

East Las Olas Boulevard over Intracoastal Waterway Bridge Rehabilitation Project Financial Project ID: 449257-1-52-01



Presented to:



Central Beach Alliance
Your Beach. Your Voice. Your Vote.

September 26, 2024

Introductions

Meet the Team



Thuc H. Le, P.E.
FDOT Project Manager
FDOT District Four



Josh Baimel, P.E.
Project Manager/Roadway
Engineer-of-Record
JMT, Inc.



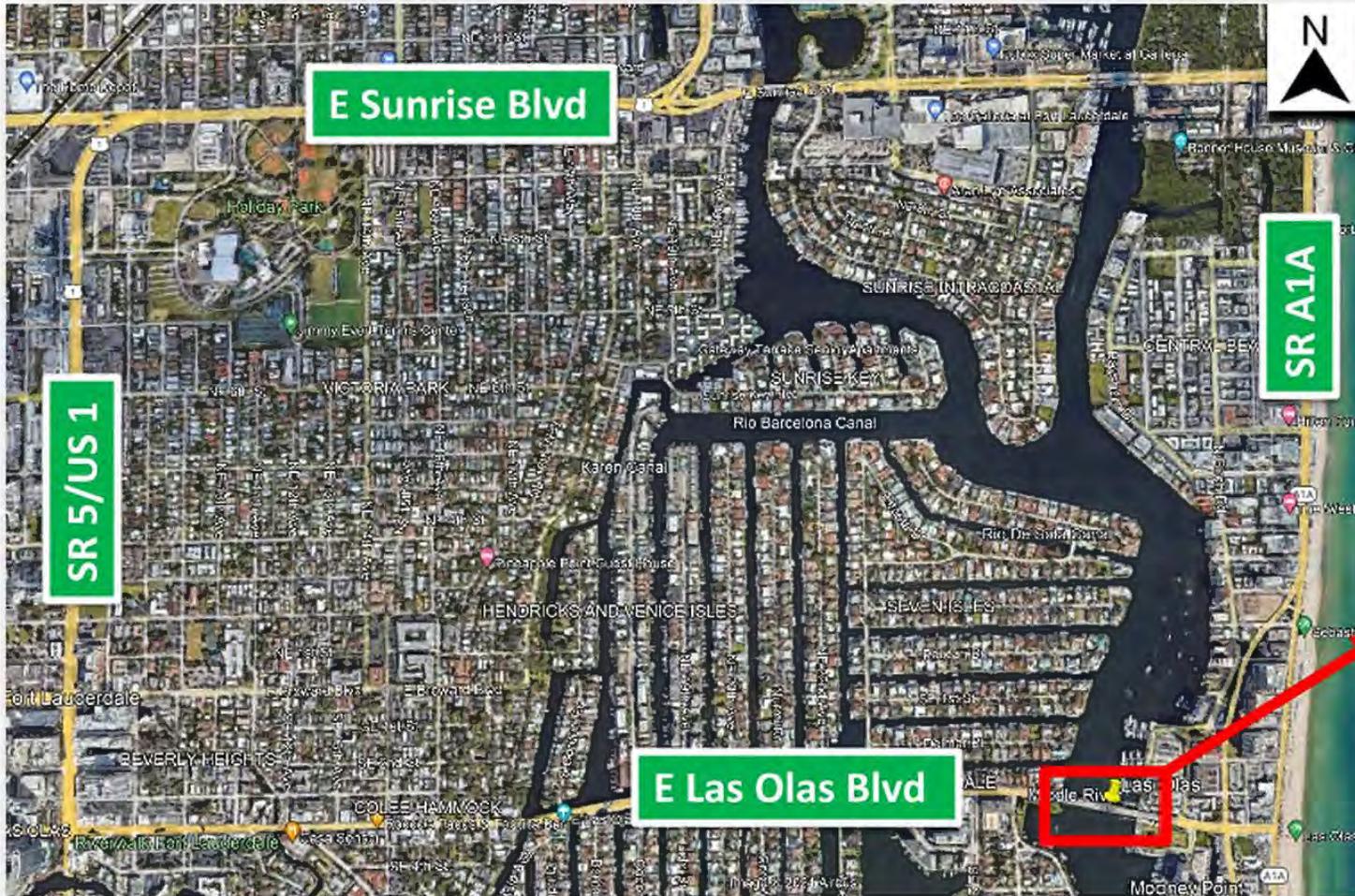
John Danielsen, P.E.
Senior Structural Engineer/
Engineer-of-Record
HDR, Inc.



Dan Dan Zhao, P.E.
Senior Roadway Engineer
JMT, Inc.

Project Location and Overview

Project Location



Project Location link:
<https://tinyurl.com/y8c5znj8>



History of Las Olas Blvd Bridge Projects

Past Improvements:

- 2014 – Bridge painting, deck overlay, and barrier installed in front of sidewalks
- 1998 – **Bridge rehabilitation** (joints, handrail, roadway lighting, ladders and platforms, concrete wheel paths, generator, fender repair, control system, recon machinery, bulkhead, concrete repair, repair and replace structural steel, repaint structural steel)
- 1979 – **Bridge rehabilitation** (machinery and castings, ladders and platforms, repaint structural steel, replace electrical equipment)
- 1977 – Bridge repainted
- 1976 – Fender system replaced

Project Overview

Proposed Improvements:

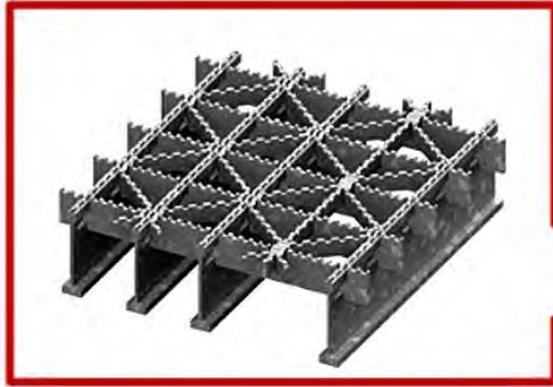
- Replace old deck with new solid surface aluminum deck.
- Paint the movable bridge deck and fascia elements.
- Replace important electrical components and wiring.
- Replace the mechanical span locks which connect the two halves of the movable bridge deck when the bridge is in the “down” position.
- Replace the existing navigation/marine fenders in the waterway, including replacement of the timber piles and support beams.
- Renovate the bridge tender house.
- Minor repaving of the roadway at ends of the bridge and restore traffic monitoring site.

Project Length: 0.207 mile

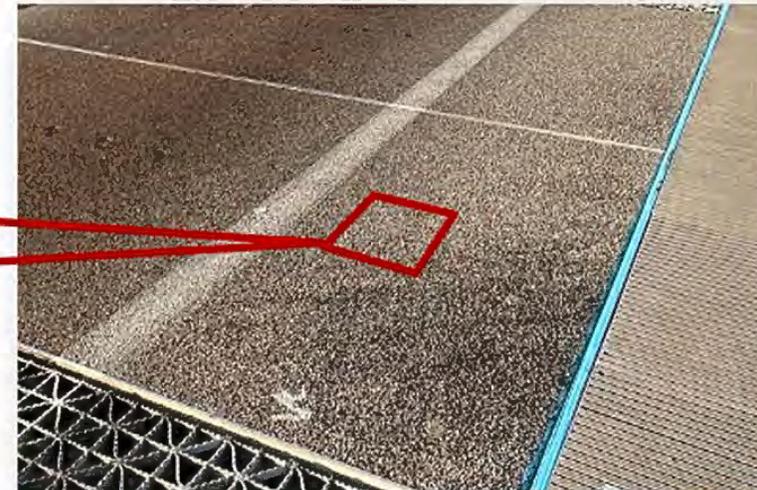
Proposed Improvements

Proposed Improvements

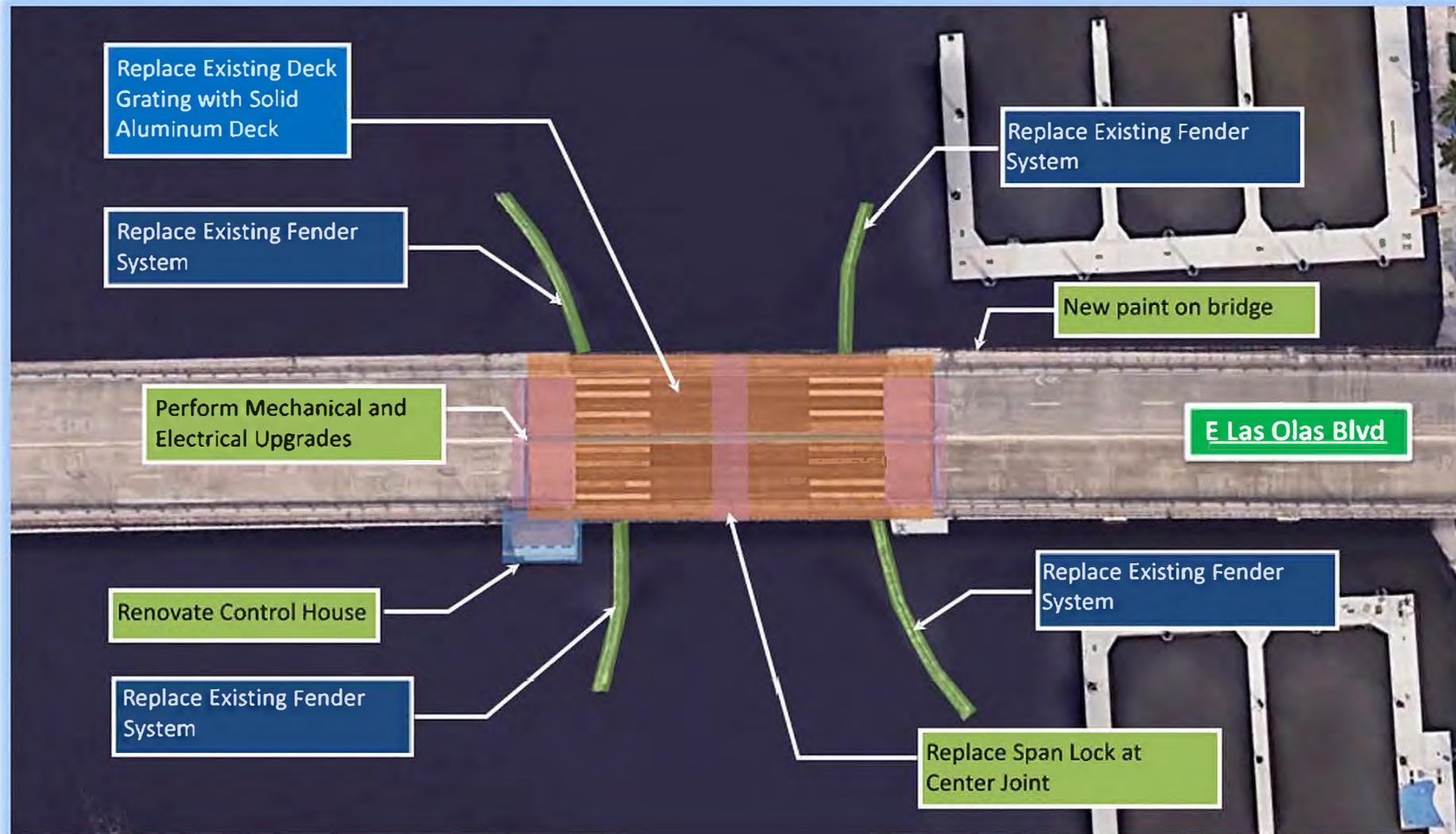
What does the bridge deck look like now?



What will it look like after Construction?
(sample location shown)

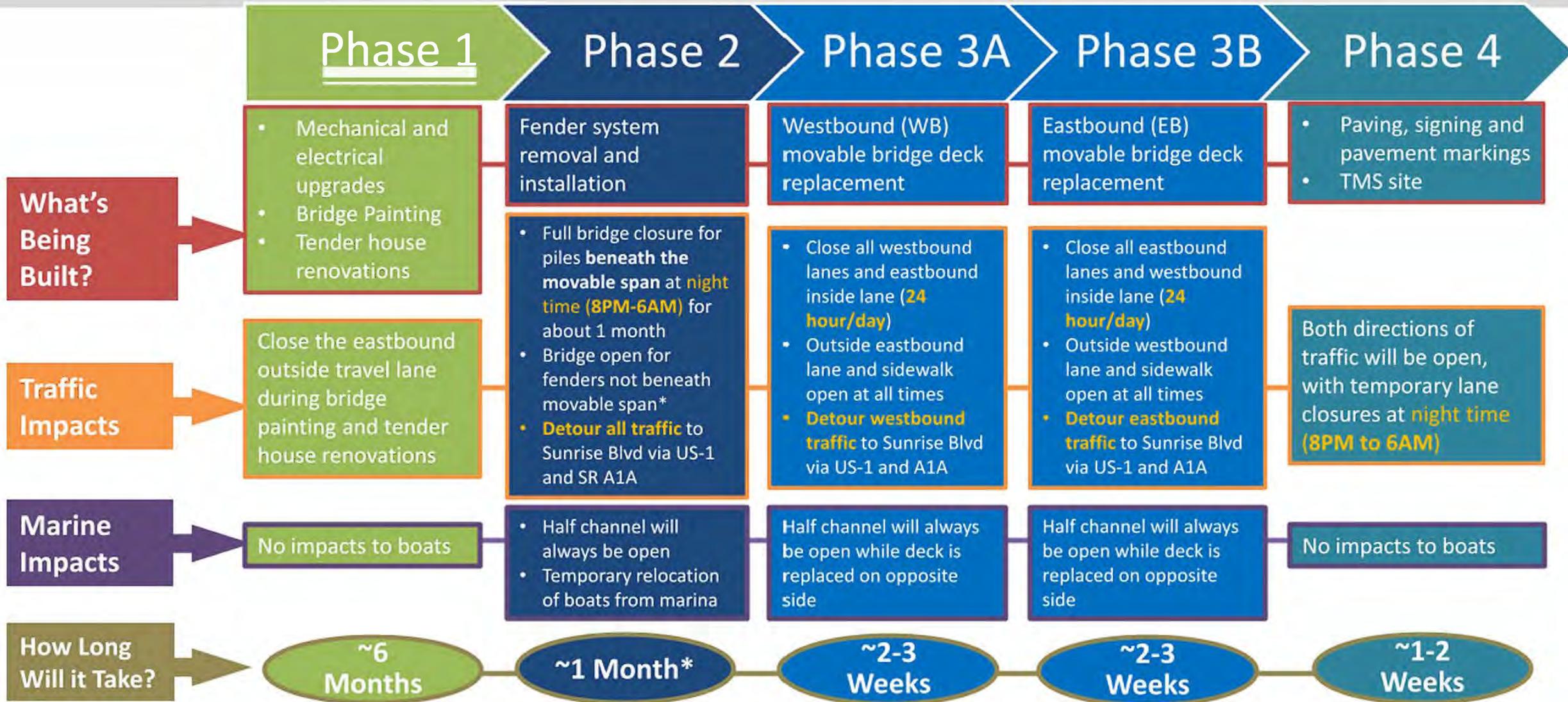


Summary of Proposed Improvements



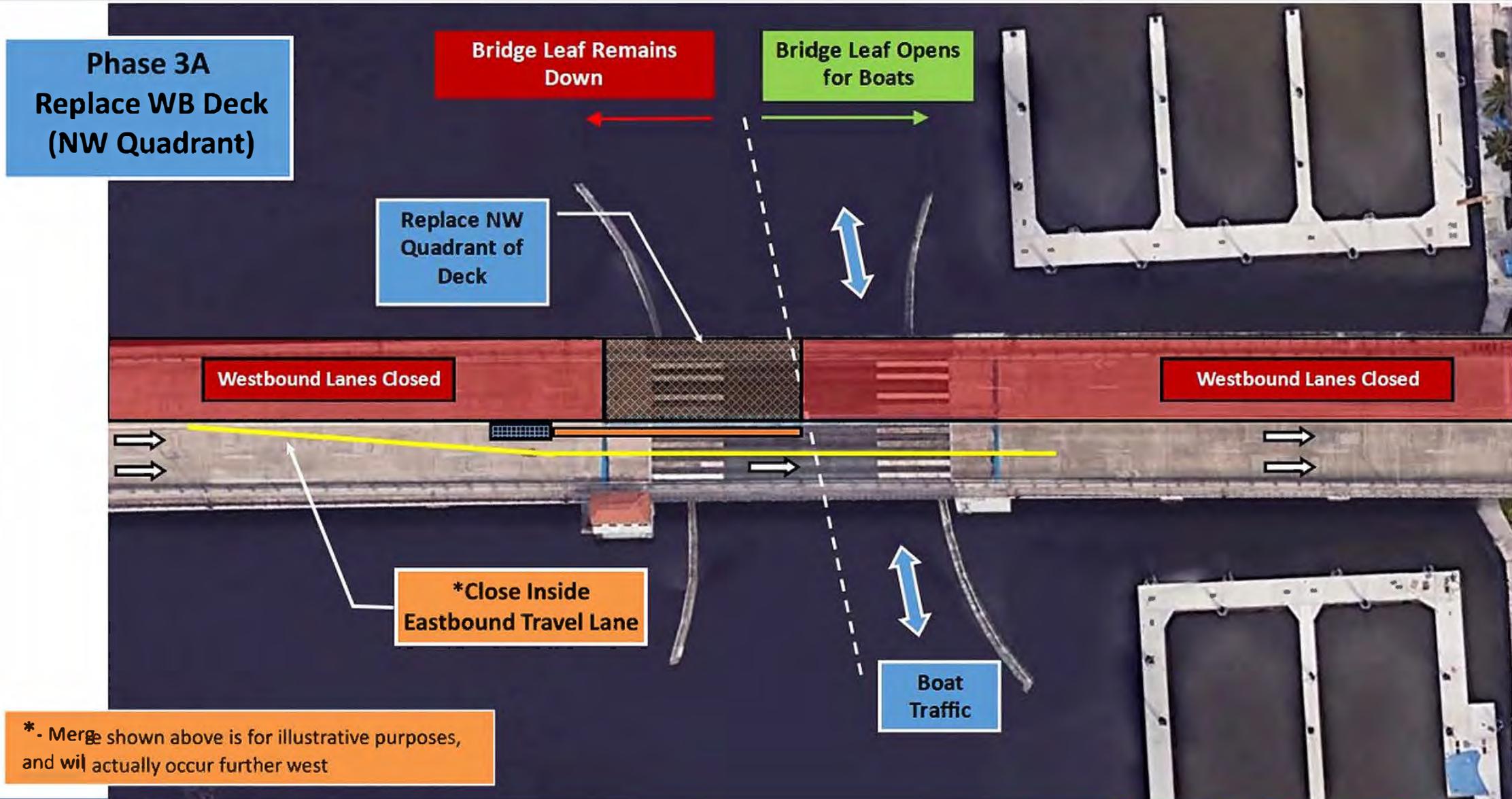
Construction Impacts

Duration and Phasing of Construction

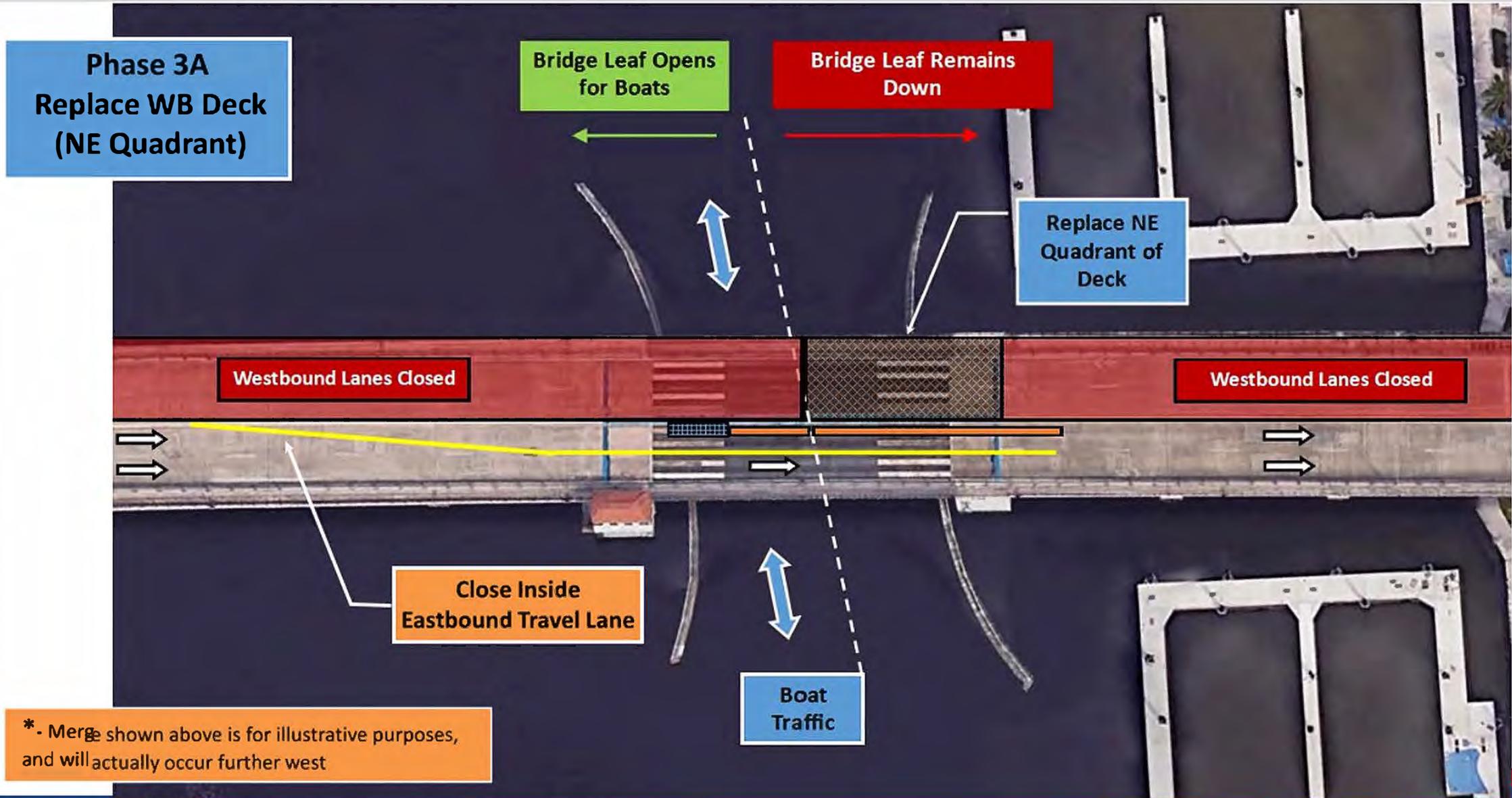


* - ~1 month for piles beneath bridge (detour at night); additional ~ 1-2 months for remaining piles (bridge open to traffic)

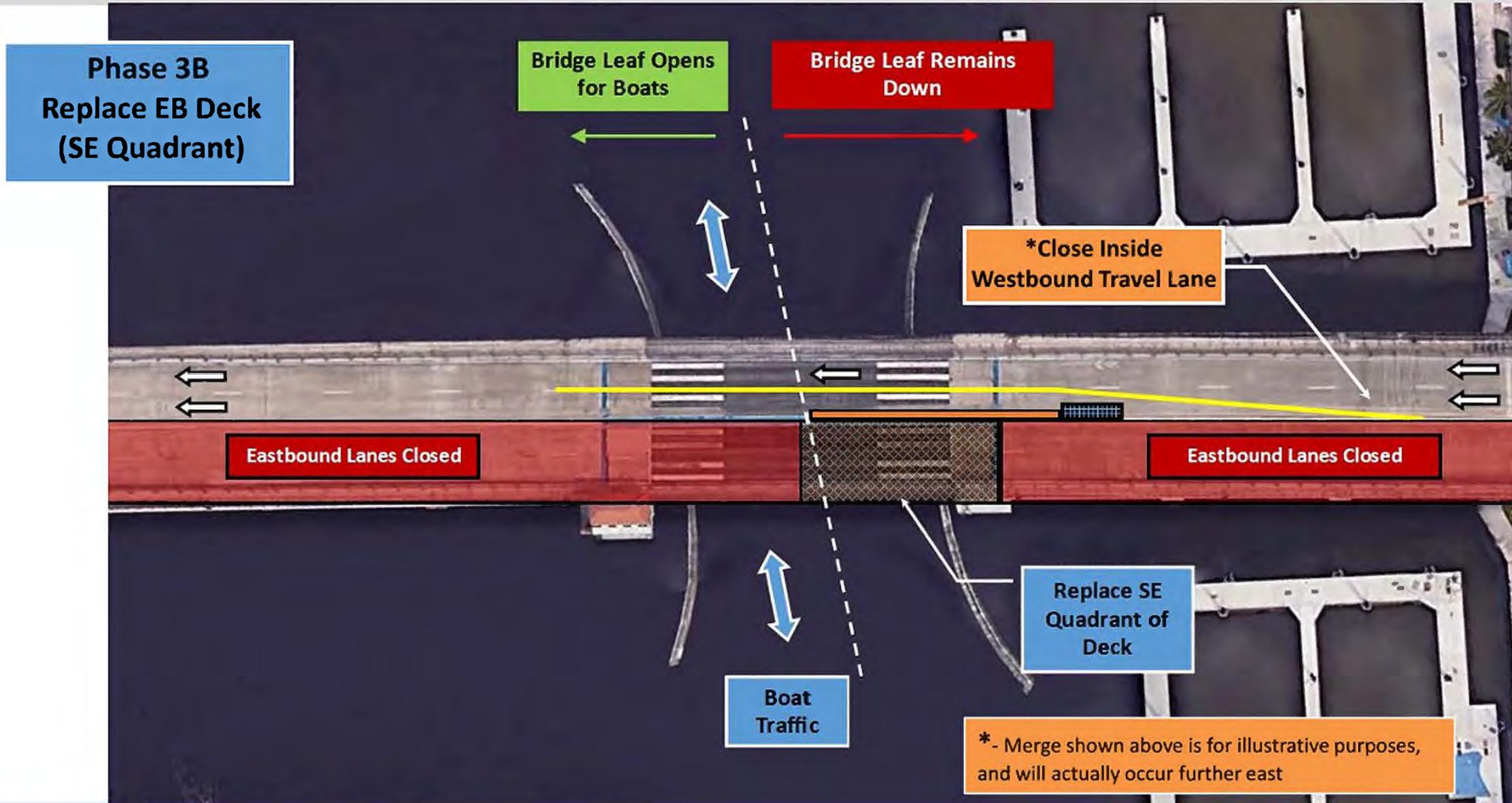
Temp. Traffic Control During Deck Replacement



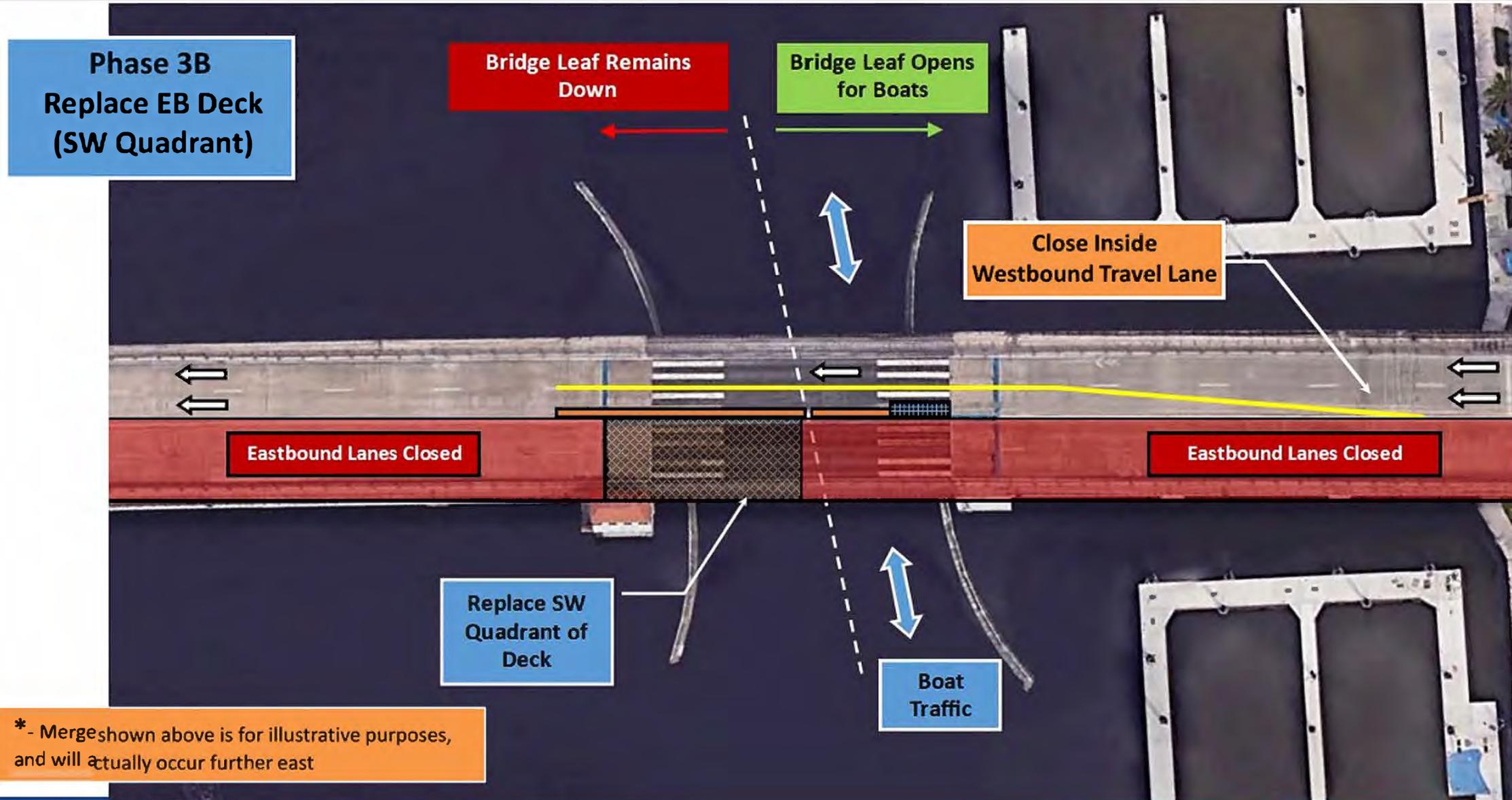
Temp. Traffic Control During Deck Replacement



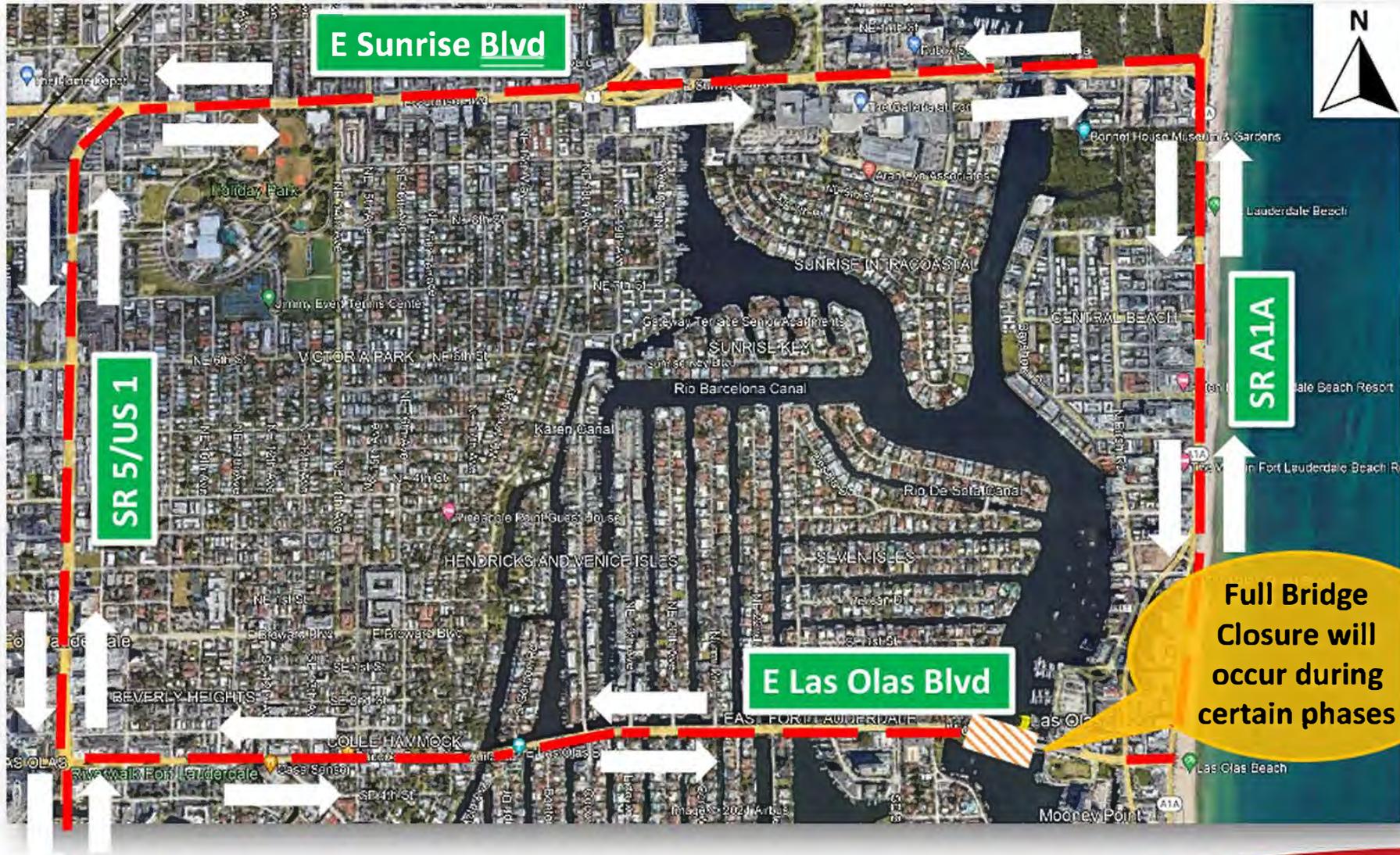
Temp. Traffic Control During Deck Replacement



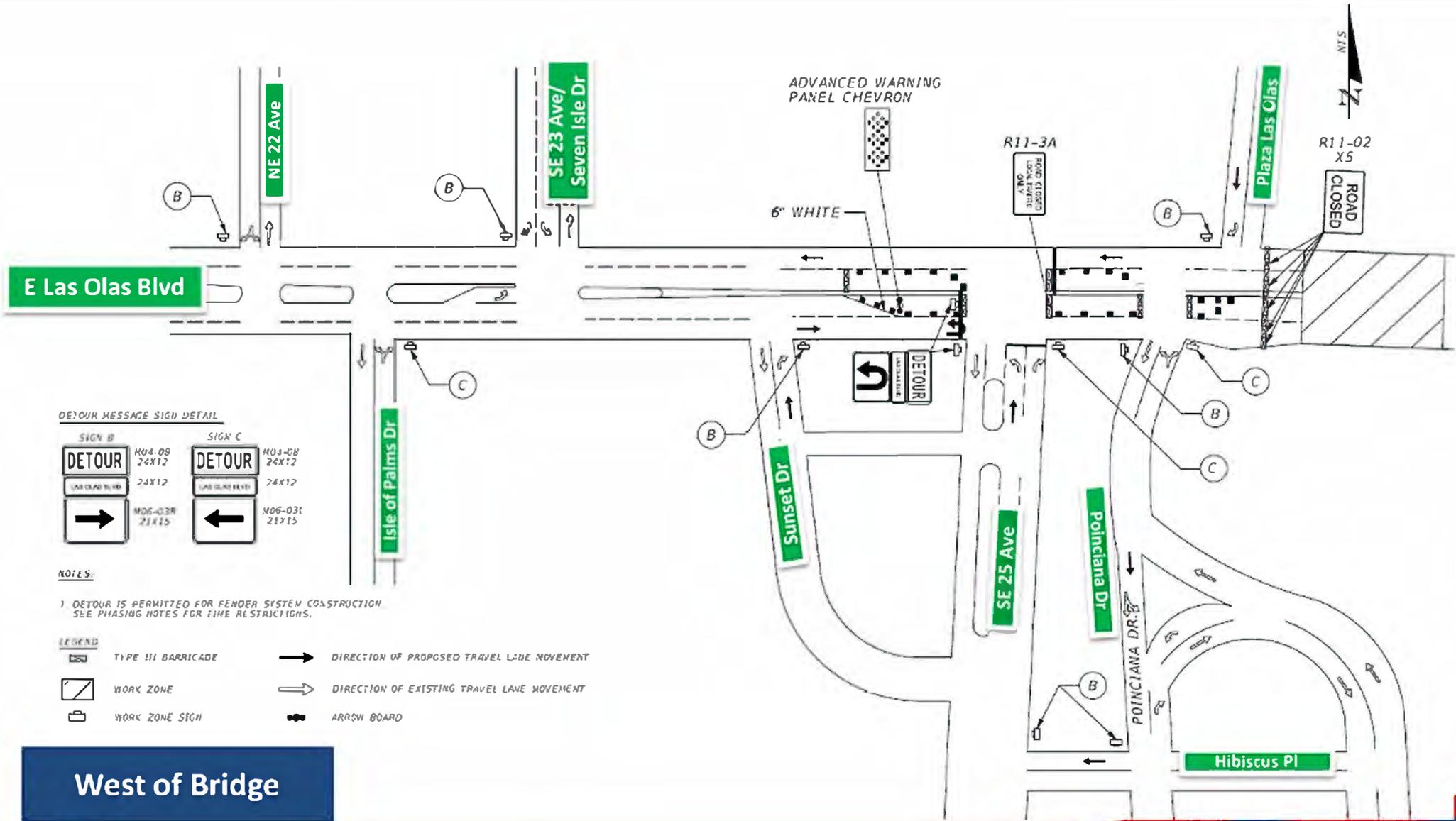
Temp. Traffic Control During Deck Replacement



Temporary Traffic Control Plan (Detour)



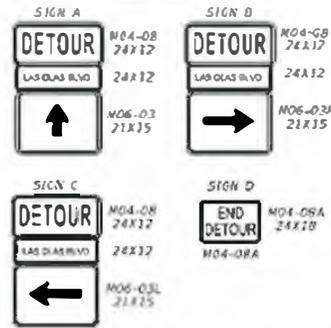
Temporary Traffic Control Plan (Local Traffic)



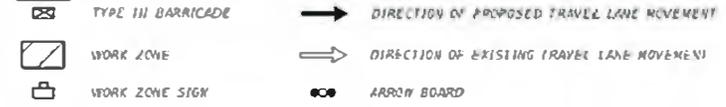
West of Bridge

Temporary Traffic Control Plan (Local Traffic)

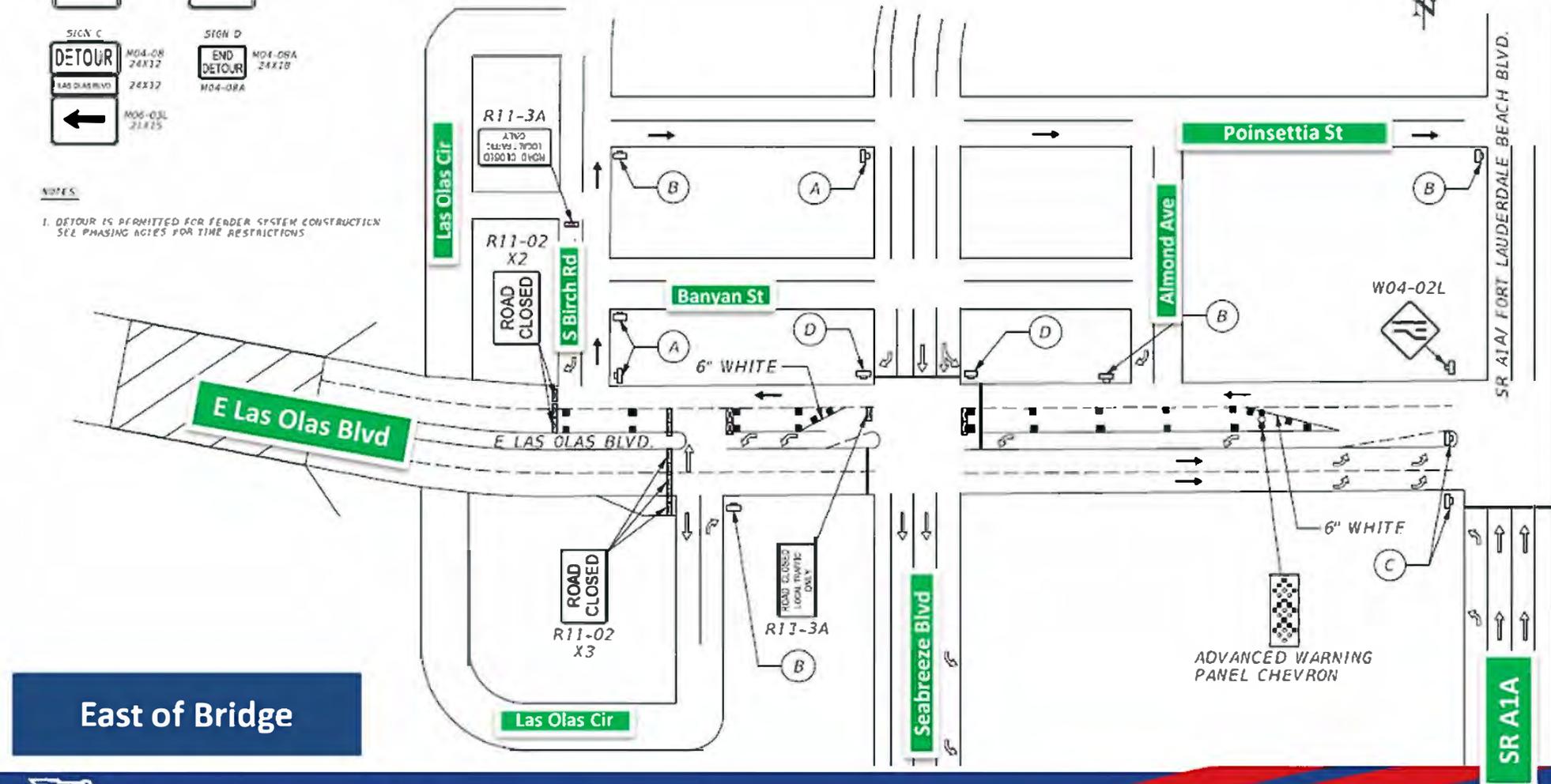
DETOUR MESSAGE SIGN DETAIL



LEGEND



NOTES
1. DETOUR IS PERMITTED FOR FENDER SYSTEM CONSTRUCTION
SEE PHASING NOTES FOR TIME RESTRICTIONS



Additional Temp. Traffic Control Plan Issues

Minimizing Delays/Impacts to Everyday Travel:

- Using partial detours in lieu of full bridge closure during deck replacement
 - Maintains pedestrian access by keeping one sidewalk open
 - Helps reduce travel times/burden by keeping one bound of traffic open
- **SMART** Work Zone collaboration (ex. adjustment of signal timing as needed along detour routes; providing/updating **advanced traveler information**)
- Coordinating with concurrent bridge project on Sunrise Blvd to ensure all lanes on Sunrise Blvd bridge are open during Las Olas Blvd bridge closure/detour
- No bridge closures during “major” events (ex. Boat Show, Air Show, Spring Break) coordinated with the City of Fort Lauderdale

Addressing Response Times for Emergency Vehicles:

- Advanced notification/coordination with fire and police prior to detours and closures
- An additional informative public meeting will be held prior to construction

Project Benefits, Schedule, and Cost

Key Benefits of this Project

Electrical, Mechanical, Painting, and Tender House:

- **Aesthetic** enhancements to bridge
- Add **“redundancy”** to operating machinery (ex. dual motors)
- New windows, doors, bathroom, and **painted exterior at tender house**
- New span lock (at center opening joint) will **eliminate banging sounds** between the spans

New Solid Aluminum Deck:

- Employ Accelerated Bridge Construction (ABC) – prefabricating deck, installing while assembled
- Solid deck provides **reduced road noise**, **better rideability for bicyclists**, and is more **resilient** (non-corrosive) and **aesthetic**

New Fender System:

- **Resilient** fiber-reinforced polymer, **better at absorbing energy from vessel impacts**
- Durable, easy to maintain, and environmentally friendly
- **Reduced noise during pile installation**

Paving, Striping, Signing and Traffic Monitoring Site (TMS):

- **Aesthetics** and **safety** enhancements (ex. two-tone skip stripes)
- New vehicle detection loops and pull boxes at TMS



Project Schedule and Cost

- **Estimated Construction Start: Spring 2026**
- **Estimated Construction End: Spring 2027**
- **Estimated Construction Cost: \$11 million**



**Public Workshop
(In-person and
Virtual):
11/14 @ 6PM at
ArtServe Fort
Lauderdale**

How Long Will These Improvements Last?

- Machinery – 25 years
- Paint – 10 years
- New Solid Deck and Fender System – Lifetime of bridge



Thank you!
Q&A