



Hall-Whitaker Drawbridge Temporary Bridge

Design Public Hearing

Beverly Middle School | March 14, 2024 | 6:30pm

Project File No. 608514



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!

Public Outreach

The public meeting was noticed in the following local newspapers:

- *Salem News*
 - English, Albanian, Portuguese & Spanish
 - Ran on February 26
- *Herald Citizen*
 - English
 - Ran on February 29
- *El Planeta*
 - Spanish
 - Ran on February 26



Herald-Citizen



The meeting flyer was distributed to:

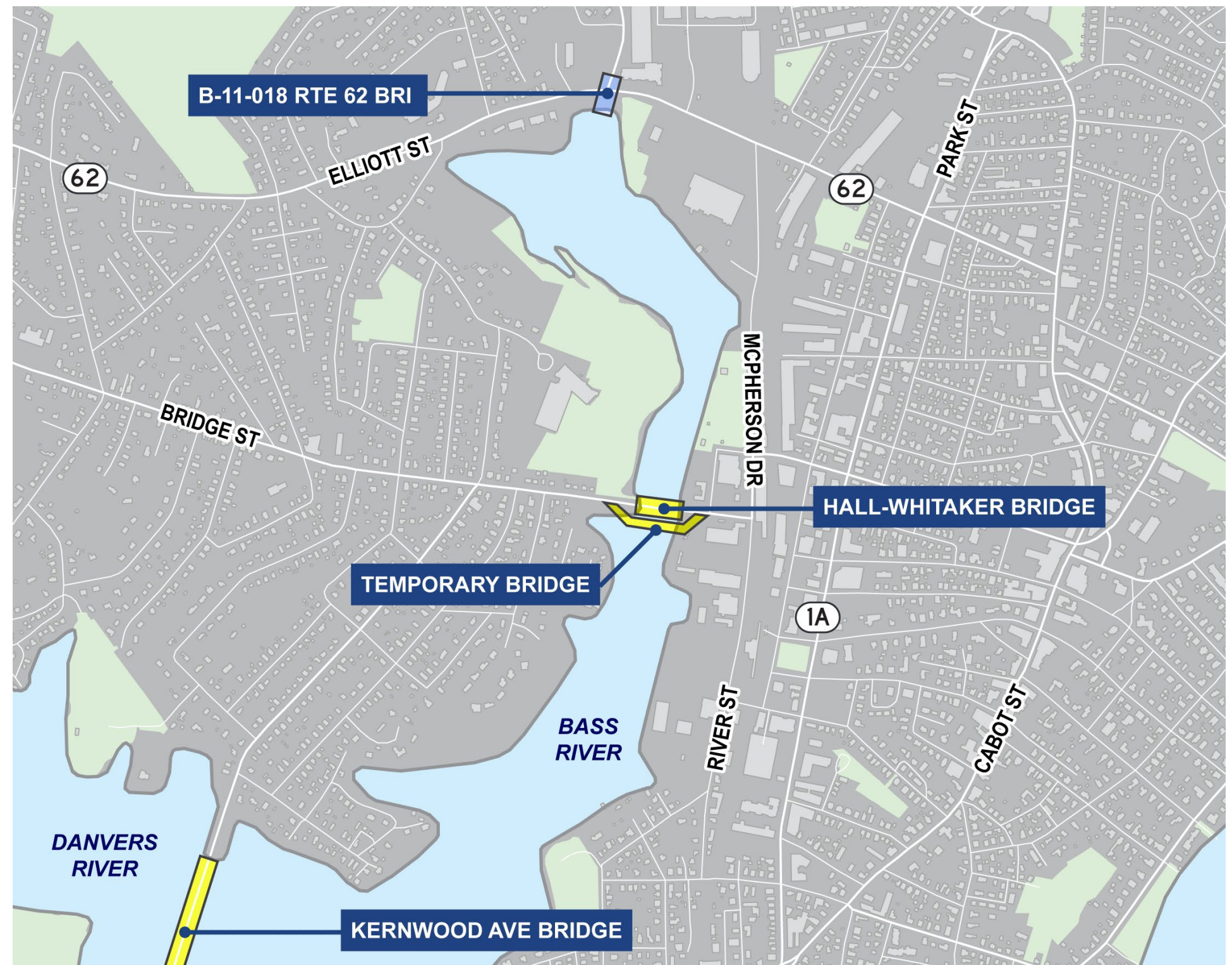
- Homes, businesses, and neighborhood associations abutting the bridge
- Beverly municipal staff
- Beverly Council on Aging, Public Library, Post Office, and grocery stores

Meeting Participants

- **City of Beverly**
 - Mayor Michael P. Cahill
- **MassDOT Highway Division**
 - Paul Stedman, District 4 Highway Director
 - Robert Antico, Project Manager
 - Michael Ruderman, ROW
- **MassDOT Design Consultant, VHB**
 - Nick Scenna, Design Manager
 - Meredith Avery, Environmental Scientist
- ***MassDOT Public Outreach Consultant***
 - *Howard Stein Hudson*
- ***MassDOT Stenographer Consultant***
 - *Advanced Court Reporters, LLC*

Agenda

- Project Background
- Project Need
- Program Objective
- Design Alternatives Analysis
- Preferred Design Alternative
- Property Impacts
- Bicycle and Pedestrian Accommodations
- Environmental, Cultural Resource, and Community Impacts
- Construction Approach
- Vehicular Impacts
- Next Steps
- Public Outreach
- Questions and Discussion



How did we get here?





Why was this
project
initiated?

Hall-Whitaker Drawbridge Closure



Recommendation:

Bridge closure to vehicular traffic.

From the State Bridge Engineer:

The bridge is beyond its useful life and the extent of deterioration and necessary repairs eliminates this bridge as a candidate for repair or reconstruction and warrants a full replacement.



What do we
want to
accomplish?

Program Objective

1. Provide a reliable travel route between the Ryal Side neighborhood and downtown Beverly.
2. As quickly as practicable, safely restore vehicular traffic to Bridge Street; while continuing Kernwood Bridge maintenance.
3. Full bridge replacement of the Hall-Whitaker and Kernwood Avenue Bridges.





**What
alternatives
were
considered?**

Conceptual Design Development Alternatives

1. Existing Bridge Rehabilitation
2. Permanent Movable Bridge Replacement
3. Temporary Movable Prefabricated Bridge
4. Temporary Fixed Prefabricated Bridge

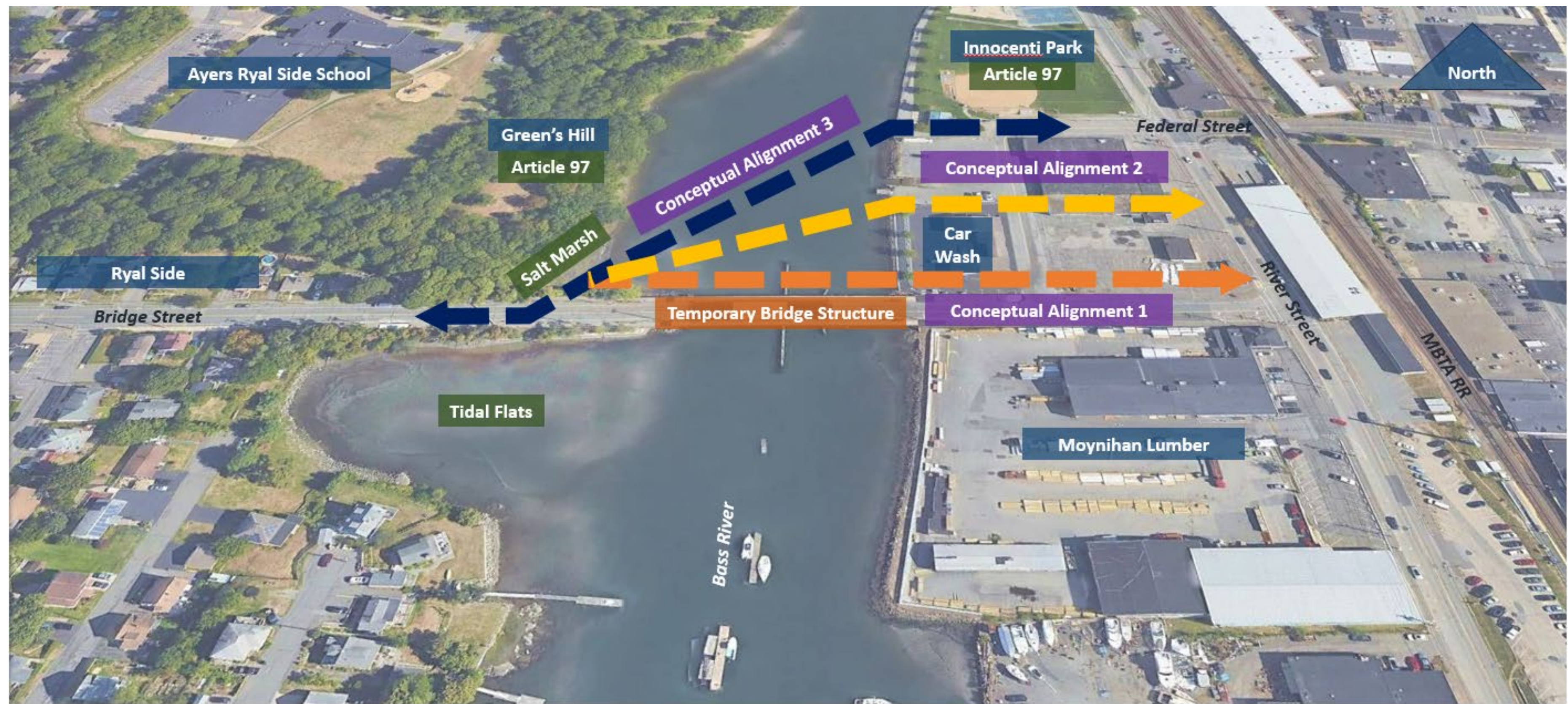
Other Considerations...

- Roadway Alignment
- Roadway Profile / Vertical Clearance at Navigational Channel
- Roadway Cross Section
- Utility Maintenance
- Foundation Types
- Maintenance of Traffic
- Private Property Impacts
- Cultural Resource Area Impacts
- Construction Sequence

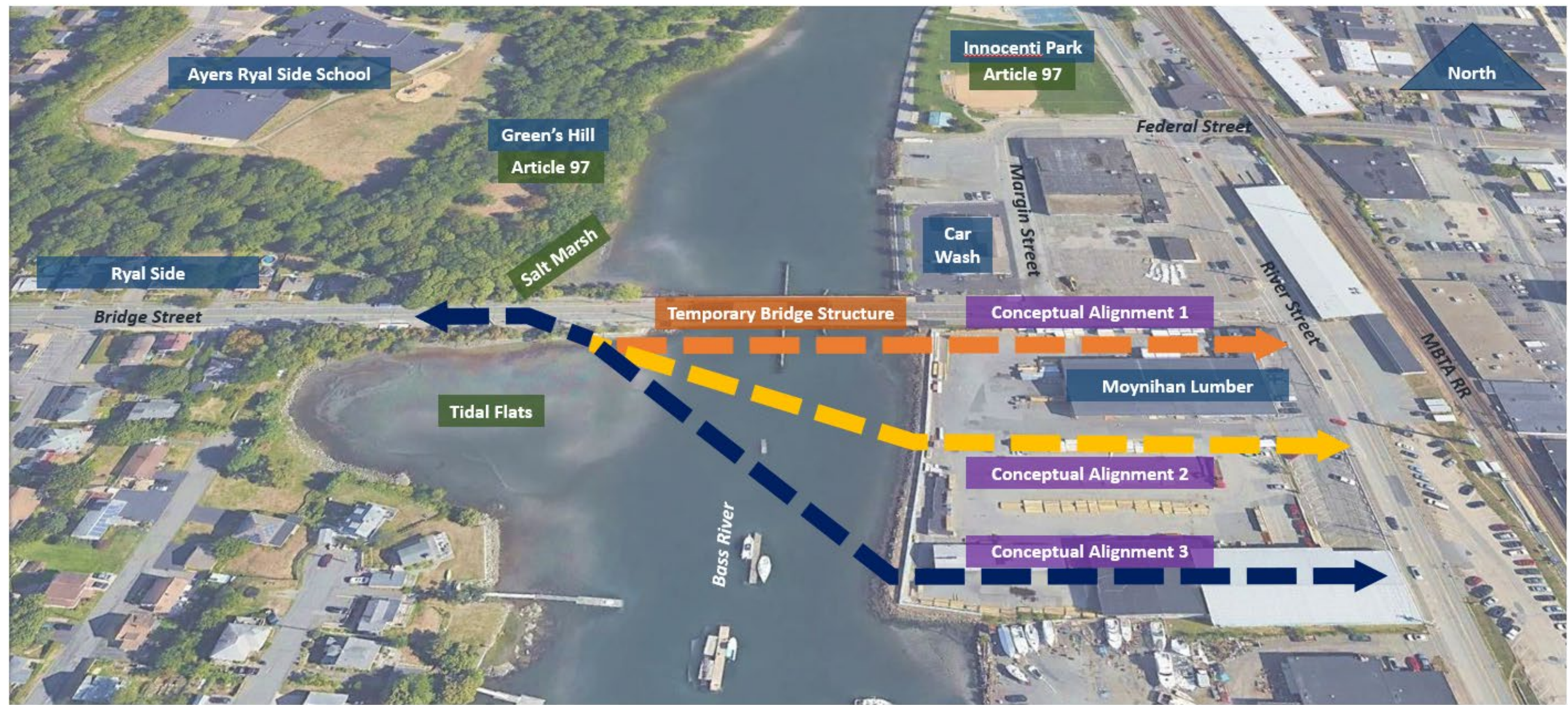


Temporary Fixed Prefabricated Bridge

Temp on Existing Alignment / Permanent on Northern Alignment



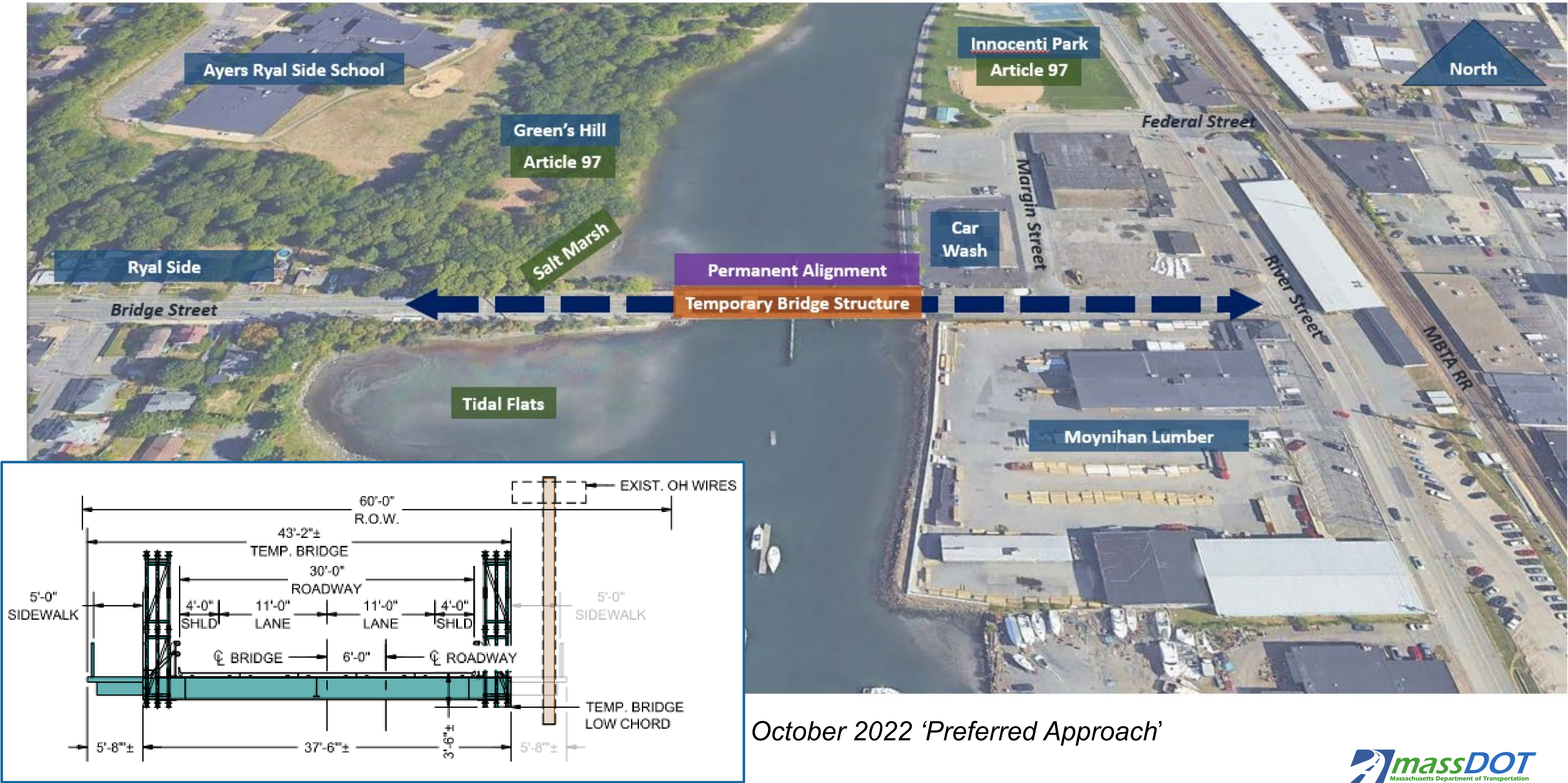
Temp on Existing Alignment / Permanent on Southern Alignment



Temp on Parallel Alignment / Permanent on Existing Alignment



Temp on Existing Alignment / Permanent on Existing Alignment



October 2022 'Preferred Approach'



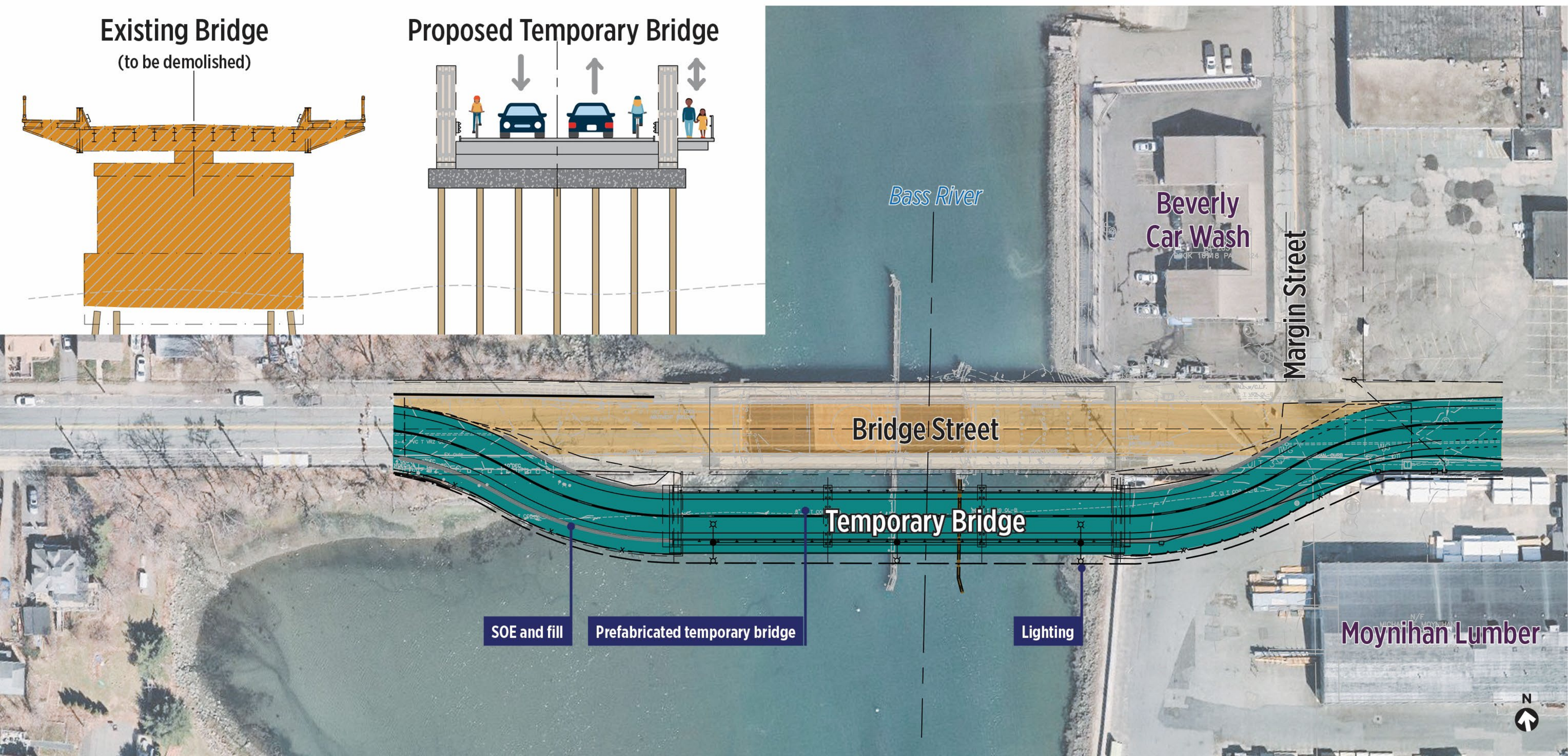
**What is the
preferred
alternative?**

Temp on Parallel Alignment / Permanent on Existing Alignment



June 2023 Revised "Parallel-Alignment"

Revised “Parallel-Alignment” – current approach



Benefits of Revised “Parallel Alignment”

- Maintains Bridge Street vehicular passage on the temporary bridge from temporary bridge opening to removal without future long-term interruption
- Maintains pedestrian and bicycle access throughout temporary and permanent bridge construction
- Allows new Bridge Street bridge to be constructed simultaneously with Kernwood (reducing overall program schedule)

Additional Challenges

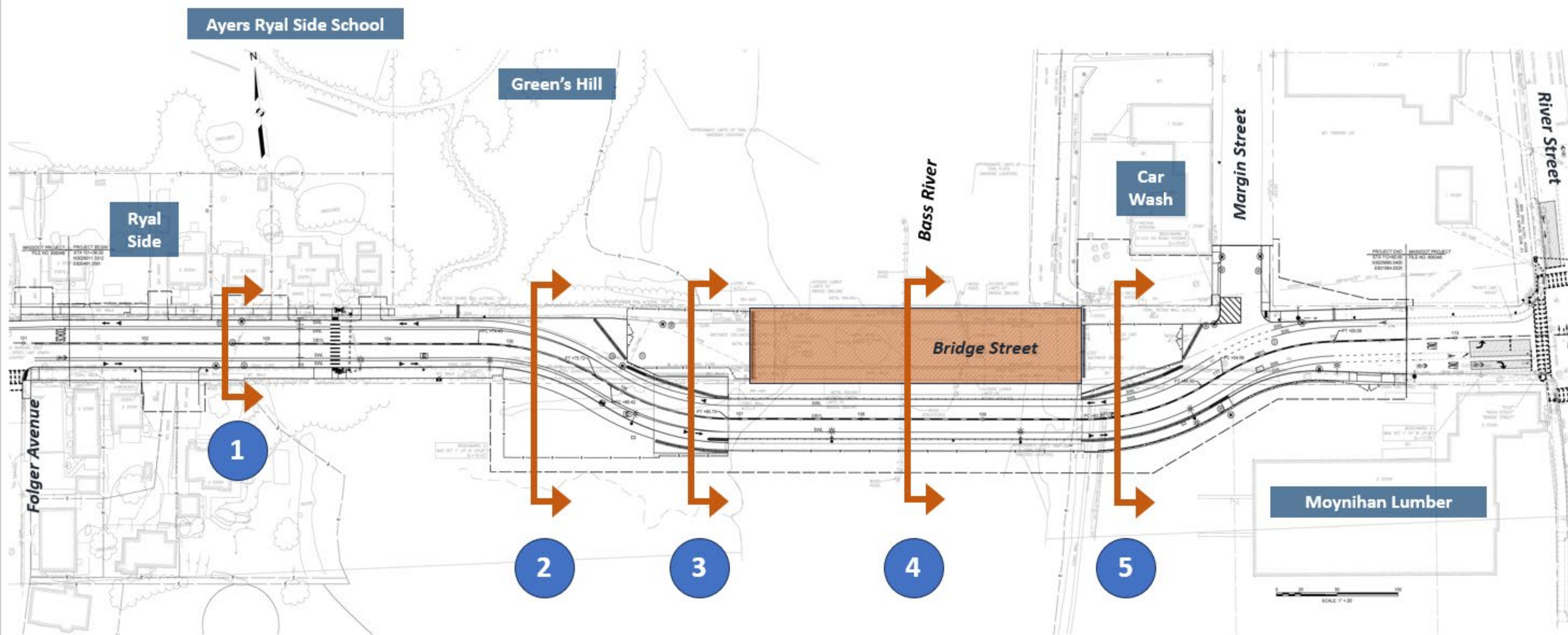
- Maintains Bridge Street vehicular passage on the temporary bridge from temporary bridge opening to removal without future long-term interruption
- Maintains pedestrian and bicycle access throughout temporary and permanent bridge construction
- Allows new Bridge Street bridge to be constructed simultaneously with Kernwood (reducing overall program schedule)



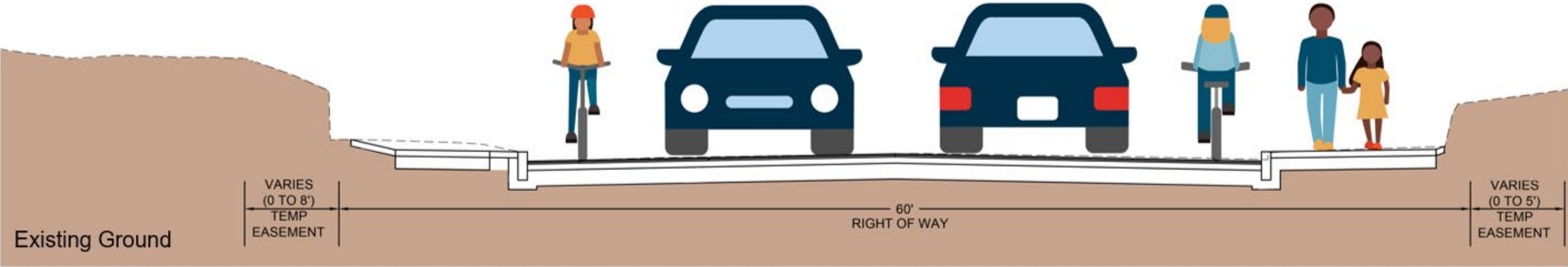
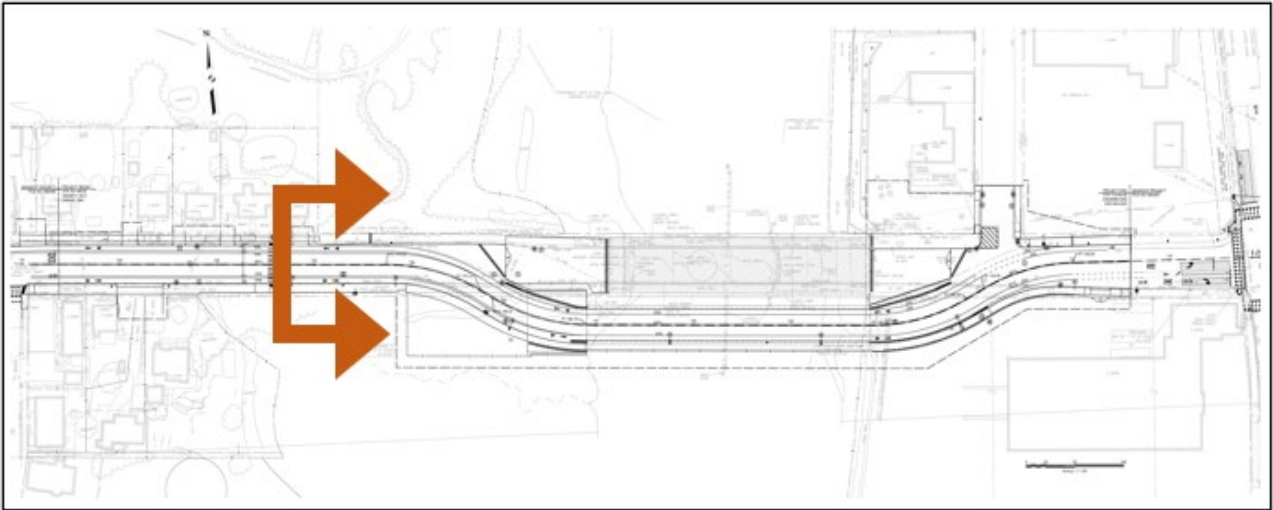
Approximate Project Limits



Roadway Cross Sections



Roadway Cross Section - 1



Private Property

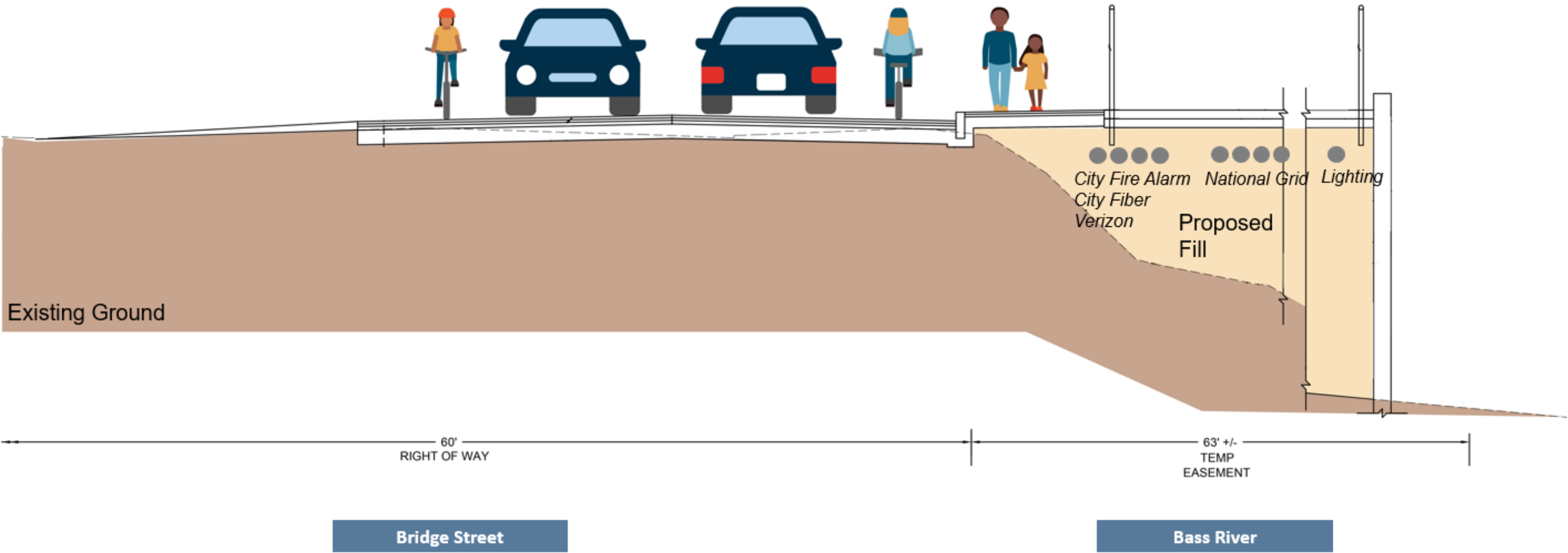
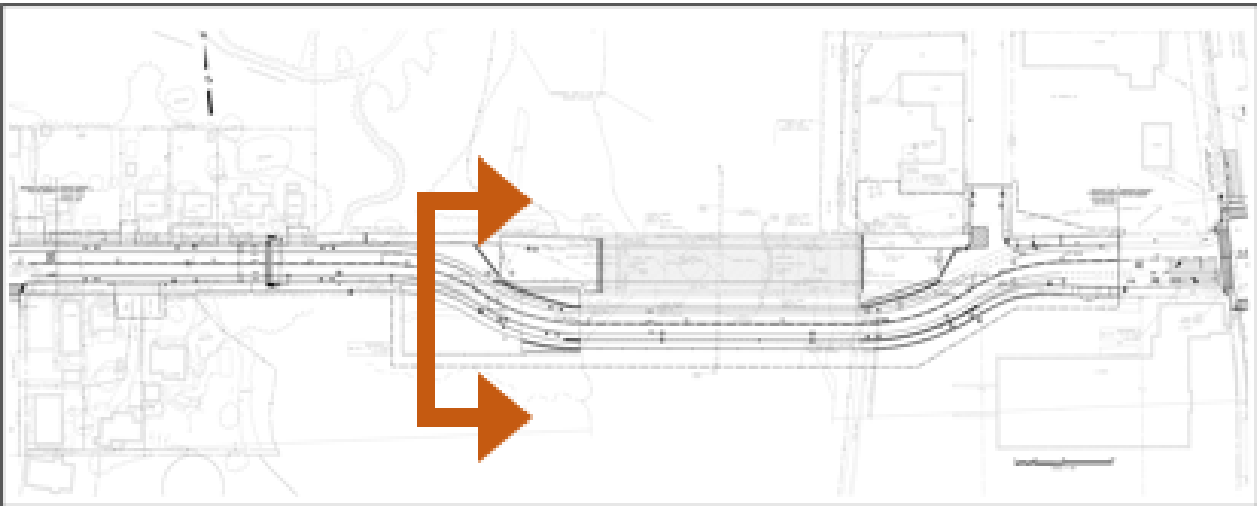
Bridge Street

Private Property

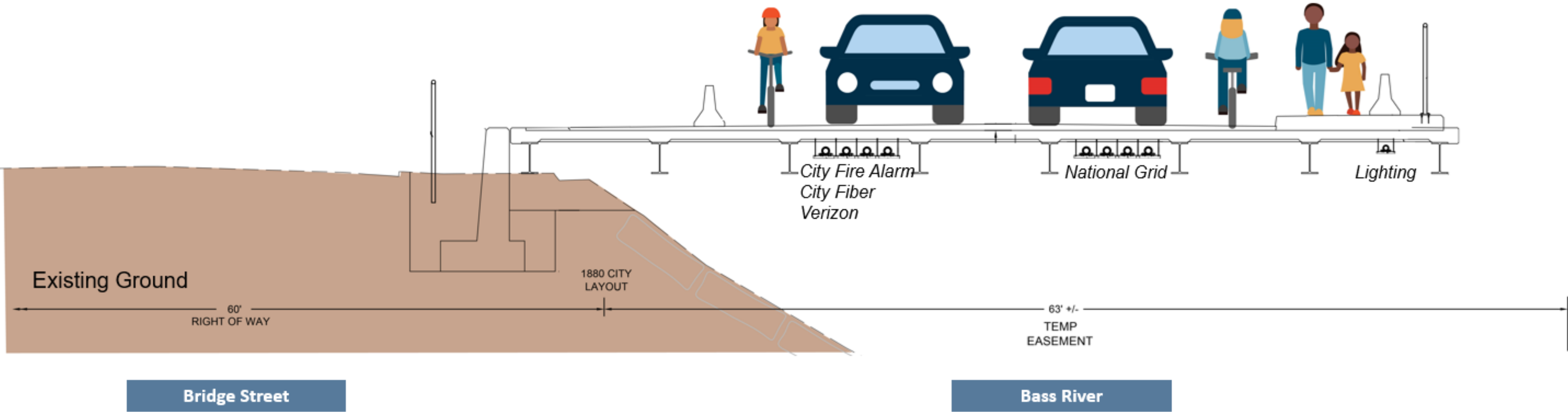
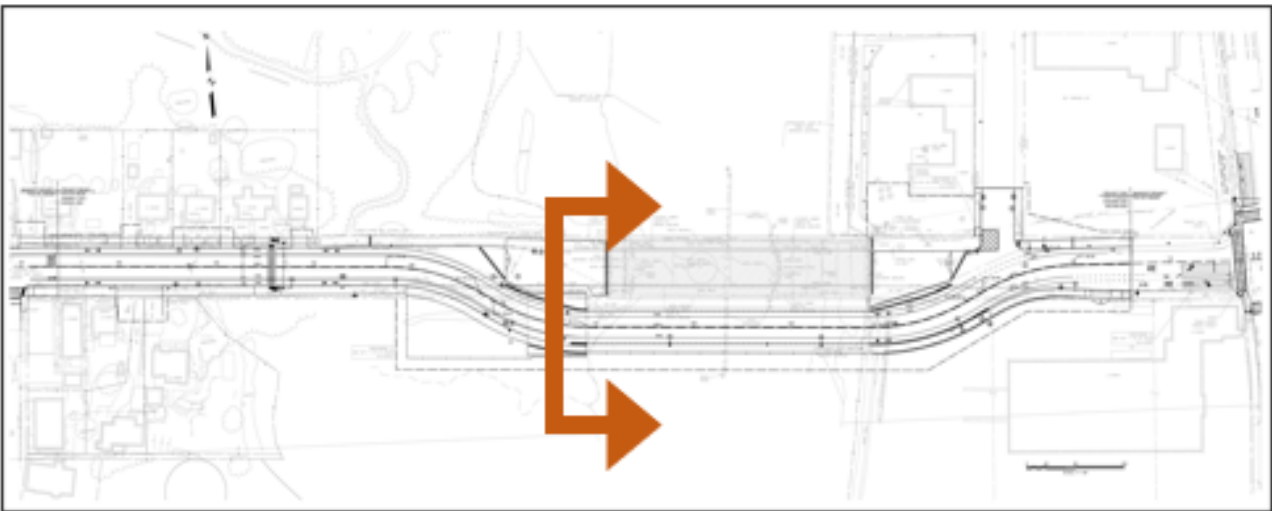
Roadway Cross Section - 2



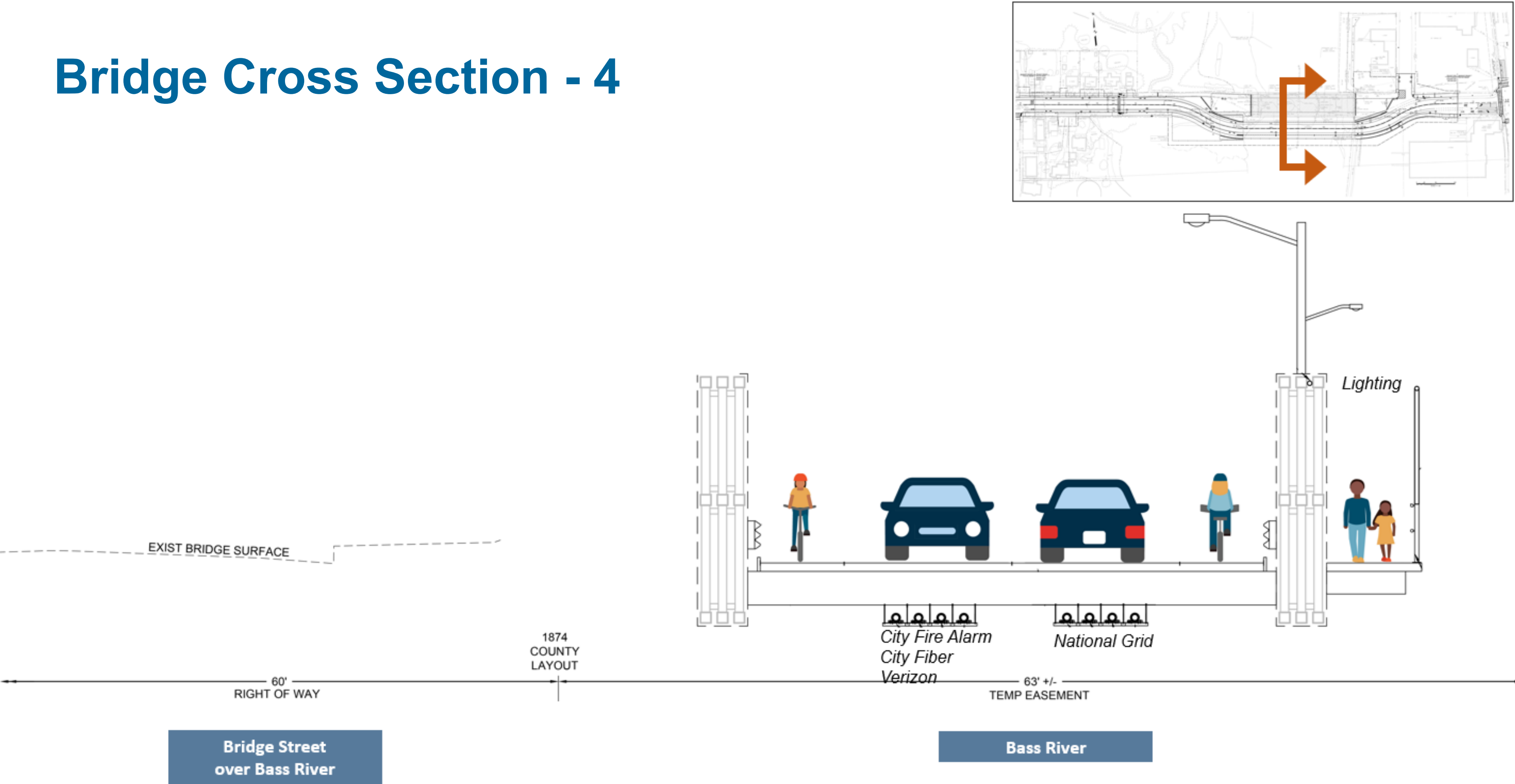
Roadway Cross Section - 2



Bridge Cross Section - 3



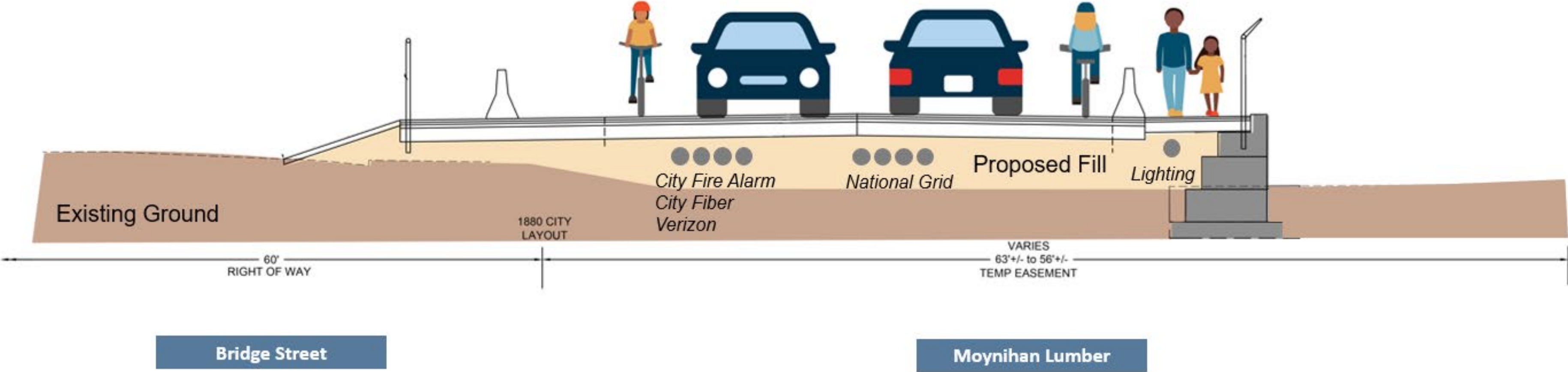
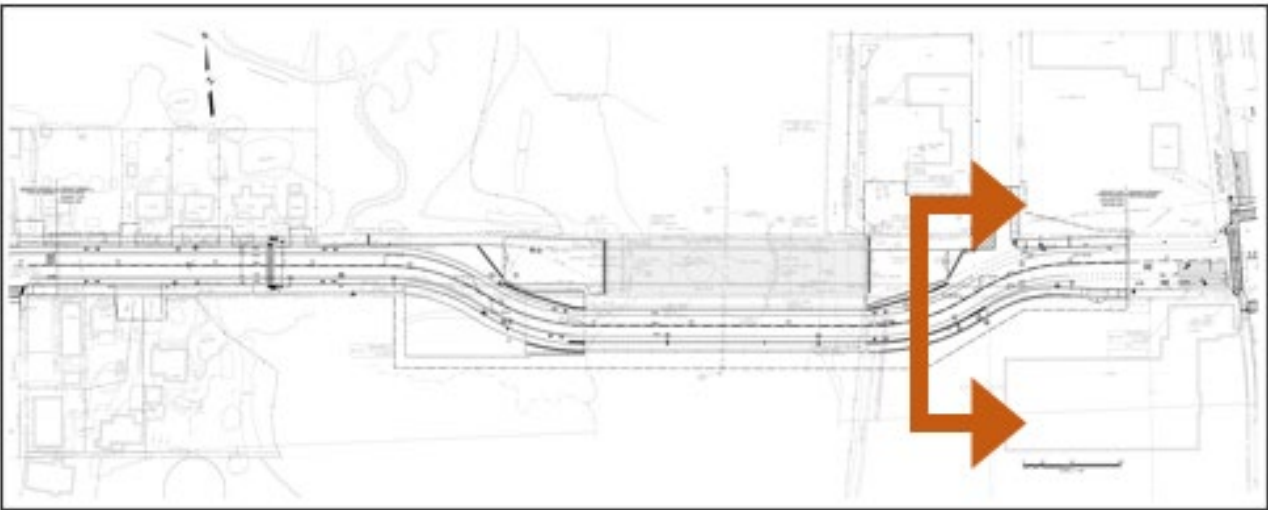
Bridge Cross Section - 4



Roadway Cross Section - 5



Roadway Cross Section - 5



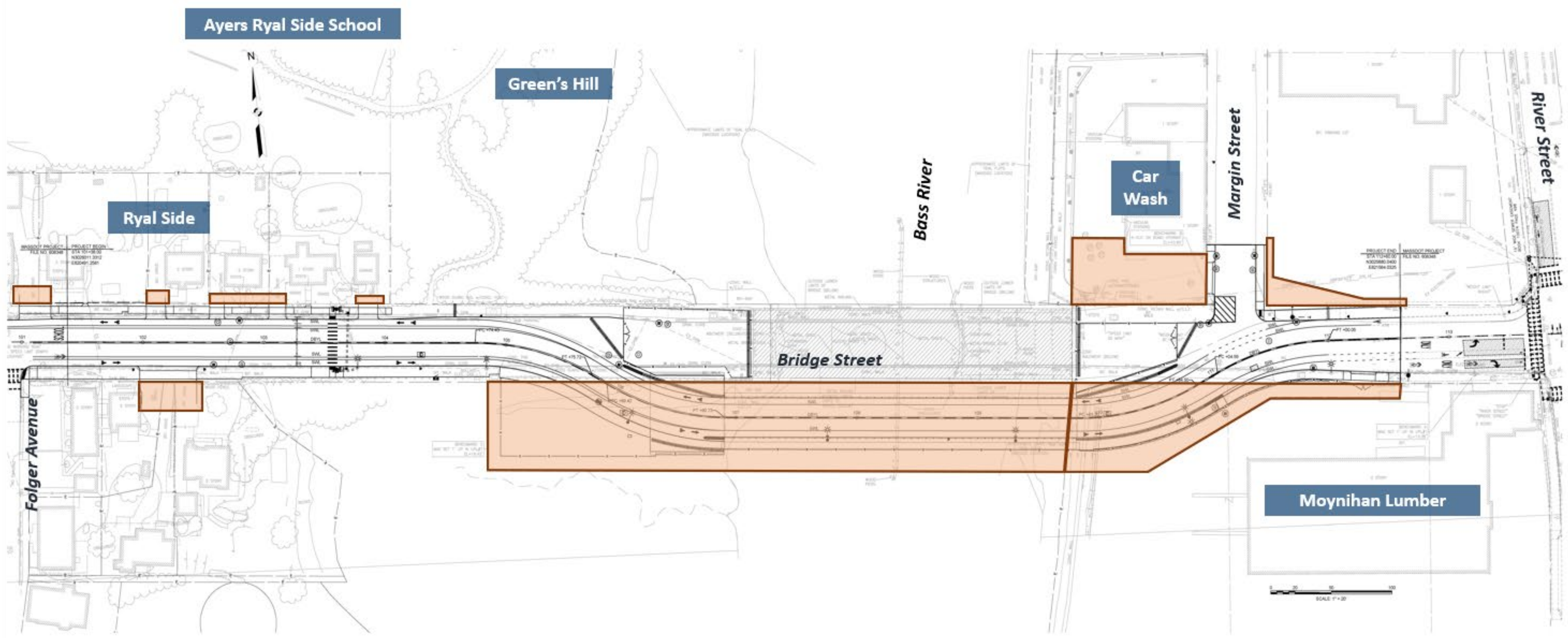


**If my property
is impacted...**

Right of Way (ROW) discussion – 25% Design

- Responsible for acquiring all necessary rights in public land for design, construction, and implementation of a project.
- Affected property owners will be contacted by personnel from the ROW Bureau or consultants representing MassDOT.
- Procedures must comply with state and federal regulations governing the acquisition process.
 - Property owners are protected under Massachusetts General Laws, primarily Chapter 79.
 - If project receives federal funds, property owners are further protected under Title III of the Real Property Act of 1970, as amended.
- Fee takings, permanent easements, and/or temporary construction easements may be required.

Preliminary ROW - Temporary Easements





**How will
bicyclists and
pedestrians
be impacted?**

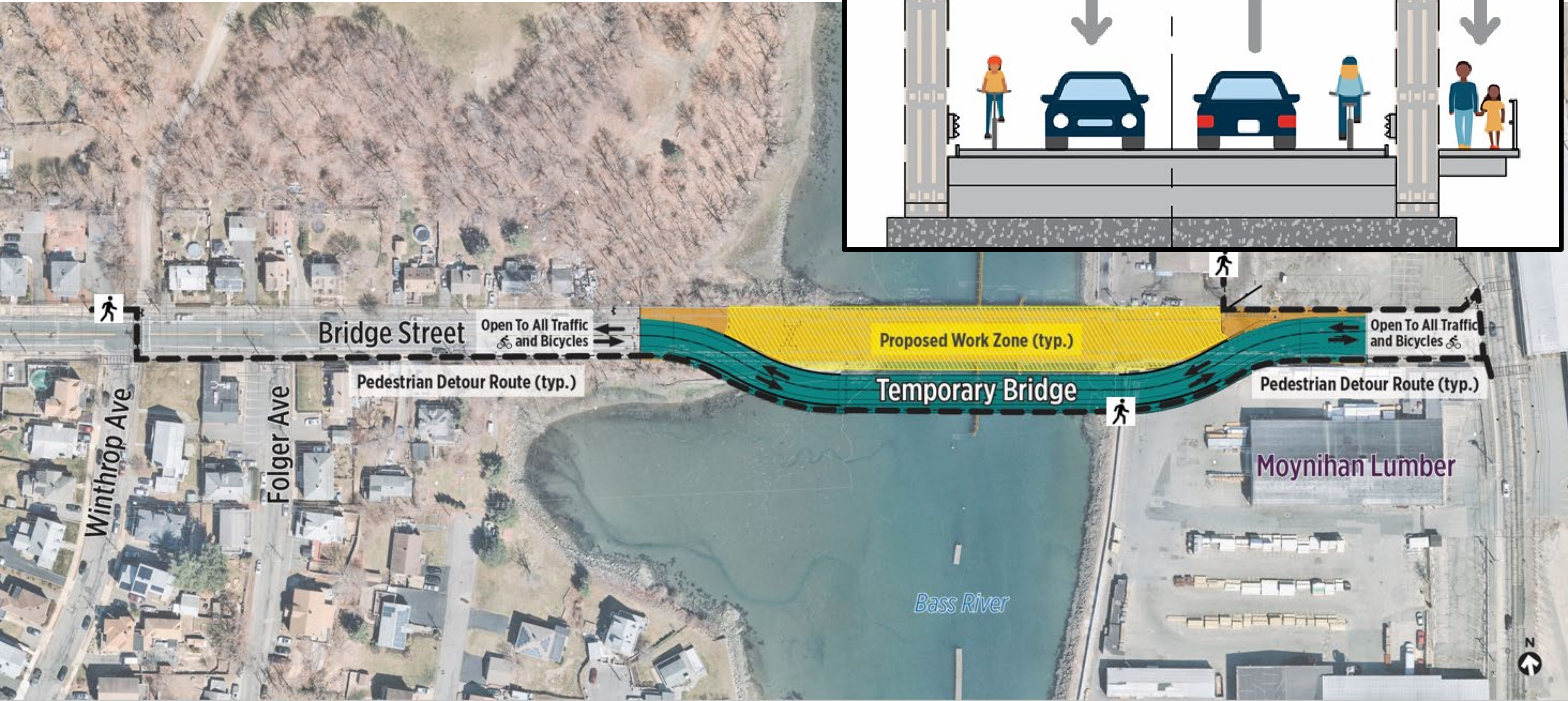
Pedestrian & Bicycle Accommodations

During Temporary Bridge Construction



Pedestrian & Bicycle Accommodations

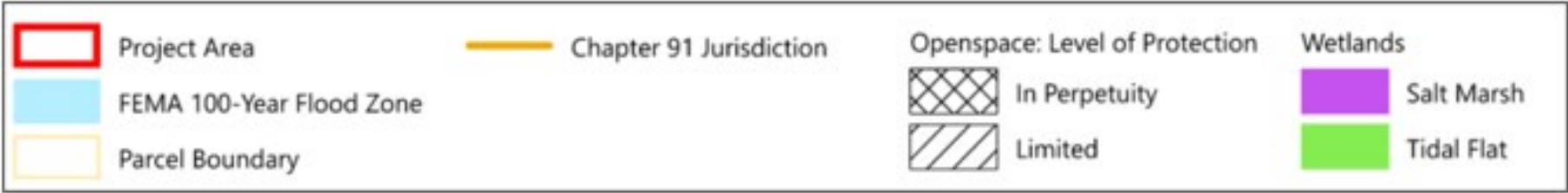
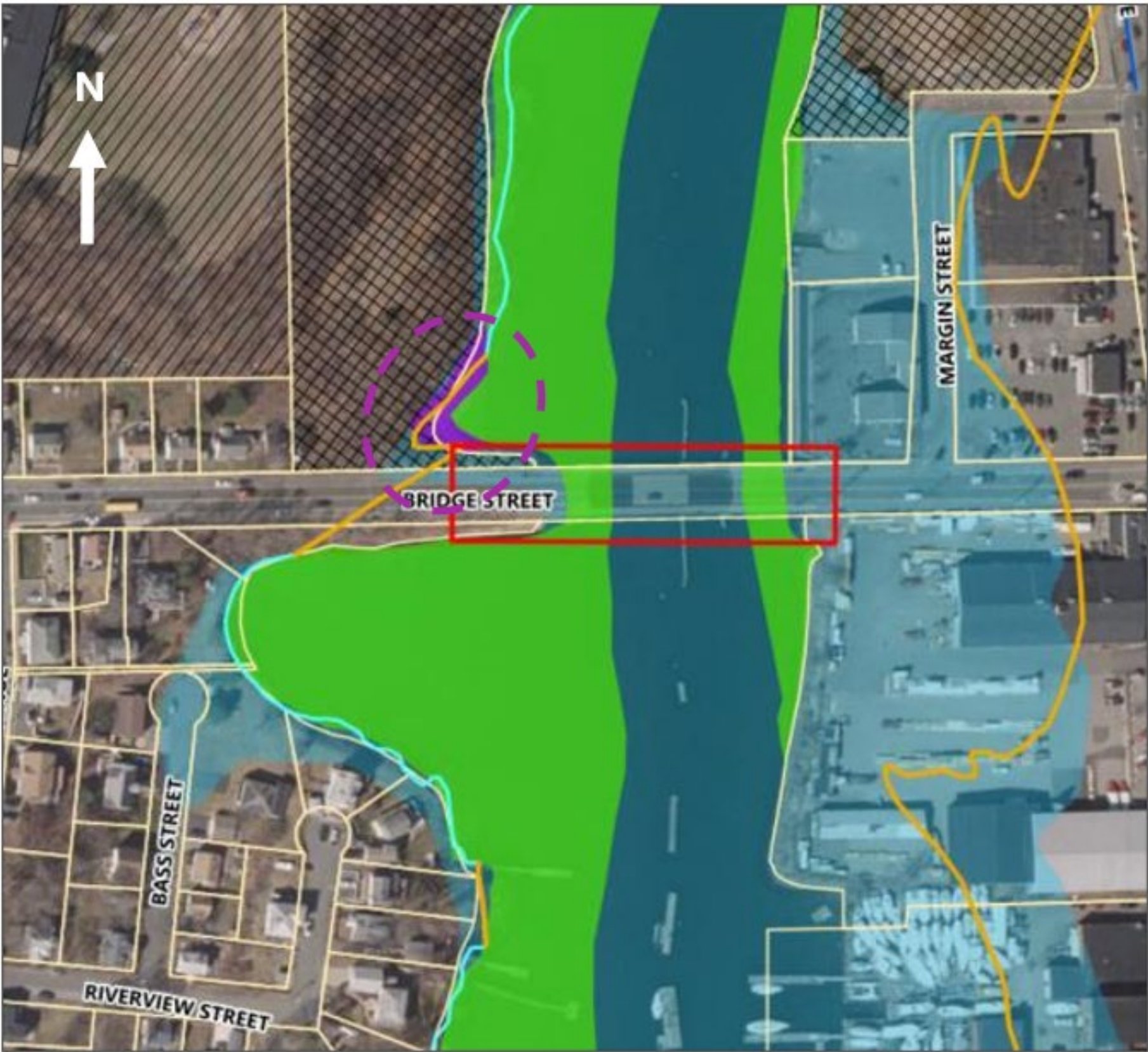
During Permanent Bridge Construction



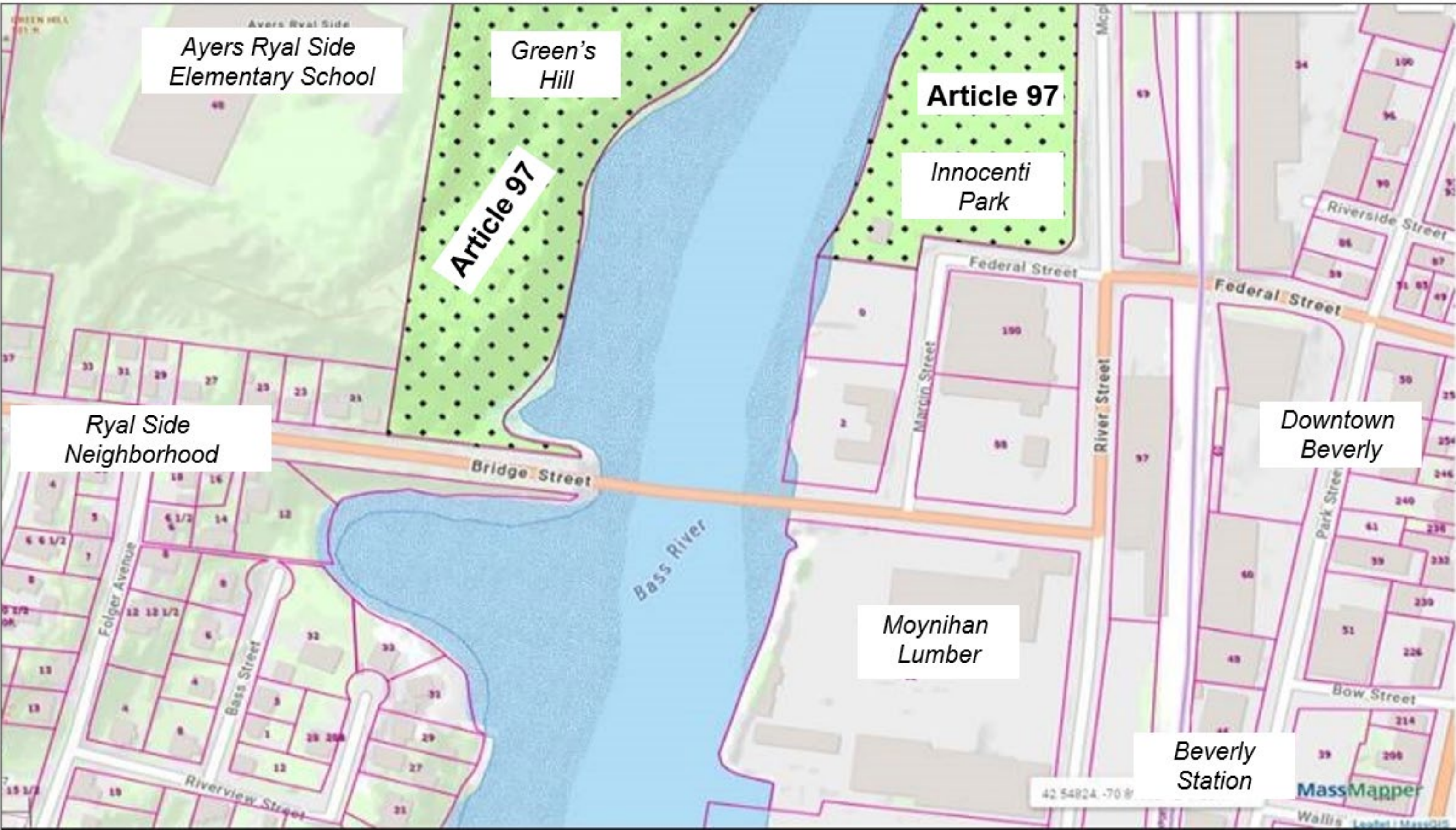


**What are the
environmental,
cultural
resource, and
community
impacts?**

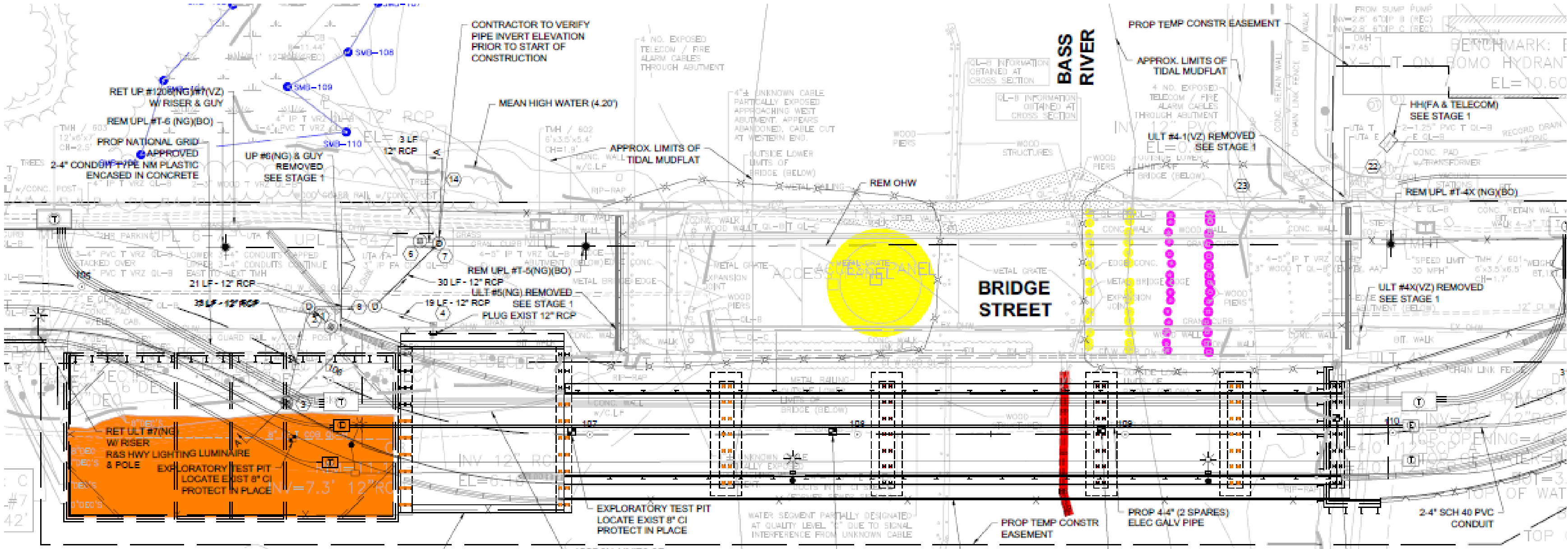
Bridge Street – Resource Areas



Bridge Street – Article 97 Public Lands



Environmental Resource Area Impacts



- TEMPORARY FILL WITHIN MUD FLATS
- BRIDGE DEMOLITION & DREDGE WITHIN MUD FLAT
- BRIDGE DEMOLITION & DREDGE WITHIN WATERS OF THE U.S.
- TEMPORARY IMPACT TO WATERS OF THE U.S.

Ongoing Agency Coordination

- MassDEP
- US Army Corps of Engineers (USACE)
- US Coast Guard (USCG)
- NOAA/ National Marine Fisheries Services (MFS)
- US Fish & Wildlife
- Massachusetts Division of Marine Fisheries (DMF)
- US Environmental Protection Agency (EPA)
- Section 106 Historic

- Not Required

- Bridge Exemptions (Mass Transportation Bond Bill)

401 Water Quality Certification
Section 404 Precon Notification (joint file w/401)
PNCD, UCSG Bridge Permit
Section 7 Endangered Species Act (Benthic Analysis)
Section 7 Endangered Species Act

National Environmental Policy Act (NEPA)
Categorical Exclusion (CE)
Environmental Assessment (EA)
Environmental Impact Statement (EIS)

Massachusetts Environmental Policy Act (MEPA)
Massachusetts Public Waterfront Act (Chapter 91)
Massachusetts Wetlands Protection Act (WPA)



Agency Coordination - Status

Temp Bridge Coordination Meetings









- 8/31/2023 Site visit with USACE and DEP
- 1/18/2024 NOAA- Section 7/EFH Coordination-Meeting
- 2/1/2024 USCG Coordination Meeting
- 2/5/2024 DMF Pre-Filing Coordination Meeting
- 3/11/2024 Pre-filing Coordination Meeting with DEP/USACE

Clearances/Review Status

- | | |
|-----------------|--|
| Section 106 | Cleared Stip VB 6/8/2023 |
| Section 7 | USFWS (NLEB) Pending |
| Section 7/EFH | NOAA Coordination Ongoing (Draft EFH Worksheet and Consultation) |
| DMF | Review Coordination Initiated |
| Section 401 WQC | Draft to DEP Pending |
| Section 404 PCN | Draft to USACE Pending |
| US Coast Guard | Application Ongoing- Review and Clearance to follow 404 Approval |

Time of Year Restrictions – MDF, NMFS, USFW

for silt producing activities in water

Time of Year Restriction	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Bass River – Bridge Street <i>March 15 through June 30 and from Sept 15 to Oct 30</i> <i>Department of Marine Fisheries lists Bass River as a spawning and habitat for American Eel (<i>Anguilla rostrata</i>)</i>												
Danvers River – Kernwood Avenue <i>February 15 to November 15</i> <i>Department of Marine Fisheries lists Danvers River / Beverly Harbor as a spawning and habitat for Winter Flounder (<i>Pseudopleuronectes americanus</i>)</i>												

Administered by the Massachusetts Division of Marine Fisheries (MDF), with review by National Marine Fisheries Services (NMFS), and US Fish & Wildlife (USFW)

Hazardous Materials Approach

- Historical and Current Land Uses
- Potential Sources of Contamination
- Available Project Subsurface Data
- Boring Program Soil Sampling & Testing
- Proper Soil Handling, Testing, Disposal, and/or Re-Use
- Dewatering and Groundwater Management
- Summarized in EECC Hazardous Materials Memo



**What is the
construction
approach?**

Construction Challenges



North Washington Street Bridge, City of Boston, Acrow.com

- Maintaining access for residents, school, businesses, and navigation
- Maintenance and protection of cultural resource areas
- Maintenance, protection, and relocation of utilities
- Construction, assembly, and demolition in and over water







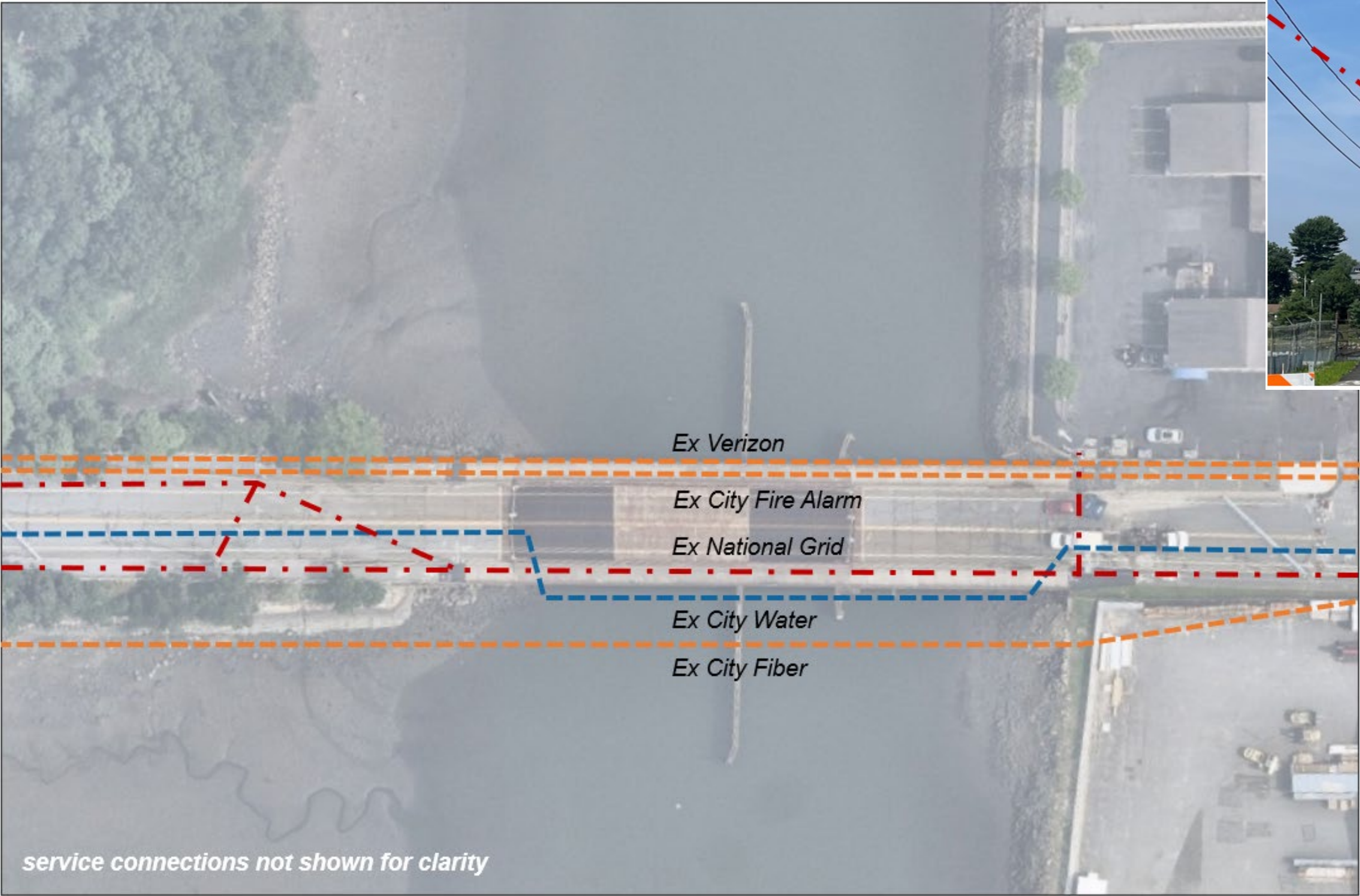








Utility Relocations – Existing Condition



- BURIED/SUBMARINE
- EX WATER - City
 - EX TELECOM - Verizon, City Fire Alarm, City Fiber
- OVERHEAD
- - - EX ELECTRIC - National Grid
- service connections not shown

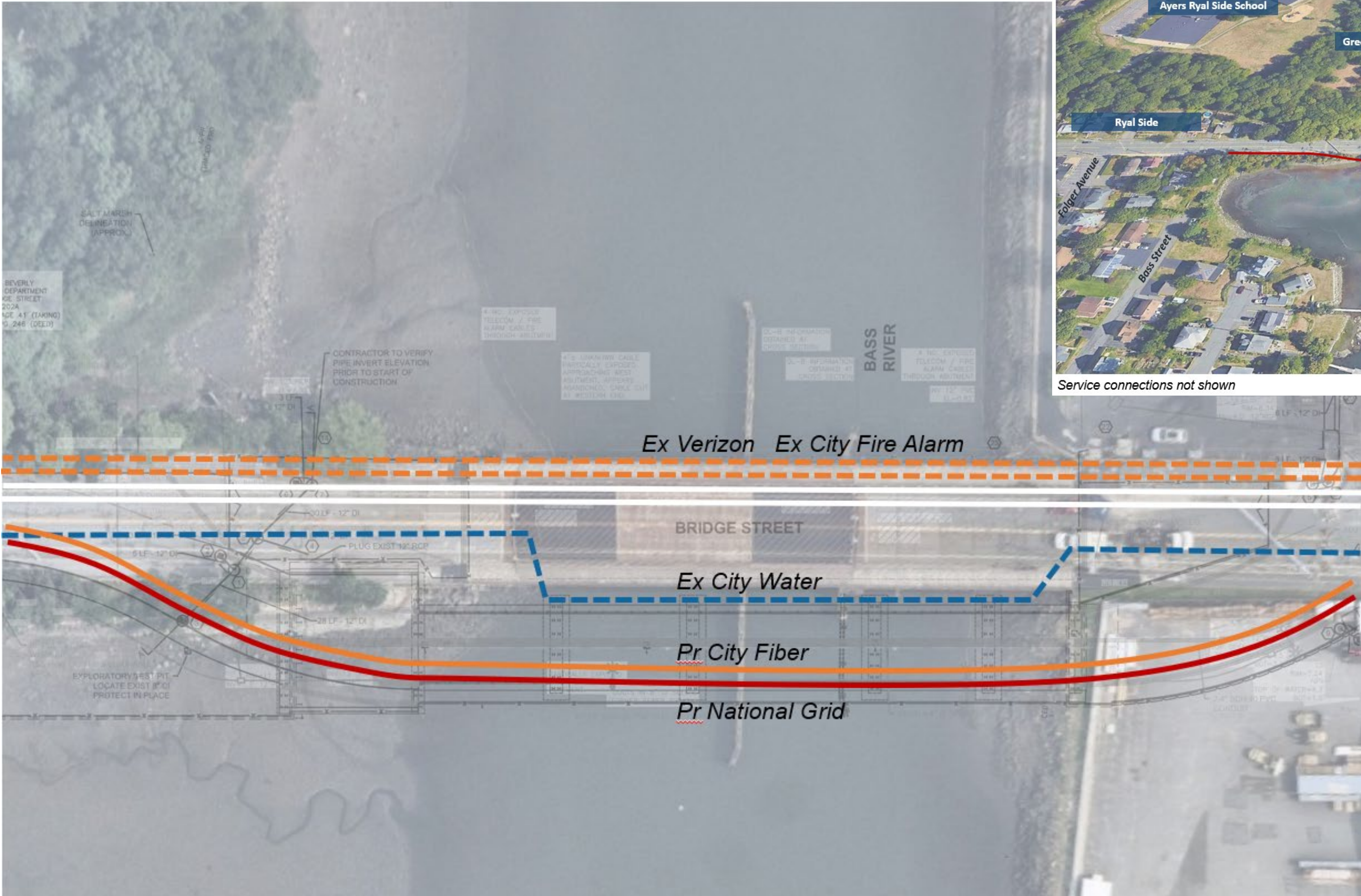
Stage 1 - Prior to Temp Bridge Construction



Service connections not shown

- BURIED/SUBMARINE
- EX WATER - City
 - EX TELECOM - Verizon, City Fire Alarm
- OVERHEAD
- PR ELECTRIC - National Grid
 - PR TELECOM - City Fiber
- service connections not shown

Stage 2A - Prior to Temp Bridge Opening

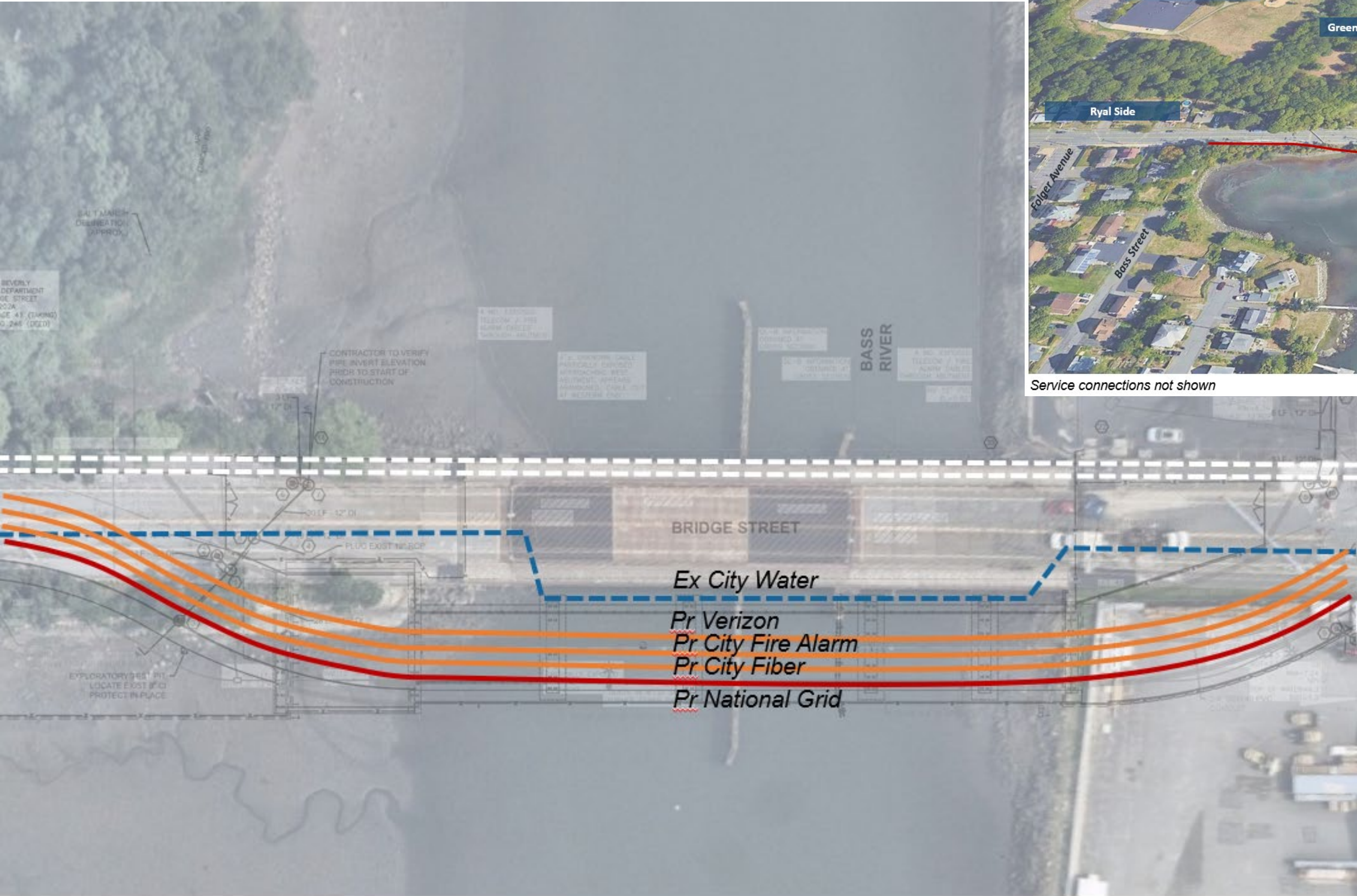


Service connections not shown

- BURIED/SUBMARINE
 - EX WATER – City
 - EX TELECOM - Verizon, City Fire Alarm
- BRIDGE MOUNTED
 - PR ELECTRIC - National Grid
 - PR TELECOM - City Fiber

service connections not shown

Stage 2B - Prior to Existing Bridge Demolition



Service connections not shown

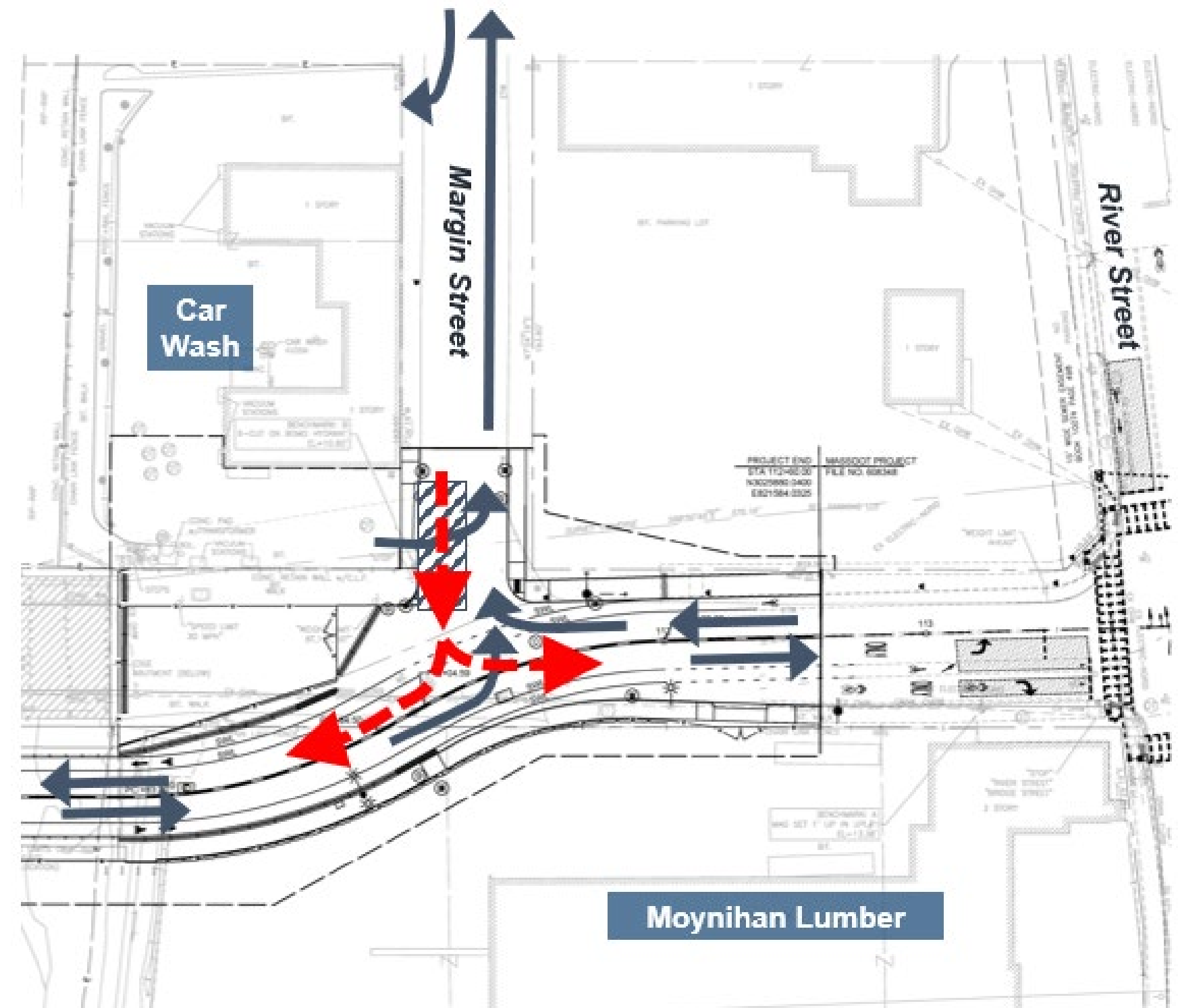
- BURIED/SUBMARINE
--- EX WATER - City
- BRIDGE MOUNTED
— PR ELECTRIC - National Grid
— PR TELECOM - City Fiber, City Fire Alarm, Verizon
- Additional Service Connections:
Verizon, Comcast (not shown)



**How will the
road user be
affected?**

Maintenance of Vehicular Traffic

- Bridge Street
 - Ped and bike maintained during construction of the temp bridge.
 - Vehicular traffic will continue to use the current bridge closure detour during construction of the temp bridge.
 - Following the opening of temp bridge, ped, bike, and vehicular traffic will be fully restored.
- Margin Street
 - Vehicular access southbound onto Bridge Street will be prohibited following opening of the temp bridge (dashed red arrow) – due to SSD.
 - Access to the Car Wash will be maintained.
 - Ped and bike access will be maintained during construction and following opening of the temp bridge.



SSD – Stopping Site Distance



**Our next
steps...**

Our next steps



25% Design Public
Hearing



File Environmental
Permits



Complete 75%
Highway & Bridge
Design



Final Design, Issue ENV
Clearance, Issue ROW
Certification



Bid Document &
Advertise for
Construction

Temporary Bridge - Design Schedule

- 75% HWY R1, 1st Structural, Permit Submission Spring 2024
- Design Reviews, Section 7 Approval, MassDEP Approval Summer 2024
- PS&E Final Design, ACOE Approval, ROW Plan Acceptance Fall 2024
- USCG Approval, ROW Certificate, Bid Docs Winter 2024/25

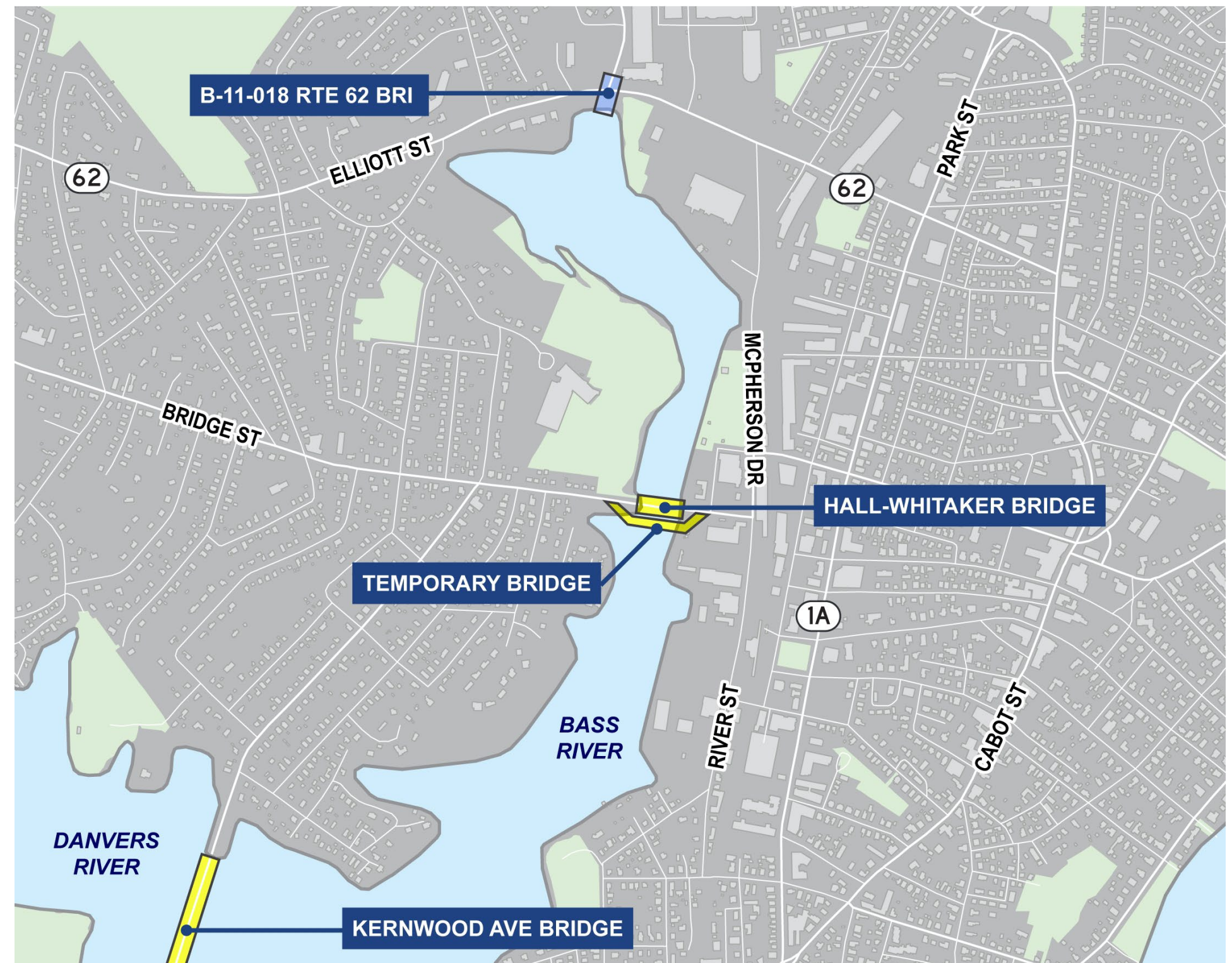
Temporary Bridge - Construction Schedule

- Advertise for Construction Spring 2025
- Construction Notice to Proceed Late Summer 2025
- Temporary Bridge Opening to Traffic Late Summer 2027*

**Time of Year Restrictions for silt producing in-water work. Administered by the Massachusetts Division of Marine Fisheries (MDF), with review by National Marine Fisheries Services (NMFS), and US Fish & Wildlife (USFW)
March 15 through June 30 and from Sept 15 to Oct 30*

Permanent Bridges - Design Progress

- Boring Program
- Updated Traffic Counts
- Supplemental Detailed Survey
- Bridge Type Selection Worksheet (BTSW)
Development, Review, Coordination with MassDOT
- Pre-25% Highway Design Development
- Constructability Workshops
- MassDOT/Private Utilities Meeting and Coordination



Permanent Bridges - Ongoing Agency Coordination

- USACE: Draft Self-Verification-Notice (SVN) (for Boring Program)
- MassDEP Approval: Sediment Sampling Plan for 401 Water Quality Certification
- USCG: Draft Project Initiation Request and Request for Preliminary Navigation Clearance Determination (PNCD)
- MassDOT Environmental and Interagency Site Meetings and Coordination
- MassDOT/Agencies/Lt Governor's Office Interagency Meeting and Coordination
- Meetings and Coordination with Bass Haven Yacht Club and USCG

Permanent Bridges - Next Steps

- BTSW and Pre-25% Design Approval
- 25% Highway Design
- Bridge Sketch Plan Development & Approval
- Continue Early Environmental Coordination
- Preliminary Right-of-Way
- Design Public Hearing
- Continued Public Information Meetings

Kernwood Bridge Repairs Update

1. Regular Inspections & Maintenance - Kernwood is regularly inspected with routine maintenance and minor repairs being addressed consistently year-round.
 - *Hall-Whitaker inspections continue as well.*
2. Rehabilitation Contract 1 of 2 - Repair project addressing utility supports near center pier was completed in 2023.
3. Rehabilitation Contract 2 of 2 - Major repair project – Advertised for bids 3/2/24 (\$6.5M Construction Value).
 - *Repairs include: steel repairs to moveable spans, timber superstructure and substructure repairs, steel grid deck replacement/wearing surface repairs, concrete substructure repairs.*
 - *Project currently in procurement with work expected to commence in Summer 2024.*



Permanent Bridges - Preliminary Design Schedule

- | | |
|----------------------------------|-------------|
| • Design Public Hearing | Spring 2025 |
| • 100% Highway Design Approval | Winter 2026 |
| • 2nd Bridge Design Approval | Winter 2026 |
| • Combined PS&E Submittal | Winter 2027 |
| • Environmental Clearance | Fall 2026 |
| • Right-of-Way Certificate | Spring 2027 |
| • Advertise for Construction | Summer 2027 |
| • Construction Notice to Proceed | Fall 2027 |
| • Permanent Bridges Complete | Fall 2032 |



**How will we
keep you
informed?**

Public Outreach

- MassDOT will provide regular updates to the City of Beverly.
- MassDOT will participate in regular Public Information Meetings.
- Mail comments and questions to:
Carrie E. Lavallee, P.E., Chief Engineer
MassDOT – Highway Division
10 Park Plaza, Boston, MA 02116-3973
Attn: Major Projects
Project File No. 608514
- E-Mail comments and questions to:
Subject: Project File No. 608514
MassDOTMajorProjects@dot.state.ma.us



Questions and discussion



Thank You

Project File Nos. 608514

MassDOT Major Projects

email: MassDOTMajorProjects@dot.state.ma.us