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Massachusetts Department of Transportation
Highway Division

John J. Beades Bridge Reconstruction Project

Public Meeting 1

Dorchester | December 16, 2025 | 6:00 PM

Project File Number: 613130

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All questions and comments are welcome and appreciated.

Please refrain from any disrespectful comments.

How to Participate

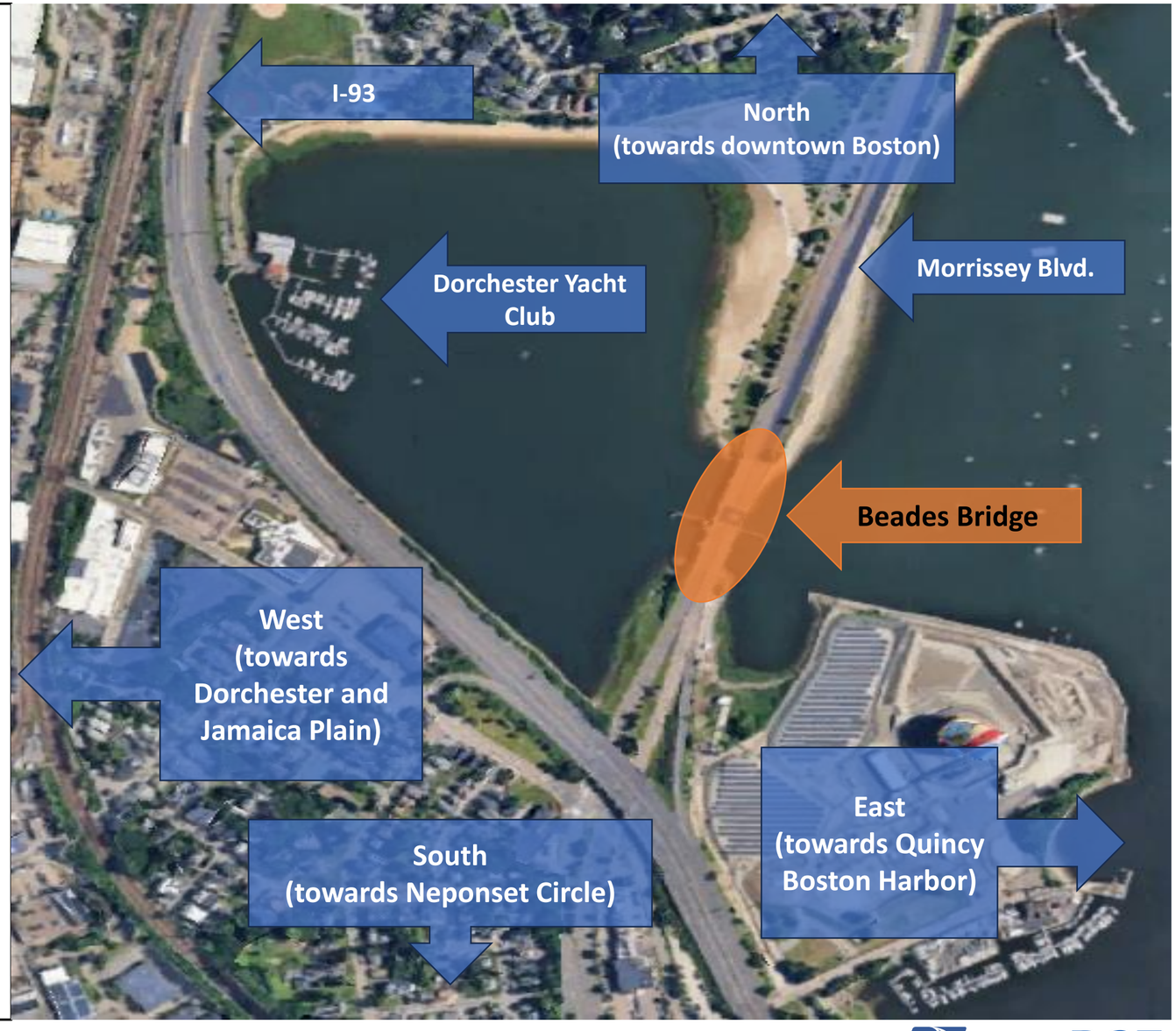
- View the 30-minute presentation
- Ask questions to project team during question-and-answer period
- Submit comments into the comment box at the sign-in table
- Representatives of the media can direct media inquiries to Jacquelyn.Goddard@dot.state.ma.us

General Public Information Meeting Notes and Procedures

- MassDOT may retain and distribute transcripts / written records of this meeting
- All parts of this meeting are considered public record.
- Information from this meeting will be posted on the Mass.gov website.
- This meeting will be open to questions and answers at the end of the presentation

Agenda

1. Welcome & Overview
2. Why was this project initiated?
3. What do we want to accomplish?
4. How has our design progressed?
5. What is our construction approach?
6. How will we keep you informed?
7. Questions and discussion



Welcome and Meeting Overview:

- MassDOT Highway Division
  - Joseph Breen, P.E., Project Manager
  - Matthew Jasmin, P.E., District 6 Project Development
  - Matthew Grew, Government Affairs

- Design Consultant, WSP USA, Inc.
  - William Varrell, Project Management/Bridge Engineering
  - Nathaniel Cabral-Curtis, Communications and Public Involvement

Language Translation Speakers

- **Haitian Creole**
  - Nixon Cadet
- **Spanish**
  - Diego Rodriguez
- **Vietnamese**
  - Thahn Kim

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How did we get here?

1927

Beades Bridge opens to traffic with two lanes in each direction

1953

Beades Bridge is widened by one lane in each direction

1998

Metropolitan District Commission identifies a need to replace the bridge

2002

Department of Conservation & Recreation carries out $9.1M rehabilitation job

2023

MassDOT initiates project to replace the Beades Bridge

2024-2025

Coordination with Morrissey Blvd. Study

Type study

Environmental study

USCG Coordination

Q4 2025

Community outreach

Local officials' briefing

December 16th

2025

Tonight's Meeting

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Public Information Meeting - Advertisement

- MassDOT email bursts
- Newsprint:
  - *The Dorchester Reporter*
  - *El Mundo*
- Public Access Cable TV
  - Boston City TV
  - Boston Neighborhood Network
- News websites
  - BostonHaitian.com
  - Vietaid.org

Public Meeting – Flyer Drops and Staffed Tables

Staffed Tables:

- Star Market – Morrissey Boulevard
- Leahy-Halloran BCYF

Flyer drops at 15 locations in the area around the bridge

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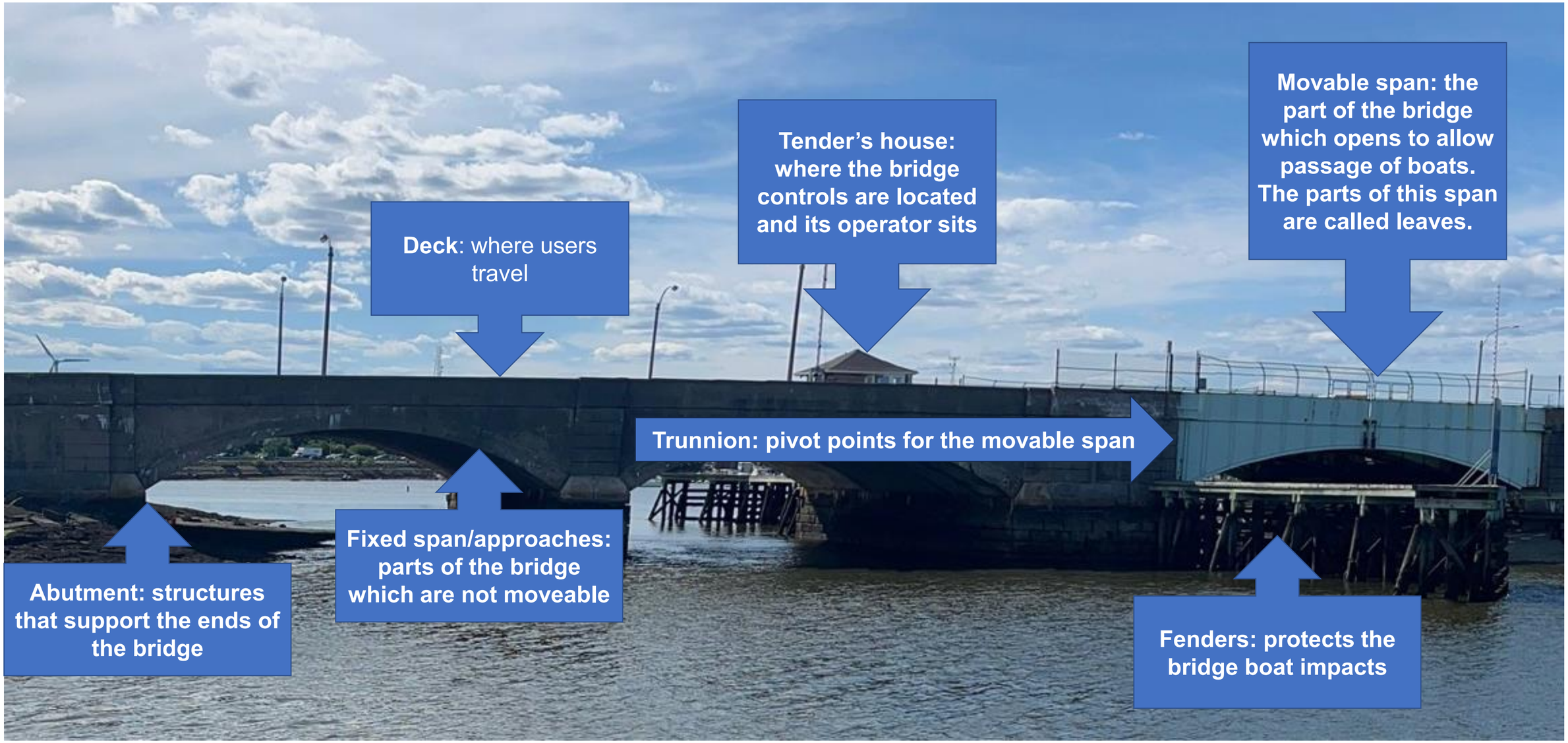
Why was this project initiated?

Key Moveable Span Bridge Terms



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Beades Bridge: Key Facts - Roadway

Configuration

- 454’ long
- 3 lanes in each direction
- Four concrete arches
- One steel movable span
- 6-foot sidewalks on each side of the bridge

Average daily weekday traffic in 2024:

- 53,000 vehicles per day
- ~50/50 north and south split
- >1% heavy vehicles

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Beades Bridge: Key Facts - Marine

- Dorchester Yacht Club is the bridge's #1 user
- Bridge logs reviewed from 2019-2024
- Usage patterns are highly consistent
  - Core months are June, July, and August
  - May and September are "shoulder months"
- In 2024:
  - 535 total openings for boat traffic*
  - 403 between Memorial Day and Labor Day
  - Only 26 openings January-April and October-December

**Excludes openings for maintenance work*

Beades Bridge: Key Facts – A Deteriorated Structure

- Superstructure is in poor condition
- Deck and substructure are in fair condition
- Movable span is heavily deteriorated
- Operating machinery from 1927 and 1953:
  - Widespread corrosion
  - Nonstandard makeshift components
  - Bridge stuck open in December 2023
  - Bridge unable to lock closed in April 2024
  - No backup power; bridge cannot operate in a blackout
- Outdated bridge tender’s house
- *The bridge remains safe, but is at the end of its useful life and should be reconstructed*

Work Completed to Date

- Survey
- Geotechnical study
- Traffic data collection
- Bridge type study
- Preliminary environmental permitting
- Early hydraulic modeling
- Maritime coordination

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Project Limits of Work

- The bridge
- North to right around the Malibu Beach restrooms
- South to just before I-93

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What do we want to accomplish?

With Regard to the Roadway User

A new bridge should:

- Improve safety for all modes of travel
  - Bicycle
  - Pedestrian
  - Vehicle
- Offer a reliable crossing of Dorchester Bay Basin (i.e., not get stuck open/unlocked)
- Provide a 75-year or greater design lifespan to reduce long-term impacts to local and regional users

With Regard to the Environment

A new bridge should:

- Capture roadway stormwater
- Reduce the number of supports in the water
- Be raised above future flood levels

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With Regard to Marine Users

A new bridge should:

- Maintain access for recreational boaters

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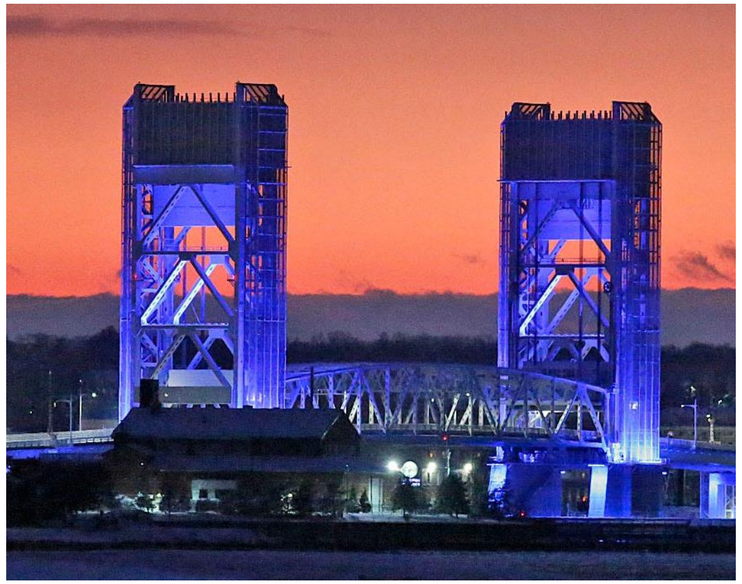
How has our design progressed?

Commonalities Across Potential Replacement Bridges

- Several possible replacement bridge types analyzed to date
- All have shared several key characteristics:
  - 3 - 11’ lanes in each direction to match Morrissey Blvd
    - Median barrier between opposing directions of travel.
  - Accommodations for cyclists and pedestrians
  - Require:
    - A temporary fixed bridge to keep traffic moving during construction
    - A temporary closure of the off-ramp from I-93 northbound
    - A temporary closure of the DCR Neponset River Greenway Extension adjacent to the bridge

Movable Bridge Types Considered

Bascule
(several sub-types considered)



Vertical Lift
(Like MassDOT's Fore River)

Swing Bridge
(Like MassDOT's New Bedford-Fair Haven)

Screening Bridge Concepts

Bridge Type	Screened Out?	Selected for Further Design?	Reasons
Vertical Lift	✓		Limit to vertical height in the open position Significant visual impact
Swing Bridge	✓		Central pivot point requires increased space to achieve the same channel width
Bascule Bridge – Scherzer Rolling Lift	✓		Same style of bridge as today's Beades Bridge Includes more moving parts than other Bascule types Susceptible to alignment issues – getting stuck Greater maintenance need over the life of the structure
Bascule Bridge – Fixed Trunnion – Single Leaf	✓		Longer opening and closing times More robust pier needed to anchor the single leaf & machinery Larger lifting motor with fewer suppliers for replacement parts
Bascule Bridge – Fixed Trunnion – Double Leaf (similar to today's bridge)		✓	Shorter opening and closing times Smaller machinery and counterweight can be placed higher above the water improving corrosion and flooding issues Smaller lifting motors with more suppliers for replacement parts
Fixed bridge (no movable span)		✓	Shorter construction duration Significant cost savings in construction Significant cost savings in operation and maintenance Increased capacity for larger bicycle and pedestrian accommodations

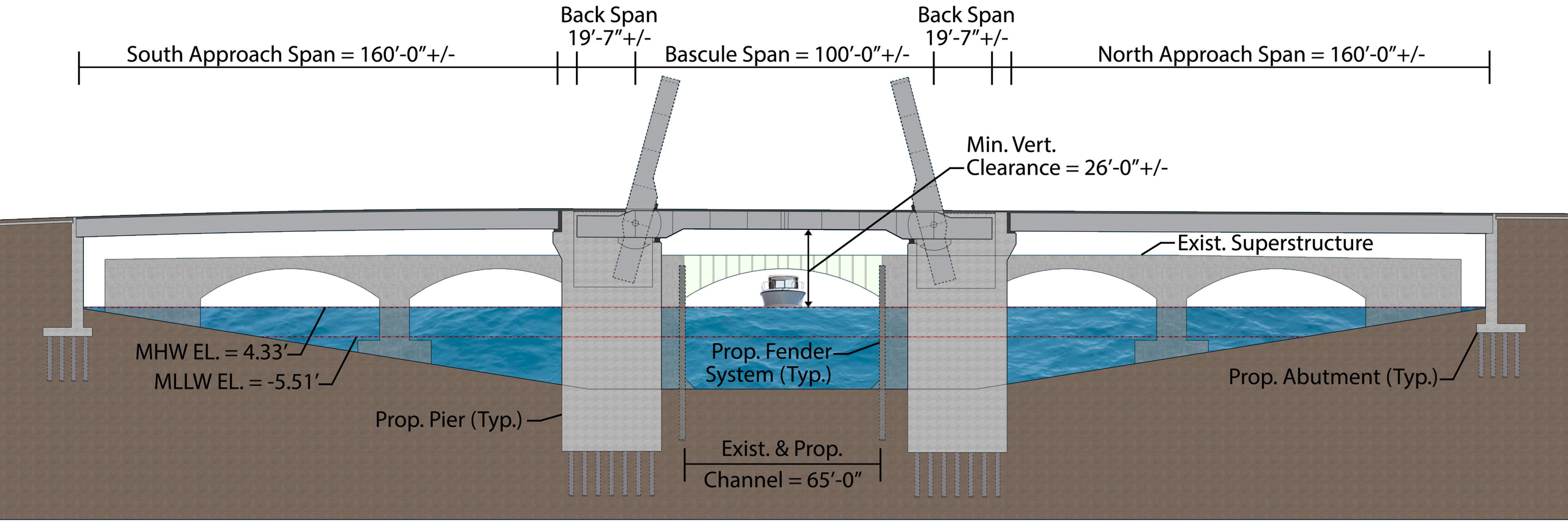
Bridges Selected for Further Development

The two bridge types selected for further design development are:

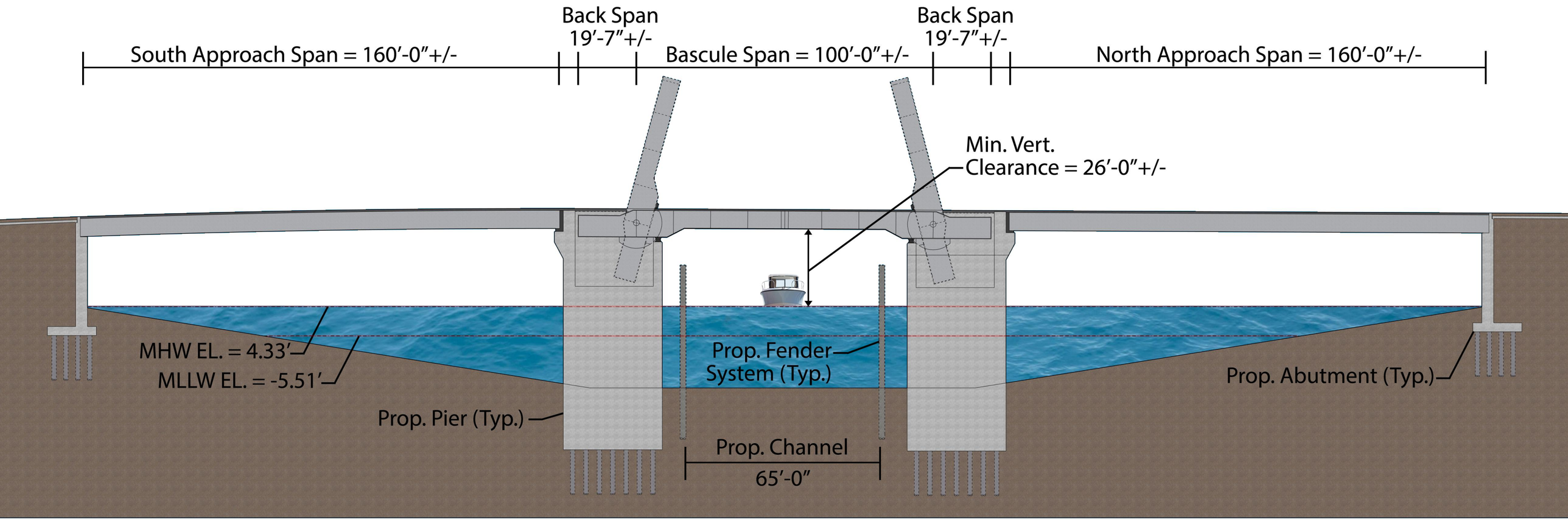
1. Movable Span - Trunnion double leaf bascule bridge
   - 65’ navigational channel width
   - 160’ approach spans composed of steel plate girders carrying a concrete deck

2. Fixed Bridge
   - 500’ overall bridge length
   - 150’ approach spans
   - 200’ span at the navigational channel
   - 30’ vertical clearance above mean high water (MHW) for navigational users
   - Increase of approximately 14’ over existing bridge closed position navigational clearance

Movable Span – Trunnion Double Leaf Bascule Bridge Comparison with Existing Bridge



Movable Span – Trunnion Double Leaf Bascule Bridge



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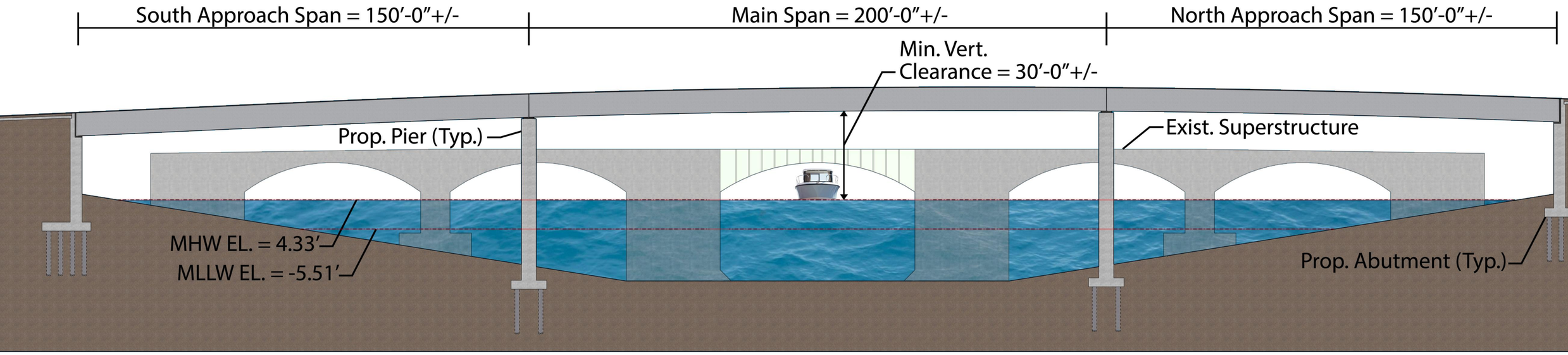
Fixed Bridge Option – Comparison with Existing Bridge



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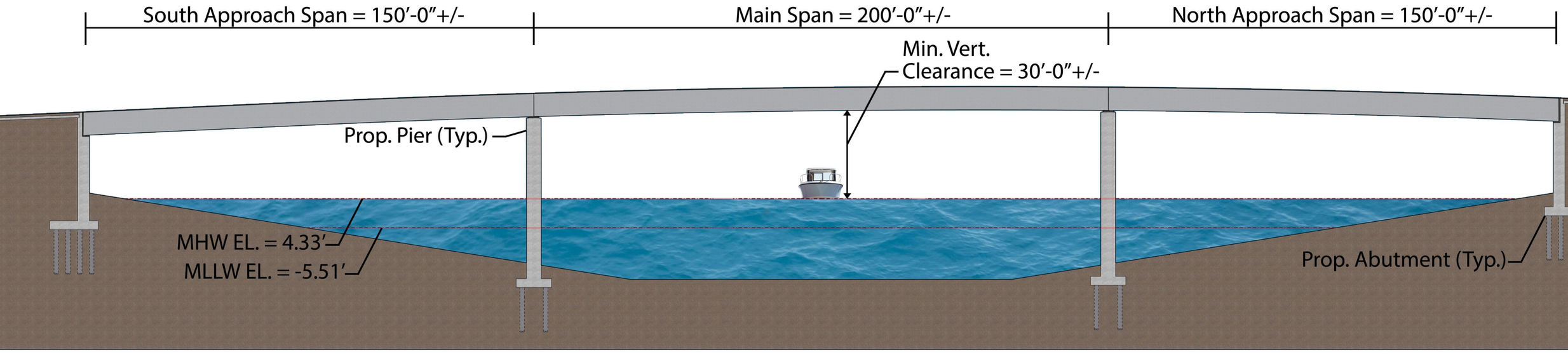
Fixed Bridge Option



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Movable vs. Fixed Bridge Concepts – Initial Comparison

	Fixed Bridge	Movable Bridge
Can improve multimodal travel conditions while handling future traffic	✓	✓
Will require a temporary bridge during construction	✓	✓
Can reduce the number of supports in the water and improve water quality	✓	✓
Anticipated construction cost	✓	
Construction duration and impacts to motorists and navigation	✓	
Anticipated lifecycle cost (includes maintenance and staffing for movable bridge)	✓	
Unlimited vertical clearance for vessels		✓
Disruptions to cyclists, motorists, and pedestrians from vessel passage	✓	
Potential loss of vertical clearance over 75-year service life due to sea level rise		✓
Requires additional coordination with United States Coast Guard		✓

This conversation is not finished; we want to have it with your input

What is our construction approach?

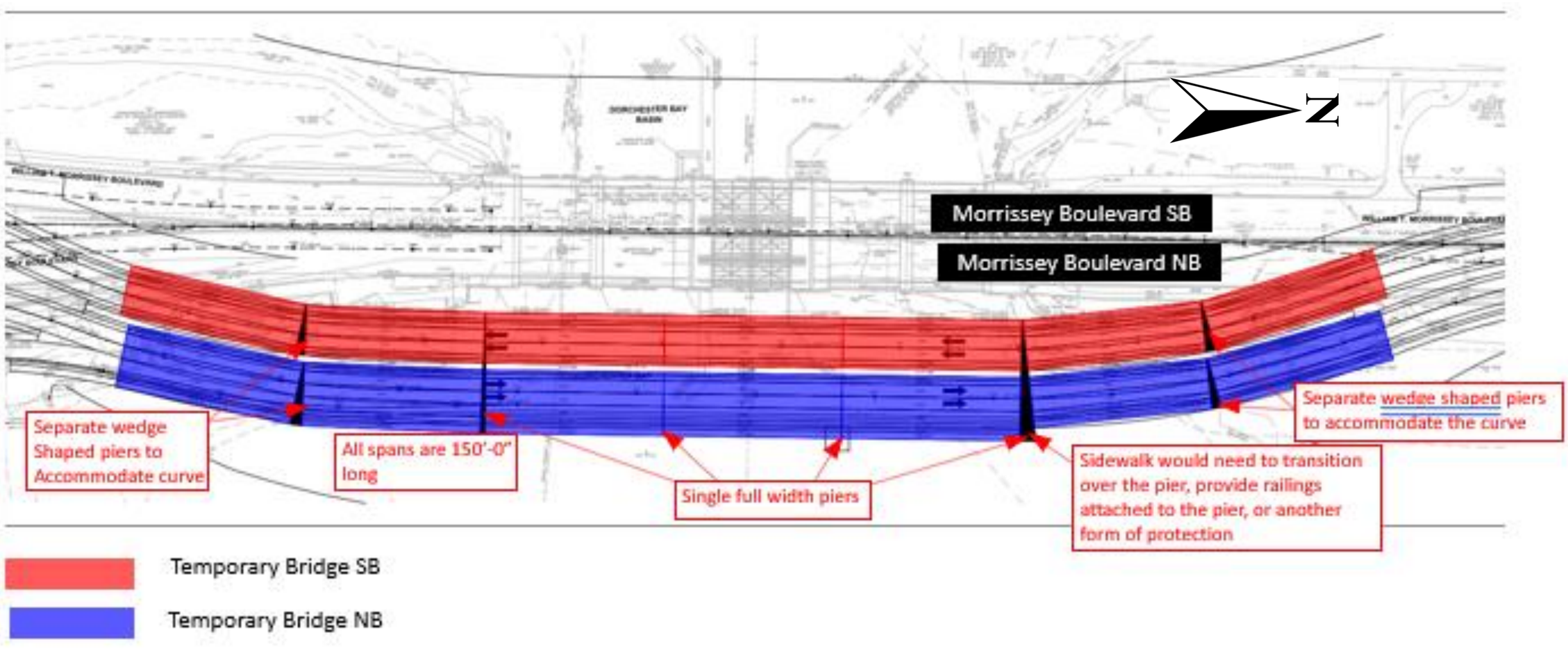
Construction Staging – An Early Look

- What we know:
  - Unlike some bridges, the Beades Bridge cannot be removed in phases
  - A temporary bridge will be required to maintain traffic during construction
    - A proposed vertical clearance of 26’ above MHW would be provided
  - To make the roadway geometry work:
    - The temporary bridge will provide two travel lanes in the north and southbound direction
    - The off-ramp from I-93 (Exit 13B) may need to be temporarily closed

- What we need to figure out more about:
  - How long each stage of construction will take?

Double Leaf Bascule Bridge vs. Fixed Bridge Comparison

- Fixed bridge: ~3.5 years construction duration
- Movable span bridge: ~5 years construction duration
- ~$70M construction cost savings for a fixed bridge versus a movable span bridge



How will we keep you informed?

Project Schedule

1

Winter 2025-2026

Obtain public comment

Advance design of bridge concepts

2

Spring-Summer 2026

PIM #2 to discuss preferred alternative

Obtain public comment

3

2026

Preliminary Design development

Environmental permitting

4

2026

Pre-25% Design level submissions and approvals

5

2027

25% Design development

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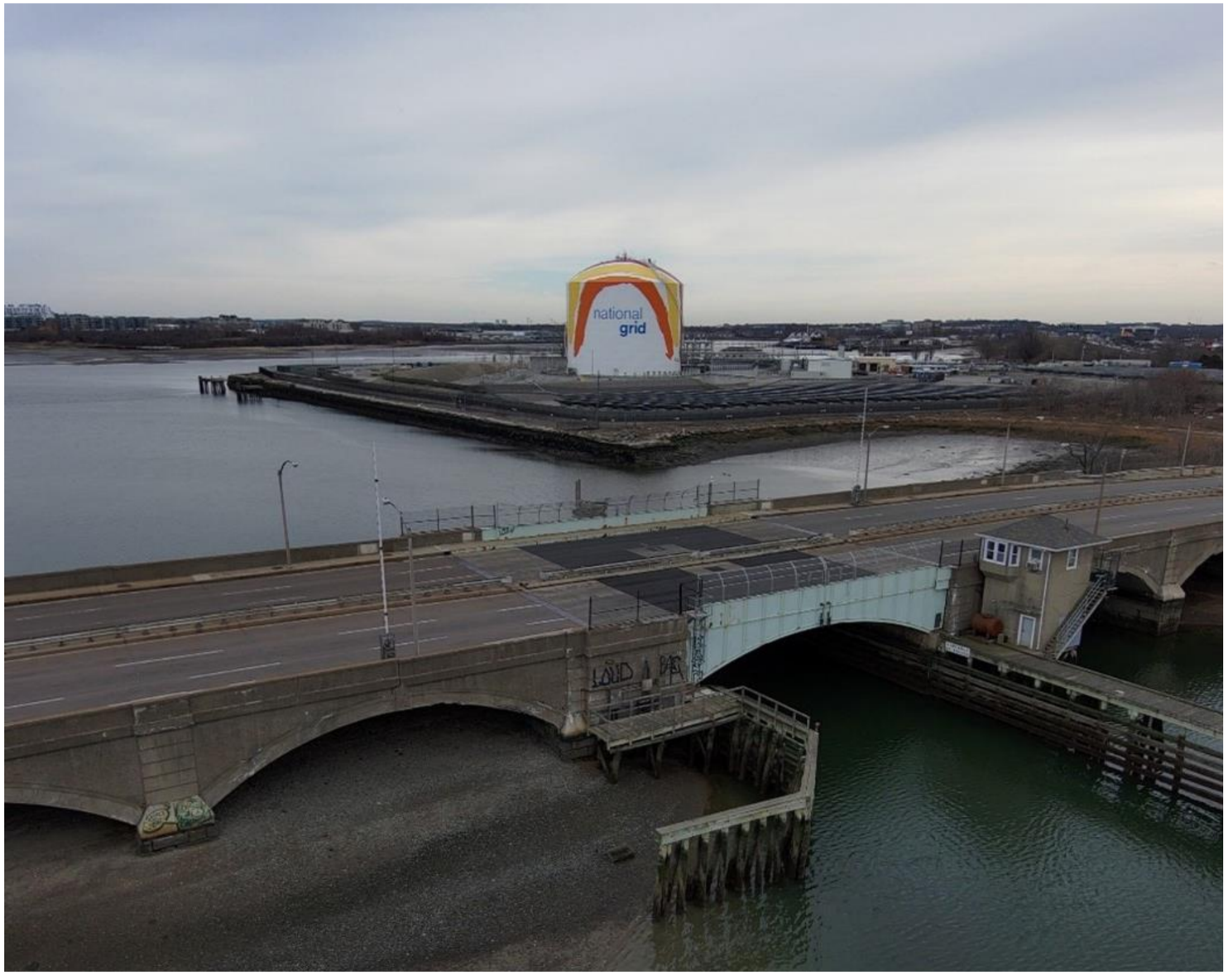
Upcoming public outreach

- Spring/Summer 2026
  - PIM #2
- Please reach out:
  - Existing issues the new bridge can address
  - Thoughts about construction



How to reach us?

- Submit written comments to:

  Carrie Lavallee, P.E., Chief Engineer
  MassDOT
  10 Park Plaza
  Boston, MA 02116
  Attention: MAJOR PROJECTS, PROJECT FILE NO. 613130

- Submit email comments to:

  Beadesbridge@dot.state.ma.us

- Visit the project website and sign up for project emails at:

  www.mass.gov/beadesbridgereconstruction

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Questions & Discussion

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Thank you

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Joseph Breen - Beadesbridge@dot.state.ma.us