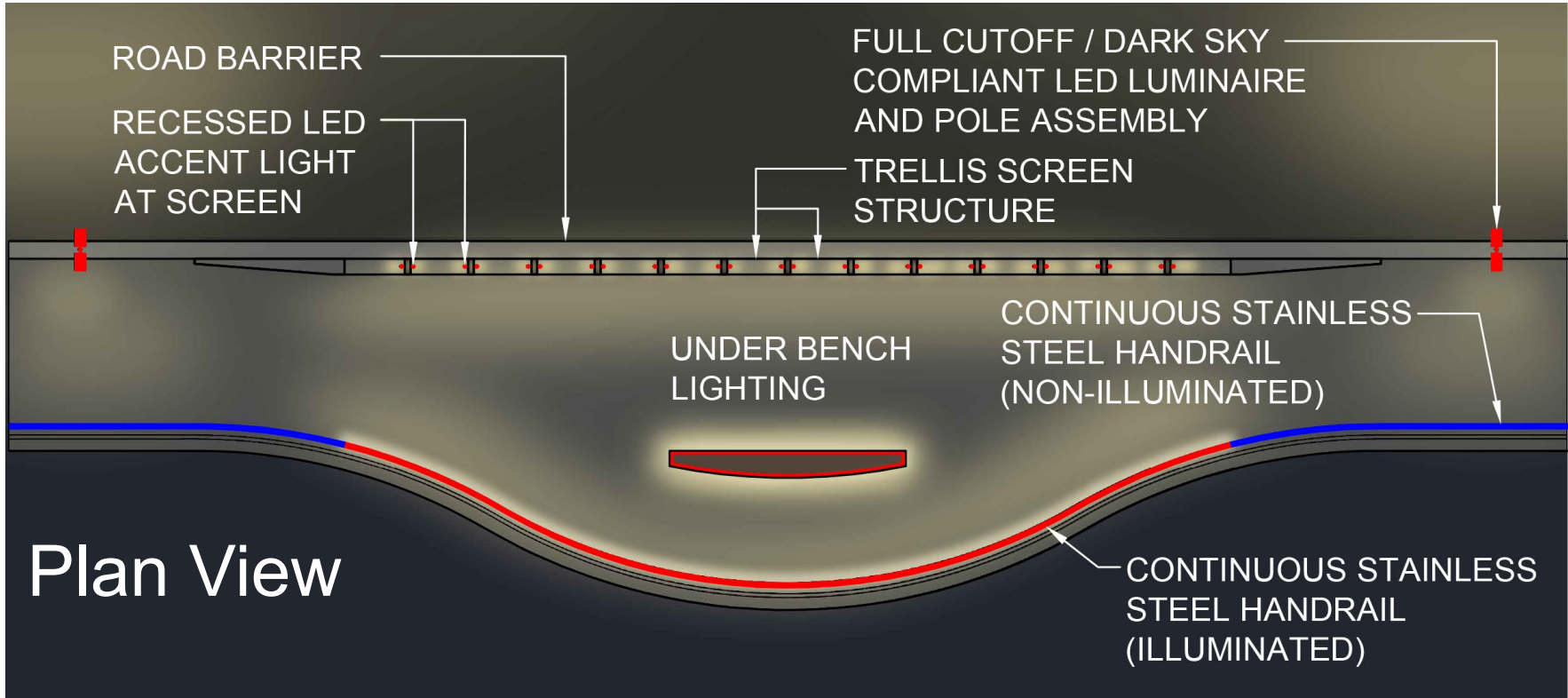
Overlook - Illuminated Handrail Lighting



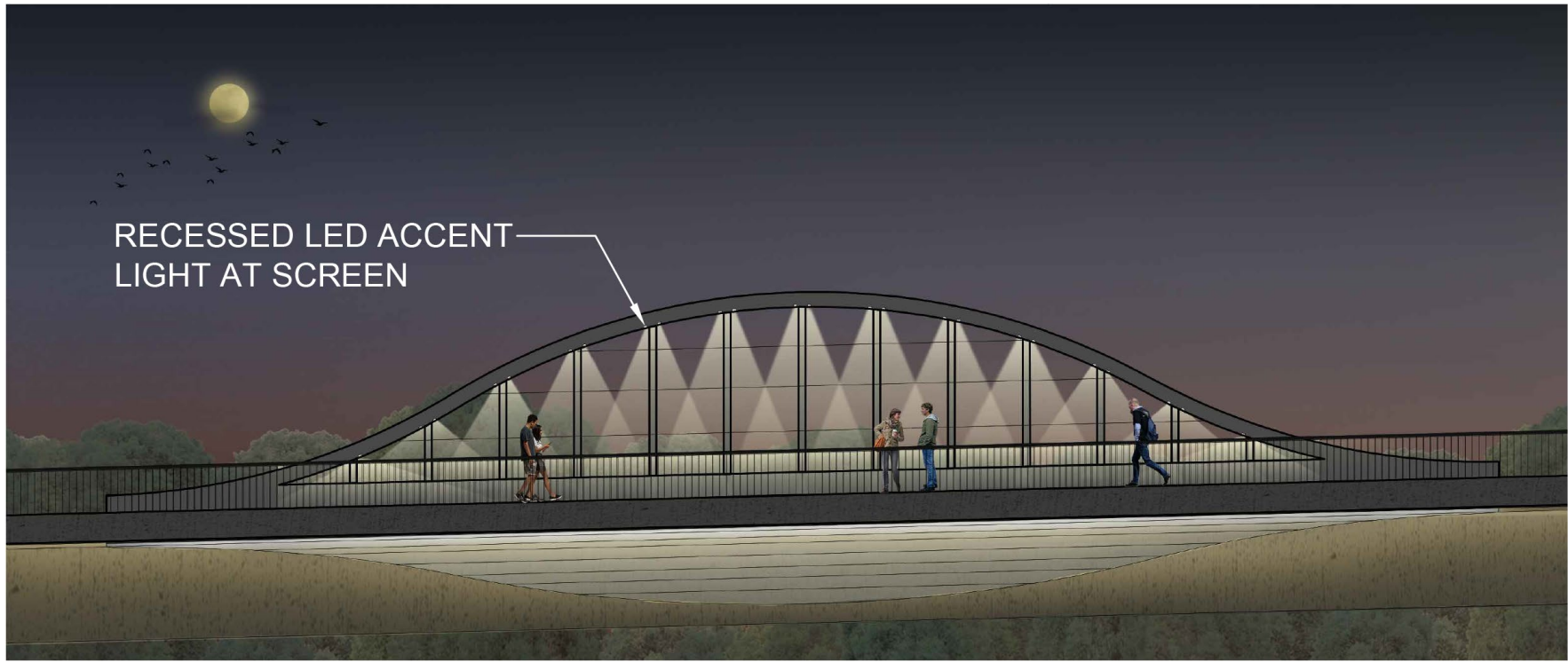
Overlook - Under Bench Lighting



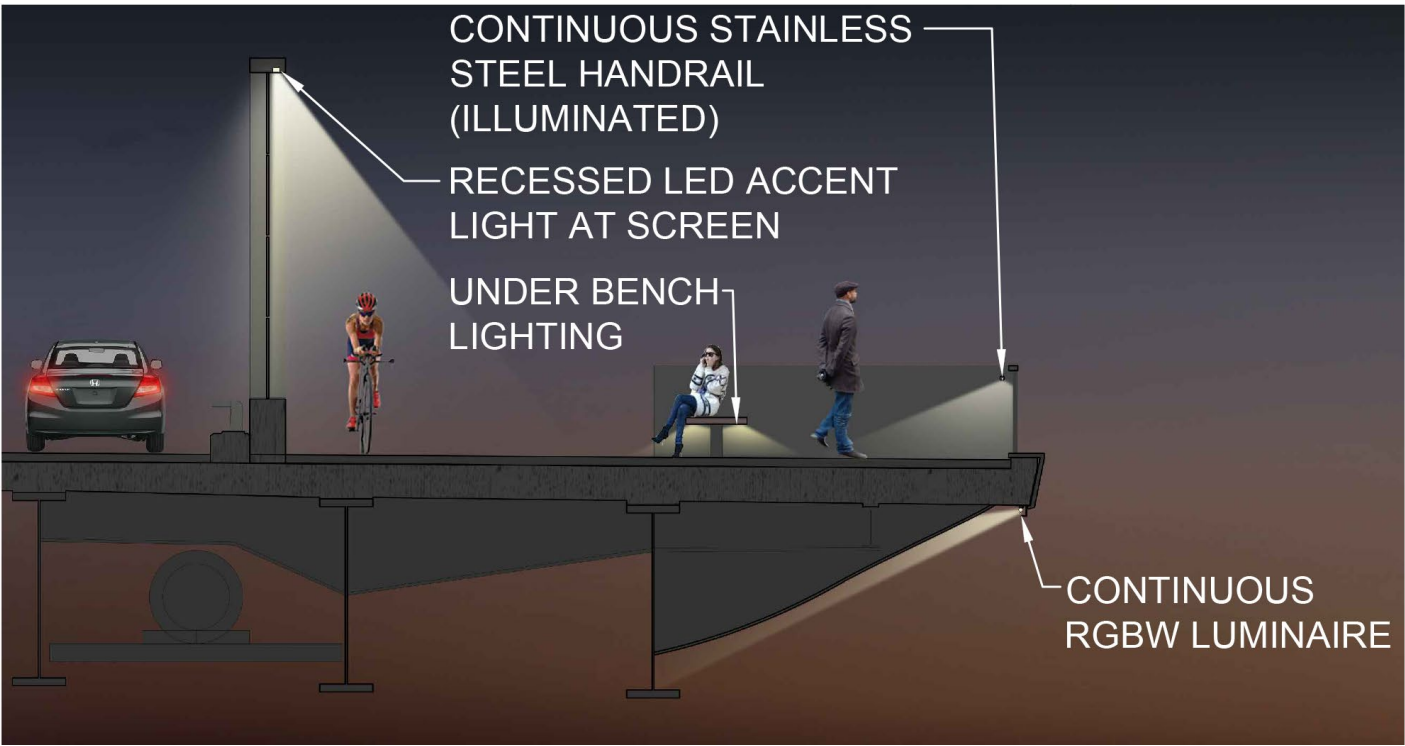
Lighting at Overlook



Section at Walkway



Elevation



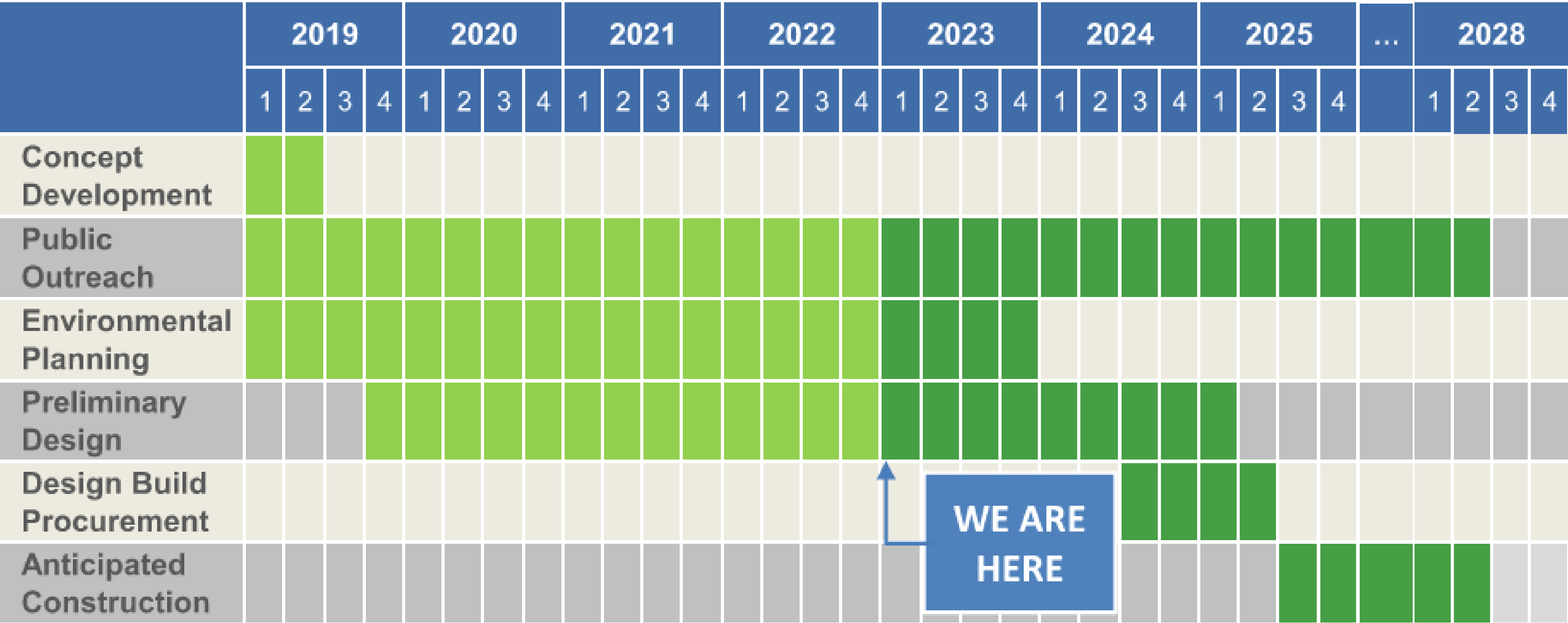
Section at Overlook





Project Timeline

Schedule & Cost

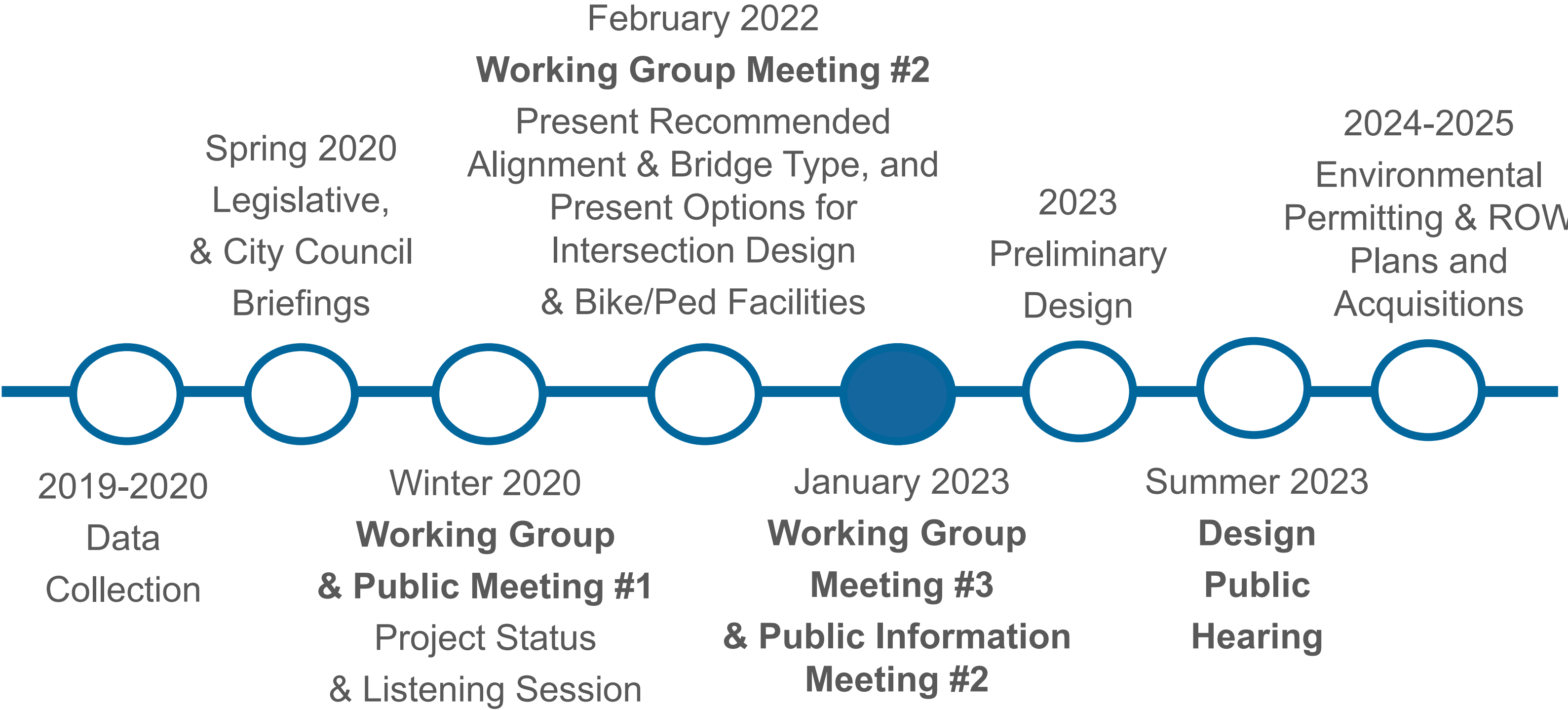


WE ARE
HERE

Anticipated Project Cost - \$170 Million



Our next steps



Working Group Feedback???

Retain north existing bridge substructure for use and opportunity for future development?

Retain existing north abutment for use as river overlook

Retain existing north piers for future use and expansion of overlook

Retain both elements

Remove both elements



Working Group Feedback???

Preference on bridge underlighting?

Fully illuminate underside of bridge

Provide lighting on exteriors faces and piers



Working Group Feedback???

What are the important overlook aesthetic components?

Bench Seating

Vertical Trellis Elements

Interpretive signage

All the above





Please provide feedback online
via the link below:
www.mass.gov/rourke-bridge-replacement-project





Questions and discussion





Thank You



Rourke Bridge Replacement Project

Lowell, MA | January 31, 2023 | 2:00pm

MassDOT #607887

