



Vietnam Veterans' Memorial Bridge Replacement

Industry Day 2025

MassDOT District 2 | November 5, 2025

Project File Number: 612187



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An aerial, top-down view of a city street scene. A multi-lane highway overpass runs diagonally from the top-left towards the bottom-right. Several cars are visible on the highway. To the left of the highway, there are several buildings of varying sizes and shapes, some with flat roofs and others with gabled roofs. Trees are scattered throughout the scene, particularly along the sides of the road and in the central area. In the bottom-center, there is a landscaped area with a circular flower bed containing various colorful flowers. The overall scene is captured in a blue-tinted, semi-transparent style, giving it a digital or architectural feel.

Team Introductions

Our Project Team



An aerial photograph of a highway interchange, likely a cloverleaf or similar design, with multiple lanes and overpasses. The image is heavily overlaid with a semi-transparent blue color. The text "Purpose, Need, and Goals" is centered in white, bold font across the middle of the image. The background shows a mix of urban development, including residential houses, commercial buildings, parking lots, and green spaces with trees.

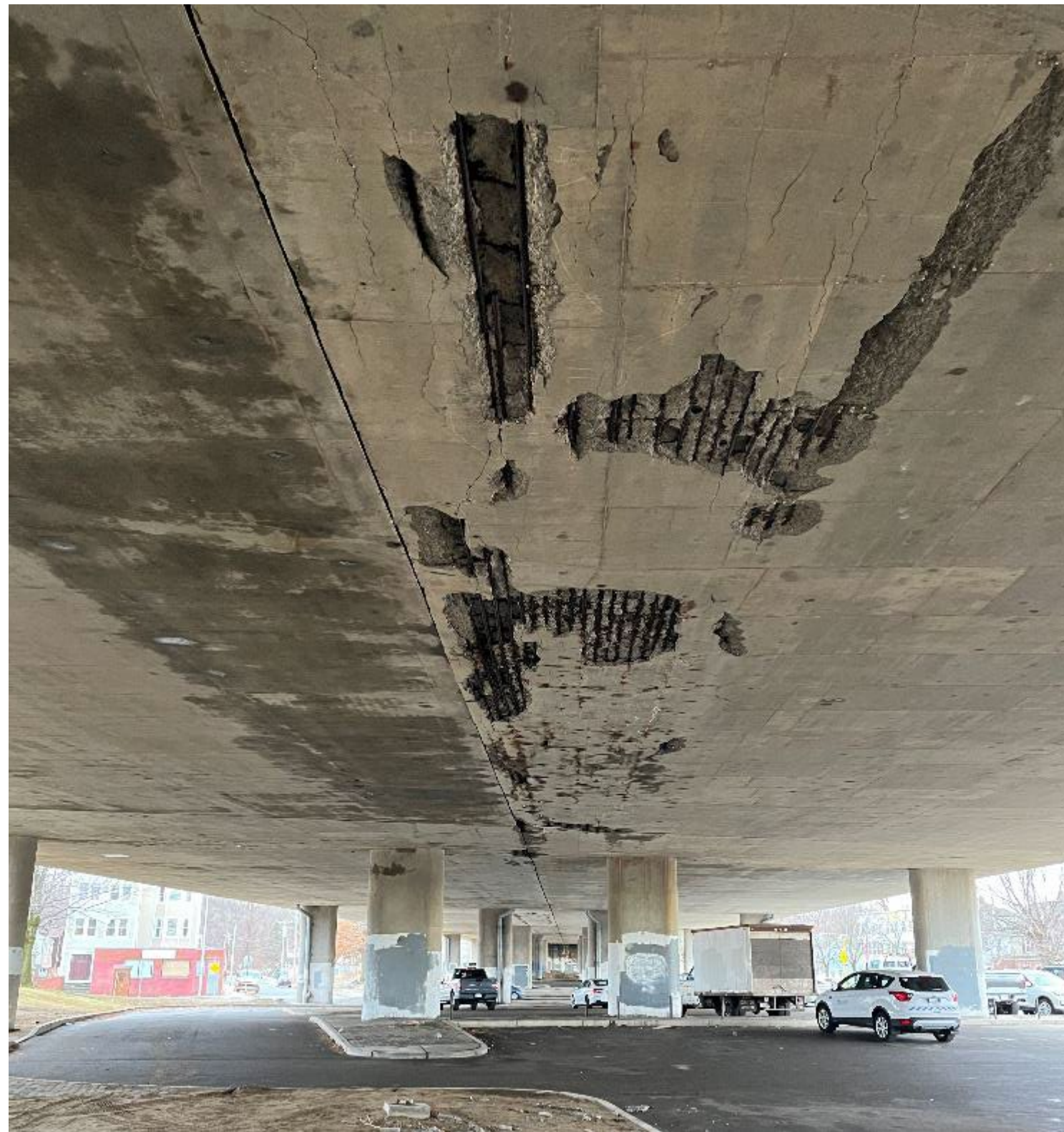
Purpose, Need, and Goals



Project Purpose

- Replace deteriorating Vietnam Veterans' Memorial Bridge
- Address unused open space beneath the bridge
- Limit impact to the surrounding community
- Reopen bridge to a full, 6-lane cross-section.
- Support future passenger, freight, and transit movements on I-391

Project Need



- Left lanes in both directions closed since 2019
- Spalled concrete fell into unoccupied parking area in 2025
- Existing structure type is not suitable for superstructure replacement

Project Goals

- Replacing the Vietnam Veterans' Memorial Bridge will deliver the following benefits:
 - Improved mobility for private vehicles, freight trucks, and transit buses on I-391
 - Improved conditions on Chicopee Street below the bridge:
 - Improved lighting
 - Reduction in vacant “nuisance activity” space
 - A rationalized parking supply to support local business
 - Improved neighborhood views through replacement of a deteriorated structure
 - Enhancements to Vietnam Veterans' Memorial Park



Location and Existing Conditions

Project Limits and Context



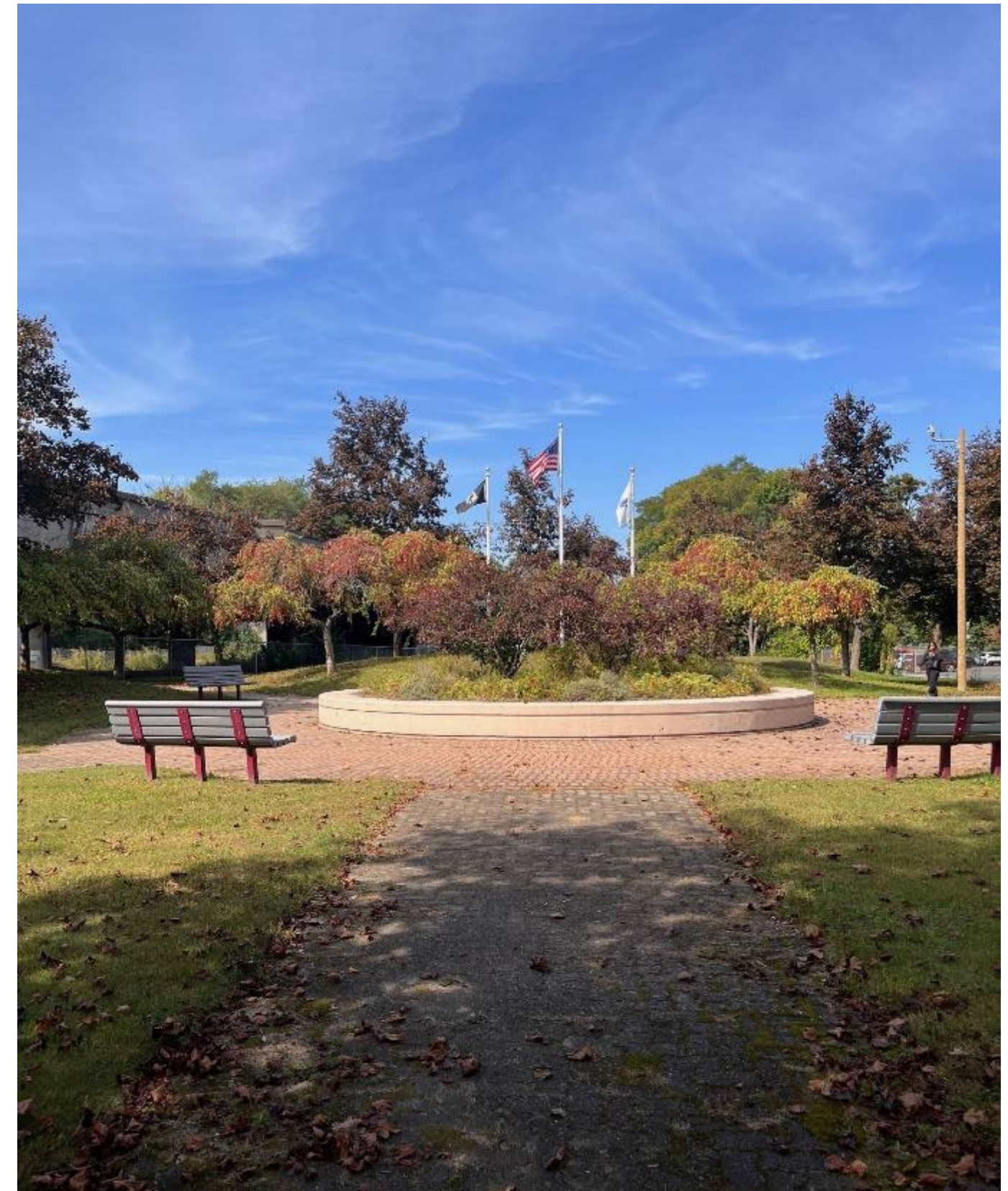
Vietnam Veterans' Memorial Bridge: Key Facts

- Configuration
 - 840' long
 - 111' wide (out-to-out)
 - Expansion Joint at Median
 - Concrete box girder superstructure
 - Six integral piers
- Approximate daily traffic:
 - 31,760 vehicles per day
 - 4.8% heavy vehicles (buses, trucks)
- Three lanes in each direction
 - Left lanes closed in both directions due to structural deterioration



Project Area: Key Facts

- Willimansett is home to traditionally underserved populations
- Vietnam Veterans' Memorial Park
 - Used by area veterans for an annual commemoration the Saturday of Memorial Day Weekend
- Ample parking (~105 spaces)/vacant area below the bridge:
 - Supports local small businesses, but provides space for nuisance activities

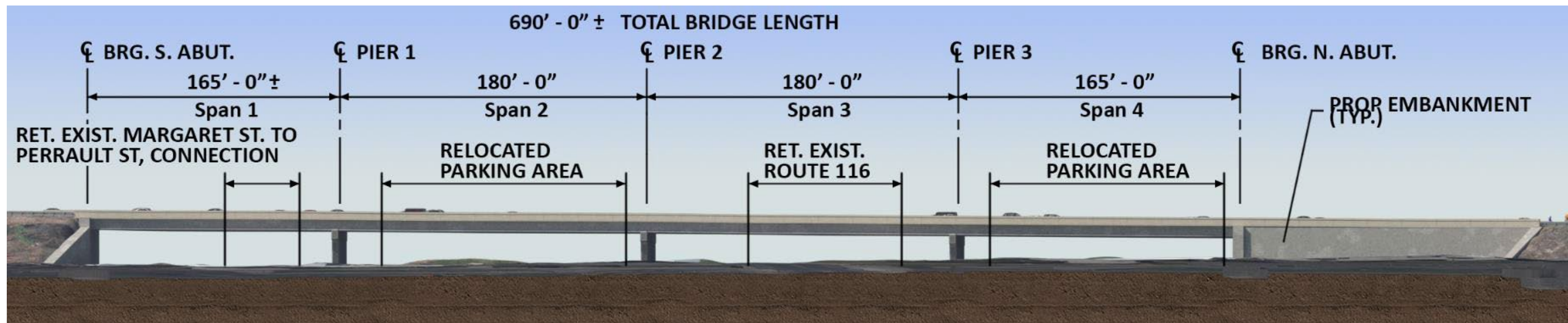


An aerial photograph of a multi-lane highway under construction, overlaid with a semi-transparent blue filter. The highway has several lanes with yellow and white lane markings. Various vehicles, including cars, trucks, and a large tanker truck, are visible traveling along the road. On the right side of the highway, there is a construction area with a yellow dump truck and a yellow excavator. The surrounding landscape includes green trees, grassy areas, and some buildings in the distance. The text "Major Scope Components" is centered over the highway in a white, bold, sans-serif font.

Major Scope Components

Project Scope – Bridge/Structure

- Reduces unused space below the bridge
- Avoids existing pier locations
- Limits ROW impacts
- Maintains Margaret St. to Perrault St. connection



Project Scope – Chicopee Street/Parking

- Reconstruct Sidewalks
- Install new lighting below the bridge
- Mill-and-overlay of Chicopee Street in the project's final stage
- Restore bus stops to current location in the project's final stage



Project Scope - Vietnam Veterans Memorial Park

- Install park enhancements:
 - New fencing along St. Louis Avenue
 - Landscaping to visually screen the bridge
 - Upgrades to veterans' memorial plaques
 - Stone dust paths:
 - Along the memorial columns to improve access
 - Under the viaduct north of Chicopee Street to help connect to Rivers Park and the new parking area



Project Scope – Construction Staging

- 3 Primary Stages of Construction
- Removal of live load from NB bridge required
- Reconstruction of portions of existing SB deck required during Pre-stage 1
- Remove all traffic Median crossover lanes are needed accomplish the lane shifts in Stages 1 through 3



Anticipated Short-term Detours



- No Long-Term Detours
- For local cars:
 - Margaret/Perrault Connector if Chicopee Street is impacted
 - Chicopee Street if Margaret/Perrault Connector is impacted
- For trucks or regional traffic:
 - Grattan Street to I-391
 - I-391 towards Holyoke to Exit 5 (Main Street)
 - Right off the exit ramp onto Main Street
 - Right off Main Street onto Cabot Street
 - Cabot Street to Willimansett Bridge
 - Willimansett Bridge to Chicopee Street
- Operations impacting Chicopee Street timed to begin after final 9PM run of PVTa Route 21

An aerial photograph of a multi-lane highway interchange, overlaid with a semi-transparent blue filter. The image shows several vehicles, including cars and a semi-truck, traveling on the roads. The surrounding area is filled with lush green trees. The text "Environmental Permitting and ROW" is centered in white, bold font across the middle of the image.

Environmental Permitting and ROW

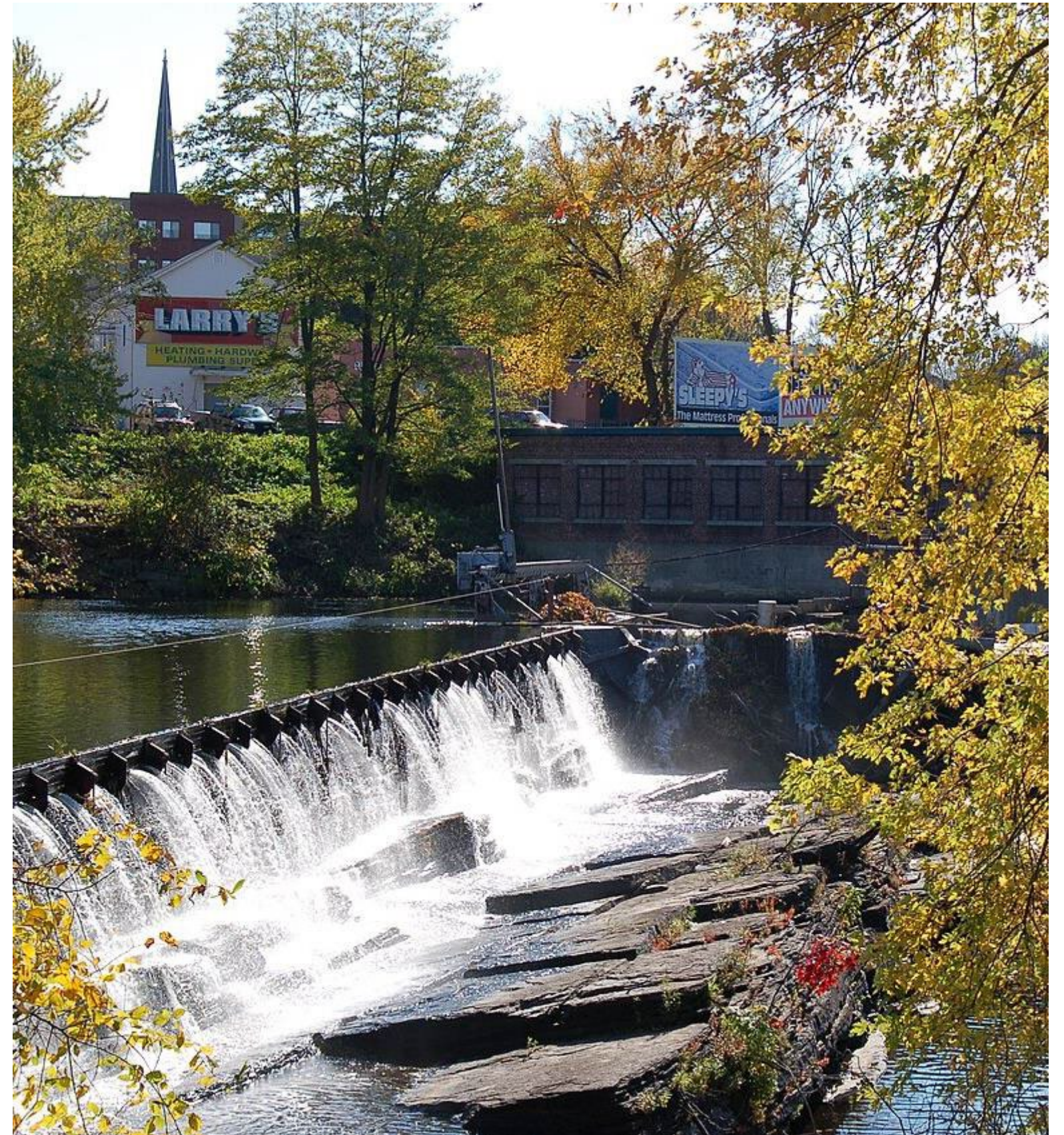
Permitting and Right-of-Way

- Project covered by the Bridge Exemption:
 - “MassDOT is exempt from MEPA, Chapter 91, and Wetlands Protection Act if the proposed bridge design is substantially the functional equivalent of, and in similar alignment to, the existing structure.”*
 - No work within wetlands or waterways
- CE Checklist being prepared
- Rivers Park is Article 97 and 6(f) protected
 - Construction access agreement will be requested
- Vietnam Veterans’ Memorial Park is on leased ROW and is not Article 97 or 6(f) protected
- Temporary easements anticipated on Margaret Street during construction
- Taking anticipated at back-of-sidewalk on Perrault/Chicopee Street corner
 - Location is already sidewalk

**From “Environmental Permitting at MassDOT,” by MEPA/NEPA Analyst Alex Lamarche – presentation given December 2023*

Stormwater Management

- Project does not increase impervious area
- Project area runoff drains to the Connecticut River
- Deep sump catch basins will be used in the parking area
- Bridge stormwater will be captured and routed to the existing drainage

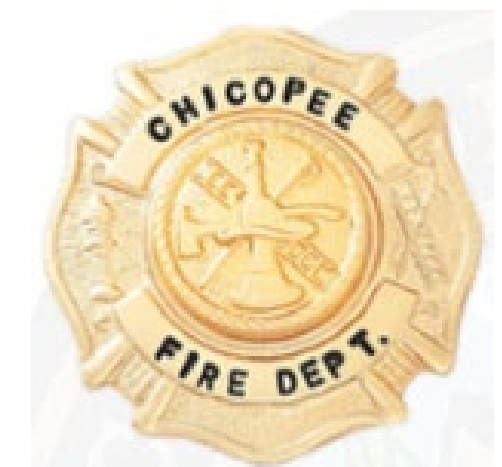


An aerial photograph of a multi-lane highway bridge spanning a wide river. The bridge has several lanes in each direction, with cars and trucks visible. The surrounding area includes residential buildings and trees on the left bank, and more trees on the right bank. The entire image is covered with a semi-transparent blue overlay.

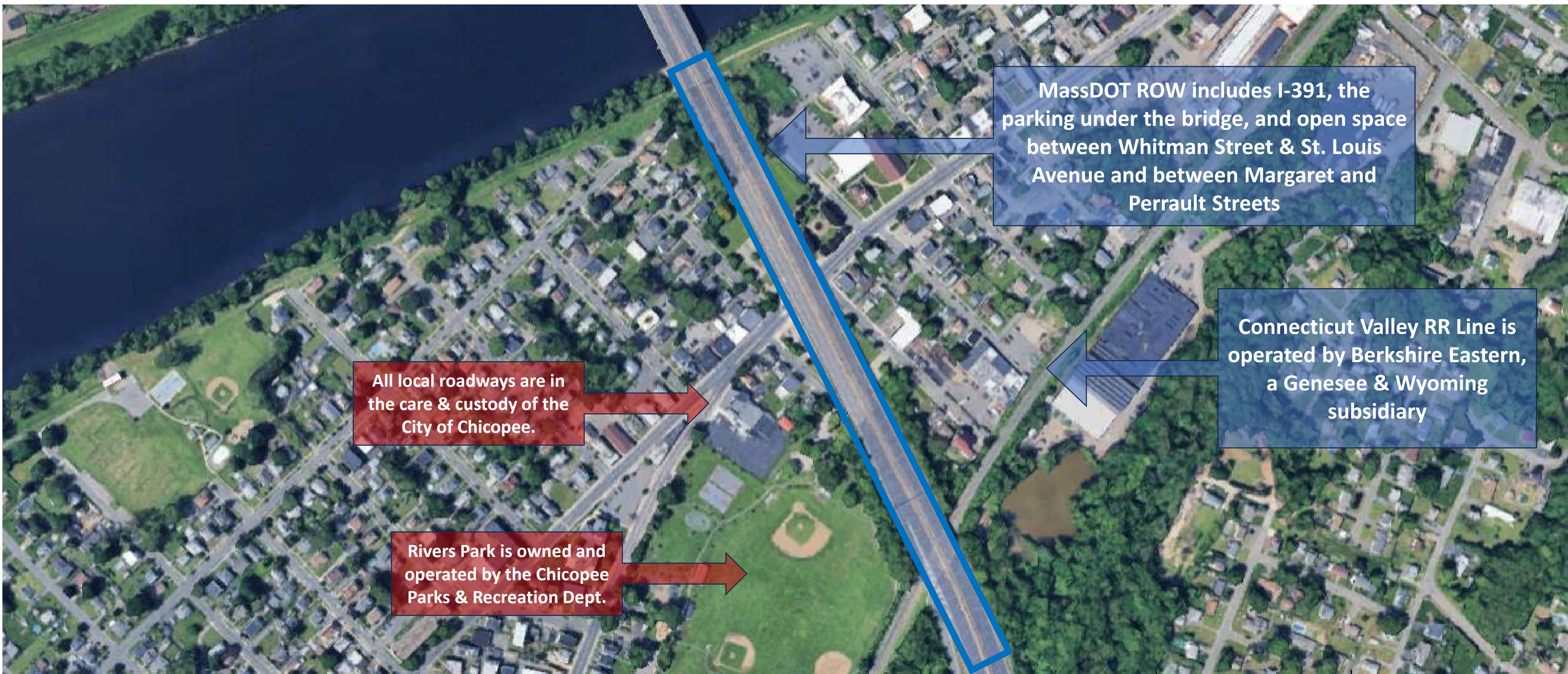
Key Stakeholders and Jurisdictions

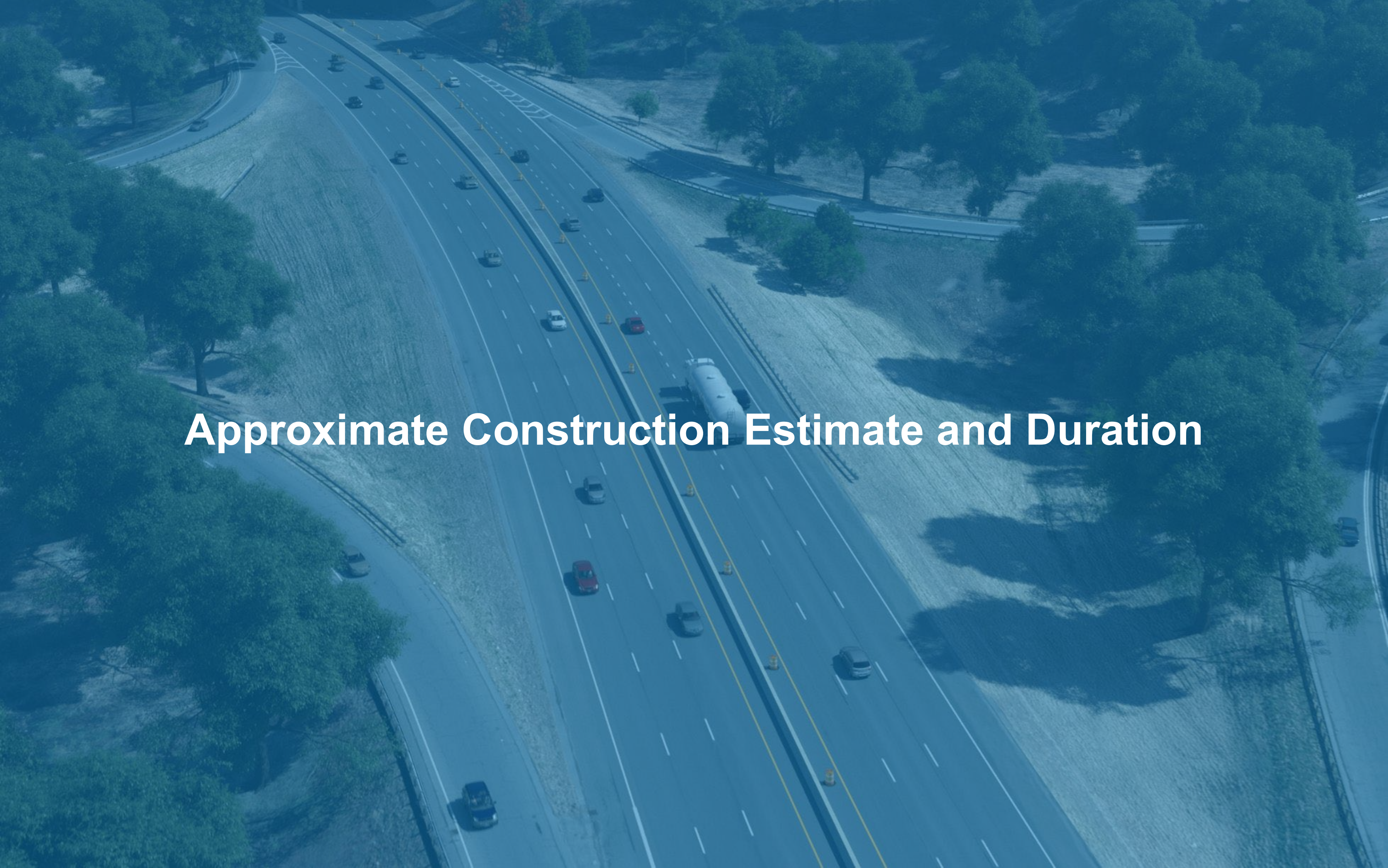
Key Stakeholders

- Key project stakeholders include
 - MassDOT
 - Federal Highway Administration (FHWA)
 - Pioneer Valley Transit Authority (PVRTA)
 - City of Chicopee
 - Vietnam Veterans of America
 - Baystate Hospital and Chicopee First Response



Project Area Jurisdictions

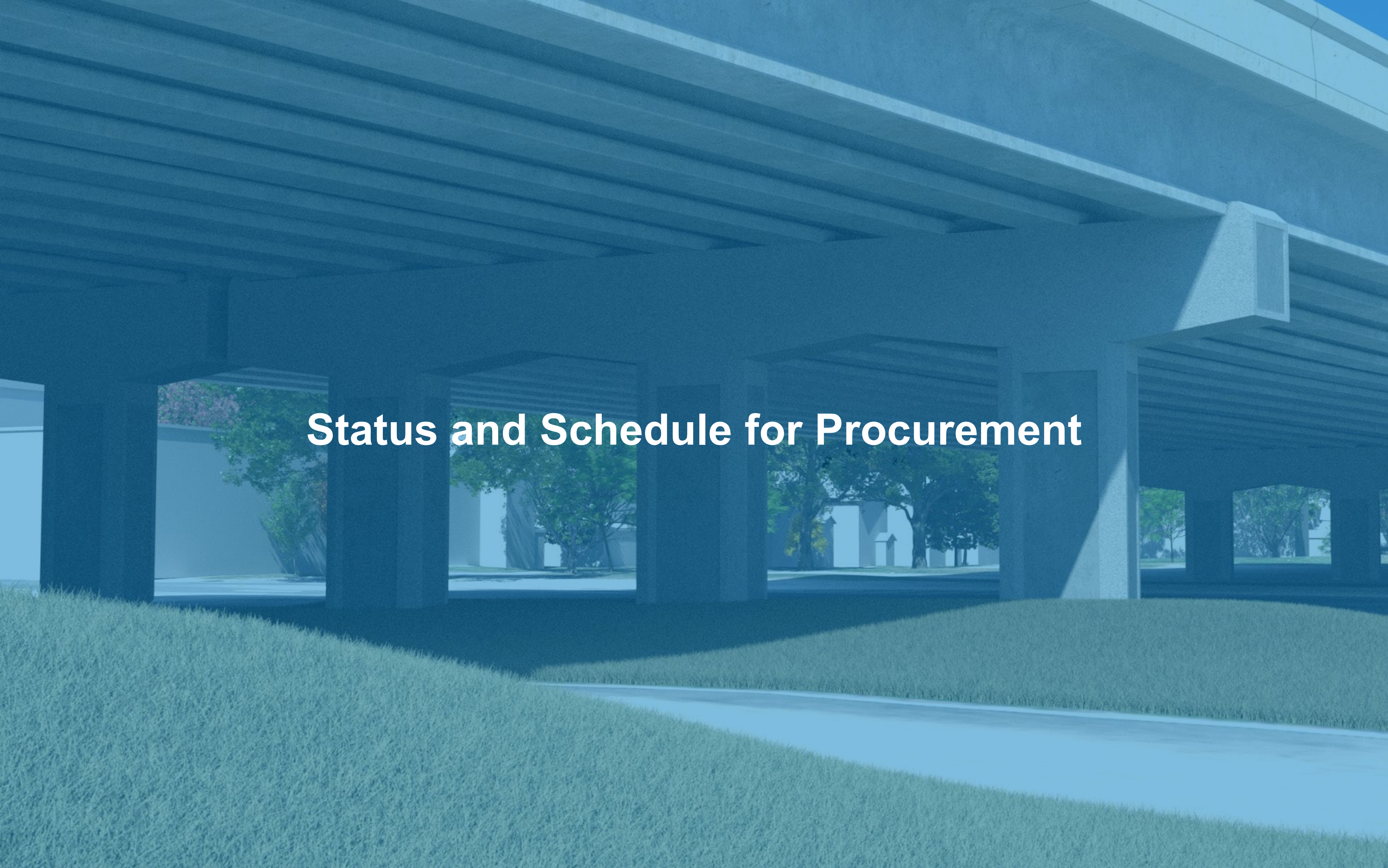


An aerial photograph of a multi-lane highway with several vehicles, including a large tanker truck. The road is flanked by green trees and grassy areas. The image has a blue tint.

Approximate Construction Estimate and Duration

Approximate Construction Estimate and Duration

- The preliminary project cost for the currently anticipated replacement bridge is \$143 million
- Assumes construction start in 2027
- Assumes construction completion in 2032

The background image shows a modern architectural structure with a series of horizontal concrete beams forming a covered walkway. Below the walkway, there are several vertical concrete columns. The ground is covered with green grass, and a paved path leads through the scene. In the background, there are trees and a building with a white facade and a small tower. The overall scene is brightly lit, suggesting a sunny day.

Status and Schedule for Procurement

Current Project Activities

- Organizing for the 25% design public hearing
- Preparing for the design/build procurement process
- Maintaining continuous coordination with the City of Chicopee



Project Challenges

- Need to repair existing bridge in Pre-Stage 1
- Closely adjacent homes and businesses
- Maintenance of car access:
 - Along the Chicopee Street corridor
 - To parking during construction
- Heavy vehicle movements:
 - Low bridge at Prospect Street just south of the Willimansett Bridge
 - Coordination of nighttime closures with last PVT route 21 departures
- Maintenance of Vietnam Veterans' Memorial Park access



Draft Procurement Schedule – Subject to Change



**Request for LOI –
11/22/25**



**Deadline to submit
LOI – 1/6/26**



**RFQ package mailed
-1/7/26**



**RFQ briefing –
1/10/26**



SOQ due – 2/26/26



RFP issued – 4/20/26



**Technical & Price
Proposal Due –
8/7/26**



**Public price opening
– 10/1/26**



**Anticipated NTP –
12/2/26**



Thank You – Any Questions?

**Veterans' Memorial
Bridge Replacement**

Industry Information Session

MassDOT District 2 | November 5, 2025

Project File Number: 612187



Palmer Bridge Bundle Industry Day Information Session

November 5, 2025



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- 5 Alternatives Considered and Preferred Alternative
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- 7 Construction Approach
- 8 Timeline: Design Build Procurement
- 9 Questions

Project Team

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Palmer Bridge Bundle:

Holly McNamara, Design-Build Project Manager – MassDOT

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

- Christopher Cameron, Project Manager – MassDOT
- Melinda Kline, Project Manager – GFT

Flynt Street over I-90

- Anthony Christakis Project Manager – MassDOT
- Joanne Ruddy, Assistant Project Manager – MassDOT
- Rick Hebert, Design Engineer – TYLin



Project Purpose and Need

Project Purpose

I-90 Mainline over MA-32 (Thorndike Street) and over MA-67 (Boston Rd)

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- Replace structurally deficient superstructure
- Complete substructure repairs



I-90 Mainline over MA-32 (Thorndike Street)



I-90 Mainline over MA-67 (Boston Road)

Project Purpose

Flynt Street over I-90

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- Increase existing substandard 14'-6" to vertical clearance 16'-6"
- Improve mobility for all users
- Replace bridge due to poor conditions



Project Need

I-90 Mainline over MA-32 (Thorndike Street) and over MA-67 (Boston Rd)

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- Bridges were built in 1957
- Repair history:
 - Deck reconstruction and substructure repairs 1984
 - Bearing replacements 1994
 - Bridge seal and joint replacements 1993 and 2003
 - Bridge deck repair and resurfacing 2007 and 2021
 - Beam end repairs 2023



I-90 Mainline over MA-32 (Thorndike Street)

Project Need (cont.)

I-90 Mainline over MA-32 (Thorndike Street) and over MA-67 (Boston Rd)

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- Existing Geometry
 - Two 12' Lanes, and 10' and 4' Shoulders in each direction
 - 35 and 45 degree Skew
 - 3 Simple Spans
 - Approx. 20' Vert. Clearance



I-90 Mainline over MA-67 (Boston Road)

Project Need

Flynt Street

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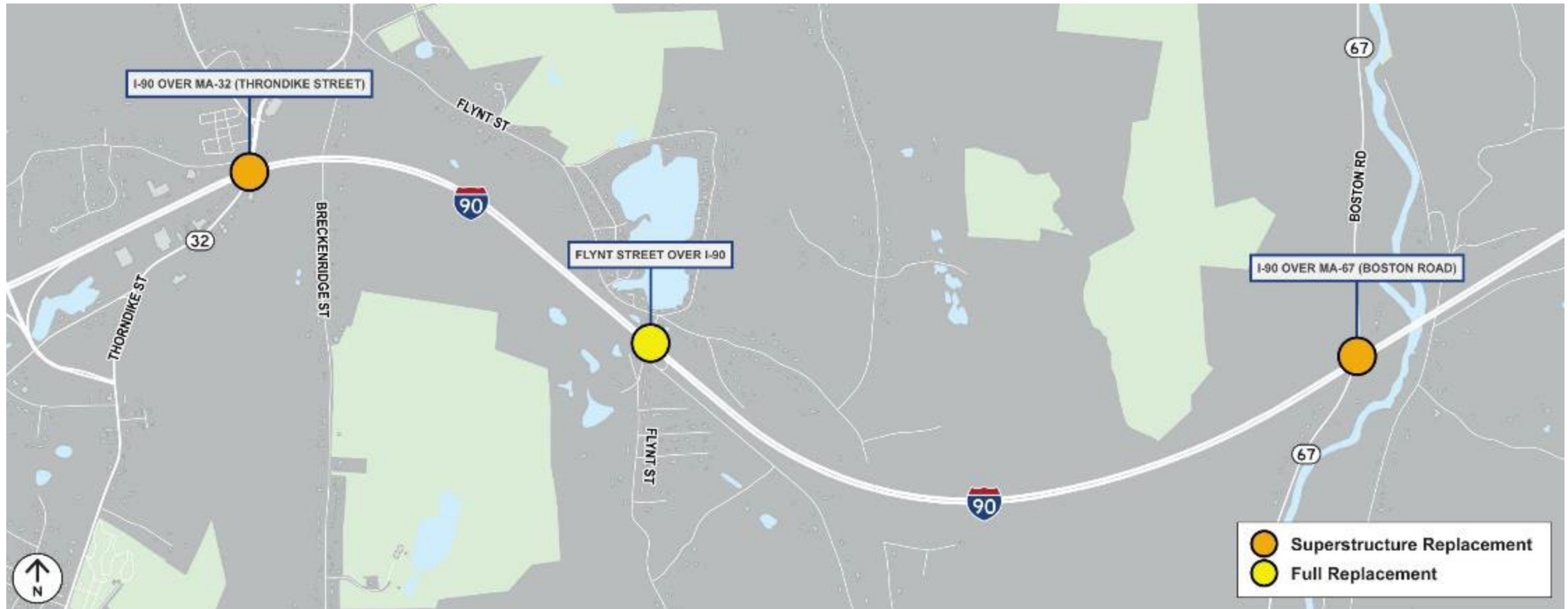
- Deck – Widespread cracking, spall and potholes, extensive patching, and leaking joints
- Superstructure – Widespread corrosion and steel beam flange section loss, failed paint, and corroded bearings
- Substructure – Large cracks, delaminated concrete, corroded reinforcement, and high chloride content

Location and Existing Conditions

Project Location

Palmer Bridge Bundle

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Existing Conditions

Flynt Street over I-90

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Scope of Work

Scope of Work

Palmer Bridge Bunde

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Superstructure Replacement: I-90 Mainline over MA 32 (Thorndike Street) and MA 67 (Boston Road)

- Replace superstructure
- Substructure repairs

Full Bridge Replacement: Flynt Street Over I-90

- Replace bridge with two-span structure
- Estimated Project Cost: \$30 million
- Approximate Construction Duration-2 years of construction

***Alternatives Considered
and Preferred Alternative***

Alternatives

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

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Superstructure Replacement:

- Conventional Construction
 - Cast-in-place deck, new steel stringers
 - Long term crossovers that maintain 2 lanes in each direction

Accelerated Construction

- PBUs
- Long term crossovers that maintain 2 lanes in each direction
- Weekend lane reduction on I-90 to 1 lane in one direction for PBU placements
 - Short term detour of local road below bridges for these weekends
 - Detour at Thorndike St location approx. 6 miles, detour at Boston Rd. location approx. 15 miles

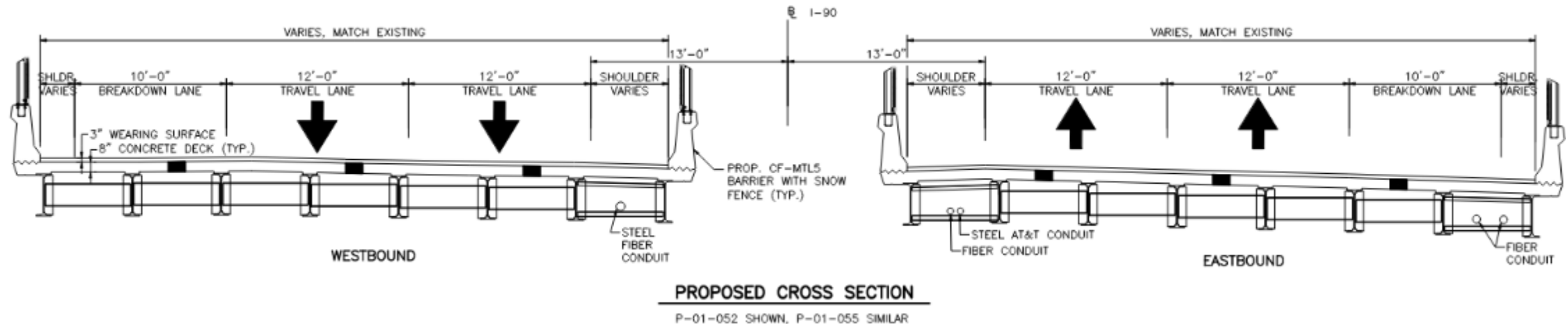
Alternatives

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

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Chosen Alternative: Accelerated

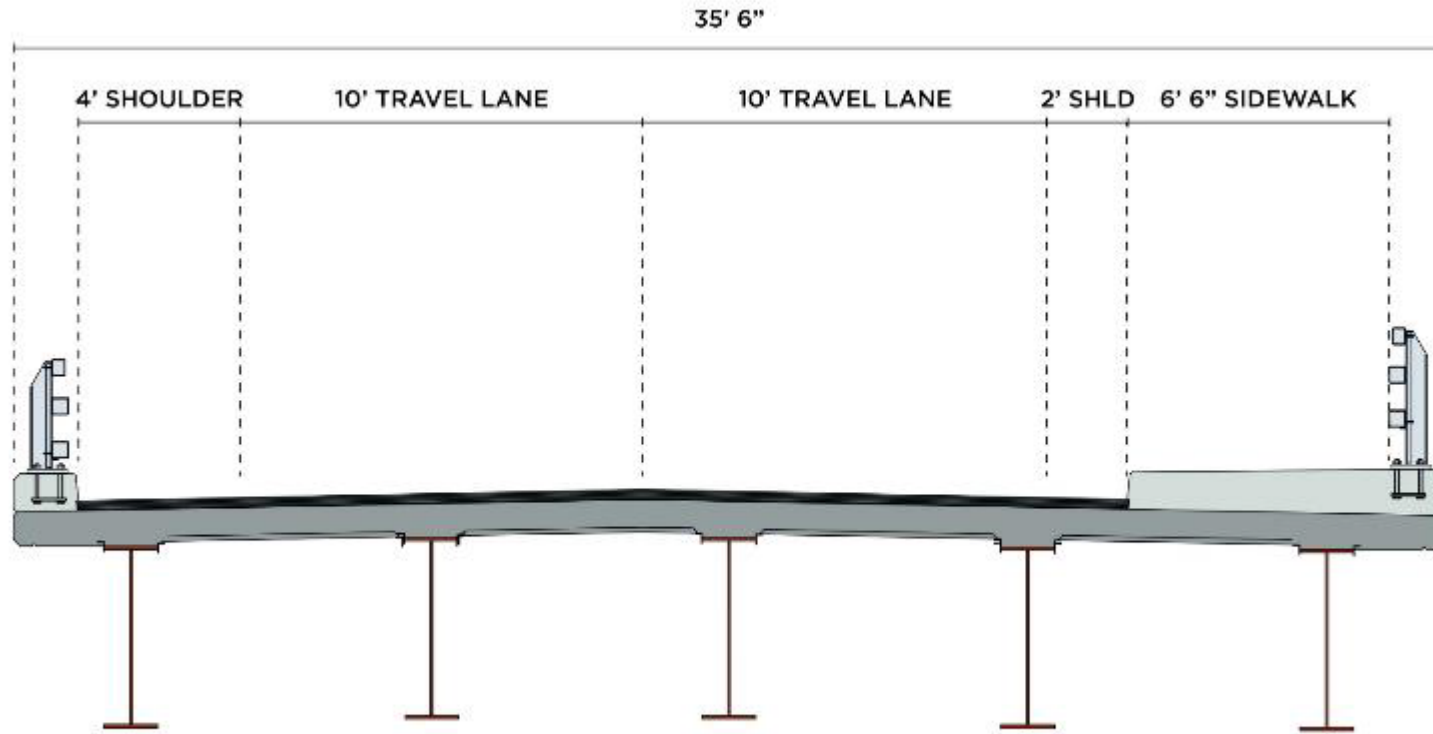
- Reduces overall construction duration
- Reduces duration of impacts to I-90 traffic



Alternative 1: 132' Single Span Steel Girder

Flynt Street over I-90

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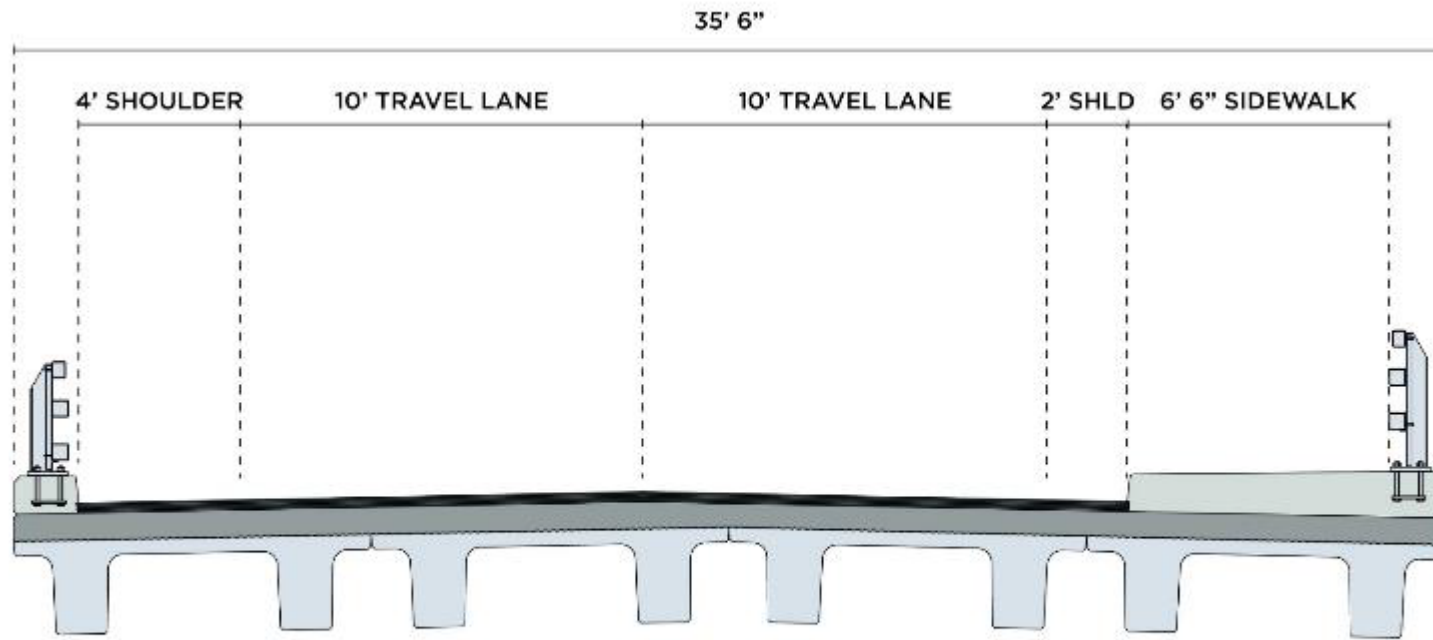


- Steel girders with composite concrete deck
- Integral abutments with MSE retained fill approaches
- Eliminate need for median pier
- Increased ROW impact resulting from increase to grade change
- Abutment location restricts potential future widening on I-90

Alternative 2: 160' Two Span NEXT-F Beam

Flynt Street over I-90

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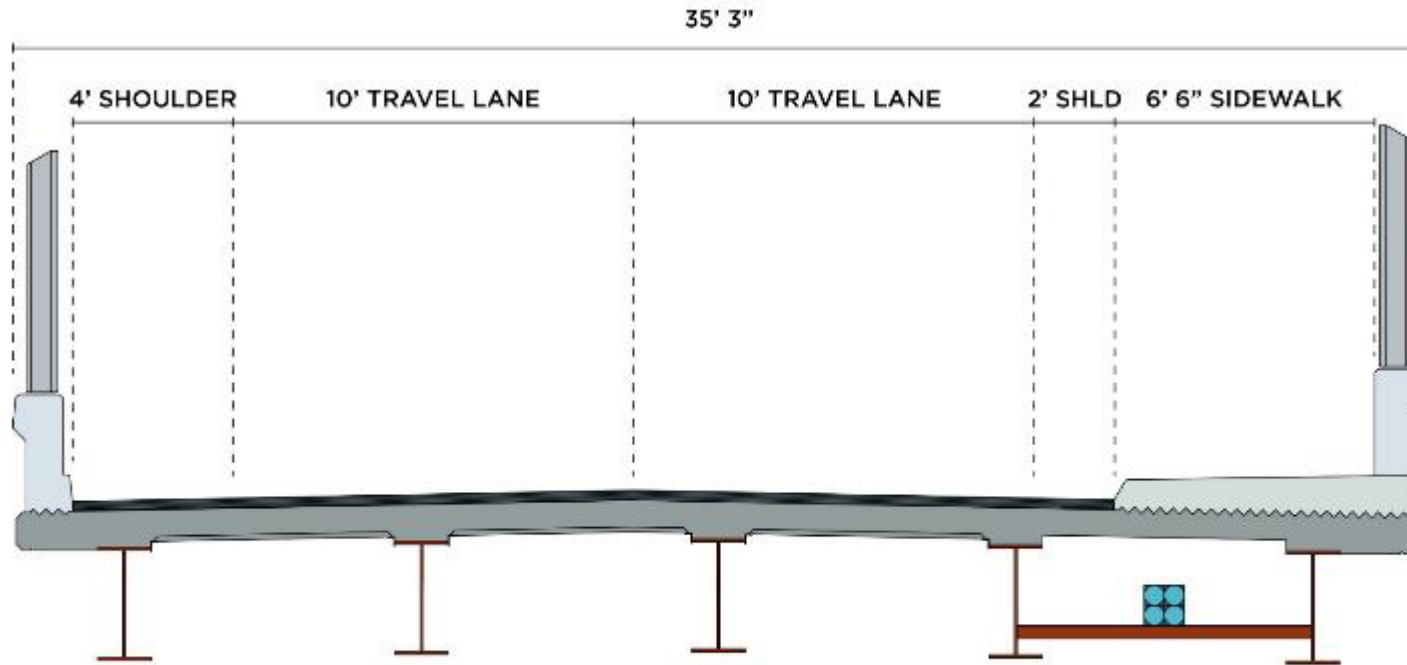


- NEXT-F beams with composite concrete deck, made continuous for live load
- Tall integral abutments
- Larger capacity cranes needed for NEXT-F beam lifts

Preferred Alternative: 178' Two Span Steel Girder

Flynt Street over I-90

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- Steel girders with composite concrete deck
- Integral abutments

Potential Risks

Potential Risks

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I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

- Accelerated bridge construction
 - Tolerance issues and tight windows
 - Condensed schedule with sizeable scope
 - Long-term crossovers and weekend lane reductions on I-90
 - Local road impacts
- Substructure repairs
 - Coordination between multiple bridge sites
 - Utility relocations on I-90: Exterior girders carry fiberoptic conduits

Flynt Street over I-90

- Coordination of detour routes

Construction Approach

Construction Approach

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I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

- Assumed sequence of construction
- Substructure repairs, chloride extraction of substructures, FRP wrap pier columns
- Short term, off-peak, nightly detours of local roads required for some of this work at the piers
- Superstructure replacement in 4 stages using PBUs
- Long term median crossovers on I-90
- Weekend lane reductions on I-90 and detours of local roads for PBU placements

Construction Approach

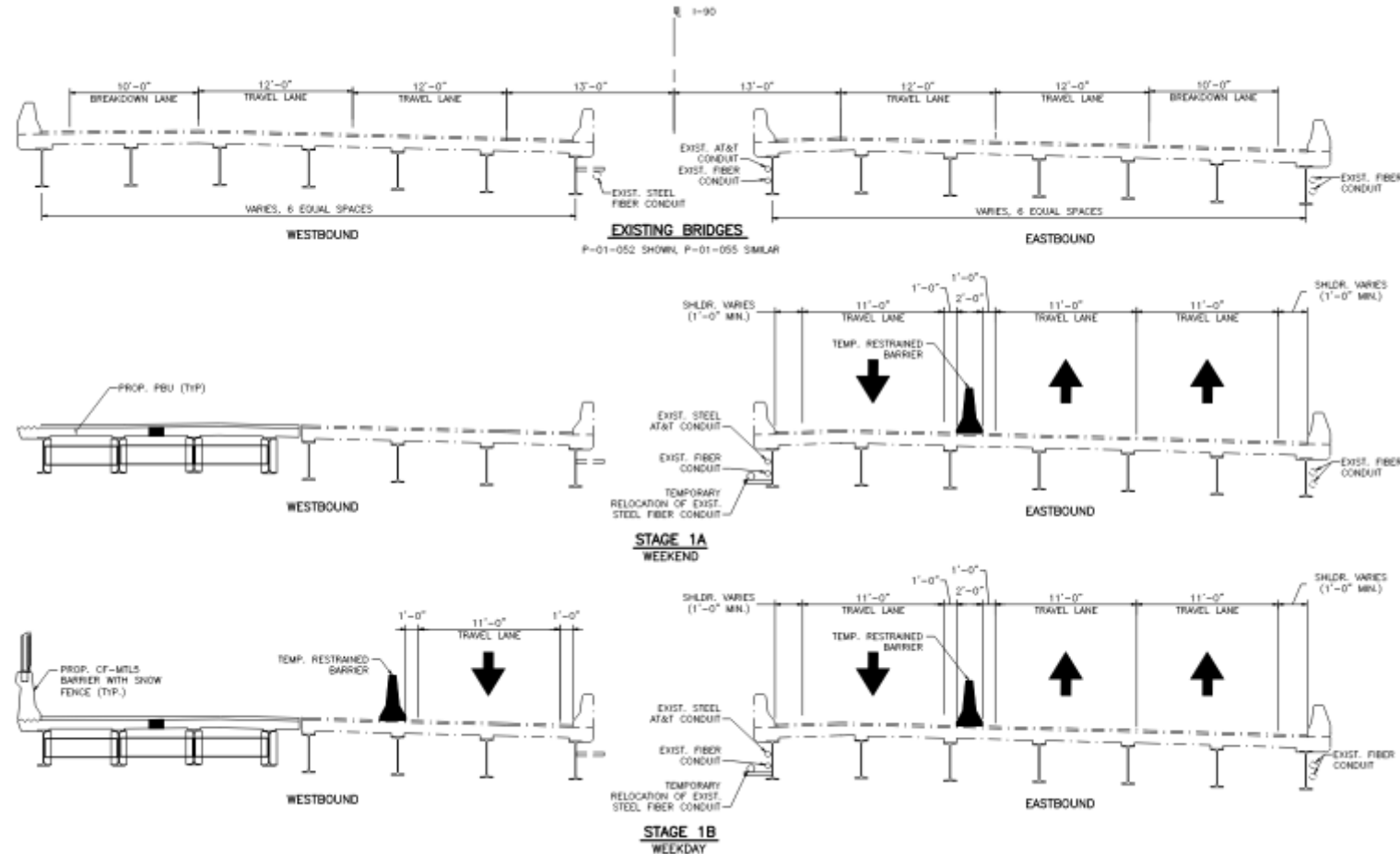
25

Flynt Street over I-90

- Accelerated Bridge Construction
- Road closure and detour of Flynt Street traffic
- Limited shoulder closures on I-90 for existing pier removals and construction of median pier
- Nighttime rolling roadblocks for existing steel beam removal and new girder placement

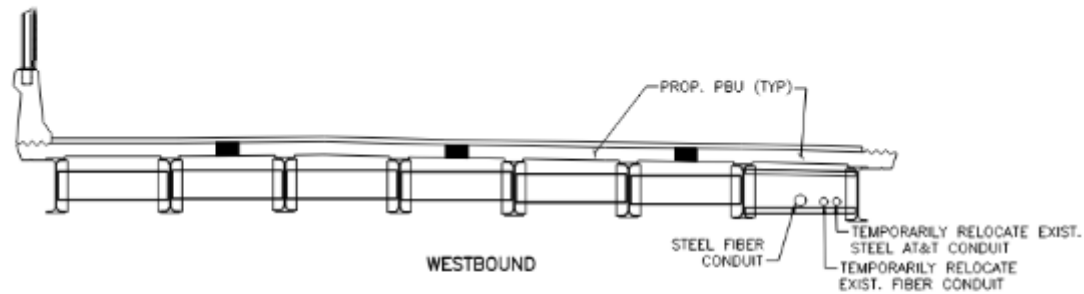
Stage 1 Traffic Management

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)

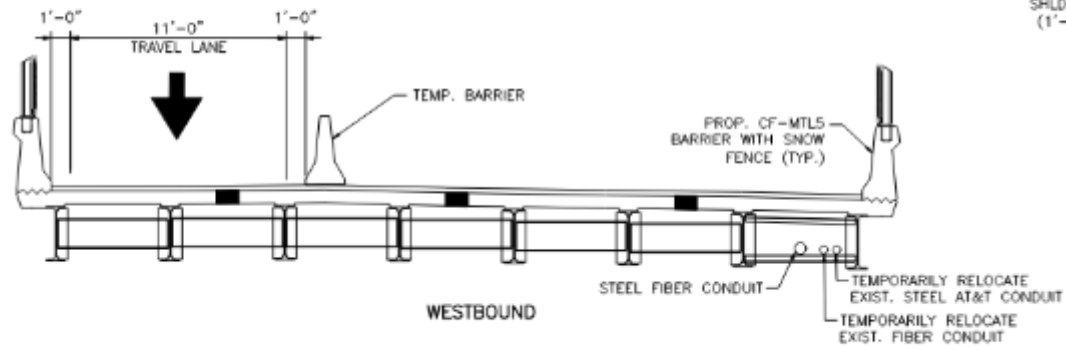


Stage 2 Traffic Management

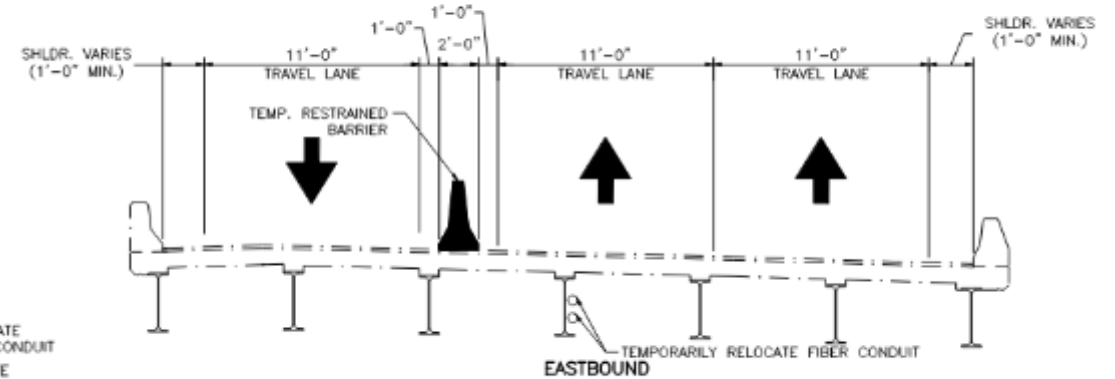
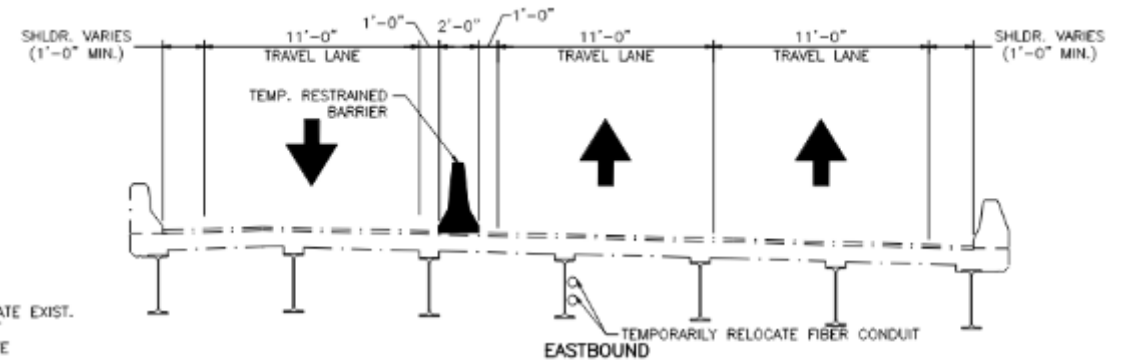
I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)



STAGE 2A
WEEKEND

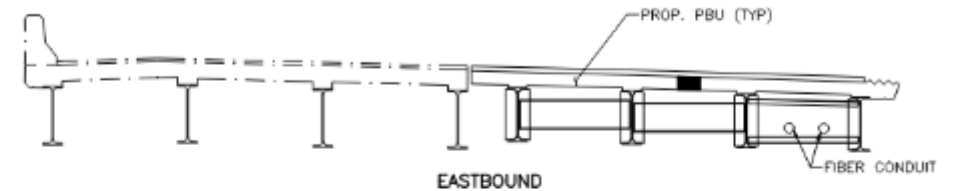
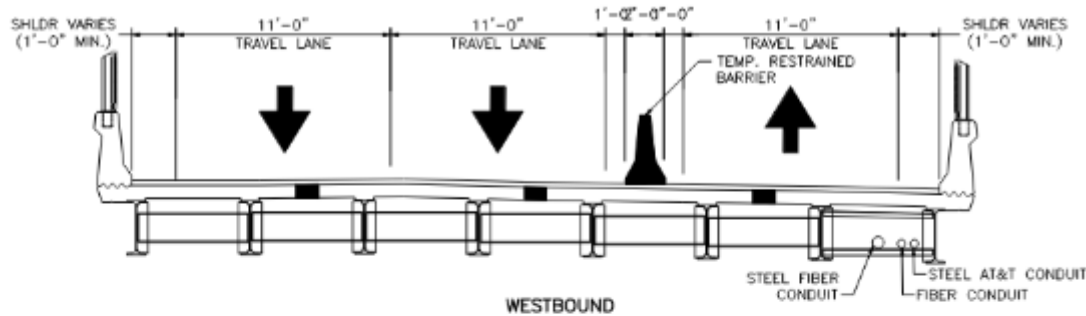


STAGE 2B
WEEKDAY

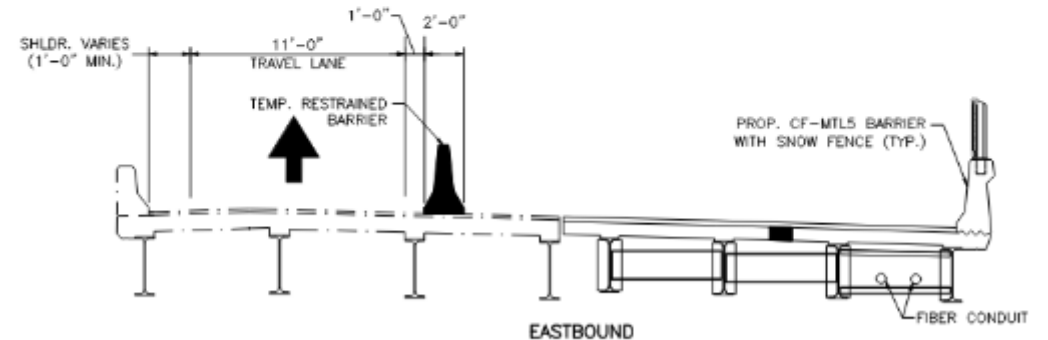
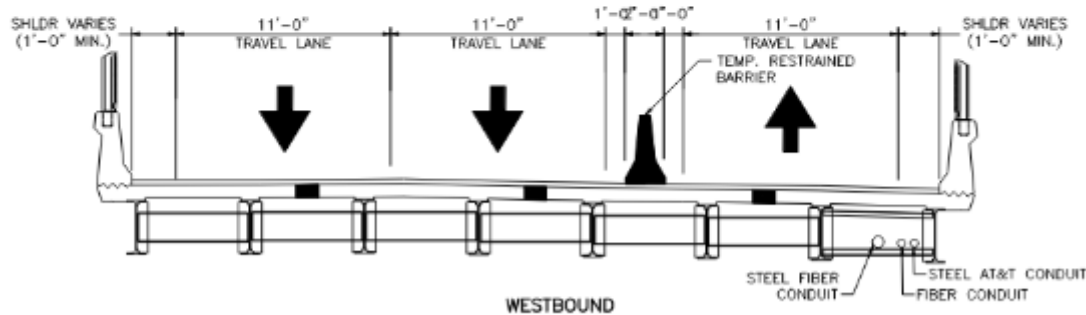


Stage 3 Traffic Management

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)



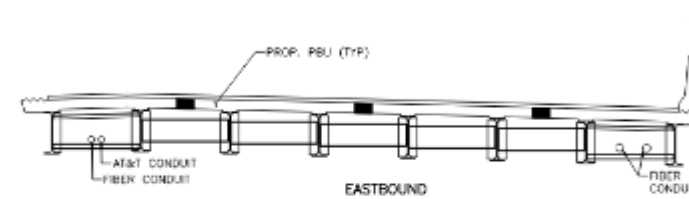
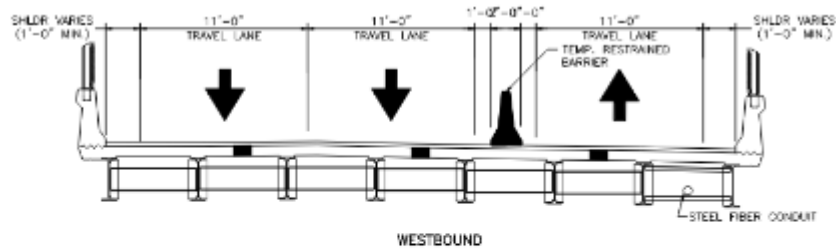
STAGE 3A
WEEKEND



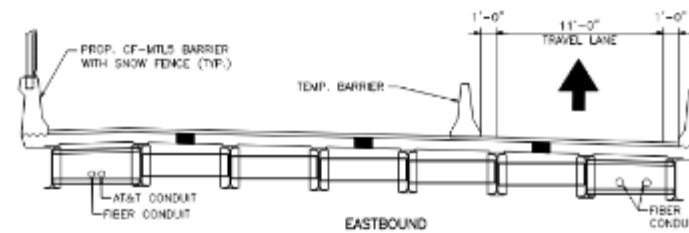
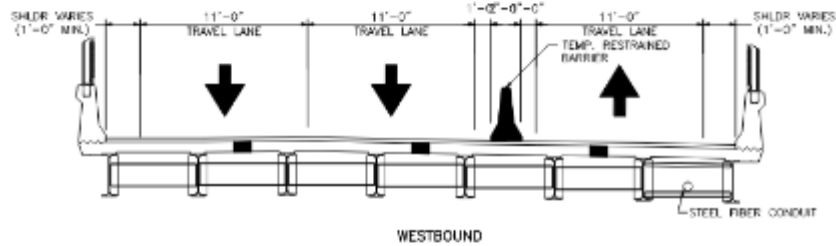
STAGE 3B
WEEKDAY

Stage 4 Traffic Management

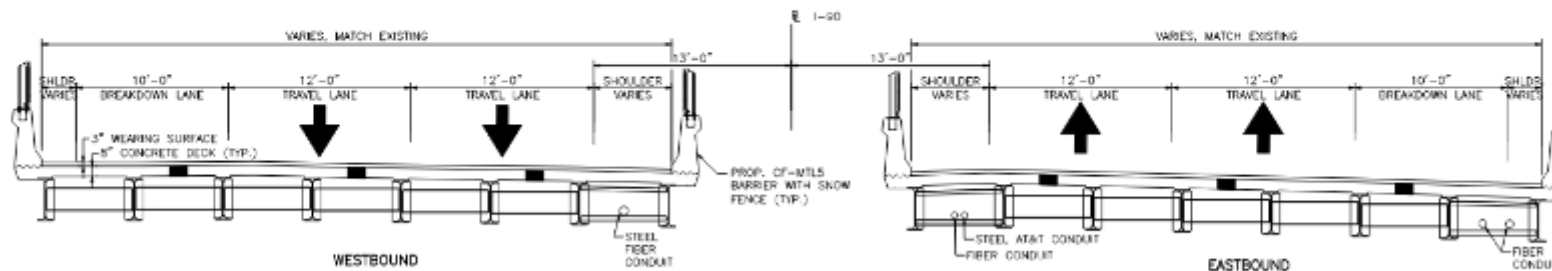
I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)



STAGE 4A
WEEKEND



STAGE 4B
WEEKDAY

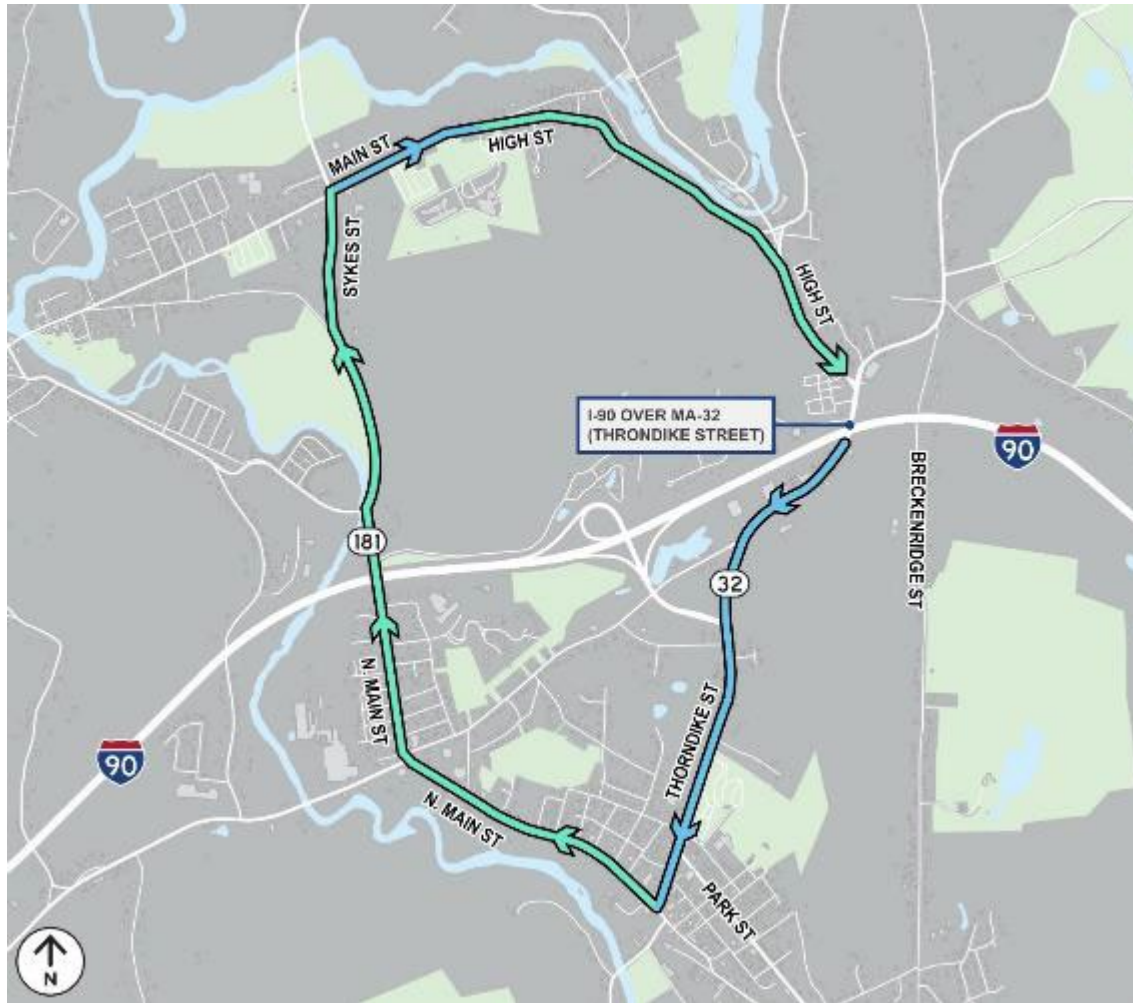


PROPOSED CROSS SECTION

P-01-052 SHOWN, P-01-055 SIMILAR

Thorndike Road Detour Route

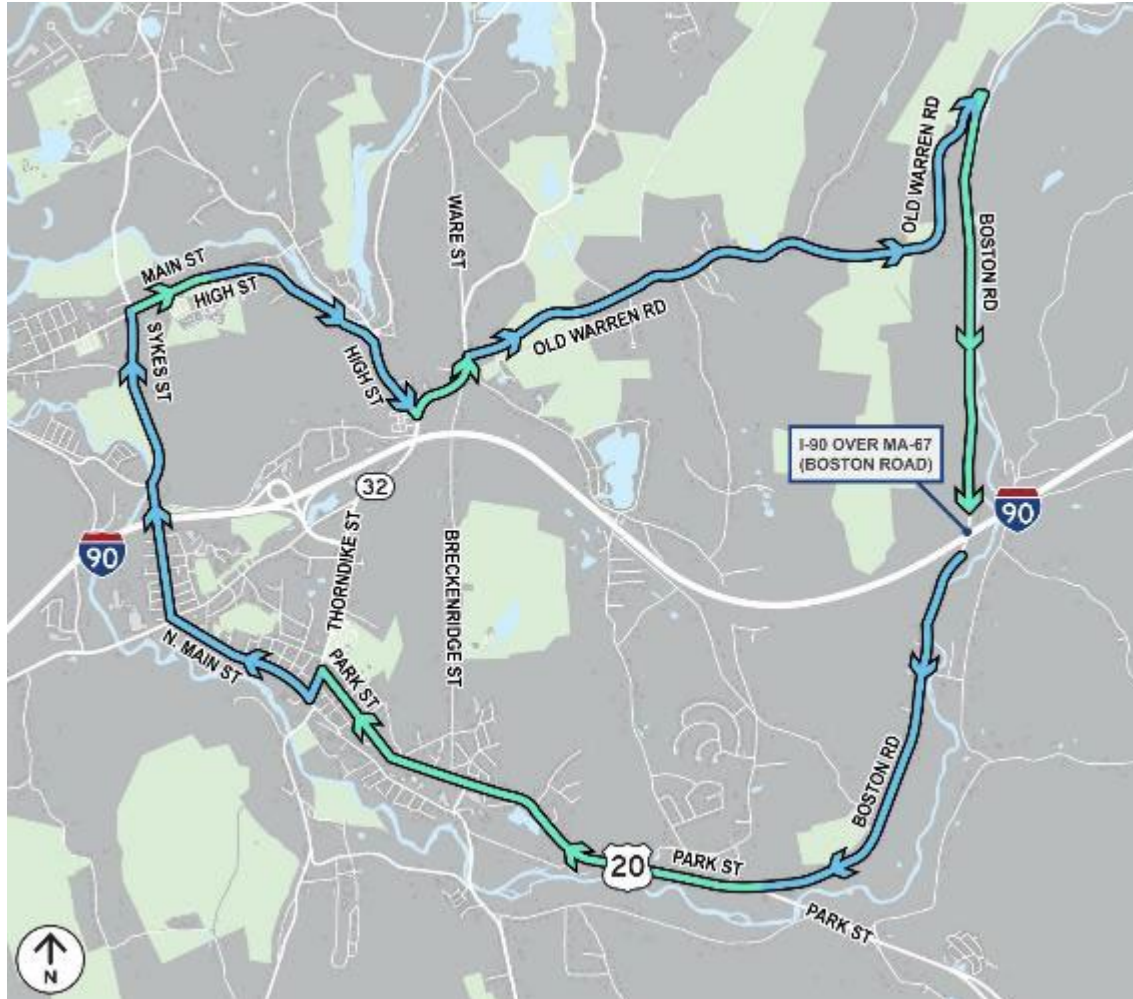
I-90 Mainline over MA-67 (Boston Road)



- Thorndike Street Detour required for weekend PBU placements and limited off-peak substructure repairs
- Approximately 6 miles long

Boston Road Detour Route

I-90 Mainline over MA-67 (Boston Road)



- Boston Road Detour required for weekend PBU Placements and limited off-peak substructure repairs
- Approximately 15 miles long

Flynt Street Detour Route

I-90 Mainline over MA-32 (Thorndike Street) and MA-67 (Boston Road)



- Total detour length: 6.9 miles end-to-end,
- About 14 minutes

***Timeline: Design Build
Procurement***

Design Build Procurement

Project Timeline

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- Letters of Interest early Summer 2026
- Notice to Proceed Fall 2027

Questions?



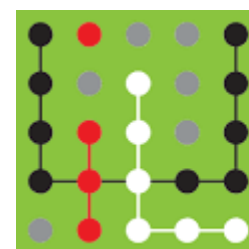
Thank You





Park Street (Rt 20) over the Connecticut River North End Bridge Springfield – West Springfield

AECOM



urban idea lab
ARCHITECTURAL & URBAN DESIGN





Route 20 (Park Street) over the Connecticut River



Springfield
West Springfield



Bridge No. S-24-003=W-21-002

Project File 612494



Project Team:

William Conroy – MassDOT Project Manager

Kristina Hanes, PE – AECOM Project Manager

Dennis Murtagh, PE – AECOM Highway Lead

Diana McCullough, PE – AECOM Structural Lead

Heidi Fisher – AECOM Senior Wetland Scientist

The AECOM logo, consisting of the word "AECOM" in a bold, black, sans-serif font.



**What do we
want to
accomplish?**

Project Purpose and Need

Existing bridge was constructed in 1924 and rehabilitated in 1985

Most recent inspection August 2025
Rated the bridge elements:

- Deck – 5 – Fair

- Superstructure – 5 – Fair

- Substructure – 5- Fair

The plate girders added in 1985
have ship-lap joints

The original trusses have pin and
hanger connections

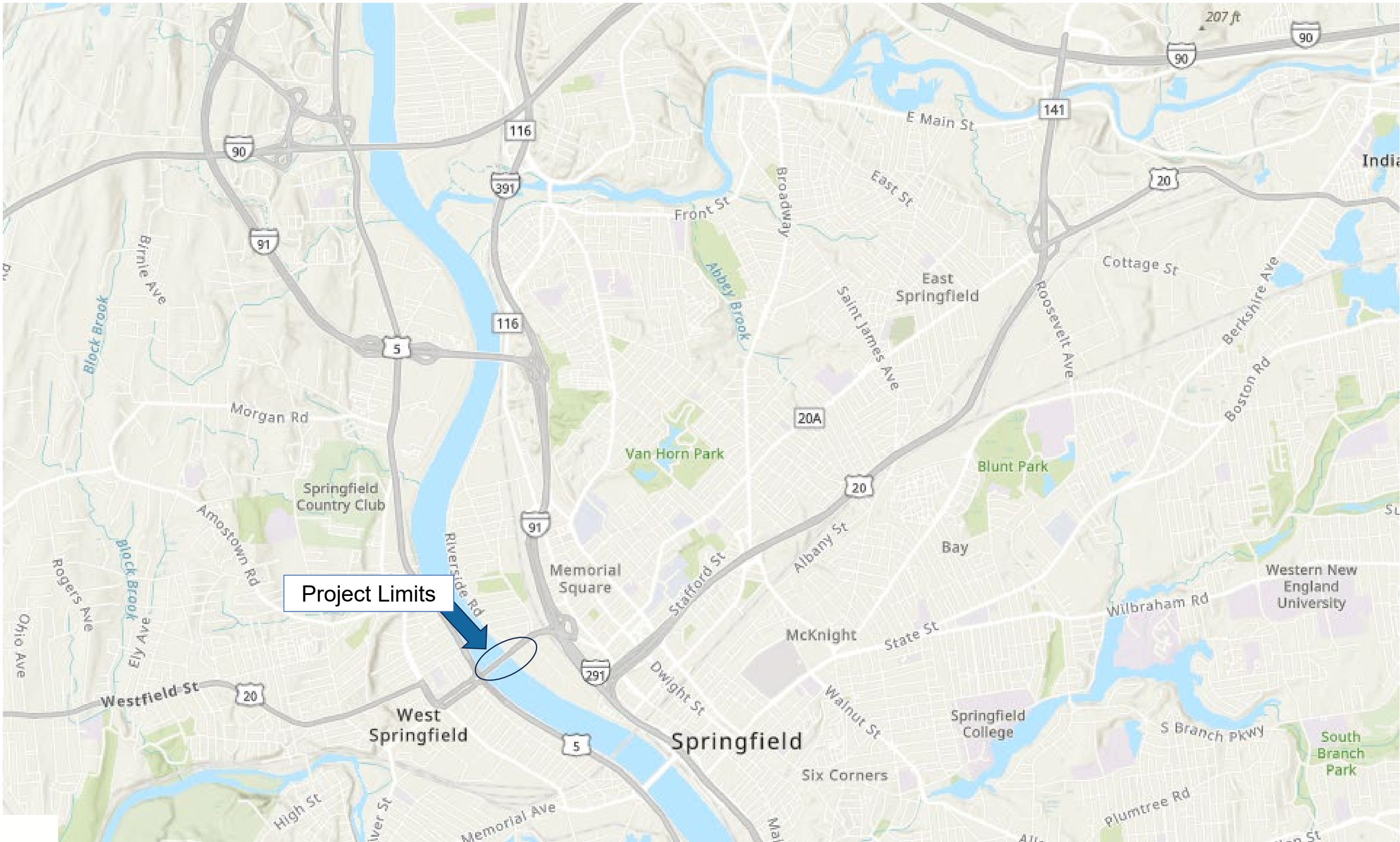




Existing Conditions



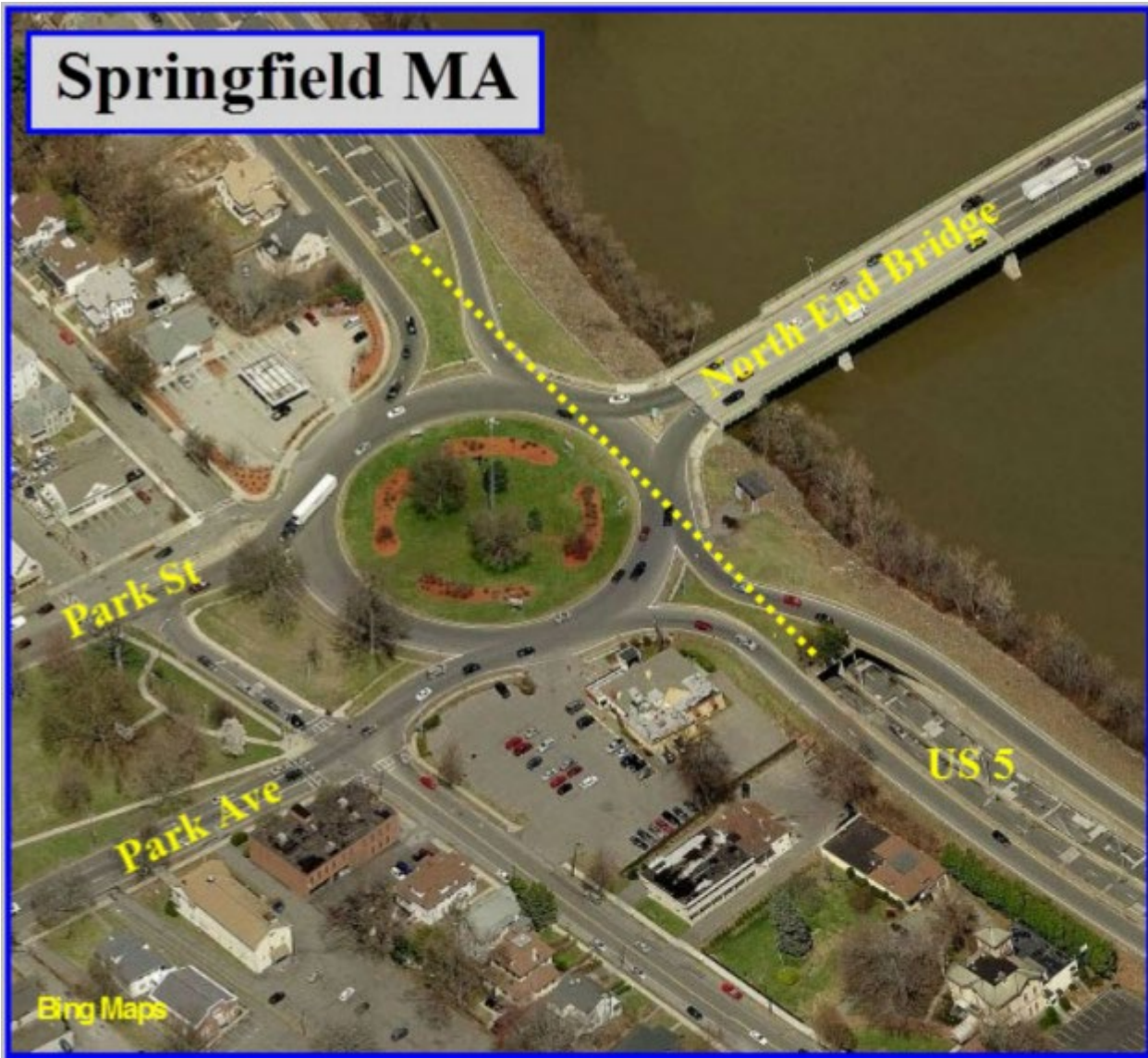
Location



Existing Conditions



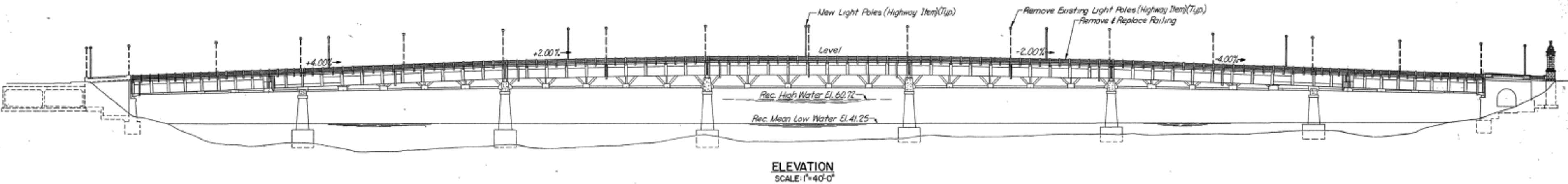
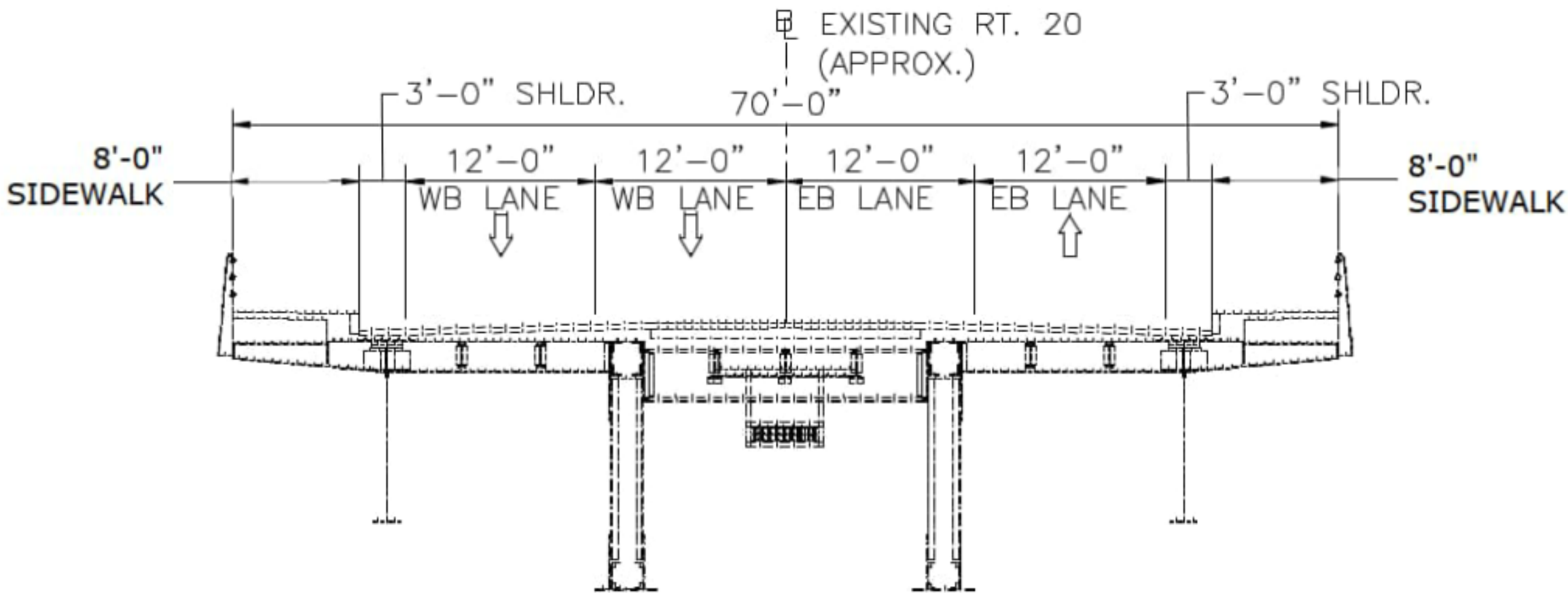
West Springfield Rotary over W-21-027
Route 5 underpass



Existing Conditions



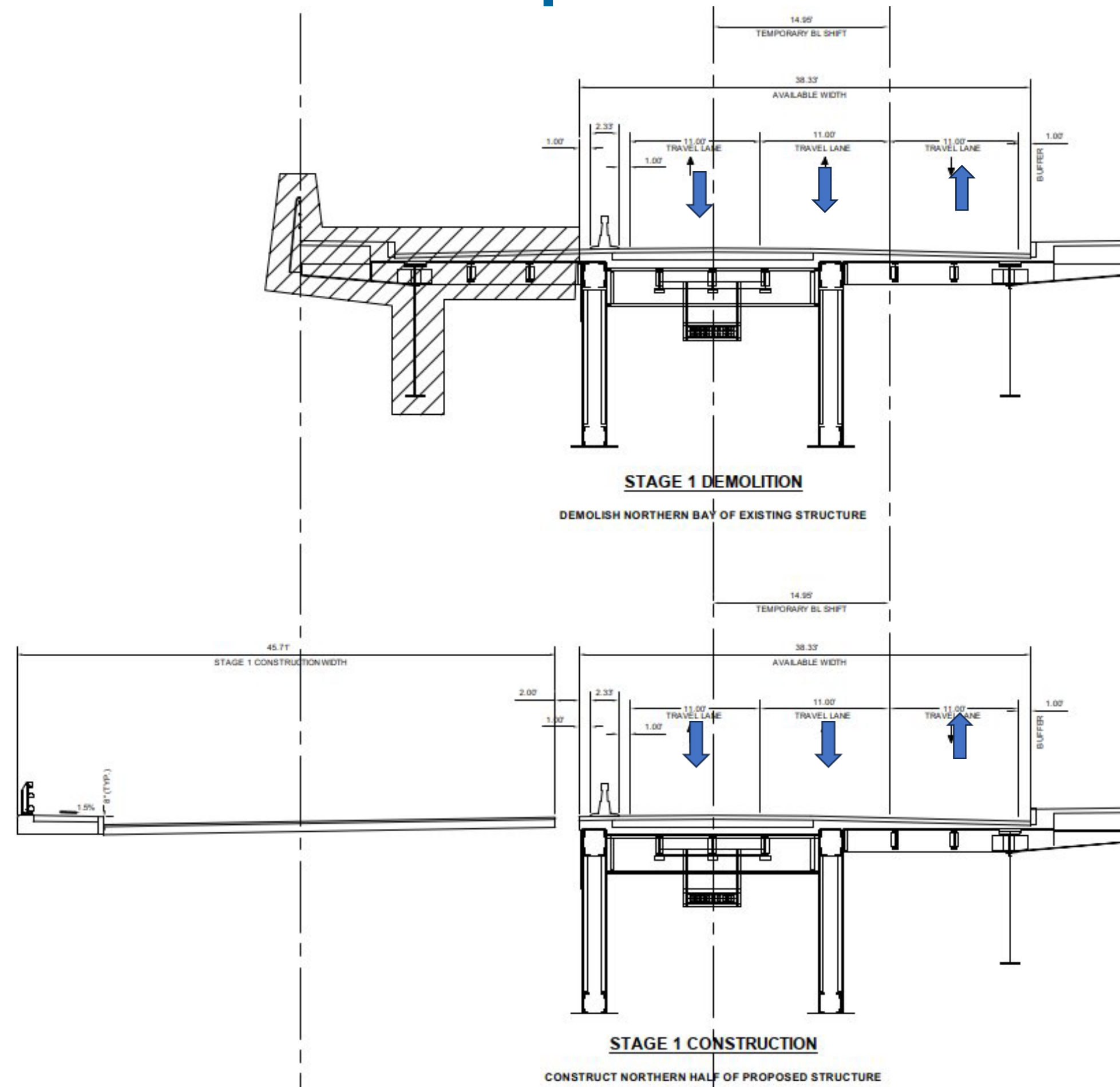
Existing Conditions



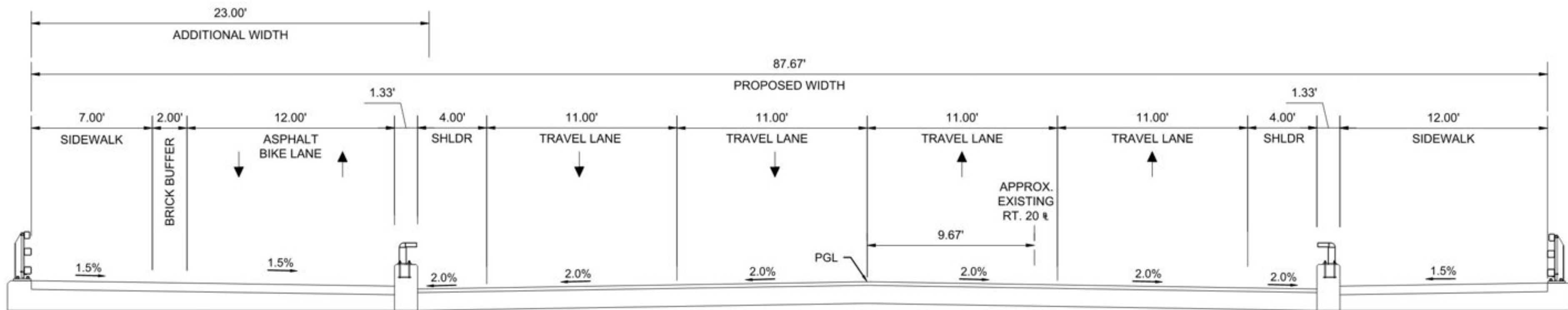


**What
alternatives
were
considered?**

Alternatives considered and preferred



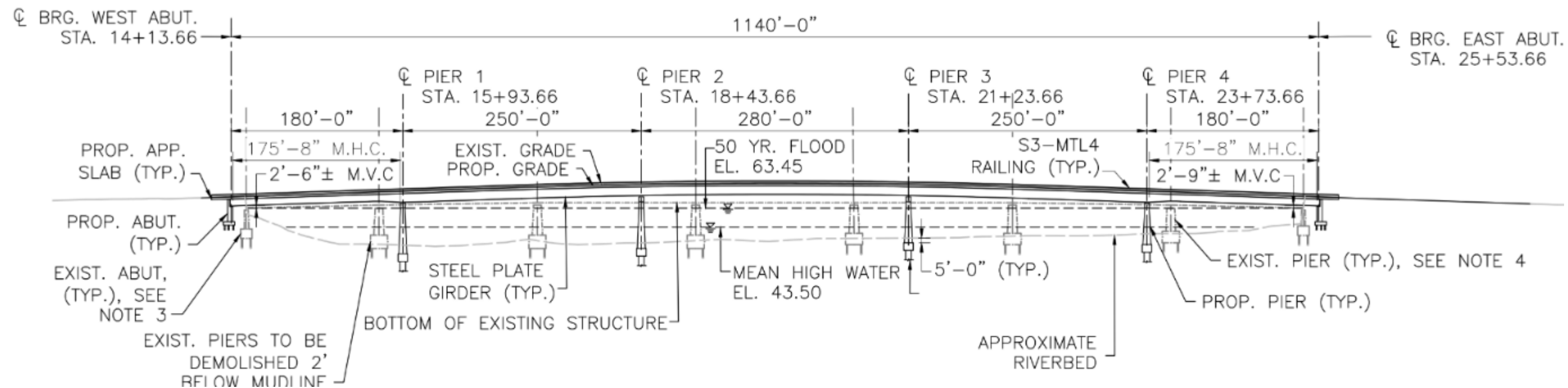
Preferred Cross Section Alternative



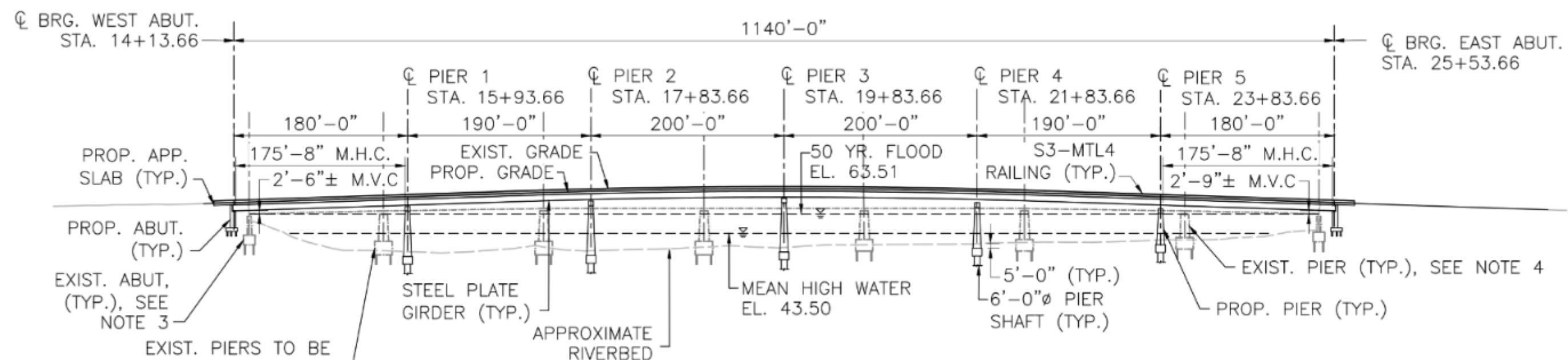
- 7' pedestrian sidewalk (North Side)
- 2' brick buffer zone between bicycle travel and pedestrian sidewalk
- 12' two-way bicycle lane at sidewalk grade (North Side)
- 2 – 11' lanes with 4' outside shoulders in each direction
- 12' pedestrian sidewalk (South Side)

Span Alternatives considered and preferred

- 5 span continuous steel plate girders with composite deck

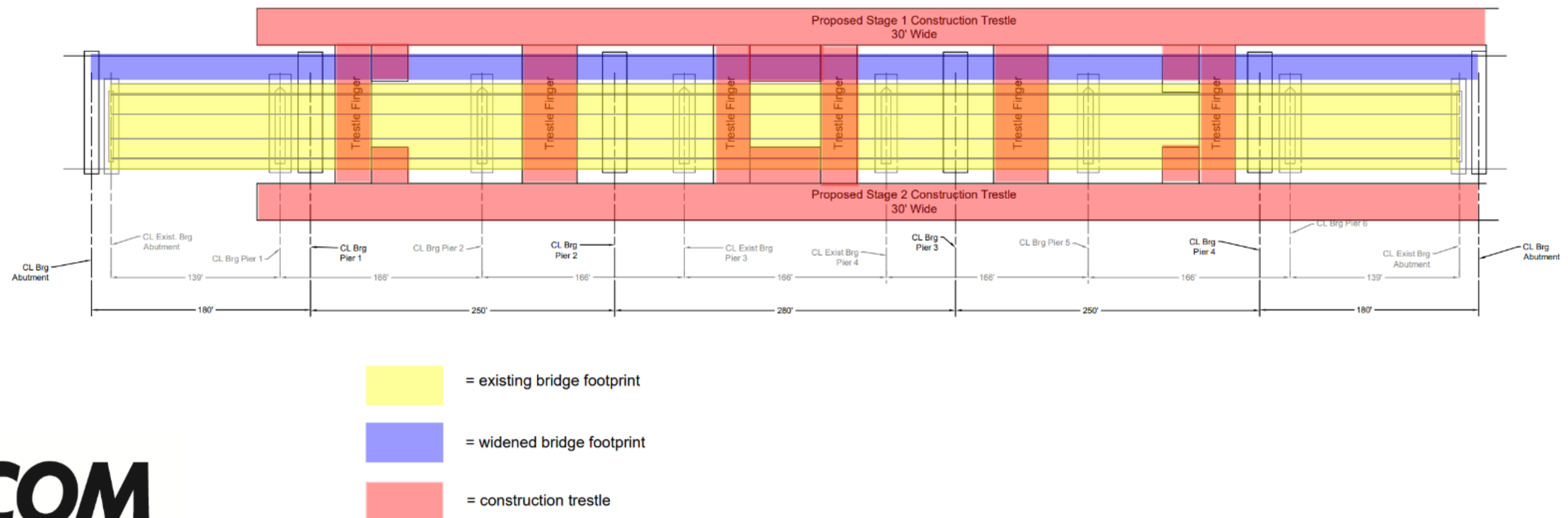


- 6 span continuous steel plate girders with composite deck
- 6 span continuous steel box girders with composite deck



Construction Approach

- Anticipated two-stage trestle
- Access through Riverside Park
- Access through boathouse driveway and parking lot
- Drilled shaft foundations at abutments and piers
- Staged Construction with wall piers





Project Risks

Project Risks

Time of year restrictions

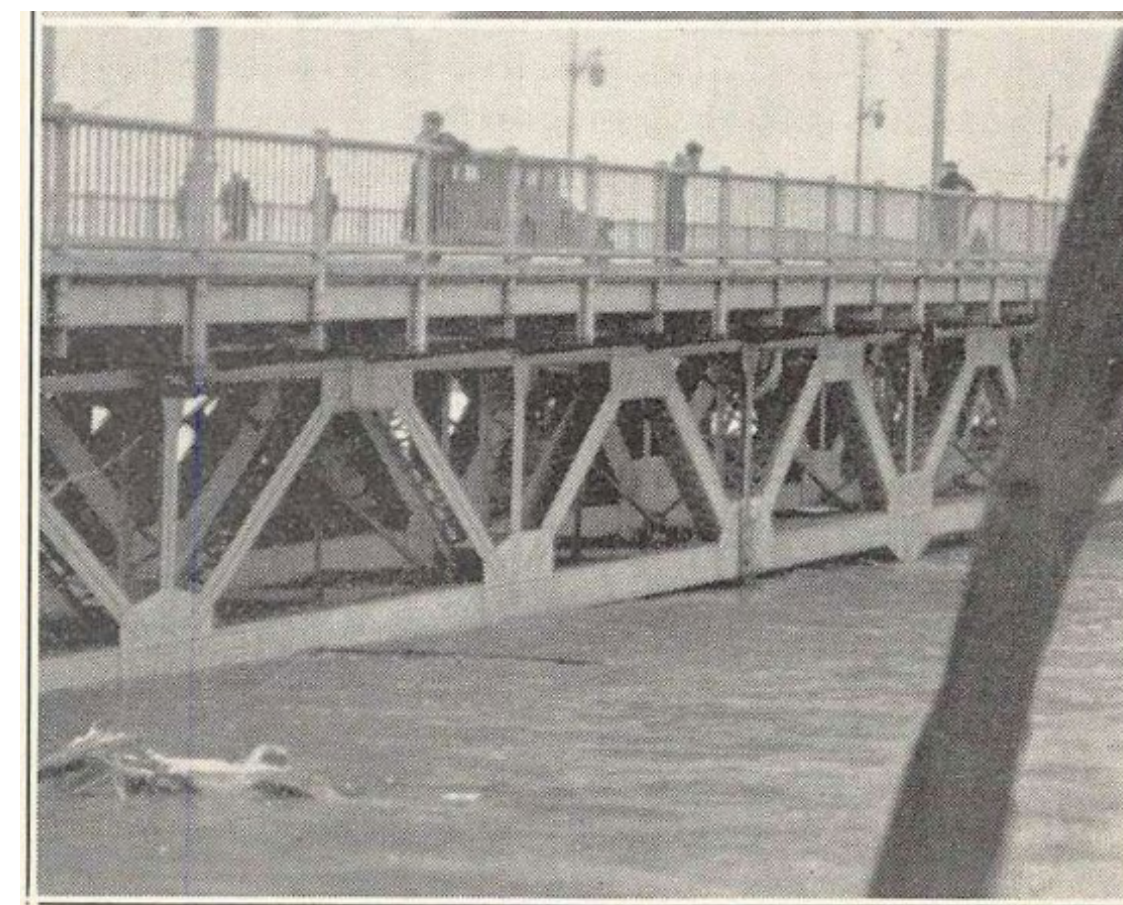
High variability of water levels

Adjacent Article 97 Parkland

Limited laydown area

Urban job site

Recreational river use



Top
Bottom
PLAINFIELD STREET SECTION
NORTH END BRIDGE
THE GREAT SPRINGFIELD FLOOD SCENES, 1936



AECOM



Scope of Work

Scope of work

- Design and Construction of new North End Bridge over the Connecticut River.
- Demolition of existing structure including foundations to 2' below mudline
- Reconfiguration of the Intersection at Riverside Road
- Addition of a mid-block pedestrian crossing and Hawk Signal
- Approach reconstruction at each end of the bridge
- Preservation and Relocation of 2 of the existing 4 bridge monuments
- Drainage improvements
- Reconstruction and landscaping of parkland
- Improvements to the Route 5 underpass
 - Structural Repair
 - Pump Station Upgrades
 - Drainage improvements

Anticipated Construction Duration – 4 +/-years

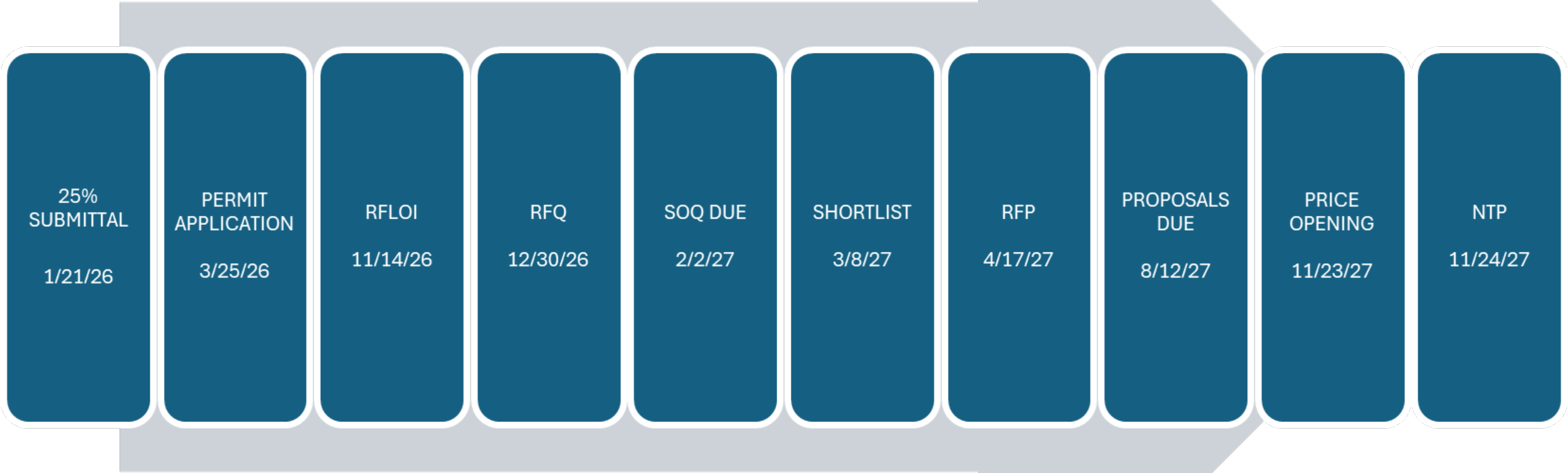
Anticipated Construction Value - \$280M+



Procurement
time line

AECOM

Project Timeline





Questions and answers



Thank You

***Park Street (Rt 20) over the Connecticut River
North End Bridge
Springfield – West Springfield***

District 2 Industry Day 11/5/25

Project File number 612494

Project Manager Contact Information:

William.H.Conroy@dot.state.ma.us



Three Bridge Replacements St. James Ave & Tapley Street Over I-291 and CSX Railroad Springfield, MA

MassDOT D2 Industry Day

November 5, 2025

Project File No. 612167



Presentation Participants

VHB Project Manager

– Tim McIntosh

VHB Structural Design

– Pat Veale

VHB Traffic

– Chris Berganti

MassDOT - Major Projects

Courtney Sulerud – Project Manager

Rob Antico – Project Manager



Agenda

01 Existing Conditions

02 Goals / Objectives

03 Preferred Alternative

04 Scope of Work

- Major Elements
- Project Risks

05 Staging Approach

- St. James Avenue
- Tapley Street

06 Timeline and Cost

07 Questions and Answers





Existing Conditions

Project Area and Existing Conditions



Existing Conditions—Looking North



Existing Conditions—Looking South



CSX
Railroad

I-291

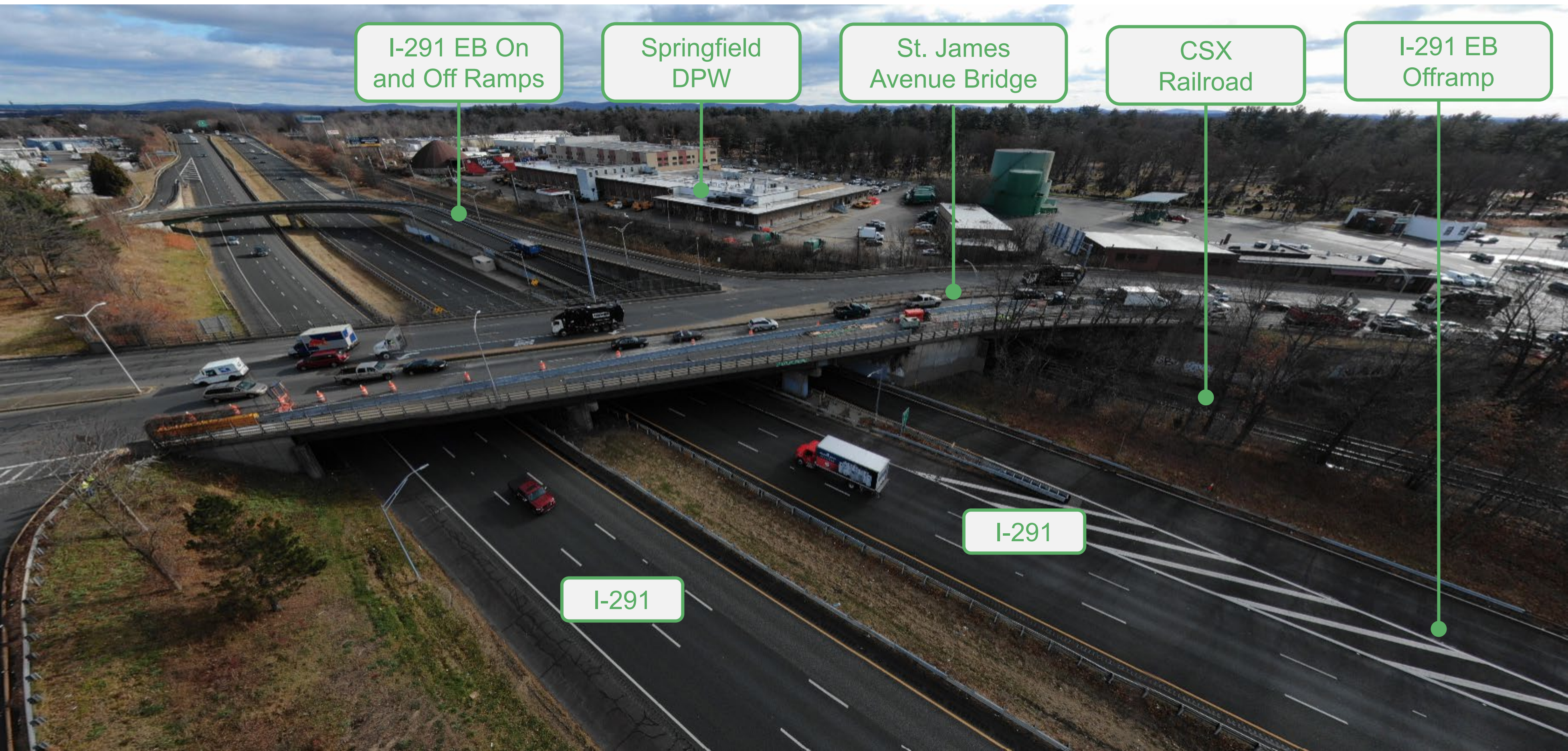
I-291 EB
Offramp

Tapley Street
Bridge

St. James
Avenue Bridge

Page
Boulevard

Existing Conditions—Looking East



I-291 EB On
and Off Ramps

Springfield
DPW

St. James
Avenue Bridge

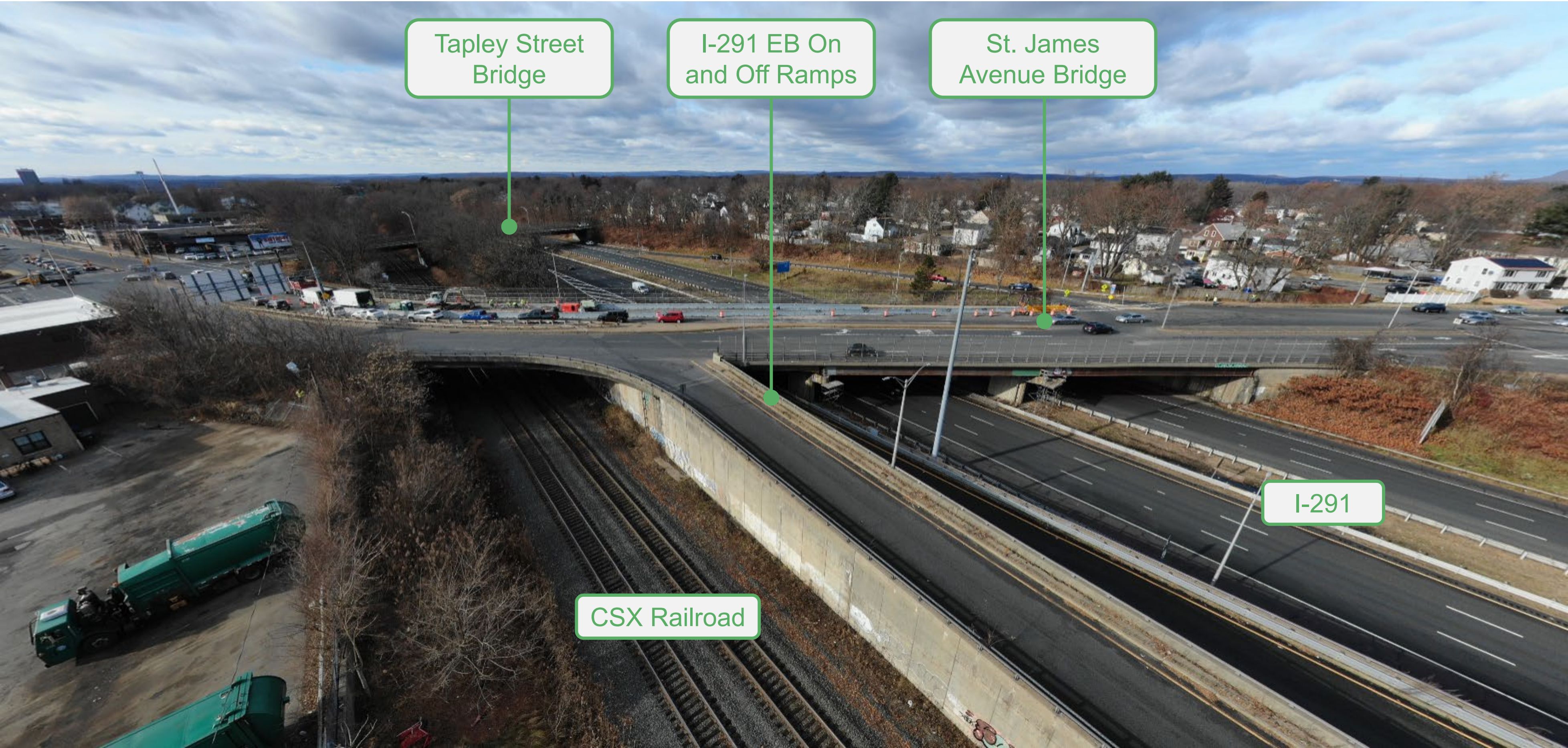
CSX
Railroad

I-291 EB
Offramp

I-291

I-291

Existing Conditions—Looking West



Tapley Street Bridge

I-291 EB On and Off Ramps

St. James Avenue Bridge

CSX Railroad

I-291

Existing Conditions—St. James Avenue Bridges

Bridge No. S-24-017 over CSX RR

- Constructed in **1956**
- Deck in **Poor** Condition
- Superstructure in **Fair** Condition
- Substructure in **Fair** Condition

Bridge No. S-24-071 over I-291

- Constructed in **1969**
- Deck in **Fair** Condition
- Superstructure in **Fair** Condition
- Substructure in **Fair** Condition

All spans are nearing the end of their service life and are ready for replacement.

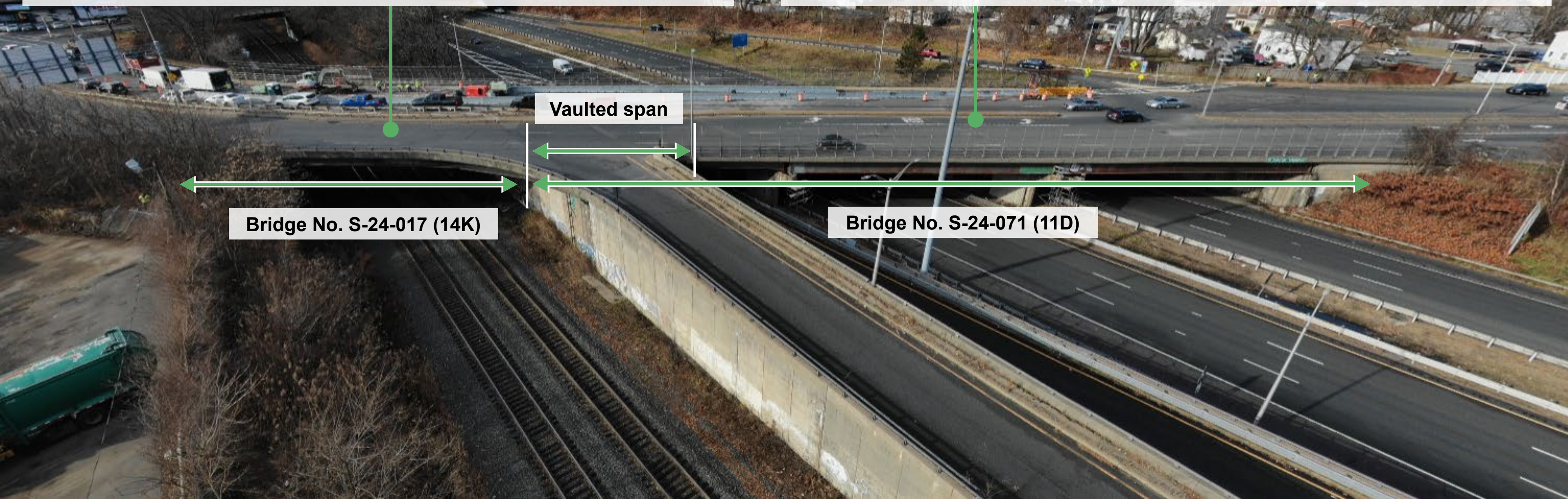
Existing Conditions—St. James Avenue Bridges

Bridge No. S-24-017 over CSX RR

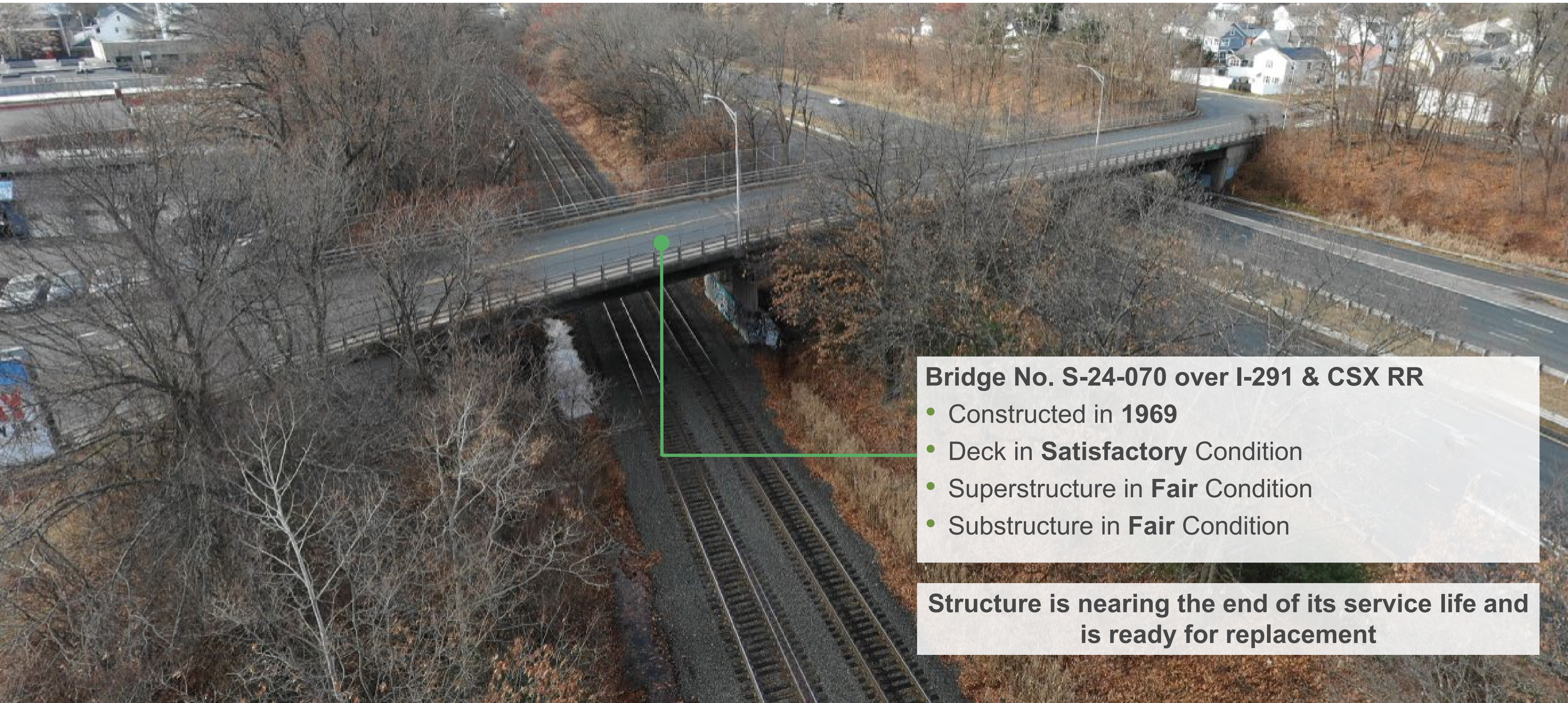
- Rolled steel beams with 6.5" min. concrete deck
- Reinforced concrete cantilever abutment on timber piles
- Reinforced concrete wall pier (modified cantilever abutment) on timber piles

Bridge No. S-24-071 over I-291

- Vaulted span of concrete T-beams with 8" min. concrete deck
- Built-up steel plate girders with 8" min. concrete deck
- Concrete piers (wall pier & multi-column) on spread footings
- Concrete cantilever abutment on spread footing



Existing Conditions—Tapley Street Bridges

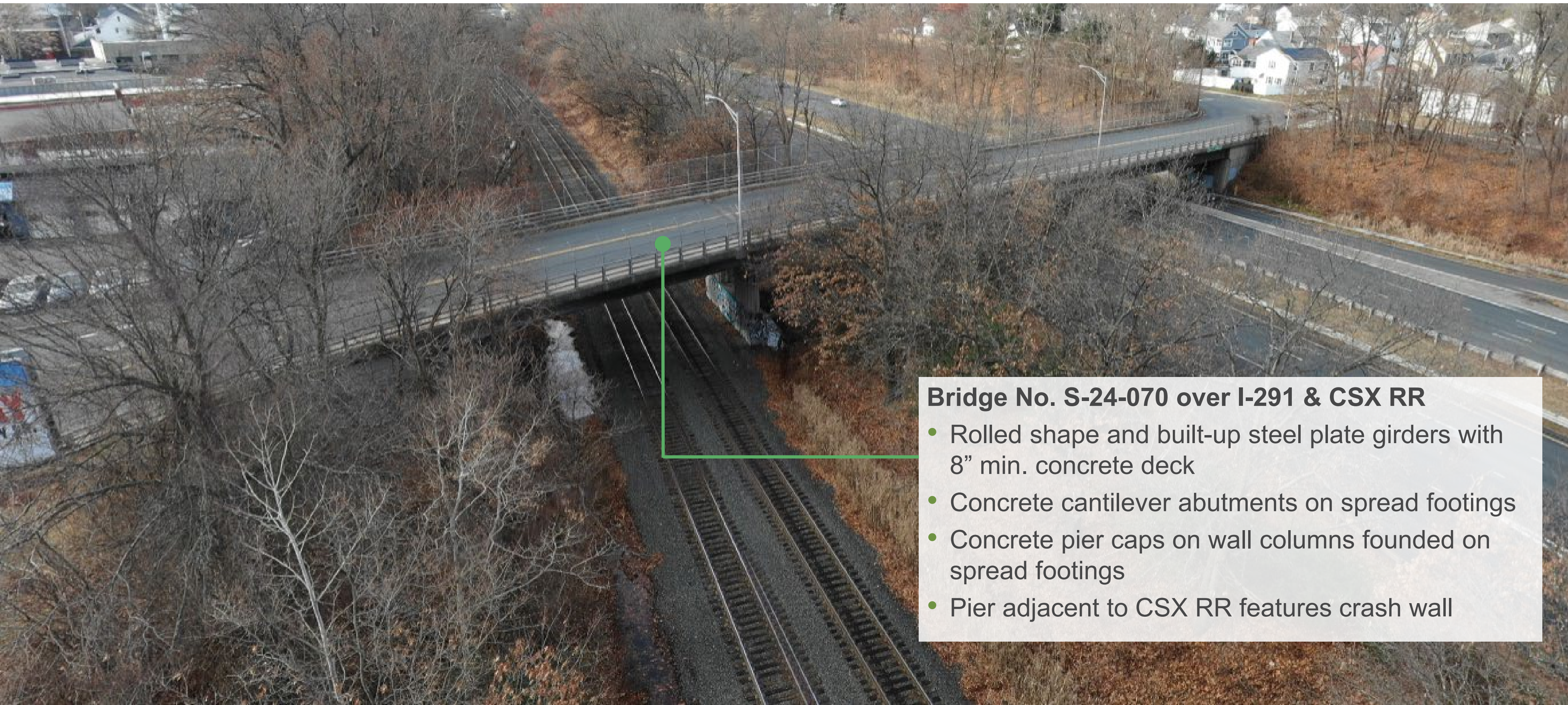


Bridge No. S-24-070 over I-291 & CSX RR

- Constructed in **1969**
- Deck in **Satisfactory** Condition
- Superstructure in **Fair** Condition
- Substructure in **Fair** Condition

Structure is nearing the end of its service life and is ready for replacement

Existing Conditions—Tapley Street Bridges



Bridge No. S-24-070 over I-291 & CSX RR

- Rolled shape and built-up steel plate girders with 8" min. concrete deck
- Concrete cantilever abutments on spread footings
- Concrete pier caps on wall columns founded on spread footings
- Pier adjacent to CSX RR features crash wall



Goals & Objectives

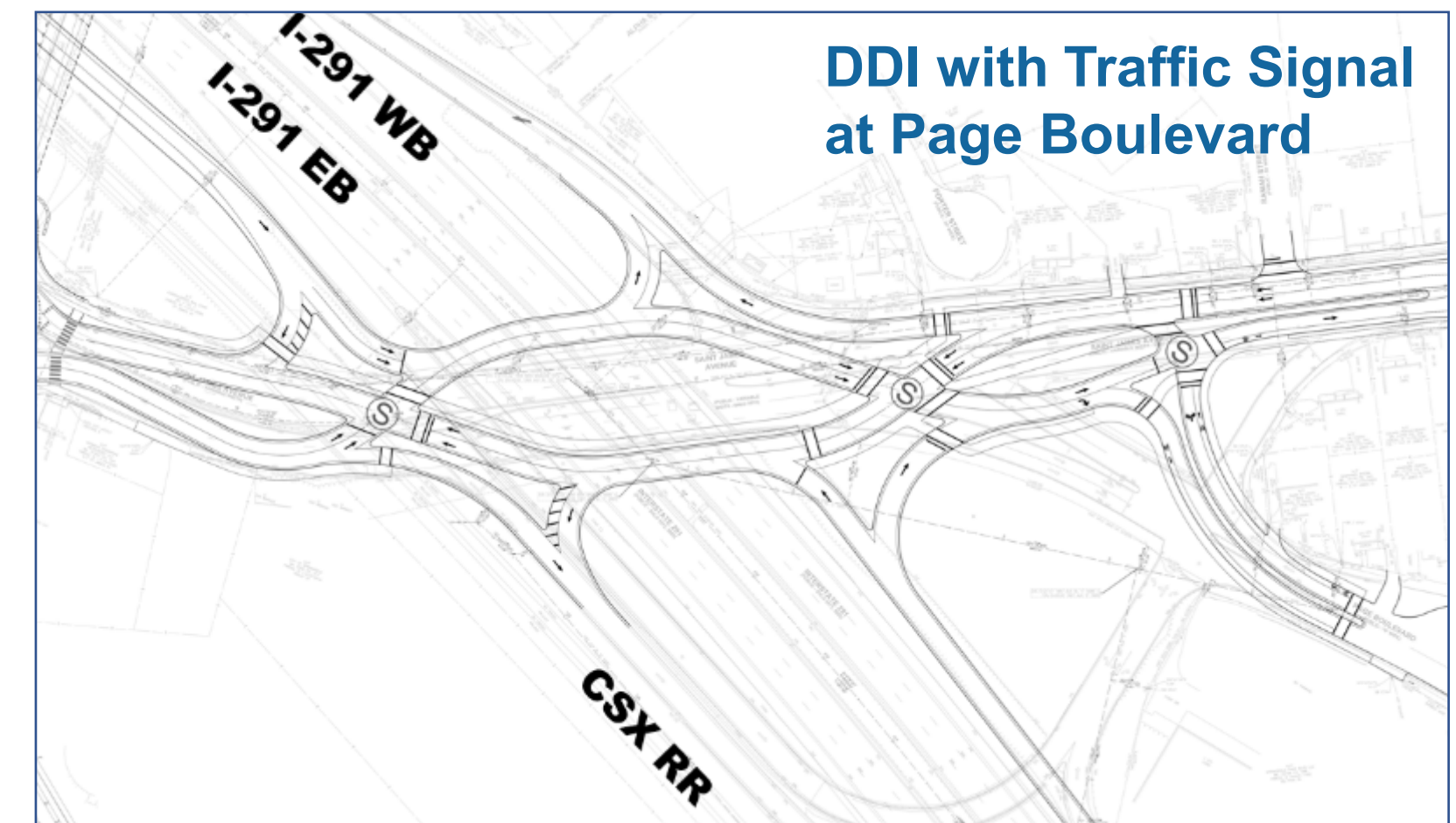
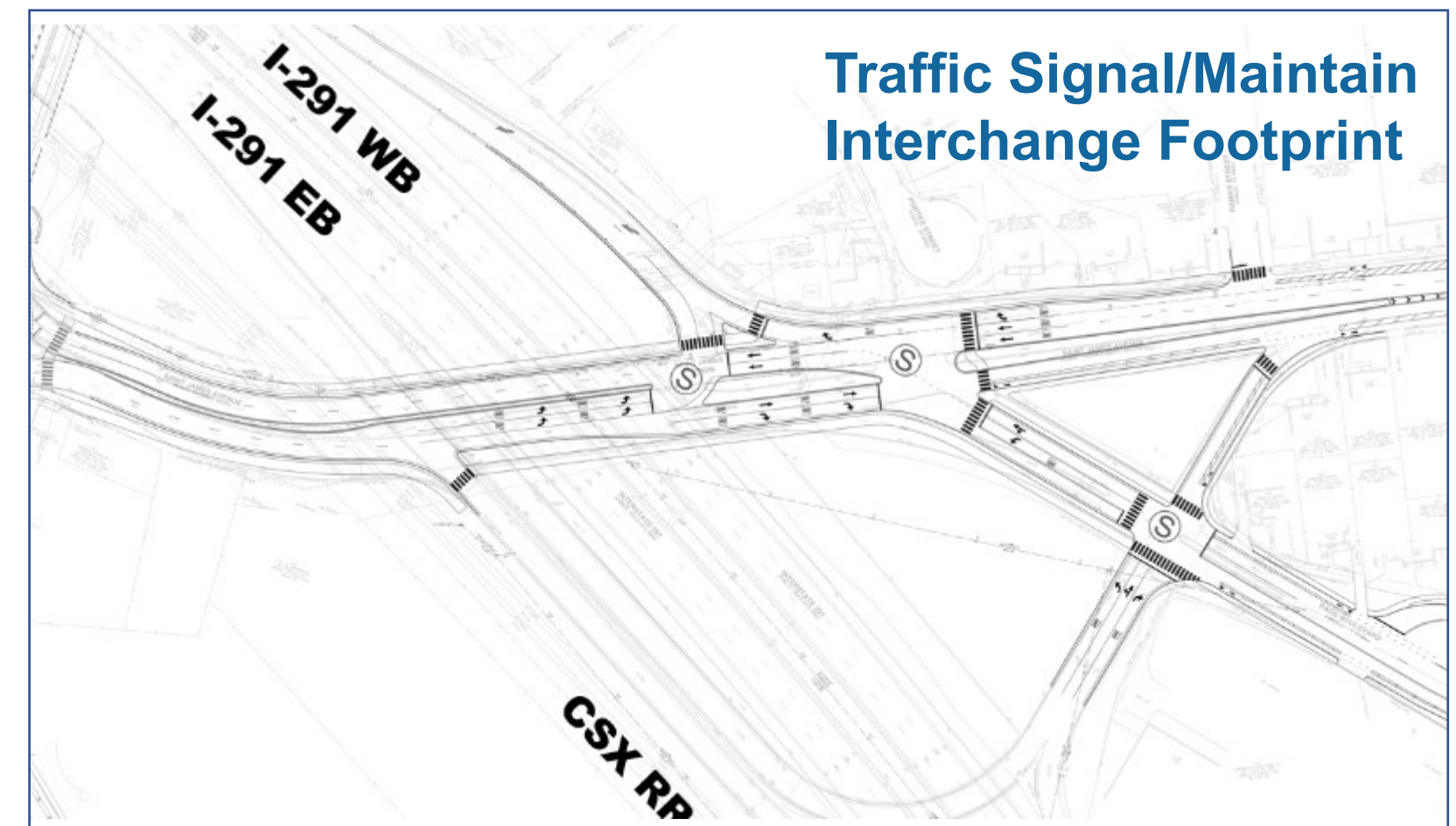
Project Goals

1. Replace Structurally Deficient Bridges
2. Improve Traffic Operations/Safety
3. Provide Bicycle/Pedestrian Facilities and Enhance Connectivity
4. Minimize Construction Impacts
5. Minimize Right-of-Way Impacts



Alternative Analysis

- Right of Way Impacts
- Environmental Impacts
- Traffic Operations
- Safety Analysis
- Pedestrian / Bike Mobility
- Constructability / Traffic Management
- Construction Cost
- Future Maintenance

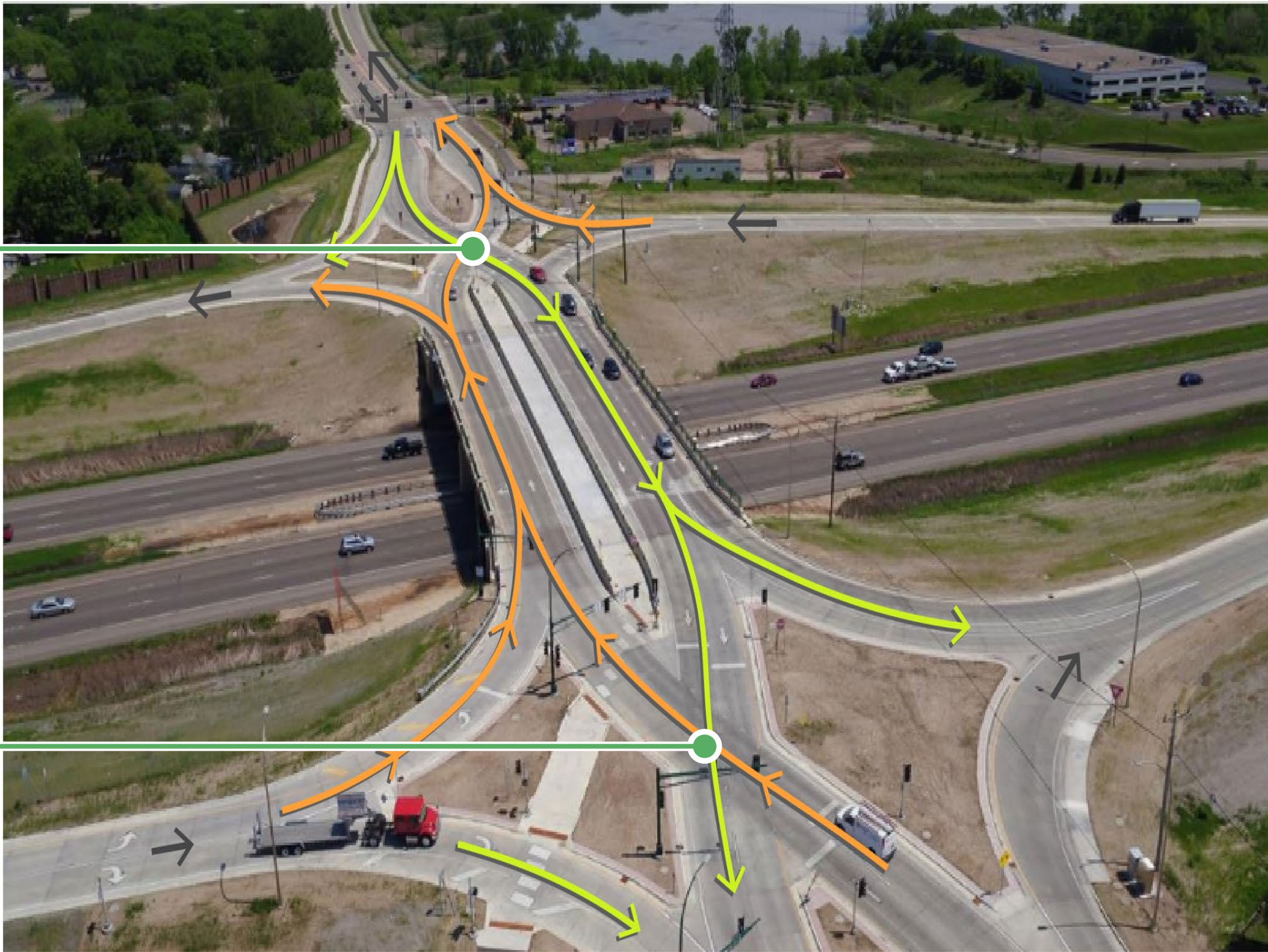


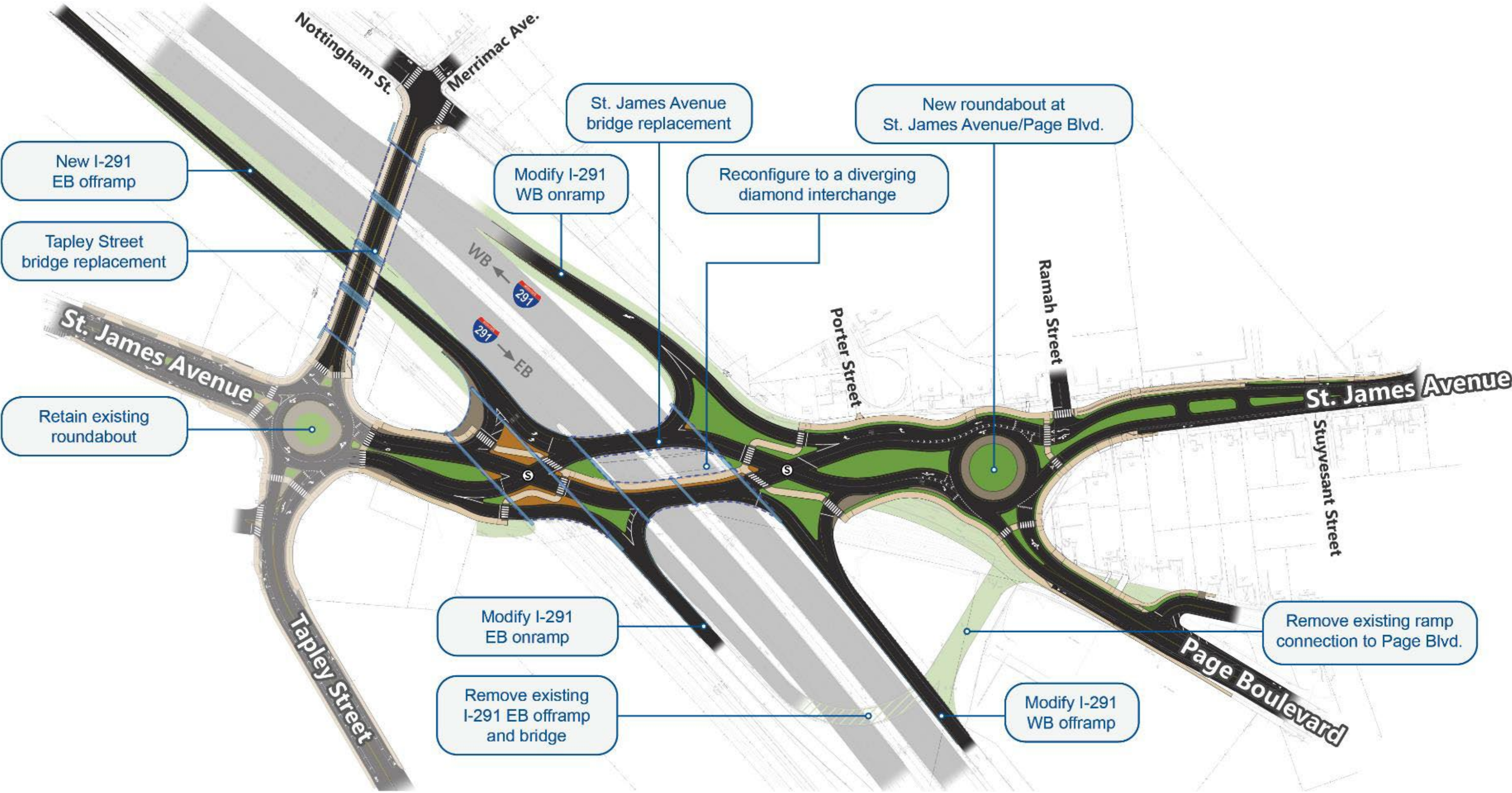


Preferred
Alternative:
**Diverging
Diamond
Interchange
(DDI)**

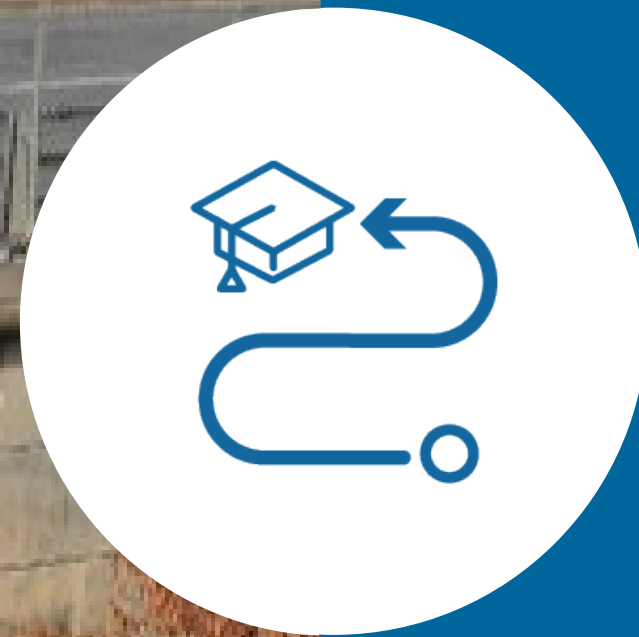
Diverging Diamond Interchange (DDI)—Example

- Crossover Intersection with Traffic Signal
- Traffic Transitions or Diverges to the left side
- Left turn conflicts eliminated
- Crossover Intersection with Traffic Signal





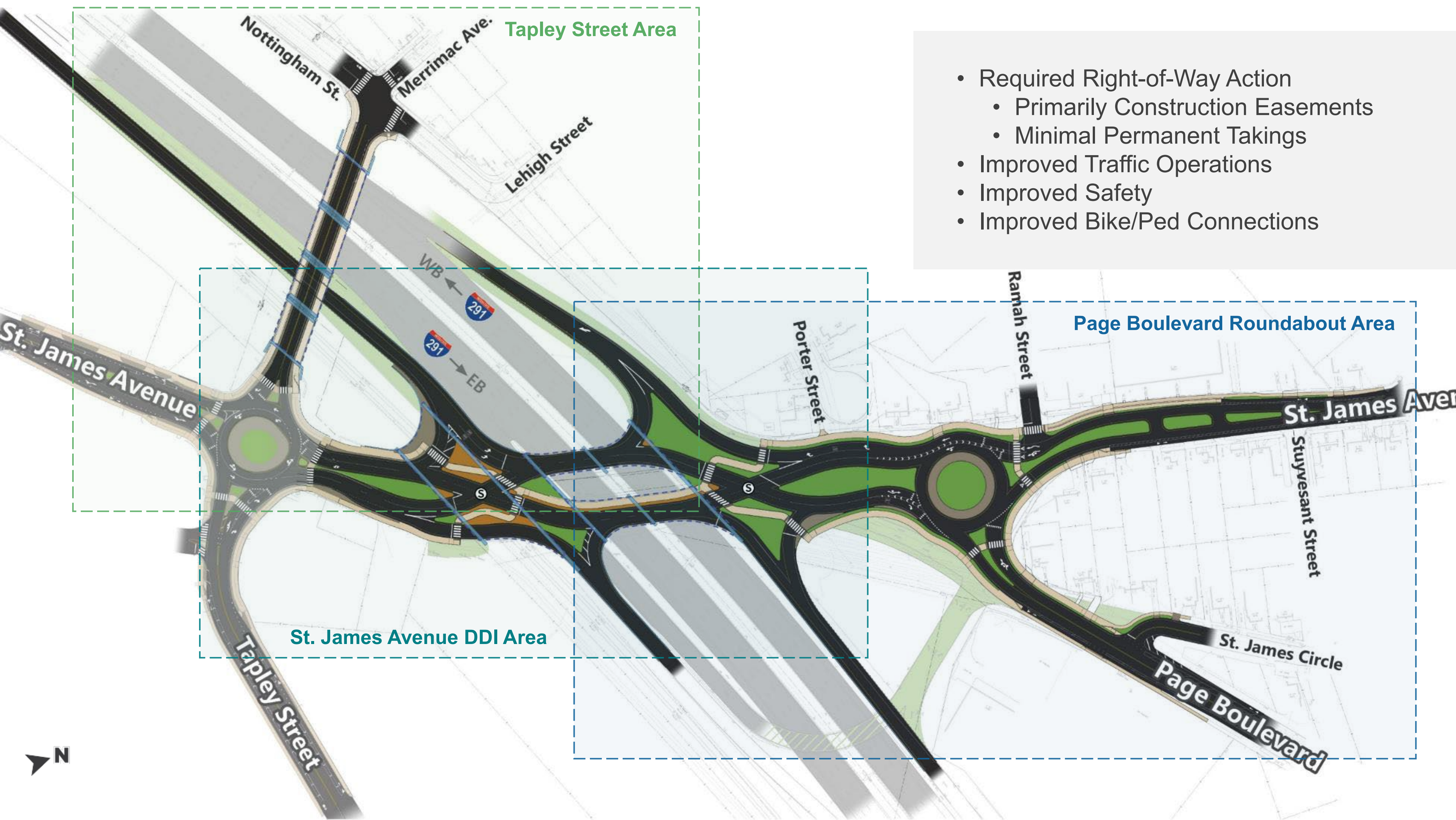
St. James Avenue over CSX RR & I-291: DDI + Roundabout Concept Plan (Preferred Alternative)



**Scope of
Work**

Major Elements

**Anticipated
Project Risks**



- Required Right-of-Way Action
 - Primarily Construction Easements
 - Minimal Permanent Takings
- Improved Traffic Operations
- Improved Safety
- Improved Bike/Ped Connections

Tapley Street Area

- Replace Bridge S-24-072
 - Steel plate girder with 8" concrete deck
 - Utilities on bridge include 12" gas and electric/telephone
- New I-291 EB off-ramp connection to St. James Ave
- Raise Tapley Street profile
 - Existing clearance over I-291: 15.83 ft
 - Proposed over I-291: 17.58 ft
 - Critical over new EB offramp: 15.57 ft (overbuild alternative)
- New Shared Use Paths on Tapley Street Bridge





St. James Avenue DDI Area

- Replace Bridges S-24-017 & S-24-071
 - Steel plate girder spans over I-291 and CSX RR
 - Fill span between I-291 and RR for ramp connectivity
 - Utilities on bridge include 12" water electric/telephone
- Raise St. James Ave profile to increase vertical clearance from 14'-4" (posted) to 16'-5" over I-291 WB
- DDI configuration improves traffic operations
- New direct access to I-291 EB from the north
- Update highway lighting for DDI



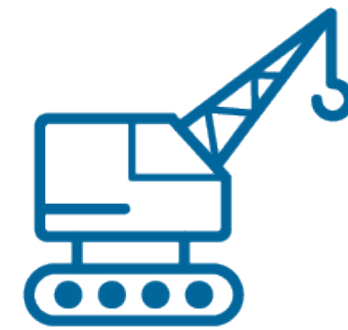
Page Boulevard Roundabout Area

- Replacing St. James Ave/ Page Boulevard signalized intersection with roundabout
- Reconfiguring I-291 WB offramp
- Minor modification to I-291 WB onramp
- New Shared Use Path system across St. James Avenue bridge
- Update Highway Lighting for Roundabout

Anticipated Project Risks

1. CSX Railroad Coordination
2. Contaminated Soils
3. Utility Coordination
4. Right-of-Way Impacts





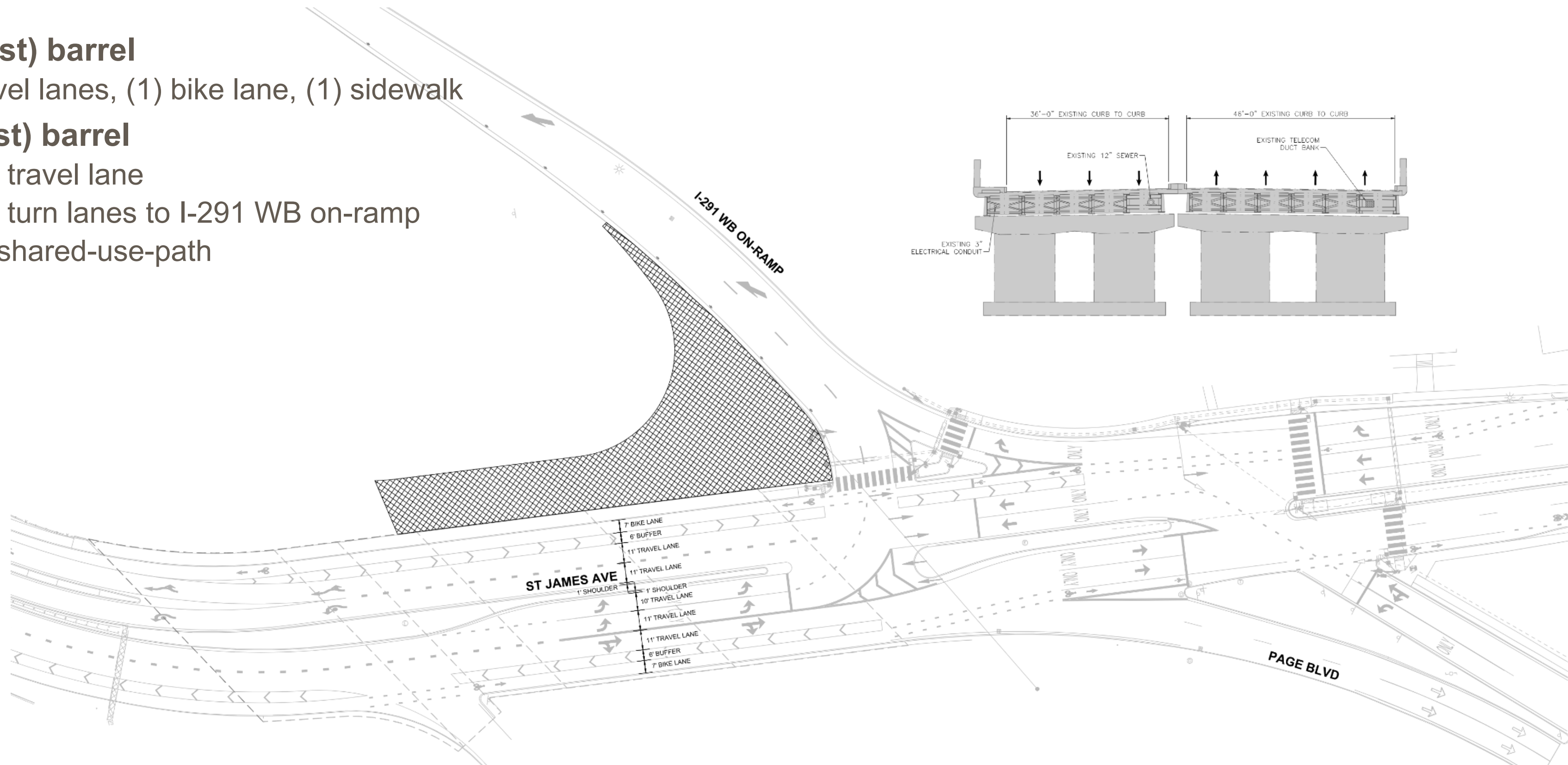
**Staging
Approach**

**St. James
Avenue**

Tapley Street

Construction Staging Approach—St. James Avenue

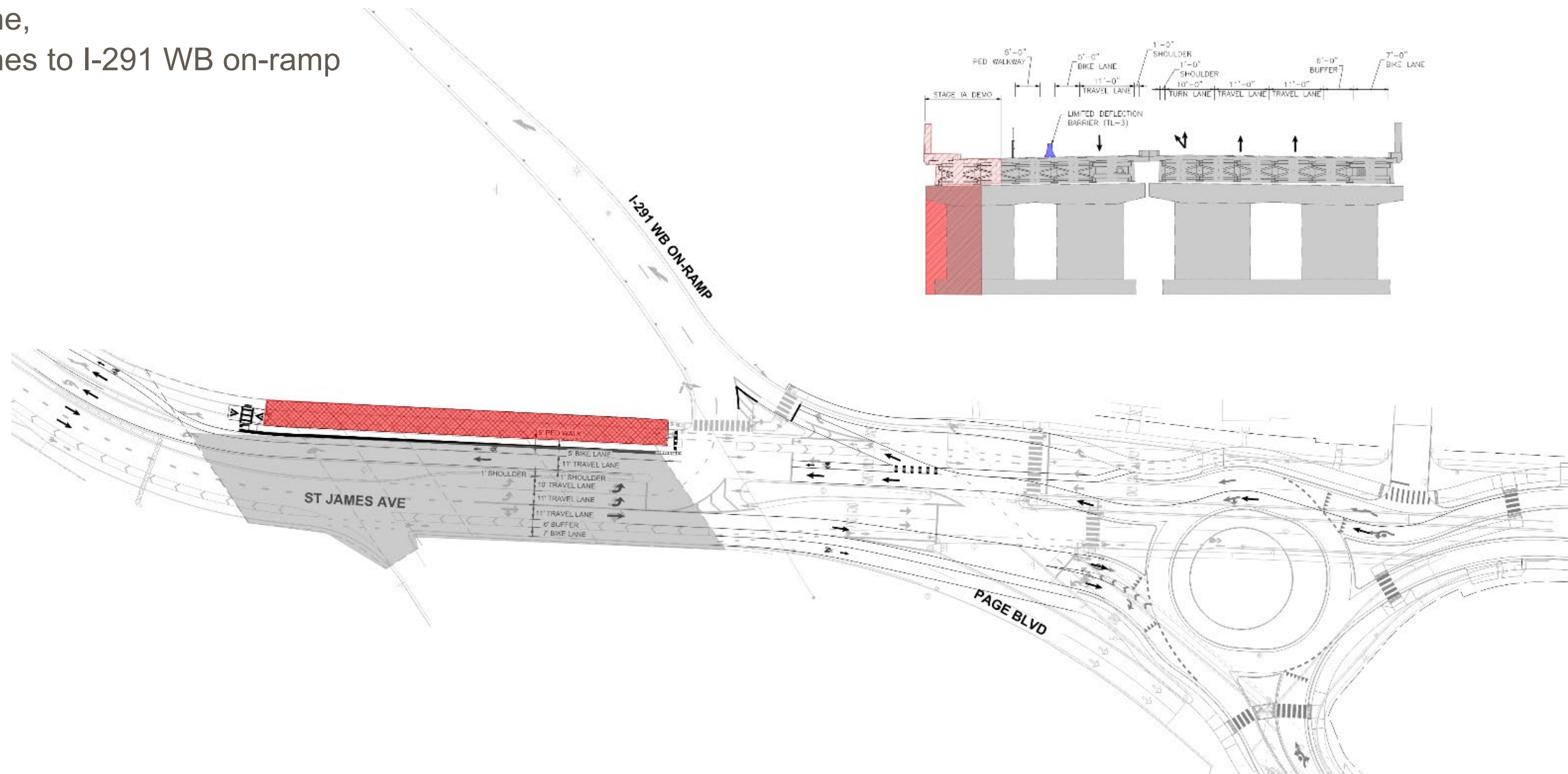
- **SB (west) barrel**
 - (2) travel lanes, (1) bike lane, (1) sidewalk
- **NB (east) barrel**
 - (2) NB travel lane
 - (2) NB turn lanes to I-291 WB on-ramp
 - (1) 10' shared-use-path



Construction Staging Approach—St. James Avenue

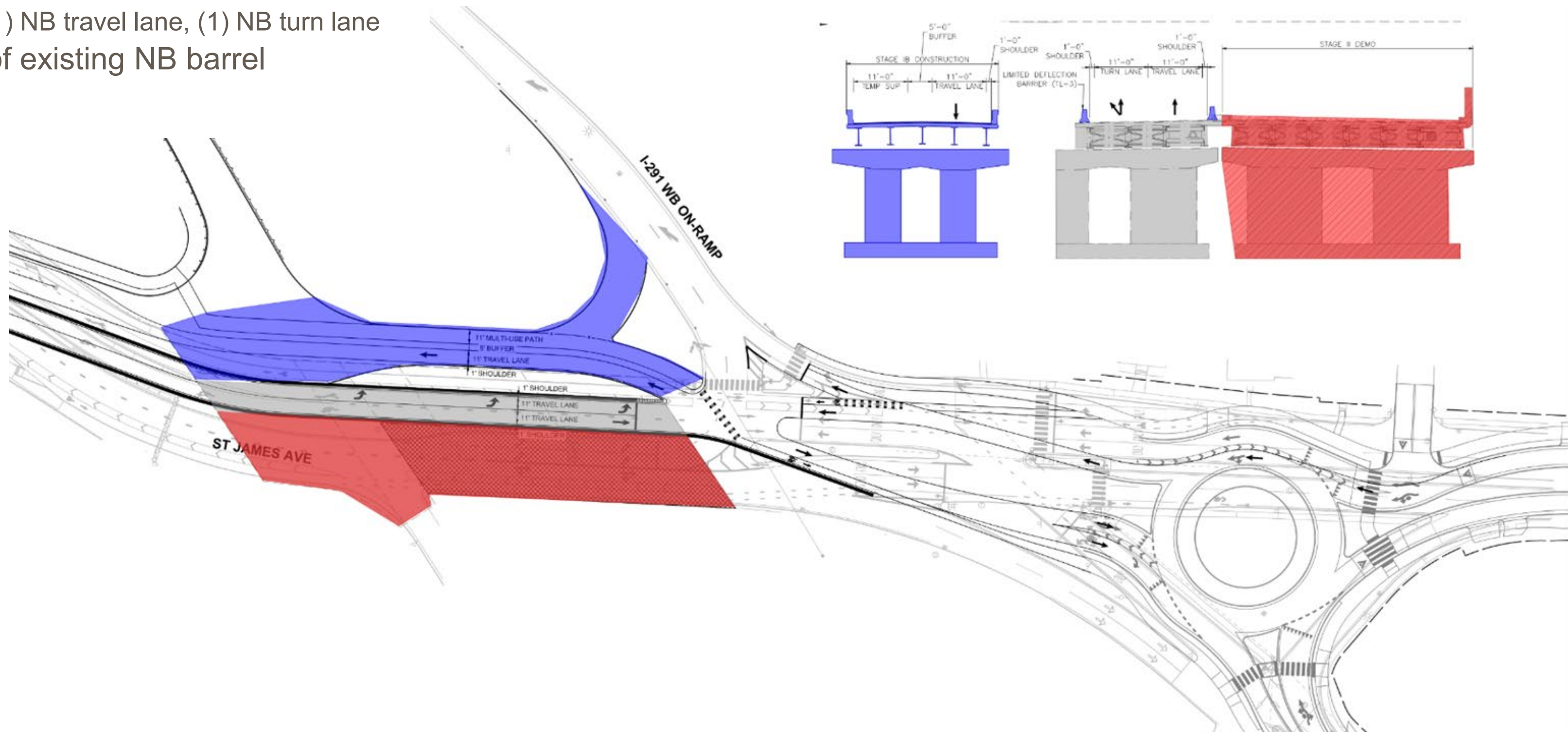
- **Stage 2**

- Partial demolition of existing SB barrel
- (1) SB travel lane, (1) bike lane, (1) ped walkway
- (1) NB thru lane,
- (2) NB turn lanes to I-291 WB on-ramp
- (1) bike lane



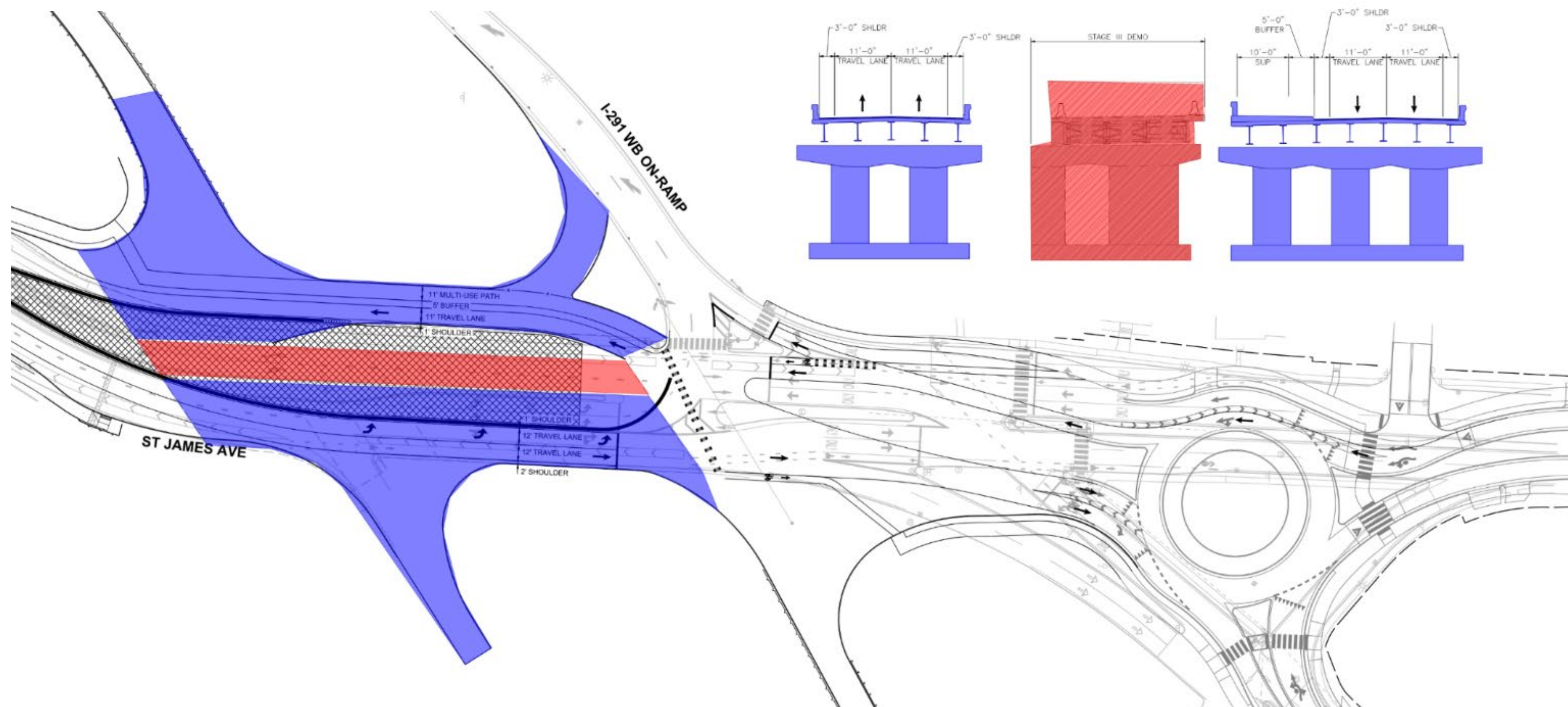
Construction Staging Approach—St. James Avenue

- **Stage 3**
 - Construct future NB (west) barrel
 - Maintain (1) SB travel lane, buffered SUP
 - Shift NB traffic
 - Maintain (1) NB travel lane, (1) NB turn lane
 - Demolition of existing NB barrel



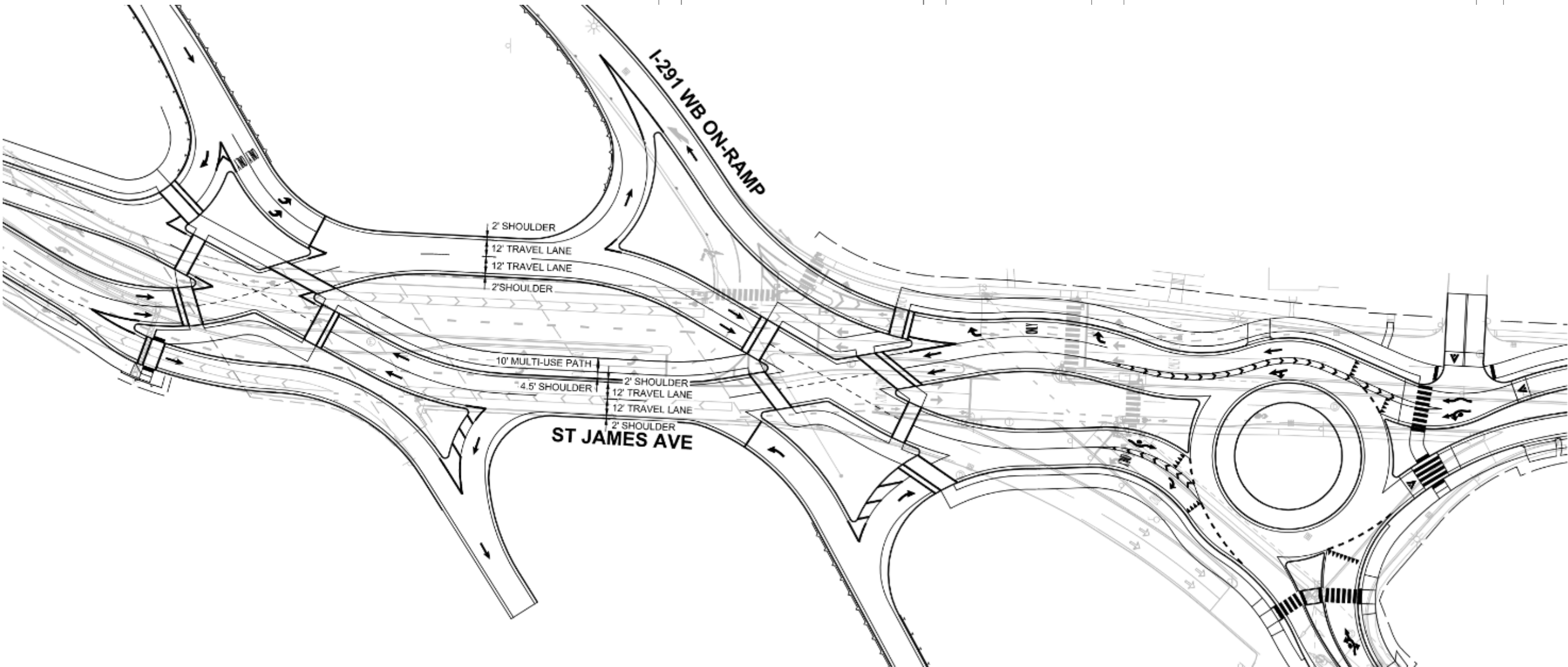
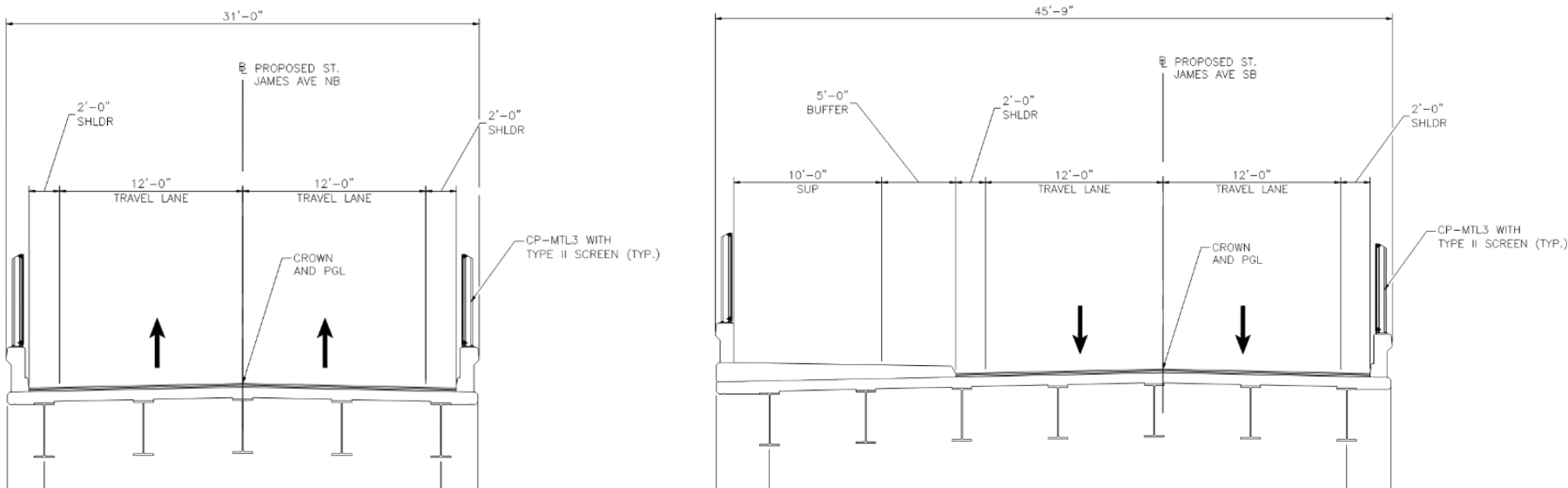
Construction Staging Approach—St. James Avenue

- **Stage 4**
 - Construct future SB (east) barrel
 - Shift NB traffic—(1) NB travel lane, (1) NB turn lane, SUP
 - (2) SB travel lanes
 - Demolish remainder of existing SB (west) barrel



Construction Staging Approach—St. James Avenue

- **Stage 5**
 - Construct center portion of bridge at crossover
 - Flip traffic into final DDI condition
 - (2) NB travel lanes on west barrel
 - (2) SB travel lanes + SUP on east barrel



Construction Staging Approach—Tapley Street

Ideal Cross Section Alternative

- Maintains Bike/Ped Connection (10' shared-use-path) throughout construction duration
- Detours traffic in **both** NB and SB directions during Stage 1
- Maintains NB traffic towards Nottingham St. during Stage 2 (remaining construction duration)
- Detour routes to be determined based on coordination with City/MassDOT
- No overbuild required
- Clearance over new I-291 EB Offramp exceeds 16'

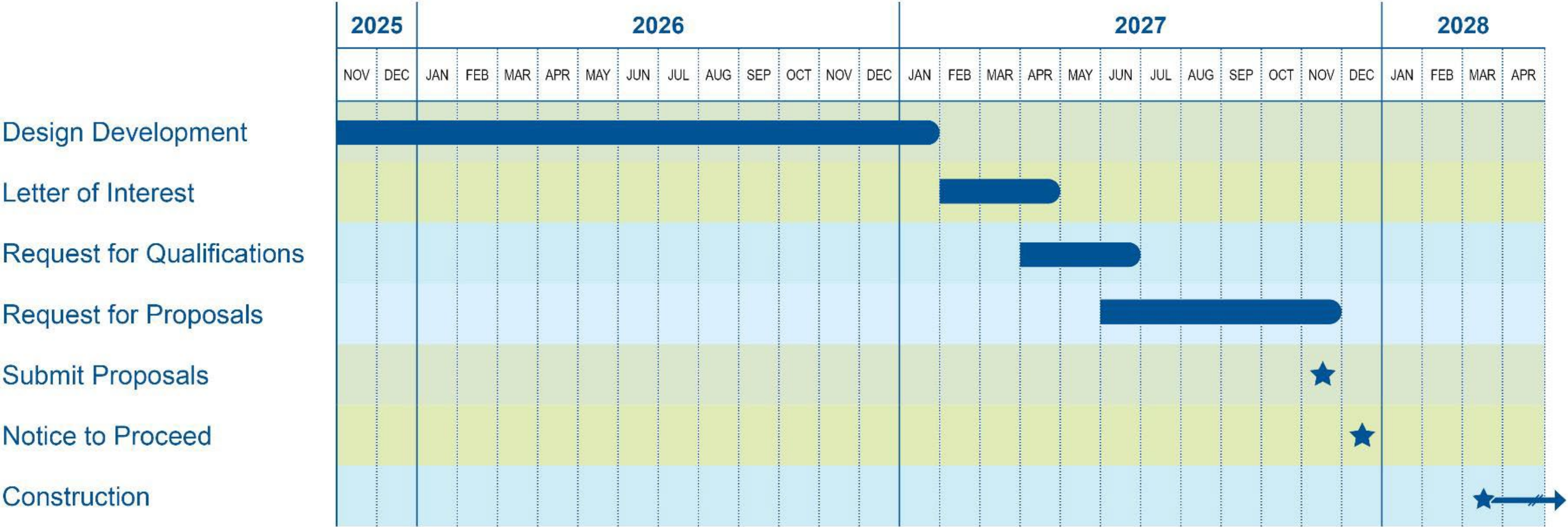
Overbuild Alternative

- Maintains Bike/Ped Connection (10' shared-use-path) throughout construction duration
- Detours traffic in **only** SB direction during Stage 1
- Maintains NB traffic towards Nottingham St. during Stages 1 and 2 (entire construction duration)
- Detour routes to be determined based on coordination with City/MassDOT
- Approximately 12' of deck overbuild
- Clearance over new I-291 EB Offramp is approximately 15.5'



Timeline and Cost

Anticipated Timeline and Cost



Construction Duration Estimate:
48 to 60 months

Current Office Estimate:
\$175M



Questions and Answers



Thank You

*Three Bridge Replacements
St. James Ave & Tapley Street
Over I-291 and CSX Railroad
Springfield, MA*

November 5, 2025

Project File No. 612167

MassDOT PM" Courtney Sulerud





MassDOT
Massachusetts Department of Transportation
Highway Division