





# CONCEPTUAL UDC APPLICATION

UPC 104888 Mayo Bridge Replacement

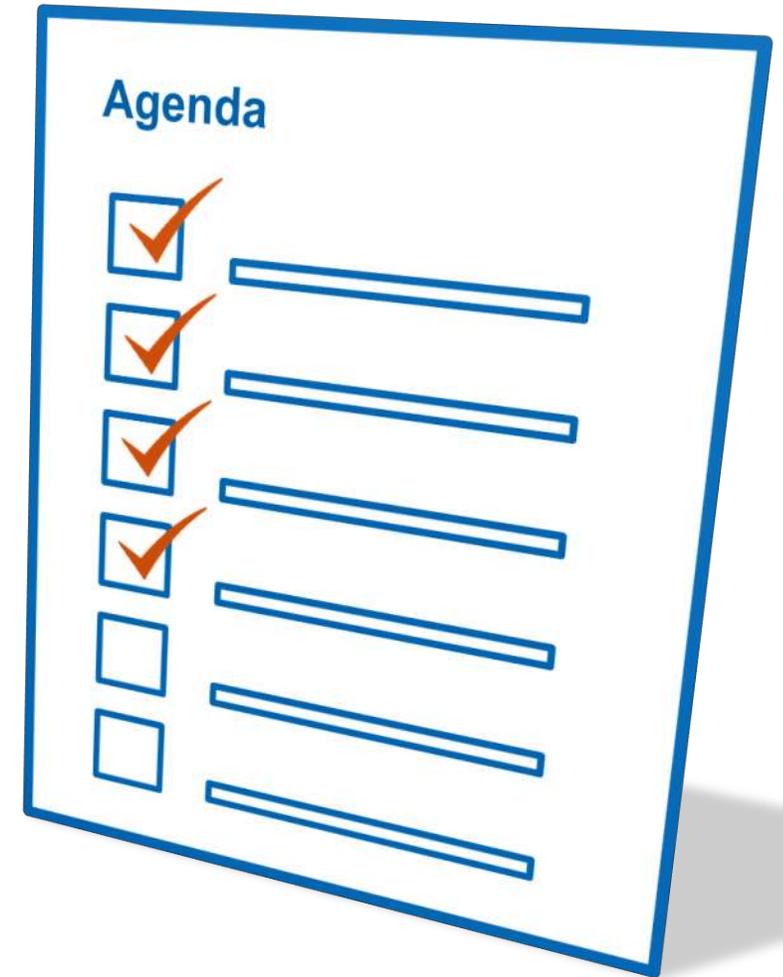


| Will Wheeler, Dr. John Kim

01/15/2026

# Agenda

- **Project Information**
- **Existing Bridge**
- **Proposed Concept**
- **Sequence of Construction**
- **Coordination**
- **Recommendation**



# PROJECT INFORMATION



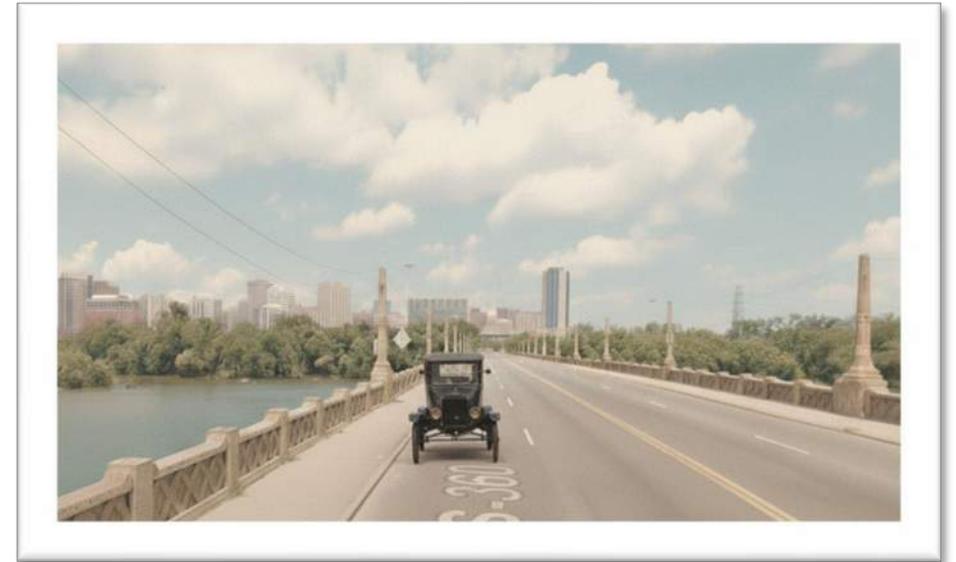
# Project Goal and Purpose

- **Goal**

- To keep bridge infrastructure safe and operational by meeting all State and Federal Standards and to improve multimodal safety by providing wider sidewalks and bike lanes. In addition, provide a strong multimodal connectivity along this vital transportation corridor

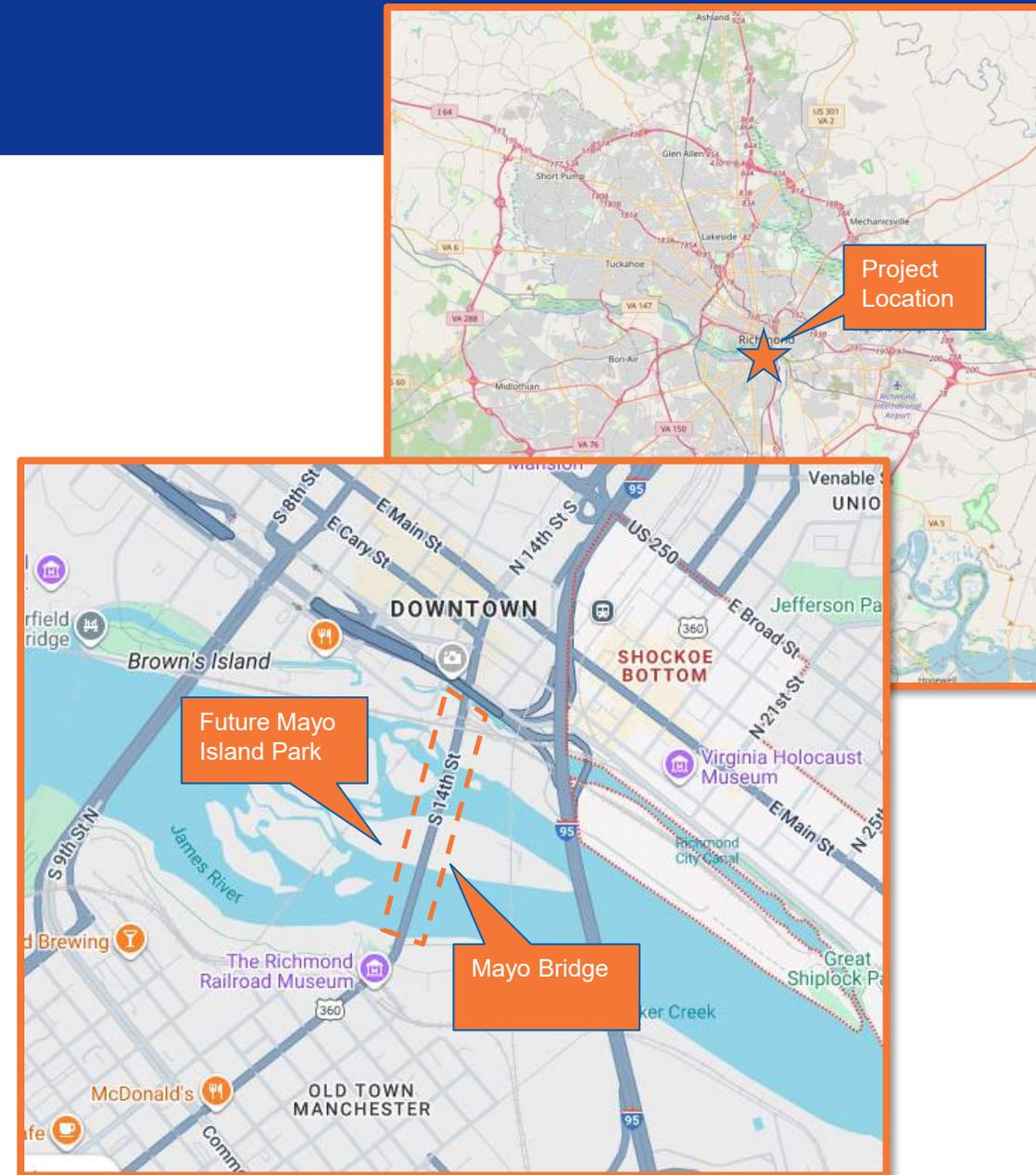
- **Purpose**

- To replace the 112-year-old bridge
- To remove “Poor” condition from City Inventory
- To enhance Multimodal Safety and Mobility



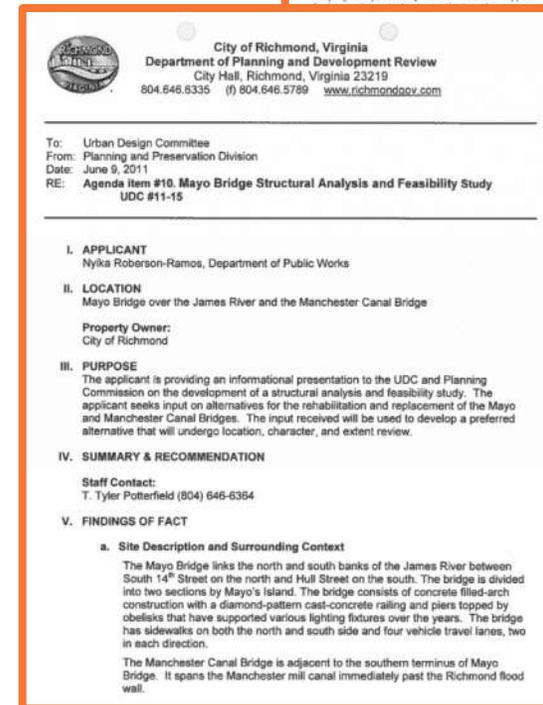
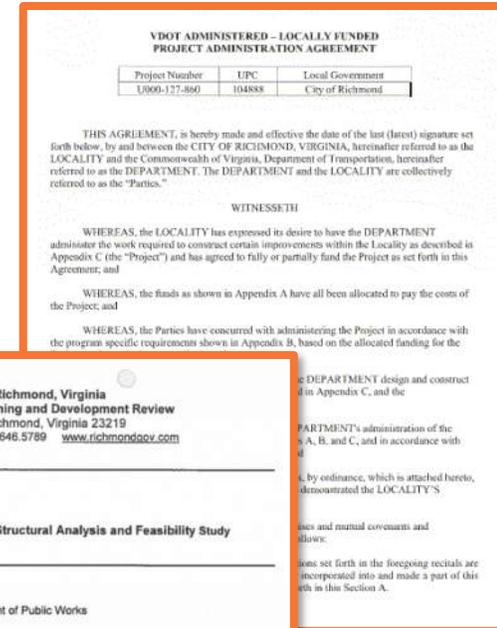
# Project Location

- **Project is located along Hull Street and 14<sup>th</sup> Street, across the James River and Mayo Island Park**
  - Between the Old Town Manchester District and the Shockoe Bottom District
  - Fast developing area
  - Facilitates new public park



# Scope History

- **2011: Mayo Bridge Feasibility Study**
  - Administered by City
  - Historic look considered important (arch, rail, etc)
- **2022: Superstructure Replacement Evaluation**
  - Administered by VDOT
- **2024: Total Bridge Replacement**
  - Result from sub-structure geotechnical finding
  - Island purchase allowed a new alignment to be considered



# Current Schedule

Milestone	Planned Finish
City Agreement	January 2022
Initial Public Survey and Public Involvement	June/September 2024
<b>UDC/CPC Conceptual Meeting</b>	<b>January 2026</b>
NEPA and L&D Public Hearing	Fall 2026
UDC/CPC Final Meeting	Early 2027
RFQ Advertise	Early 2027
RFP Advertise	Summer 2027
Award	Late 2027
Construction Complete	Mid-2032

# Cost

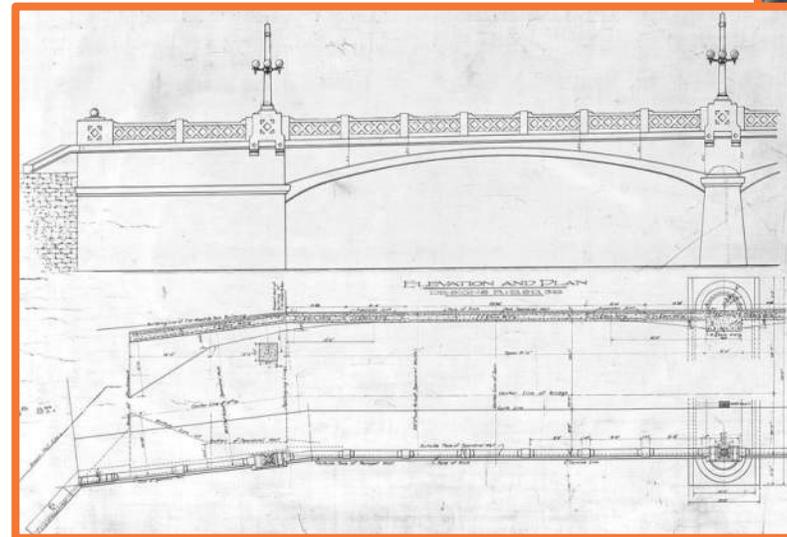
Phase	Estimate	Comments
PE	\$7,775,000	
RW	\$10,347,458	
CN	\$163,683,756	
<b>Total</b>	<b>\$181,806,214</b>	
<b><i>Funding</i></b>	<b><i>\$88,067,313</i></b>	<b><i>City exploring additional funding options</i></b>

# EXISTING BRIDGE



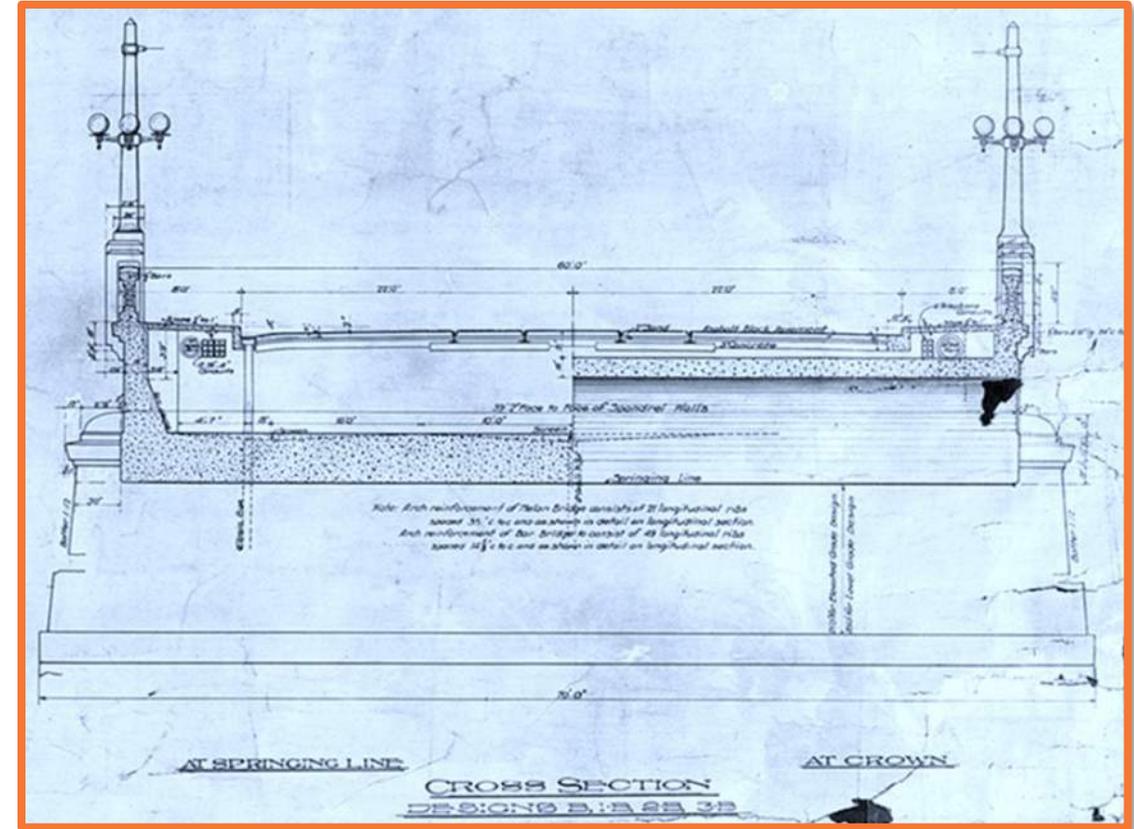
# Description

- **Constructed in 1913**
  - Earth filled spandrel arches
- **Part of the Manchester Industrial Historic District**
- **Two bridges**
  - **North Bridge**
    - 559 ft long
    - Seven (7) spans
  - **South Bridge**
    - 867 ft long
    - Eleven (11) spans



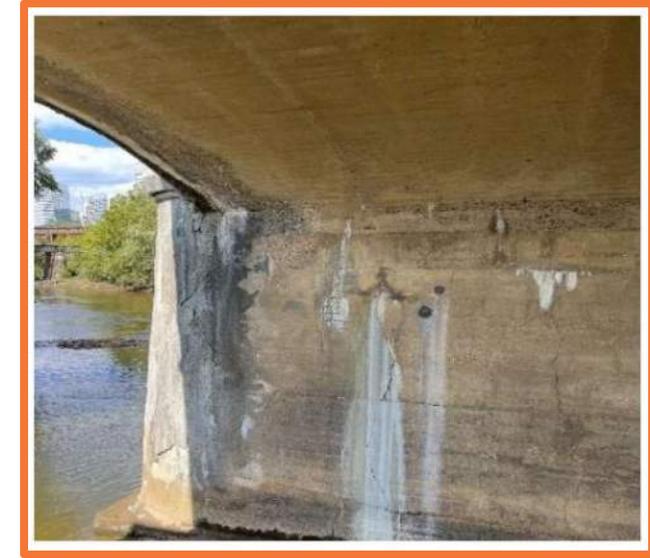
# Description (Continued)

- **National Highway System (US Route 360)**
  - 19,500 ATD (2023 data)
- **Typical Section**
  - 60 feet wide out-to-out
  - 44 ft travel lane
    - Four (4) Vehicular lanes at 11 ft each
  - 6 ft sidewalk on each side



# Condition

- **Regular Inspections (yearly)**
  - Super structure: Poor Condition
  - Sub-structure: Fair Condition
- **Geotechnical Investigation 2024**
  - Presence of ASR Confirmed in some piers
    - ASR anticipated in multiple piers
- **Scope changed from superstructure replacement to full bridge replacement**
  - Discovery of ASR in other piers during construction likely, so replacement mitigates risks



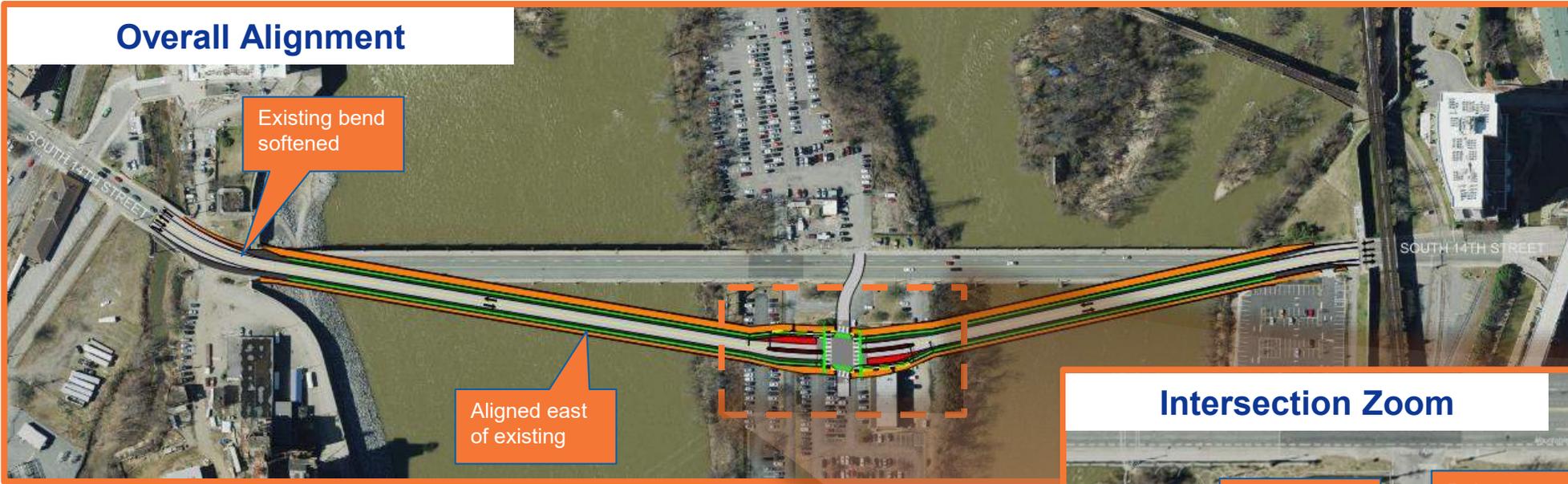
**Figure 4a from Sub-structure Analysis Report:** Grout leak through pier wall

# PROPOSED CONCEPT

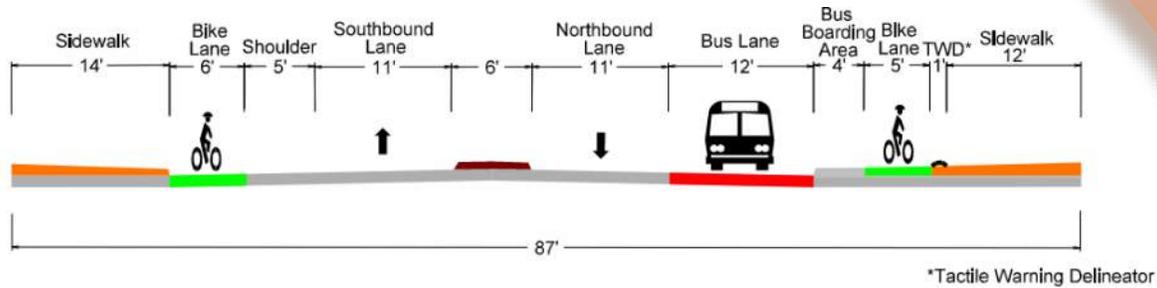
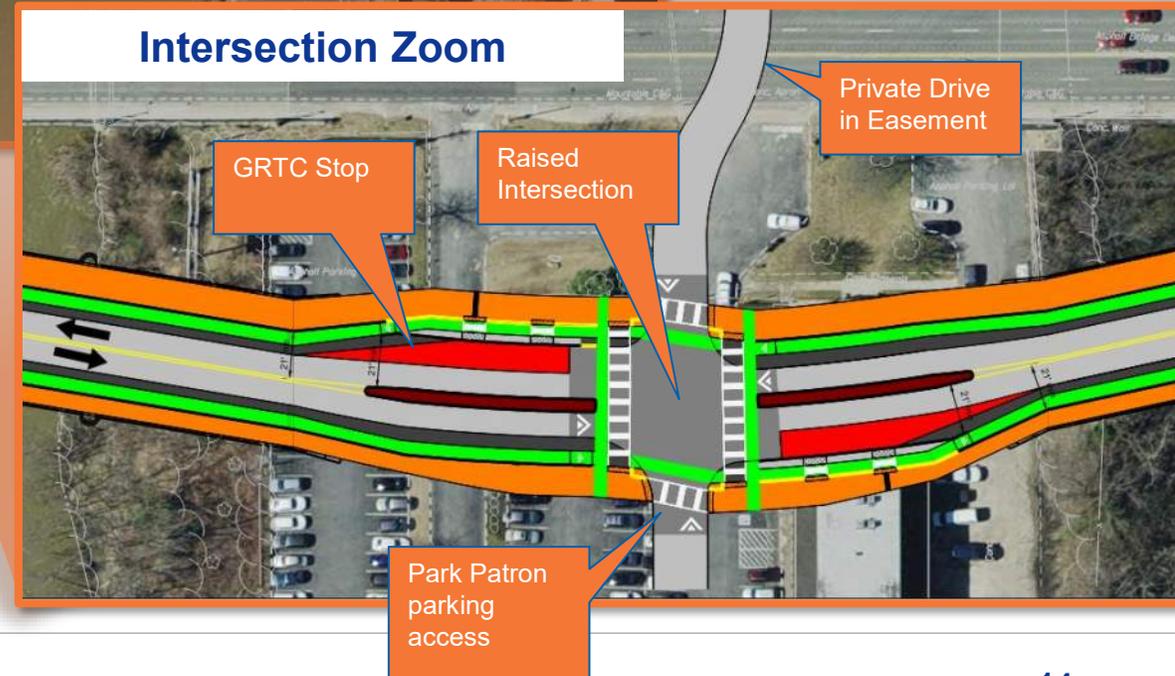


# Road Concept

## Overall Alignment

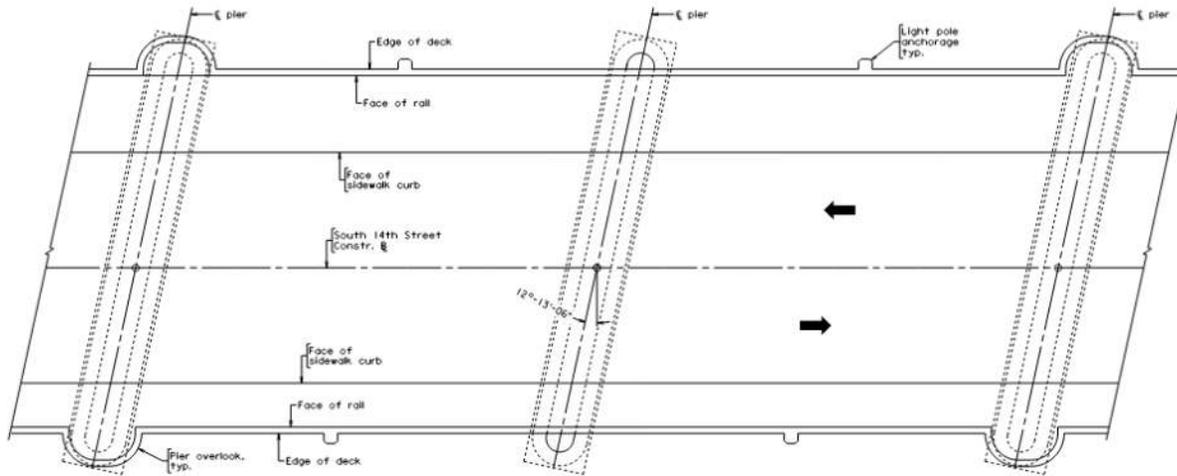


## Intersection Zoom

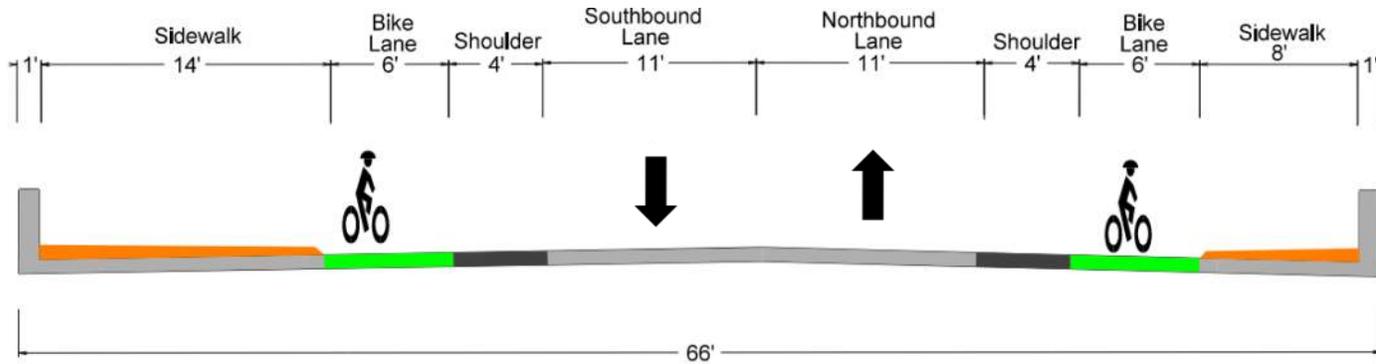


Typical Section at Bus Station (example side)

# Bridge Concept

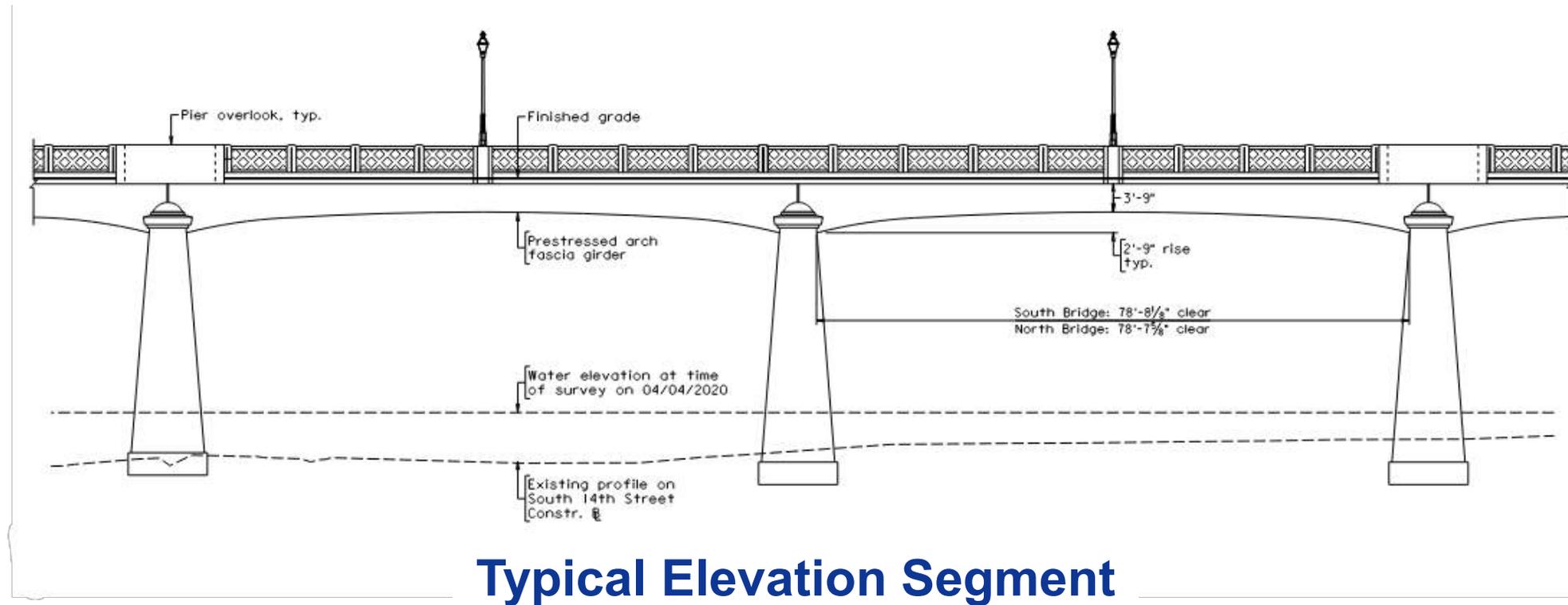


## Typical Plan Segment



## Typical Section

# Bridge Concept (Continued)



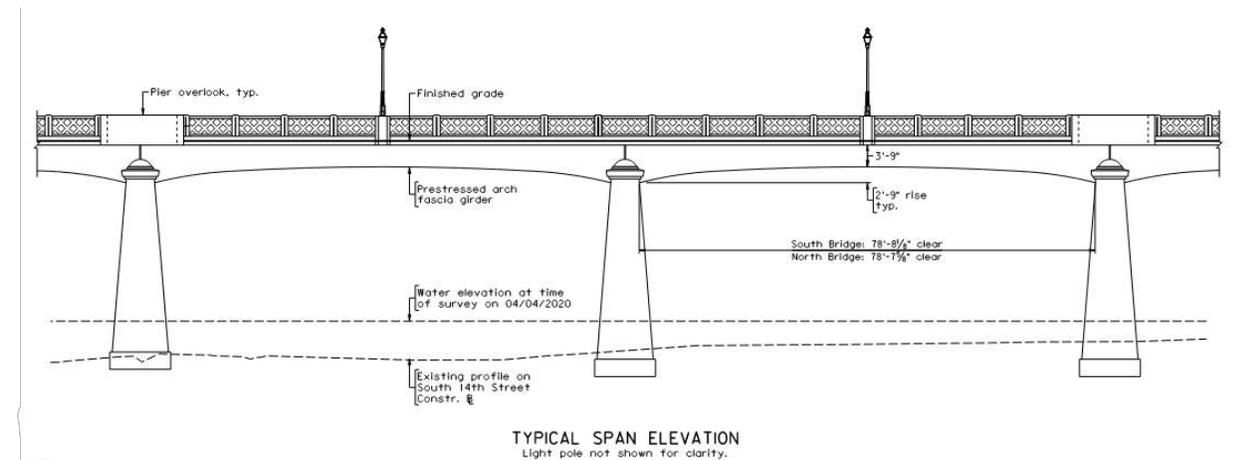
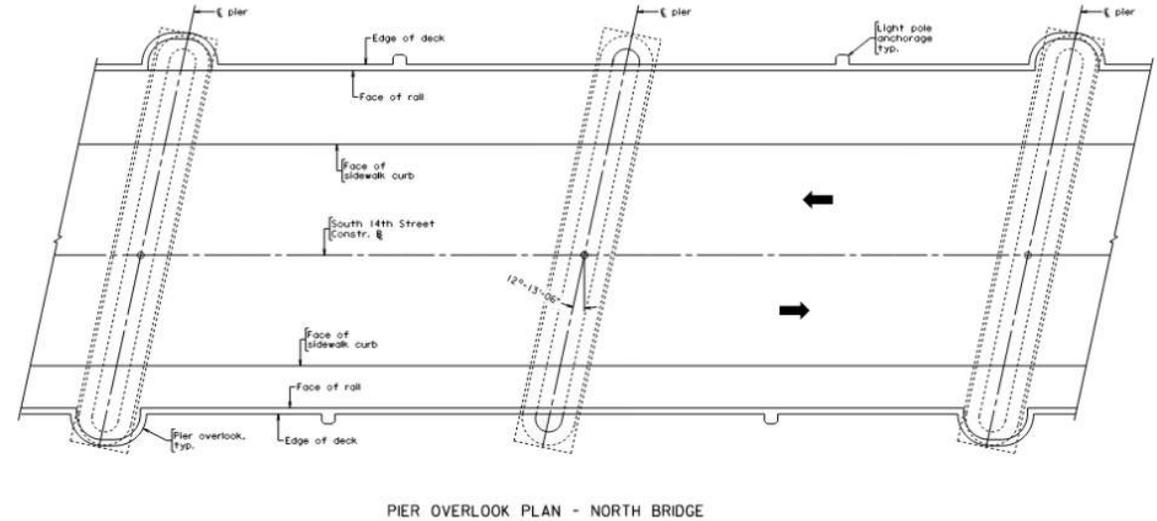
# Bridge Superstructure

- **Length**

- Approx 590 ft (N) and 850 ft (S)
- Final lengths will be set by design-build team
  - Minimum length will be defined in the procurement documents

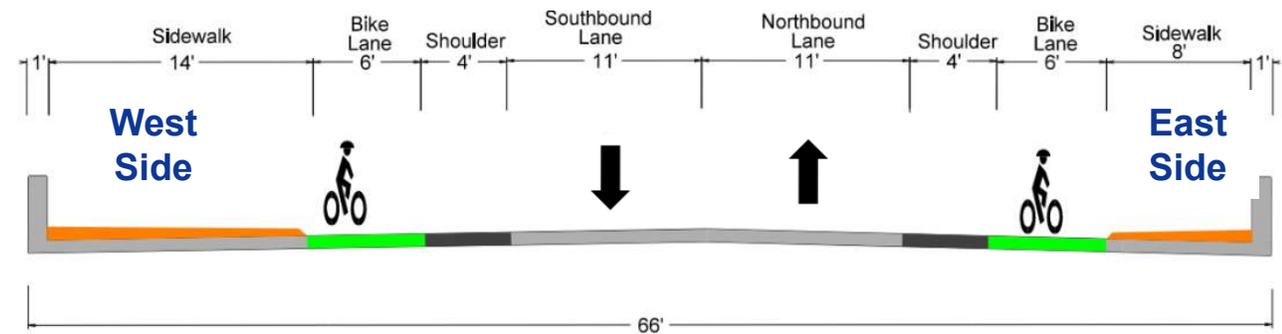
- **Structural System**

- Prestressed concrete beam with Arch façade



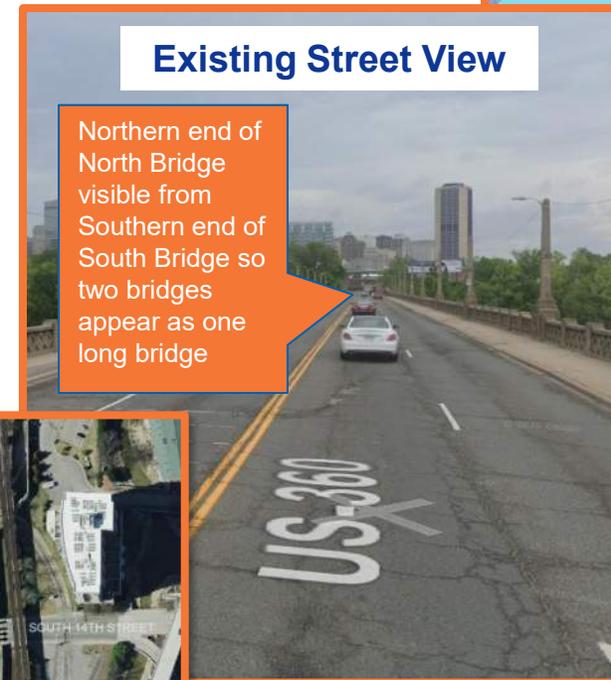
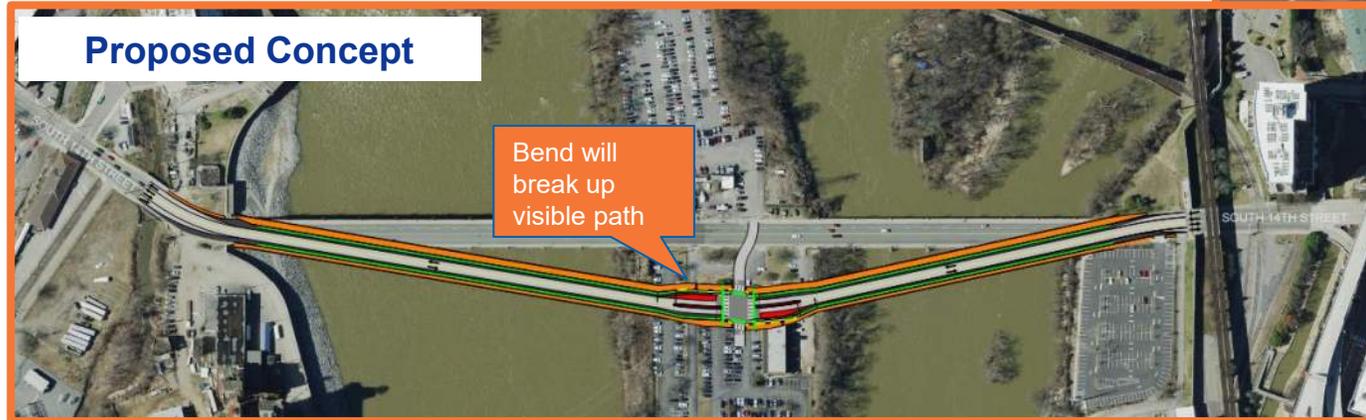
# Bridge Superstructure (Continued)

- **Width**
  - 66 Feet out-to-out
- **Capacity**
  - Two travel lanes at 11 ft each (22 ft total)
  - Two bike lanes at 6 ft each (12 ft total)
  - Two Pedestrian paths at 14 ft and 8 ft



# Key Roadway Safety Features

- **Traffic Calming**
  - Posted speed reduced to 25 MPH
  - Alignment change (reduces “long bridge” feel that encourages faster speeds)

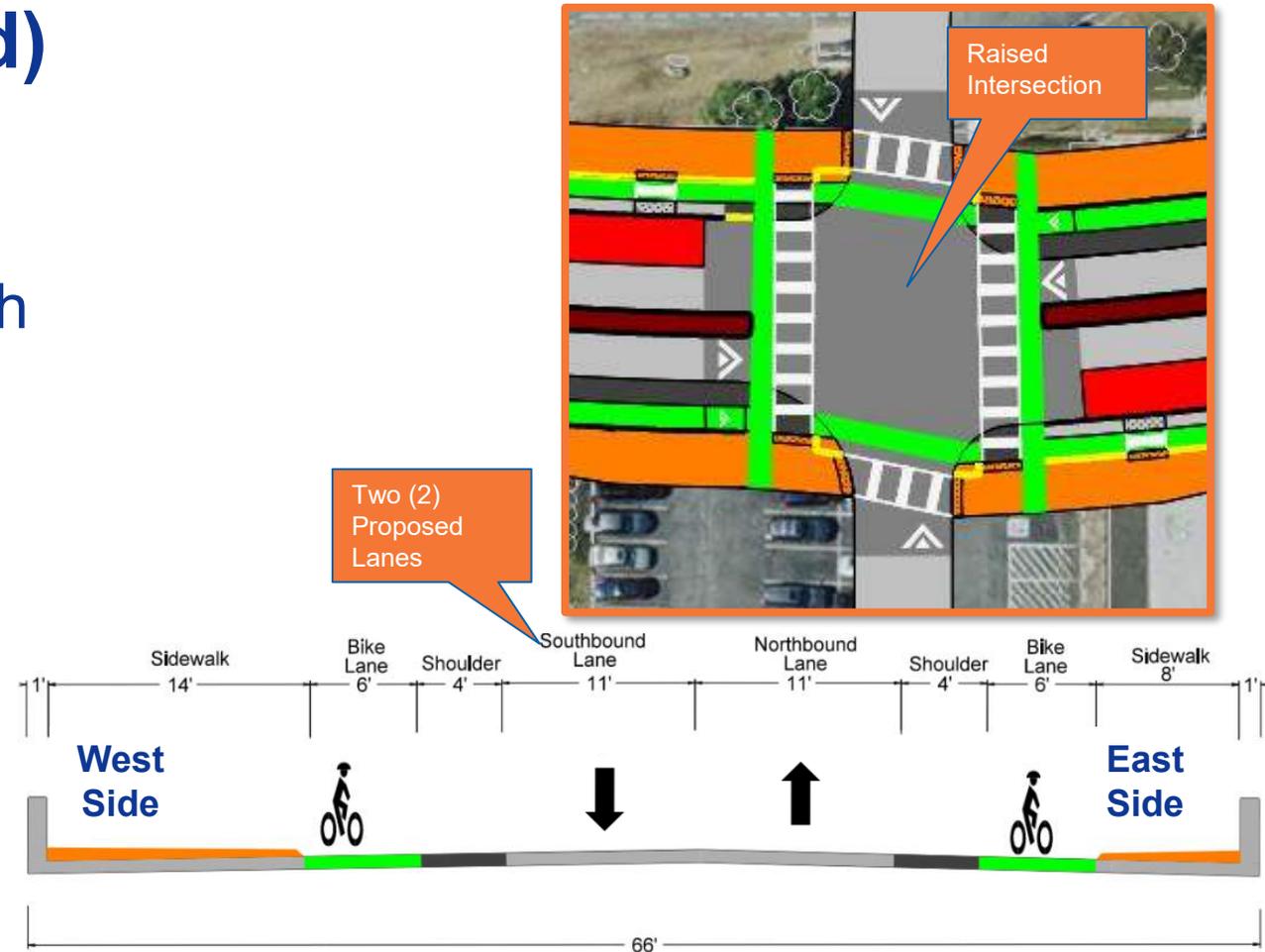


# Key Roadway Safety Features (Continued)

- **Traffic Calming (Continued)**
  - Road diet applied (2 lanes v/s 4 lanes)
  - Raised intersection on island with RRFB for pedestrian crossing



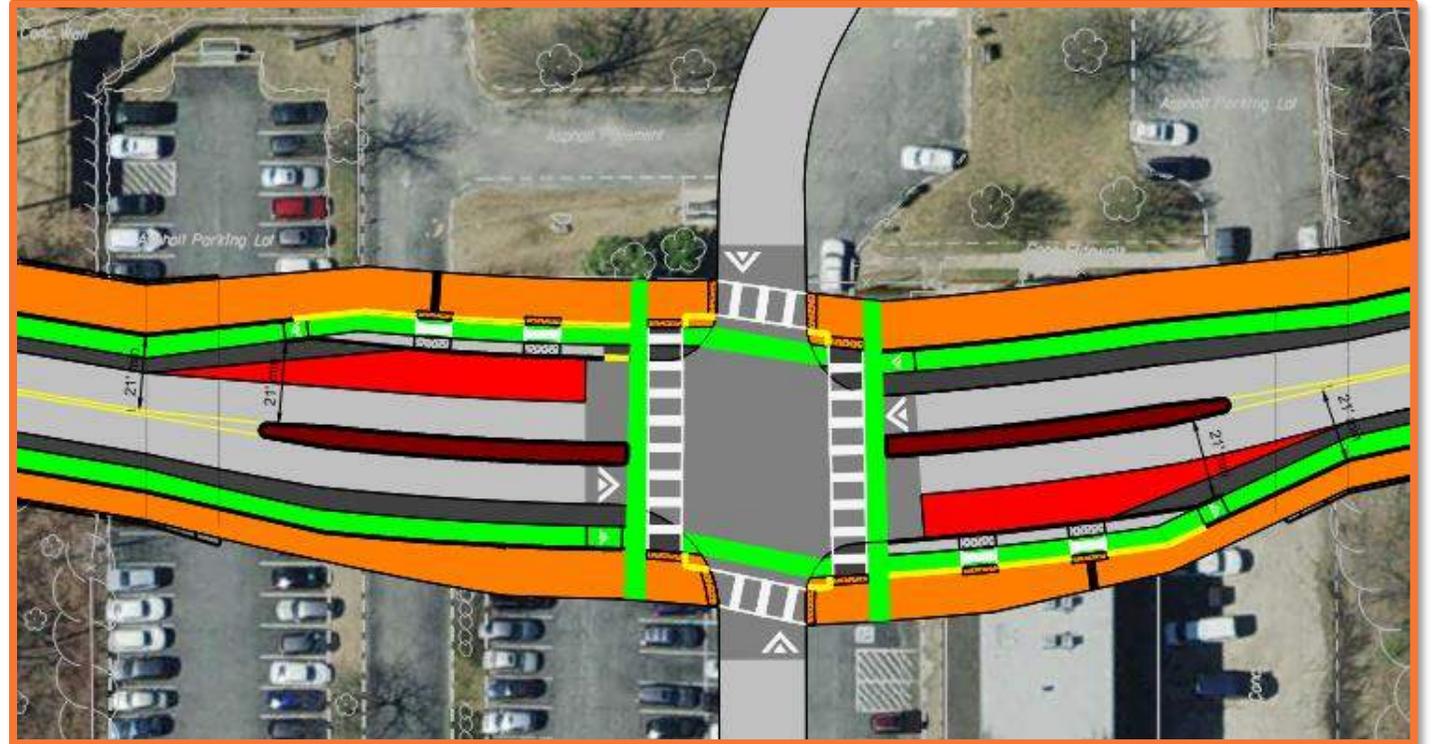
Existing Street View



Proposed Typical Section (Example Side)

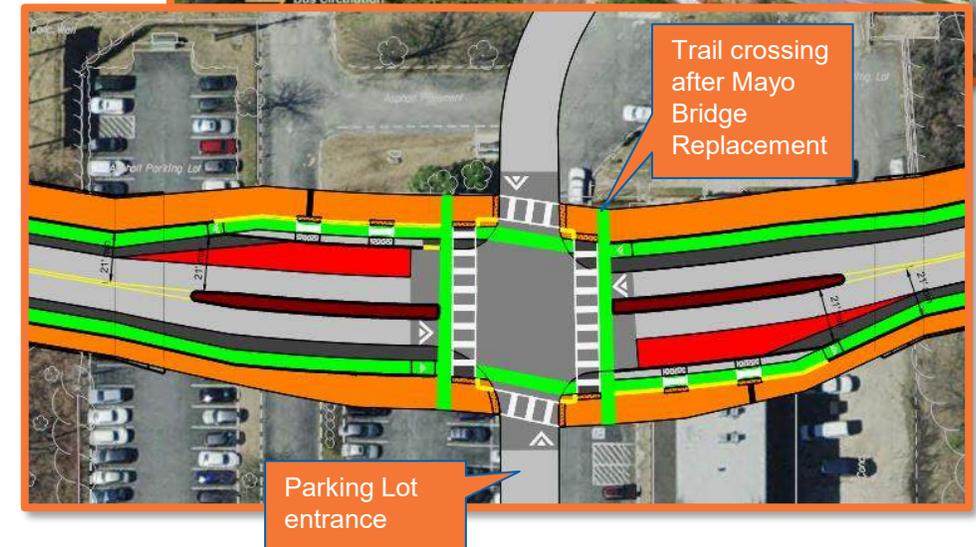
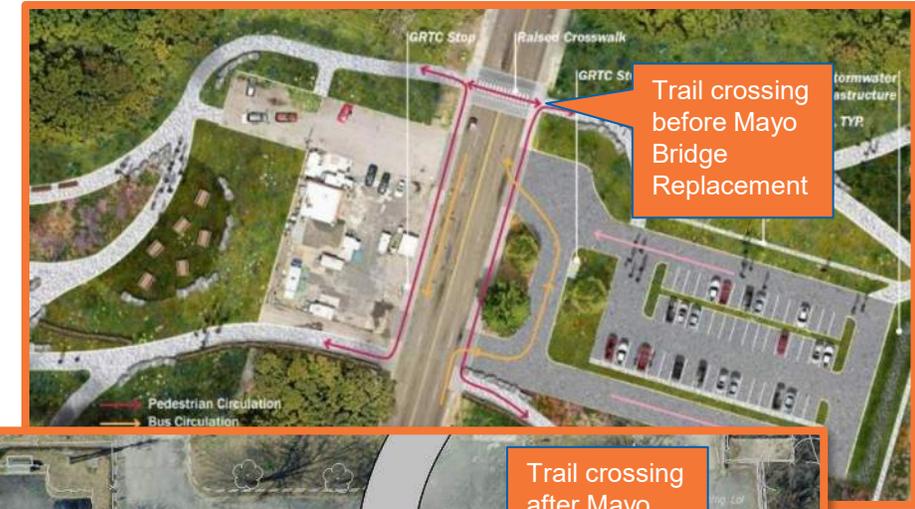
# Key Roadway Recreation Features

- **Multimodal Accommodations**
  - Bike lanes added to connect with trails
  - GRTC Stops for both directions
    - Bike Lane interface with Bus stops and sidewalk per NACTO Guidance



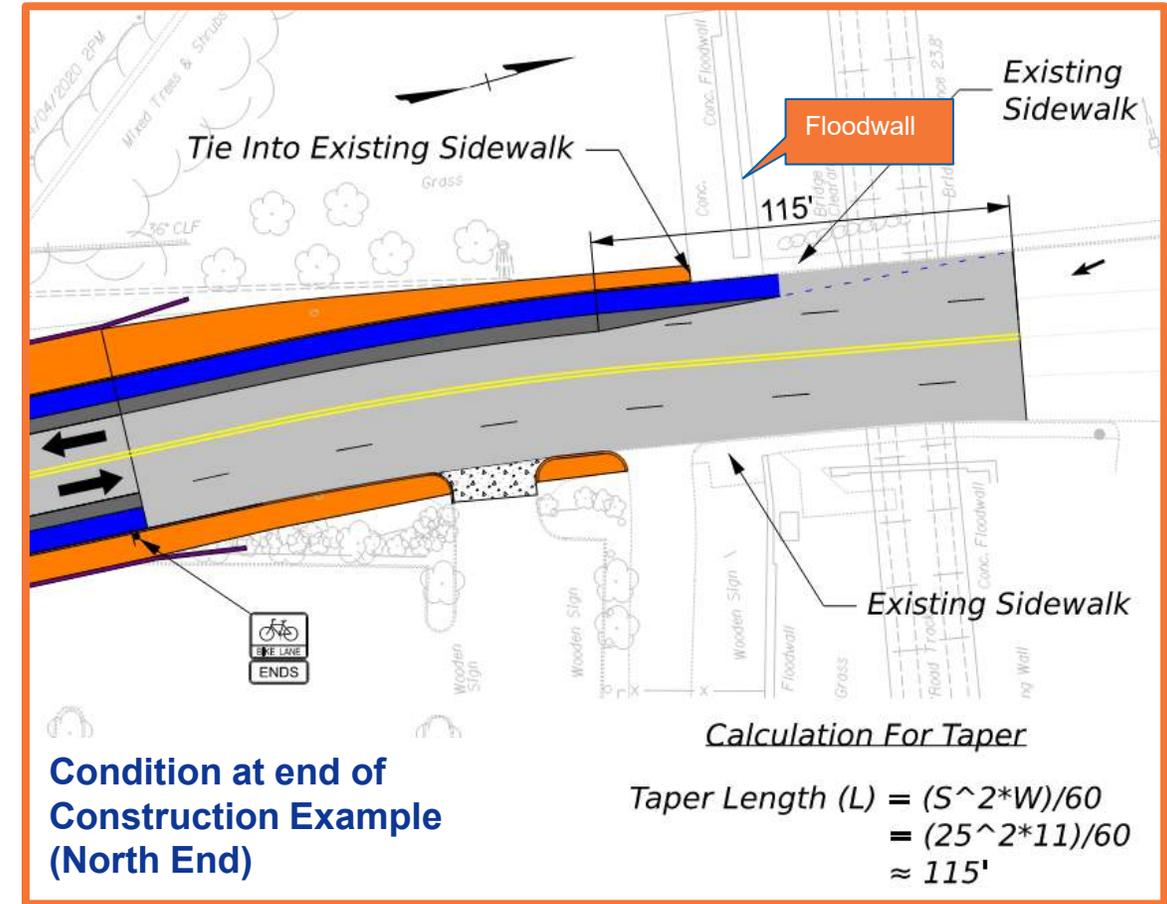
# Key Roadway Recreation Features (Continued)

- **Integration with new Mayo Island Park**
  - Raised intersection and RRFBs facilitate park patron movement
  - Bus stops and commercial entrance facilitate park as a destination
- **Increased sidewalk width**
  - Up to 26 feet total on Mayo Island Park
  - Facilitates bus stops



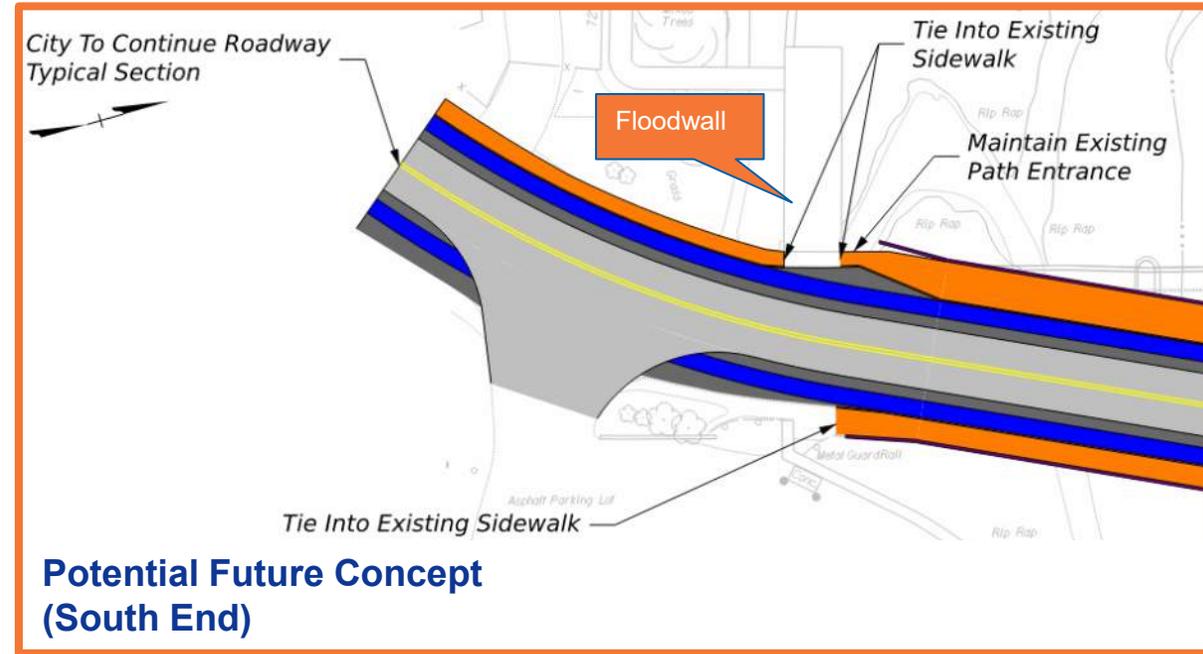
# Key Roadway Network Features

- **Integration with existing network**
  - Sidewalk crossing floodwall will remain unchanged
- **End-of-Construction Concept**
  - Sidewalk tapers to match existing near floodwall
  - Dedicated bike lane ends before flood wall



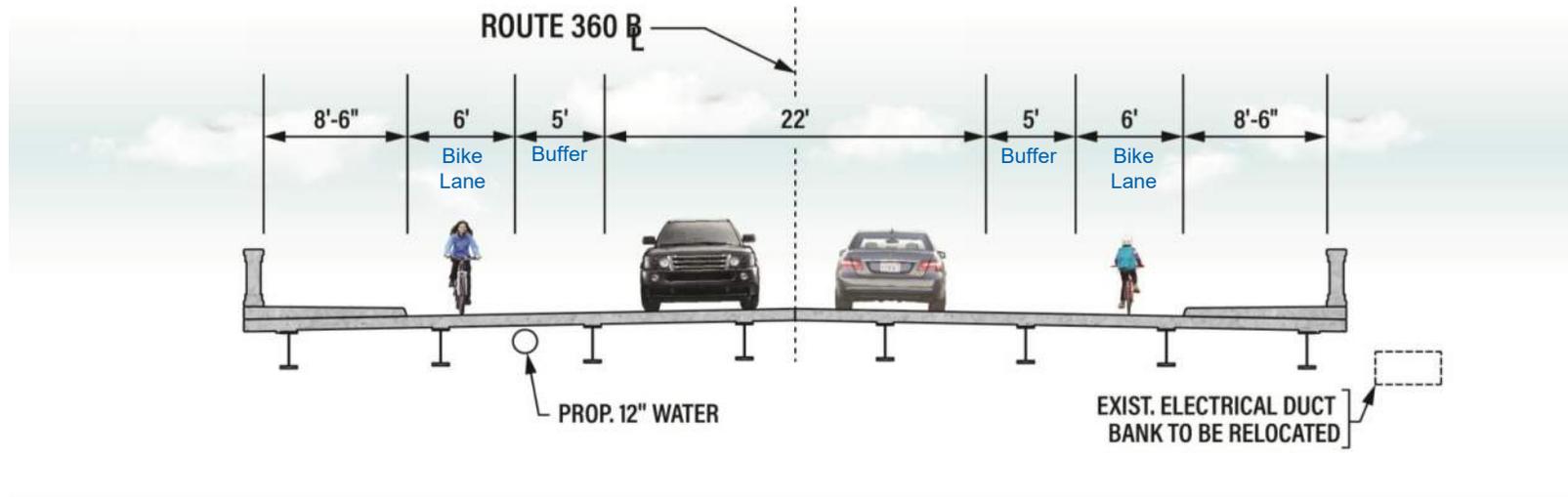
# Key Roadway Network Features (Continued)

- Integration with existing network (con't)
- **Potential Future Concept**
  - Sidewalk tapers to match existing near floodwall
  - Dedicated bike lane continues through flood wall
    - Ties to potential future Manchester Canal section approved by Planning Commission



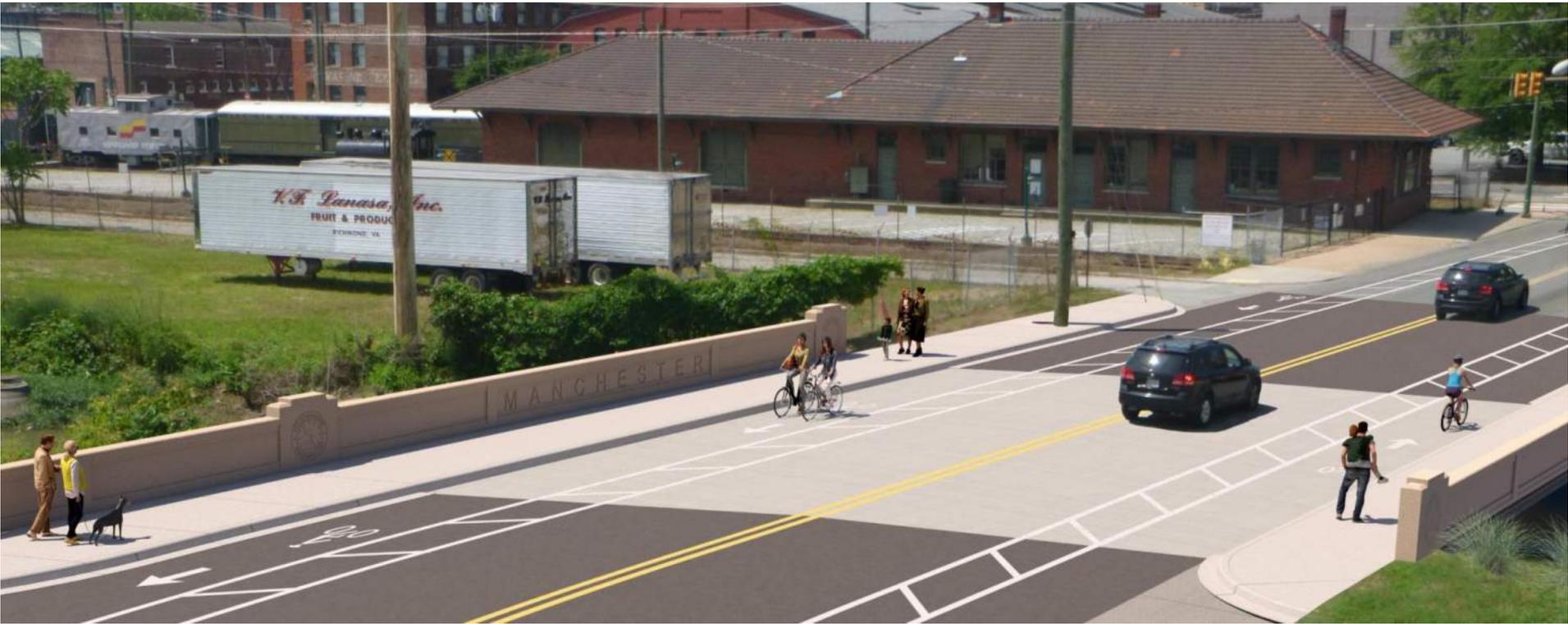
# Manchester Canal Potential Future Typical Section

- Potential Typical Section **AFTER** Mayo Bridge Reconstruction is complete
- Painted Buffer Zone
  - No flexible delineators to allow emergency access to corridor and to allow easy access over side of bridge



# Manchester Canal Potential Future Rendering

- Potential Typical Section **AFTER** Mayo Bridge Reconstruction is complete



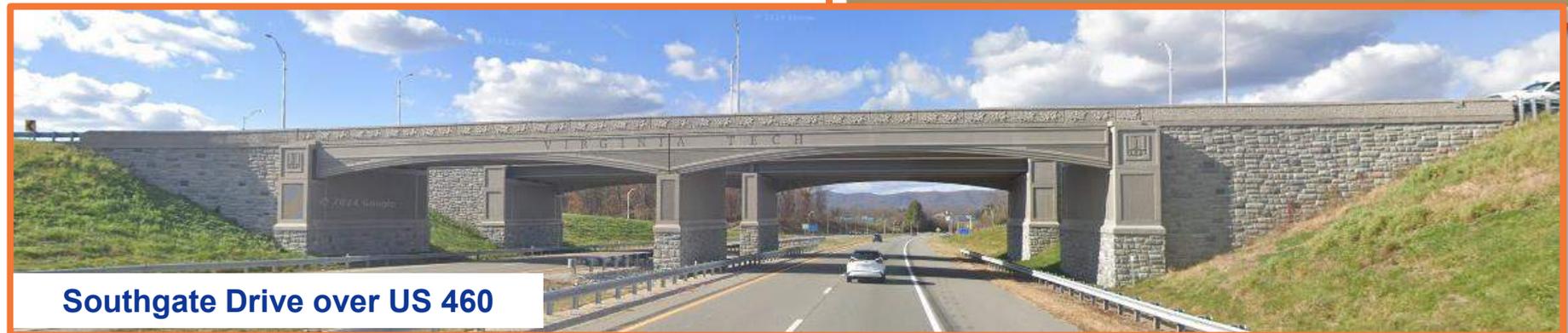
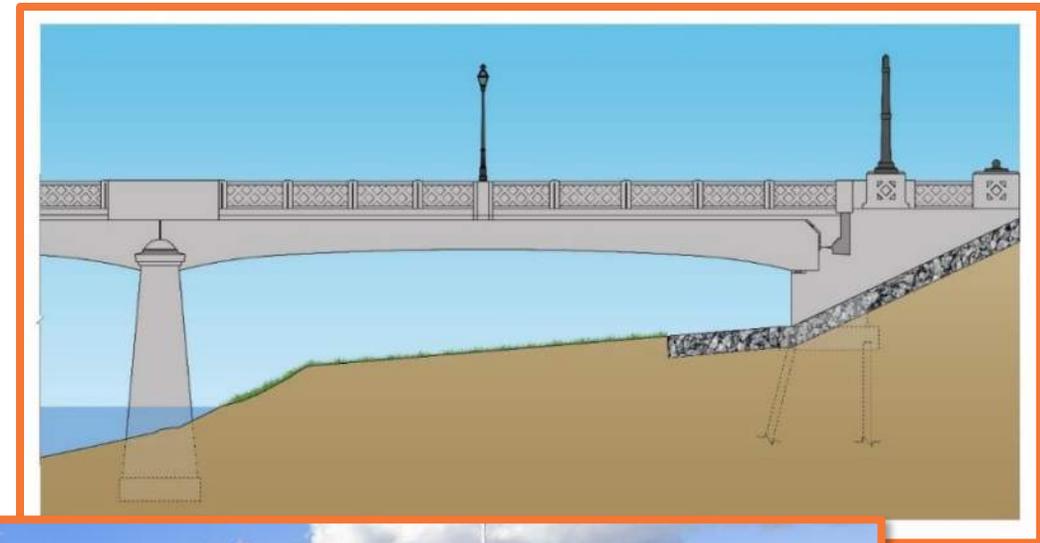
# Manchester Canal Potential Future Rendering

- Potential Typical Section **AFTER** Mayo Bridge Reconstruction is complete



# Key Bridge Historic Features

- **Historic Style Importance**
  - Blends with the nearby Manchester Industrial Historic District
  - Primary mitigation strategy for Section 106 coordination, as well as Section 4(f) coordination with FHWA
- **Arch between piers**
  - Façade similar to US 460 bridge near VA Tech



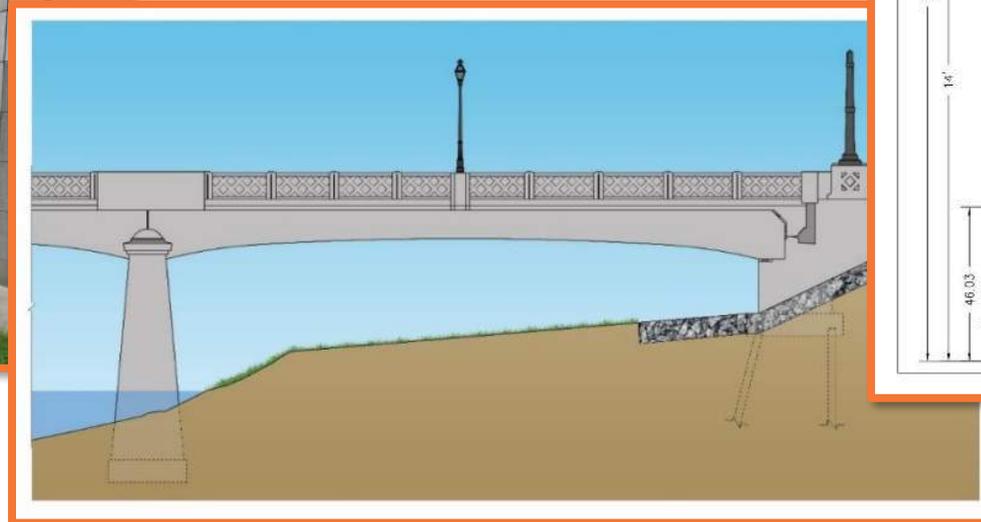
Southgate Drive over US 460

# Key Bridge Historic Features (Continued)

- **Lighting**
  - Hanover Luminaire continues historic lighting style along 14<sup>th</sup> Street
  - Spacing per lighting standards



Lights along N14 St



**Ordering Guide**

**L8228X: LUMINAIRE W/O TWIST-LOCK RECEPTACLE**  
 Modifications: Roof mounted LEDigine, Round cap & neck, Less chimney, FAMS set to pos. 5, Textured black color.

**L8228W: LUMINAIRE W/ TWIST-LOCK RECEPTACLE (shown)**  
 Modifications: Roof mounted LEDigine, Round cap & neck, 7-pin [7] receptacle mounted on ballast cover, Less chimney, FAMS set to pos. 5, Textured black color.

**LPS228G: 12' POLE ASSEMBLY**  
 Textured black color.

**LPS228H: 14' POLE ASSEMBLY (shown)**  
 Textured black color.

**Luminaire Detail Scale 1:10**

**Roof bottom view**

**Color:**  
 Textured Black

**Color:** TEXTURED BLACK  
**Panel:** CLEAR POLYCARBONATE  
**PHOTOYE:** SPECIFY 7-PIN TWIST-LOCK RECEPTACLE (shown)

**POLE ASSEMBLY:**  
 4"-3" ROUND, TAPERED SMOOTH ALUMINUM, 0.125" WALL THICKNESS, CAST ALUMINUM ANCHOR BASE W/ ACCESS DOOR, 11.38"-12.70" DIA. BOLT CIRCLE

**LEDigine Specifications:**

- 32, 3000K (warm) LEDs, typical 75 Color Rendering Index (CRI), >100,000 hours of operational life (at 25°C ambient temperature & 70% lumen maintenance), injection molded Type 3 Wide optical plates, IP66 rated optical system.
- Integral Advance Xitanium LED driver, class 1, IP66 rated, 300mA, 0-10V dimming, IntelliVat 120-277 VAC, 50-60Hz, RoHS compliant, field replaceable 20kV/25kA surge suppression.
- Delivered lumens: 6960, Voltage: 72W.
- Field Adjustable Wattage Switch (FAMS), factory set to position 5 (see chart below for settings).
- Manufactured to ISO 9001:2008 Standards.
- L8228X & L8228W fixtures as shown is not third party (ETL/UL) listed.

FAMS POSITION	LUMENS	SYSTEM WATTAGE
1	2065	25
2	3530	36
3	4129	42
4	4662	48
5	5195	54
6	5528	58
7	5927	63
8	5727	66
9	6384	68
10	5660	72

\*Factory set to position 5\*

**PRODUCTION APPROVALS**

DATE	MISC.

**CUSTOMER**

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 www.signify.com

**JOB NAME:**  
 City of Richmond, VA

**DRAWN BY:**  
 H. Kluhn

**SCALE:** DATE:  
 1:20 04/17/23

**DRAWING NUMBER:**  
 L8228W-DWG221

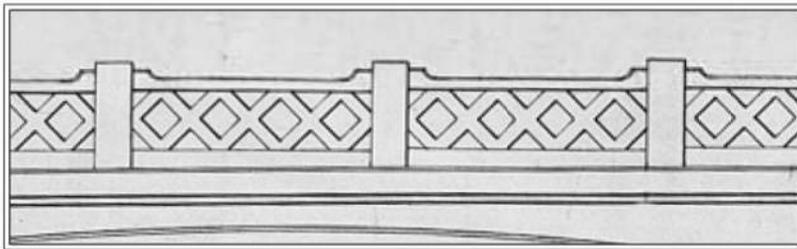
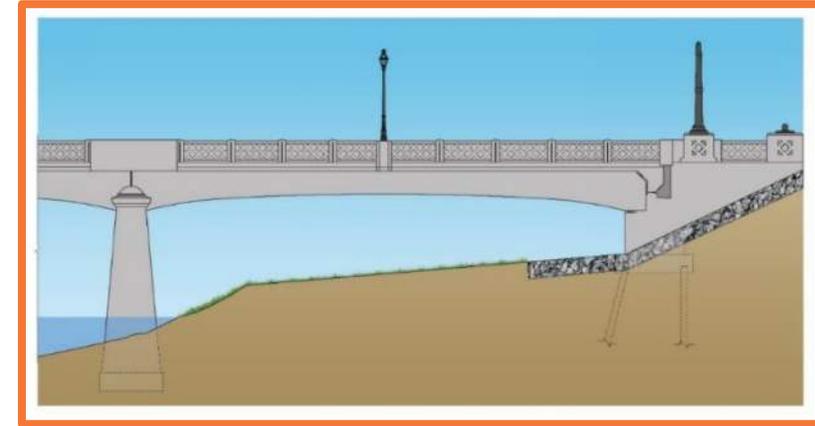
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 Dic Dominion Ltg.

**REV: A** PER: 23-004

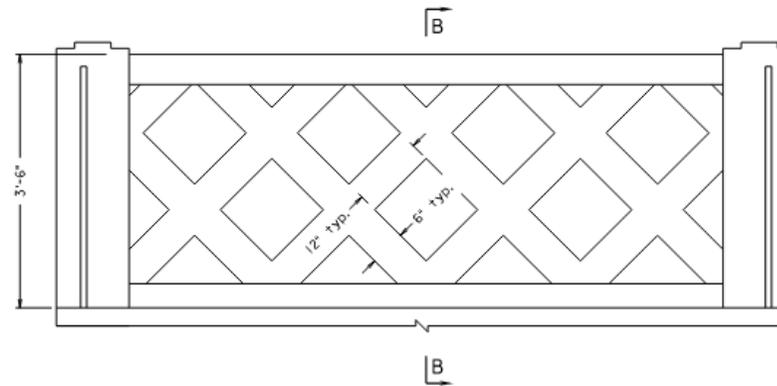
**BY:** DATE:

# Key Bridge Historic Features (Continued)

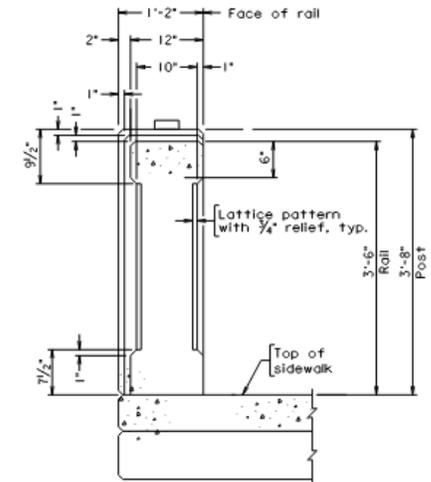
- **Railing**
  - Cross hatching Emulates the existing rail style



Existing Railing



ELEVATION  
Scale: 1" = 1'-0"

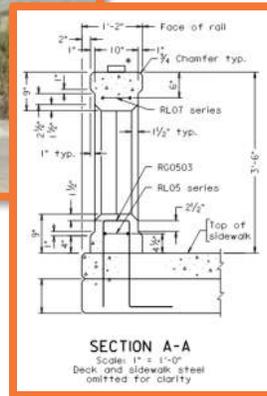
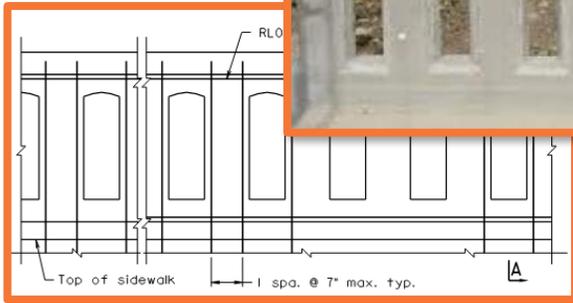


SECTION B-B  
Scale: 1" = 1'-0"  
Deck and sidewalk steel omitted for clarity

Proposed Railing

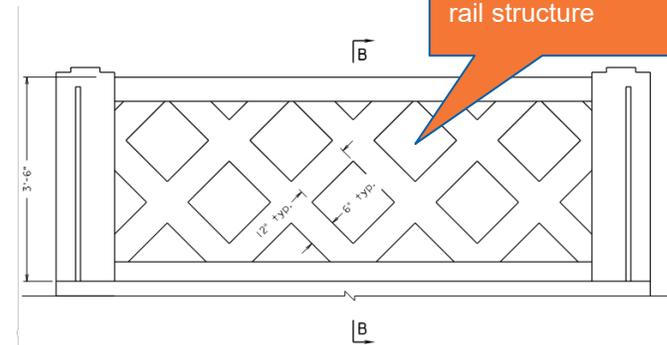
# Key Bridge Historic Features (Continued)

- **Railing (Continued)**
  - Building the rail with FHWA approved railing as a base
    - New rail from scratch would require crash testing

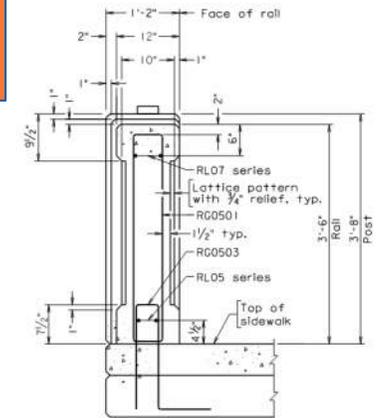


**Base Railing**

42" Texas C411 Railing (BR411-1)



**Modified Railing**



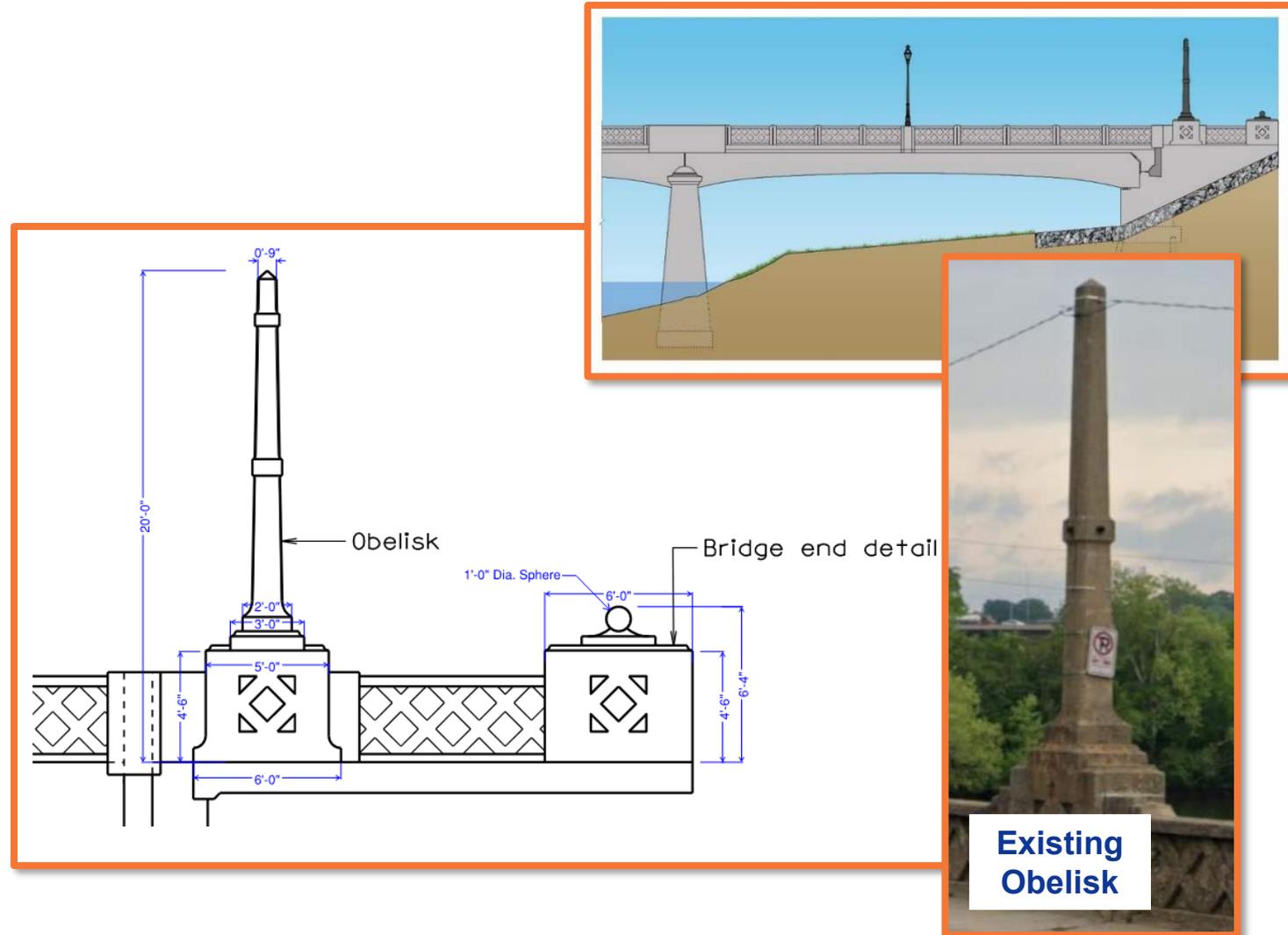
**SECTION B-B**

Scale: 1" = 1'-0"  
Deck and sidewalk steel omitted for clarity

# Key Bridge Historic Features (Continued)

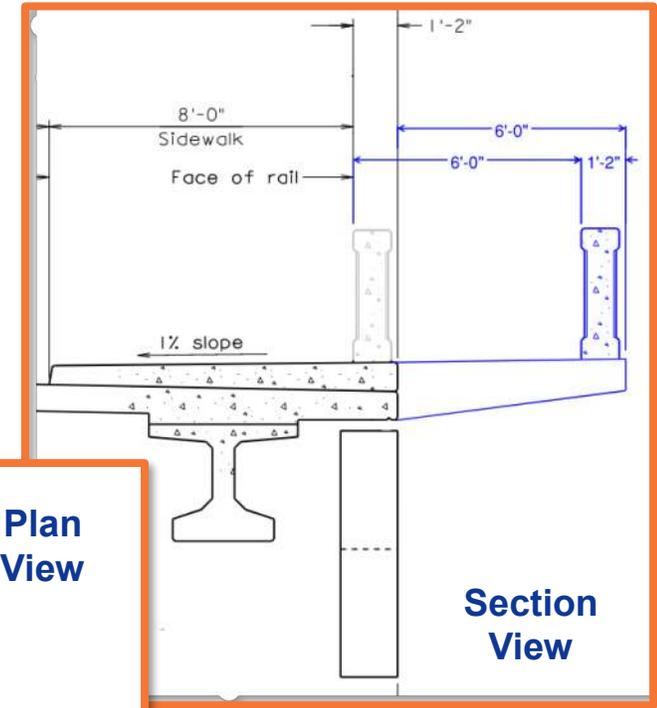
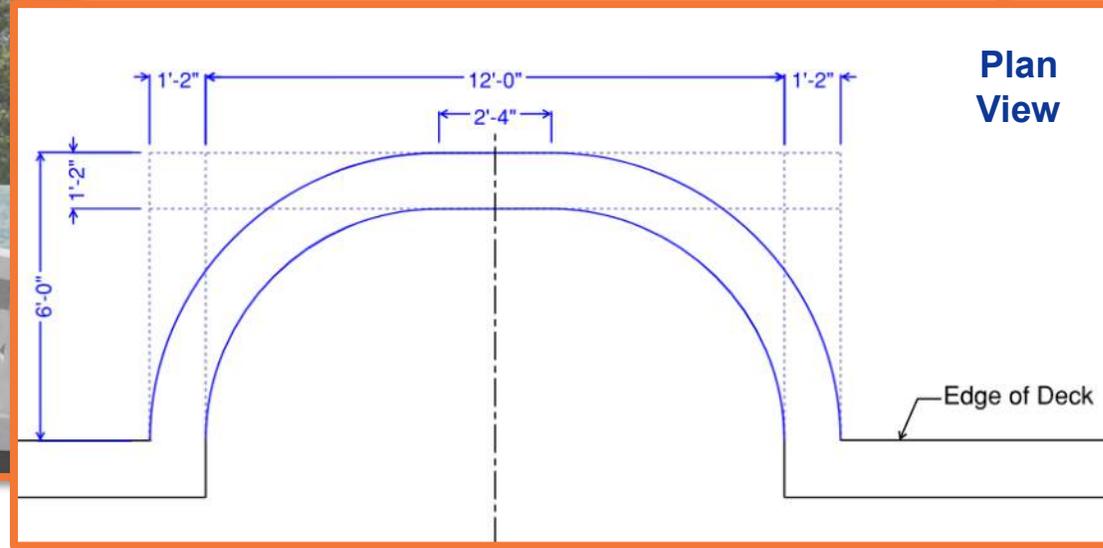
- **Obelisks**

- At corners of each bridge
- Concrete color will be grey



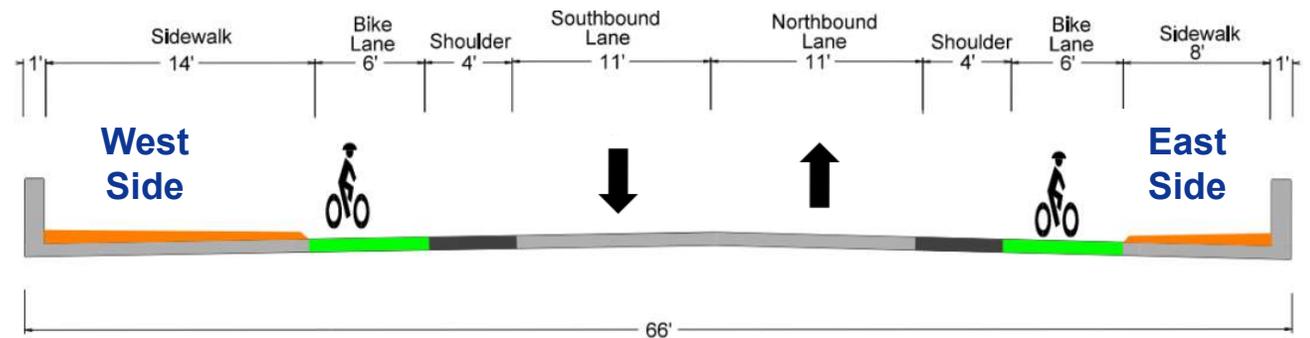
# Key Bridge Recreation Features

- **Overlooks**
  - 6 ft x 12 ft spaced every other pier



# Key Bridge Recreation Features (Continued)

- **Increased Sidewalk Width**
  - 22 ft total v/s 12 ft total
  - West side larger for groups walking along the trails
    - The park and park events can also extend onto the bridge



# SEQUENCE OF CONSTRUCTION



# Construction Sequence Constraints

- **Mayo Island Park and Private Property**

- Island will remain accessible during construction

- **Existing Utilities**

- City Gas and Verizon Business must remain active across river
- Other utilities can be back-fed

- **Time of Year Restrictions**

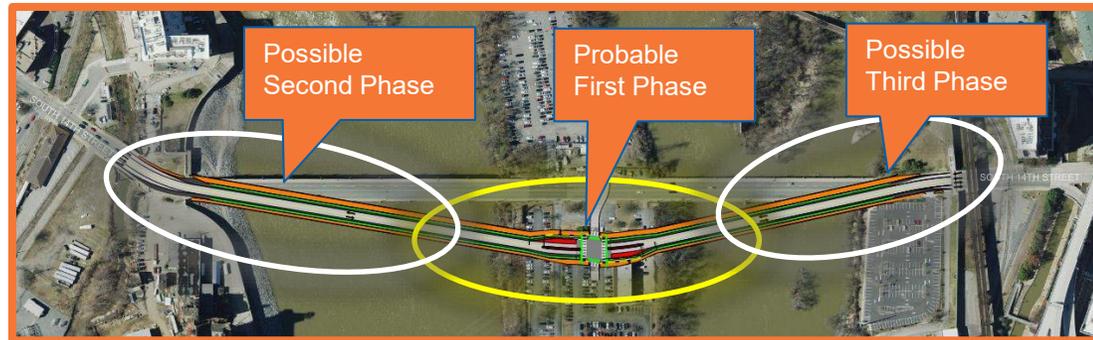
- **Channel Closure Restrictions**



# Conceptual Sequence\*

\*NOTE: Final sequence will be determined by DB team

- **New alignment facilitates constructing portion of new bridge while existing bridge remains open**
  - Detour not required immediately when construction starts
- **Portion at tie-ins and overlap with existing bridge will require full bridge closure**
  - One bridge will be required to be open to traffic during construction
  - In discussions with GRTC regarding shuttles for pedestrians



# Mayo Park Access Detour

- **Commerce Road and 9<sup>th</sup> Street Bridge Proposed**
  - East Canal and East Byrd could close the loop for local traffic to island
  - Includes change at Commerce to allow left turns
- **General traffic will re-balance to other bridges and roads**
  - Powhite tolls west of RMTA end December 2026
  - Impacts are included in ongoing Detour Study



Location	Direction	AM Peak Period				PM Peak Period			
		Before	After	Difference	% Change	Before	After	Difference	% Change
I-95 Bridge	NB	9325	10137	812	8.7	7389	7684	295	4.0
	SB	5494	5602	108	2.0	9666	10661	995	10.3
Mayo Bridge	NB	2138	0	-2138	-100.0	595	0	-595	-100.0
	SB	512	0	-512	-100.0	2160	0	-2160	-100.0
9th Street Bridge (Commerce Rd.)	NB	3374	3932	558	16.5	1603	1862	259	16.2
	SB	813	1174	361	44.4	3504	4139	635	18.1
Robert E. Lee Bridge	NB	3236	3423	187	5.8	1602	1590	-12	-0.7
	SB	1039	1037	-2	-0.2	3356	3441	85	2.5

Redistribution during construction

# Mayo Park Construction Coordination

- **Parking lot will be made available for staging**
  - Bridge relocation crosses parking lot, and changes configuration
  - CN access will be through a right-of-entry from the City
- **Completing the parking lot renovations**
  - CN Staging expected to damage parking, so Park construction is limiting improvements
  - Final bisected parking lot layout and area for staging still in discussion

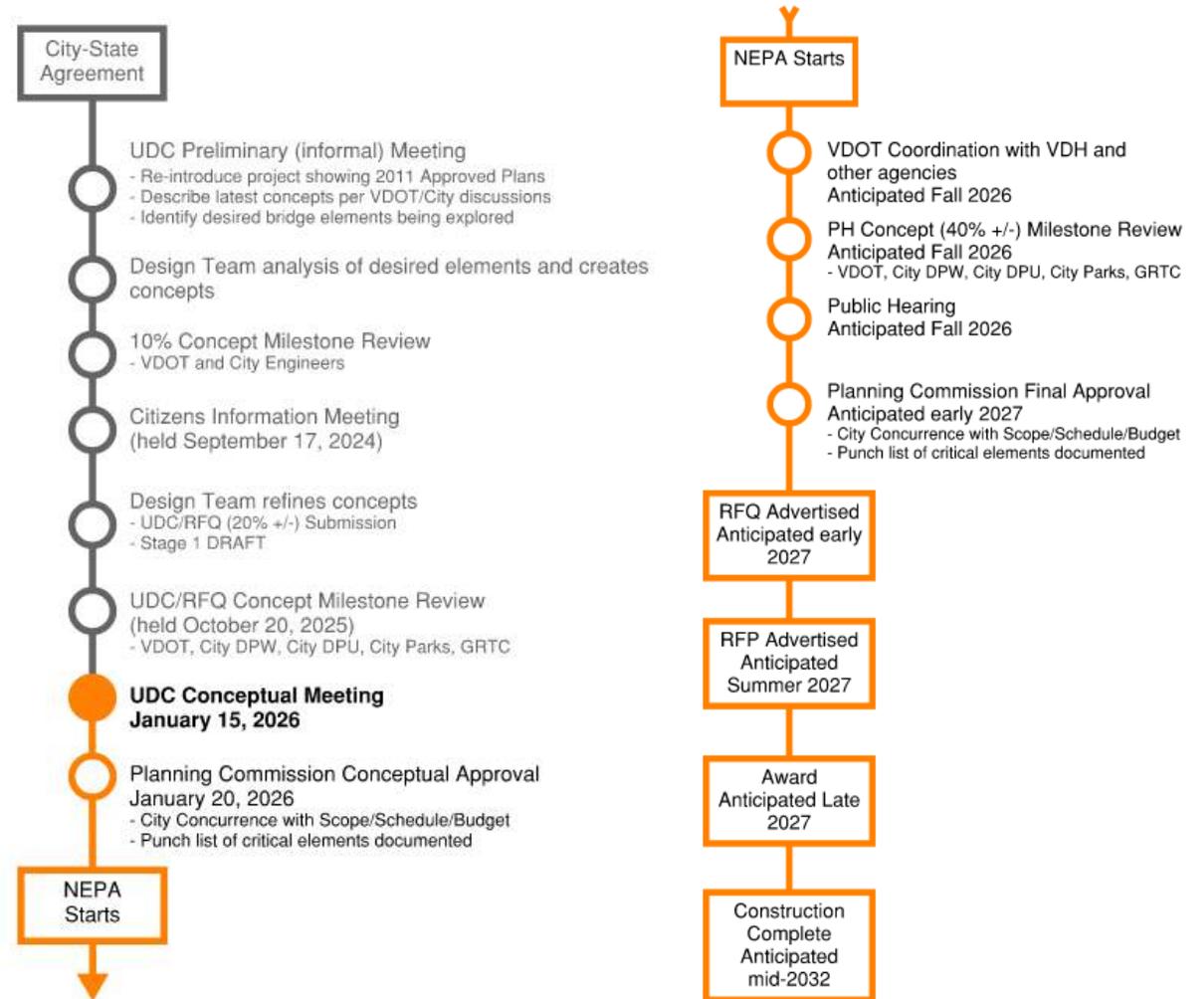


# COORDINATION



# City Planning and VDOT DB Process Coordination

- **VDOT and City discussed process coordination January 2023**
  - Preliminary City approval allows us to initiate agency discussions for NEPA
  - Concept logistics will be finalized while NEPA is underway
- **Planning Commission approvals will establish contractual requirements**
  - Design-build team completes design

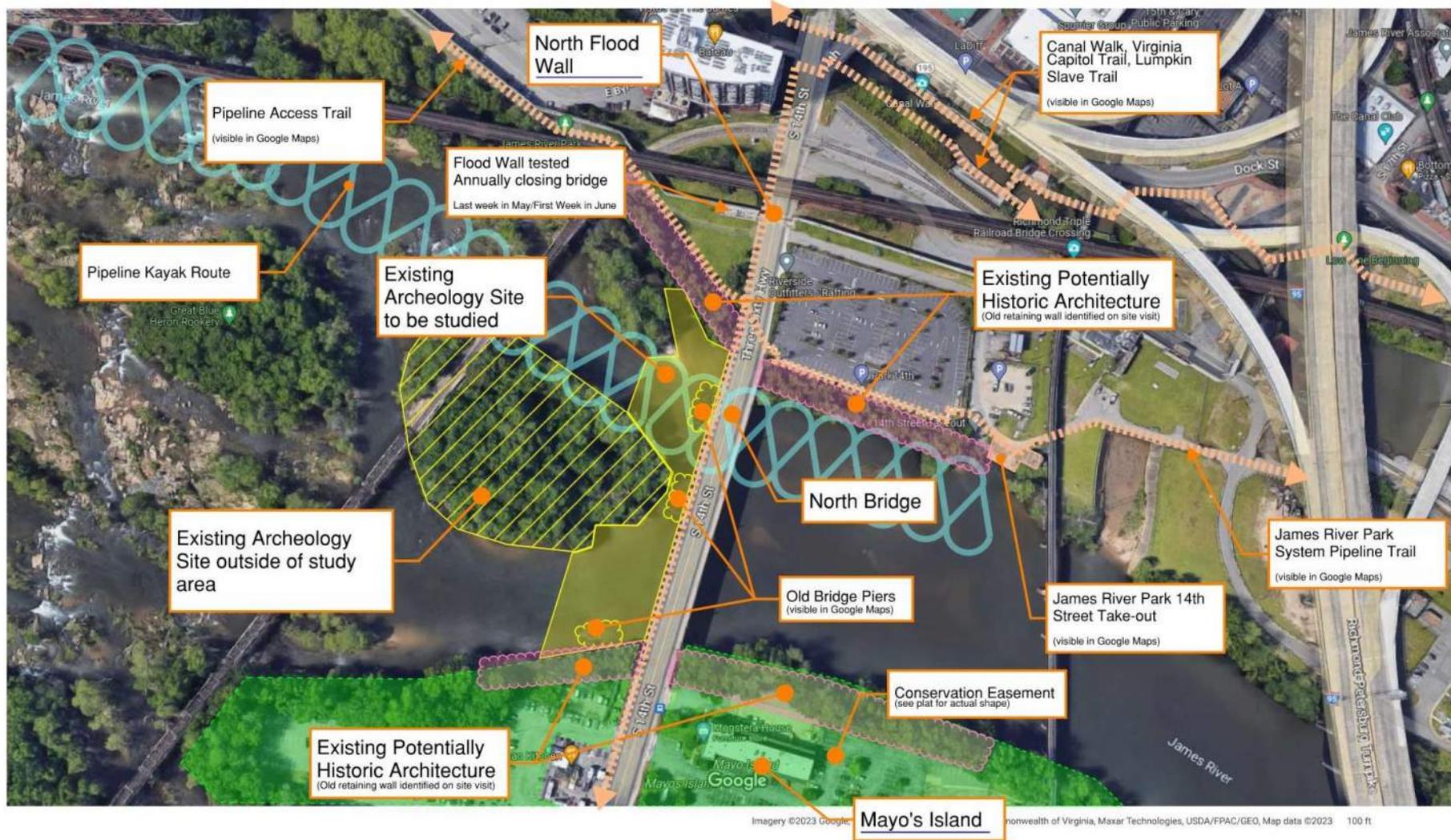


# City Inter-Department Coordination

- **Design Charette September 2024**
  - Multiple City departments attended
- **Regular monthly coordination meetings with DPW, Parks, and DCR during 2025**
- **Onboard milestone review meeting with DPW, Parks, and DCR held October 2025**



# Environmental Concern Coordination North Bridge



# Environmental Concern Coordination South Bridge



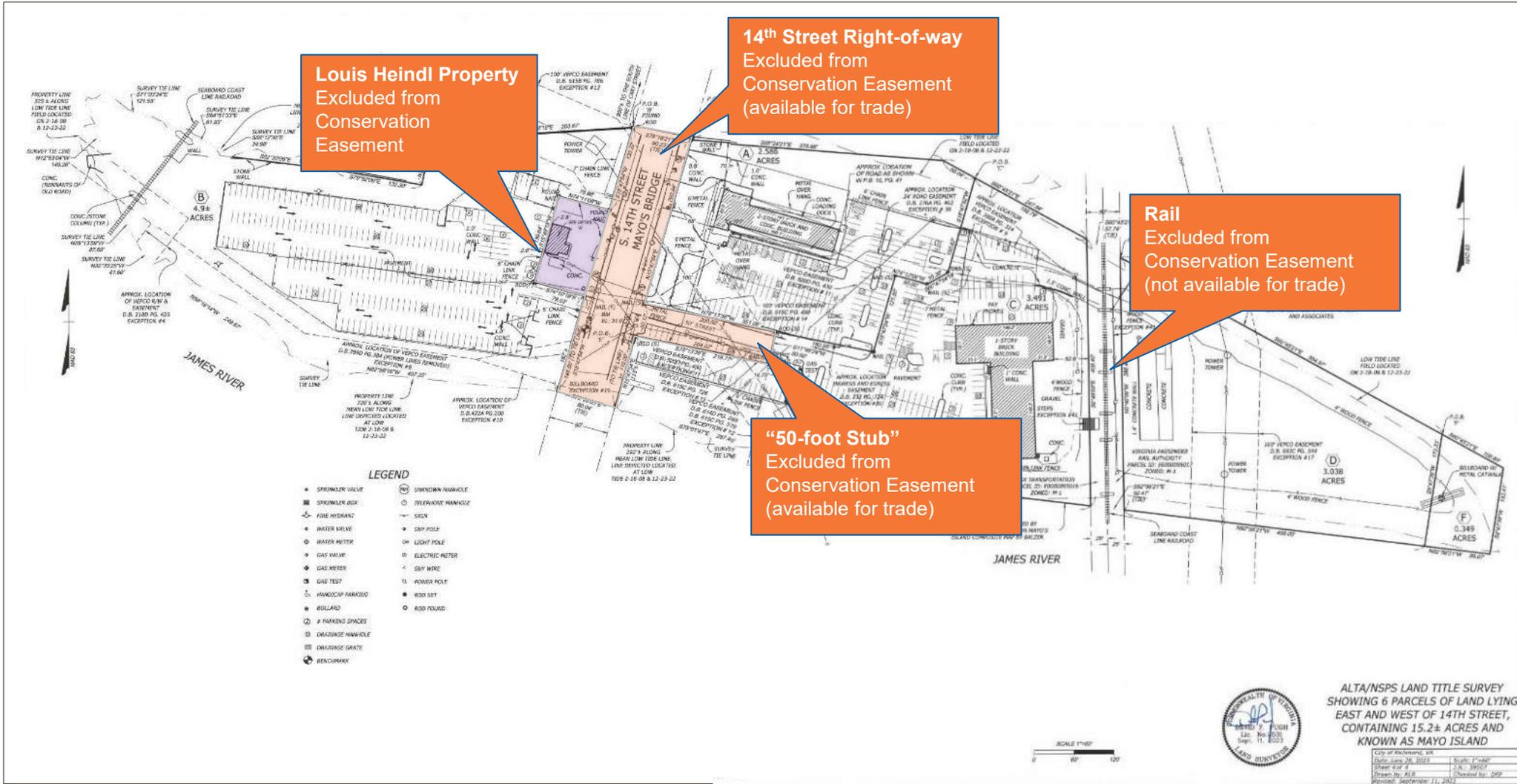
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# City Park Coordination

- **Purchase of island facilitated new alignment**
- **Involved in Charette, monthly coordination meetings, on-board review meeting, etc**
  - Worked with DPW to determine typical section and intersection approach
  - Working with VDOT to provide staging area and establish contract requirements for “leave condition”
- **Part of NEPA discussions**

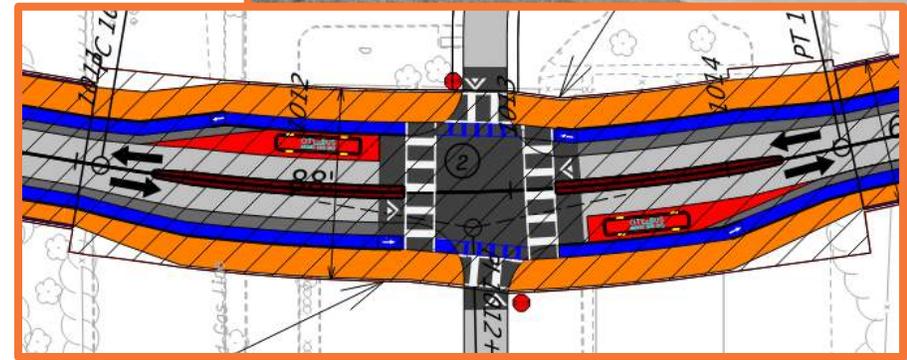


# DCR Coordination



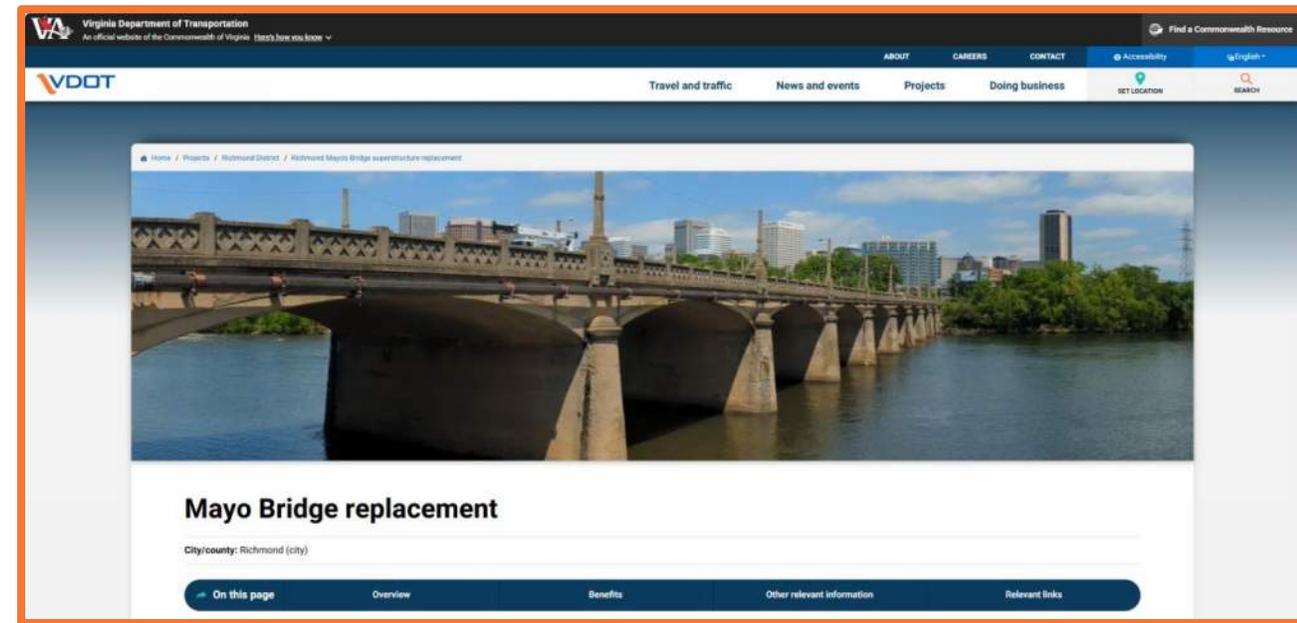
# GRTC Coordination

- Bus stop exists on the island, and will need to be replaced
- GRTC provided input on island intersection
- GRTC working with VDOT to determine pedestrian shuttle options



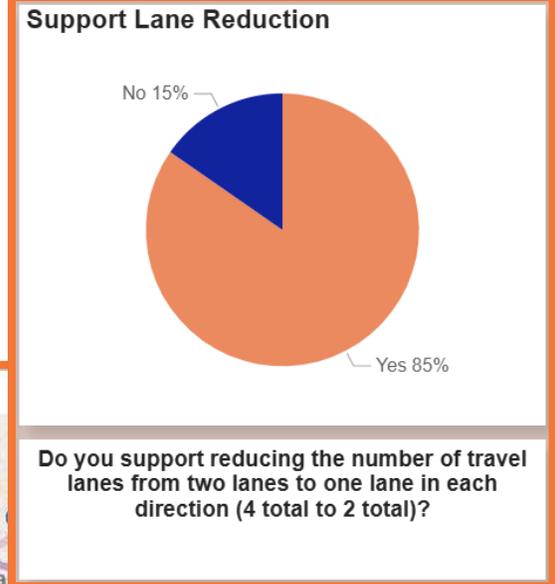
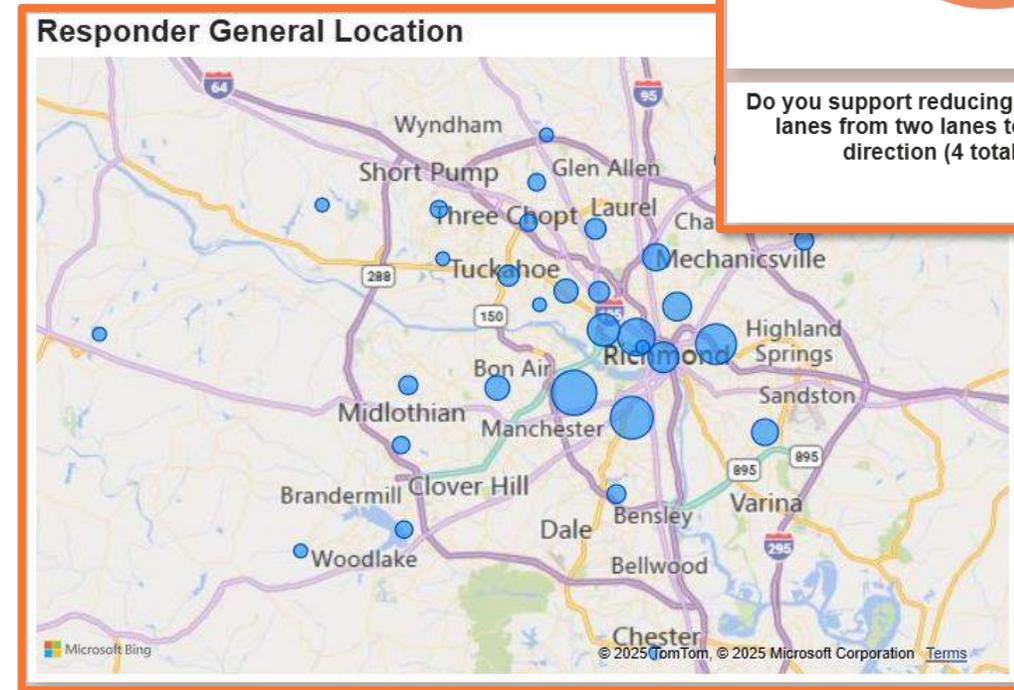
# Public Outreach/Input

- **Project Website**
- **Public Survey June 2024**
  - Results from survey provided to the Charette team and summary of results made public on website
- **CIM September 2024**
  - 100+ participants attended in-person and summary of results made public on website
  - Comments incorporated in typical section
- **Stakeholder meetings before UDC meeting**



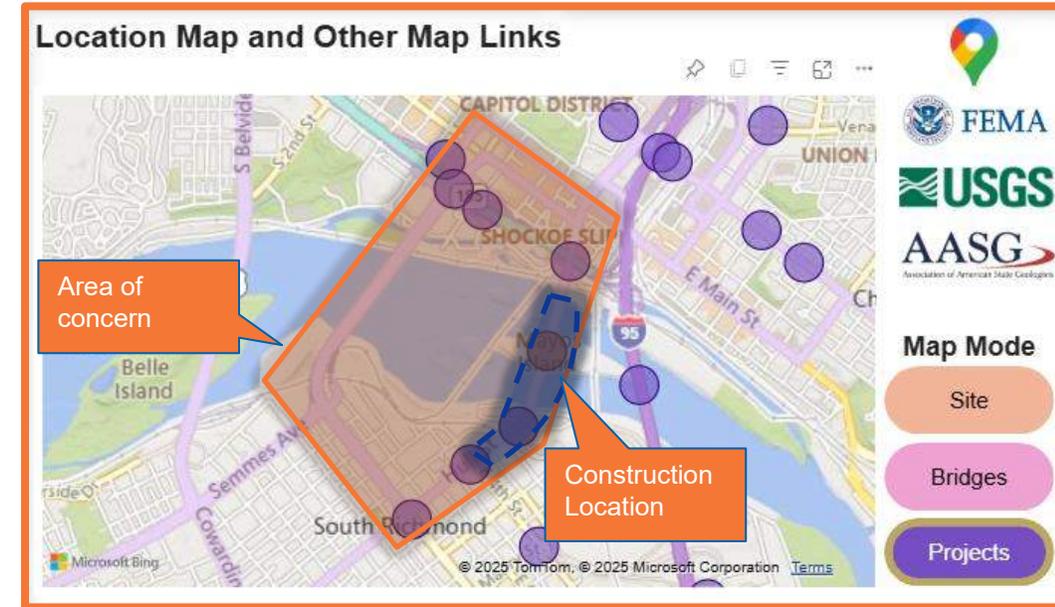
# Public Outreach/Input (Continued)

- **Public interest spans Richmond area**
- **Lane Reduction Supported**
- **Safety for pedestrian and bikes is a concern**
  - Speed reduction, vehicular lane reduction, bike lanes added, wider sidewalks, and raised intersection facilitates safety



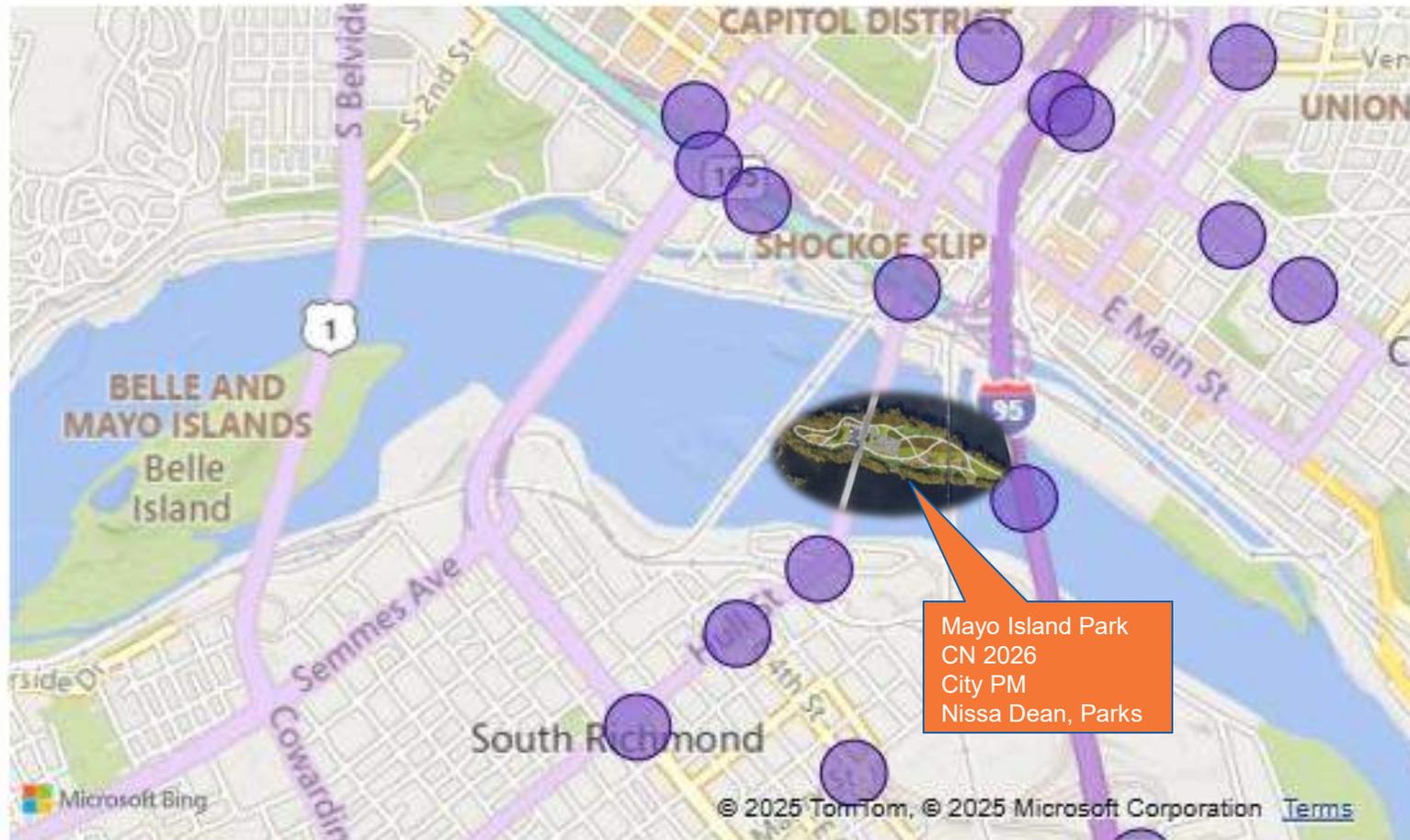
# Adjacent Project Coordination

- **Mayo Island Park:** CN end 2026
- **Canal Walk PII:** CN end 2025
- **US60/DTE Gateway:** CN end 2029
- **Commerce Road Streetscape:** CN end 2030
- **Hull Street Streetscape:** CN end December 2027
- **Manchester Canal Bridge:** CN end December 2027



# Mayo Island Park

## Location Map and Other Map Links



### Map Mode

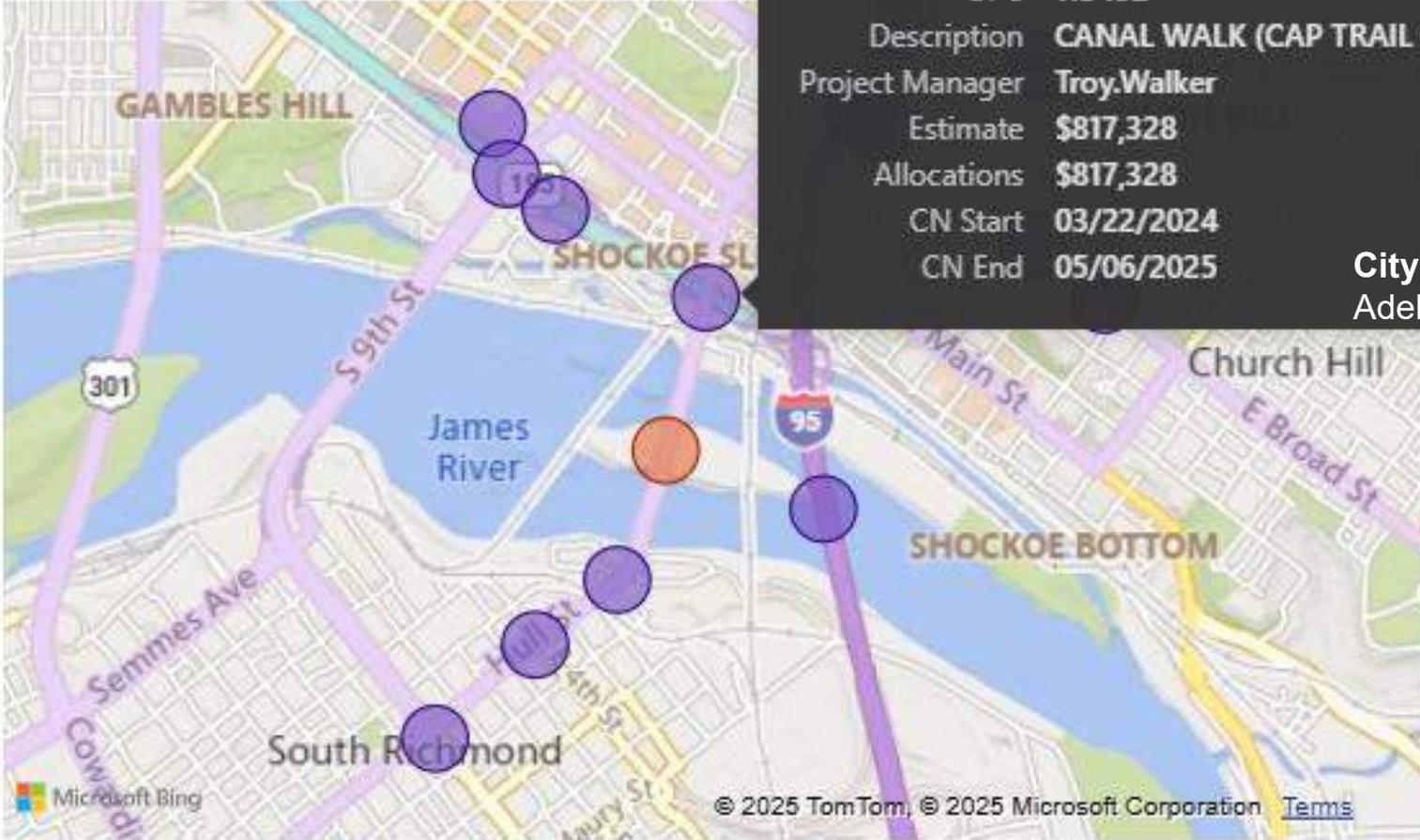
Site

Bridges

Projects

# Canal Walk (Capitol Trail Connector) Phase II

**Location Map and Other Map Links**



Latitude	37.53305790
Longitude	-77.43282266
UPC	113492
Description	CANAL WALK (CAP TRAIL CONN) PH II
Project Manager	Troy.Walker
Estimate	\$817,328
Allocations	\$817,328
CN Start	03/22/2024
CN End	05/06/2025

City PM:  
Adel Edward

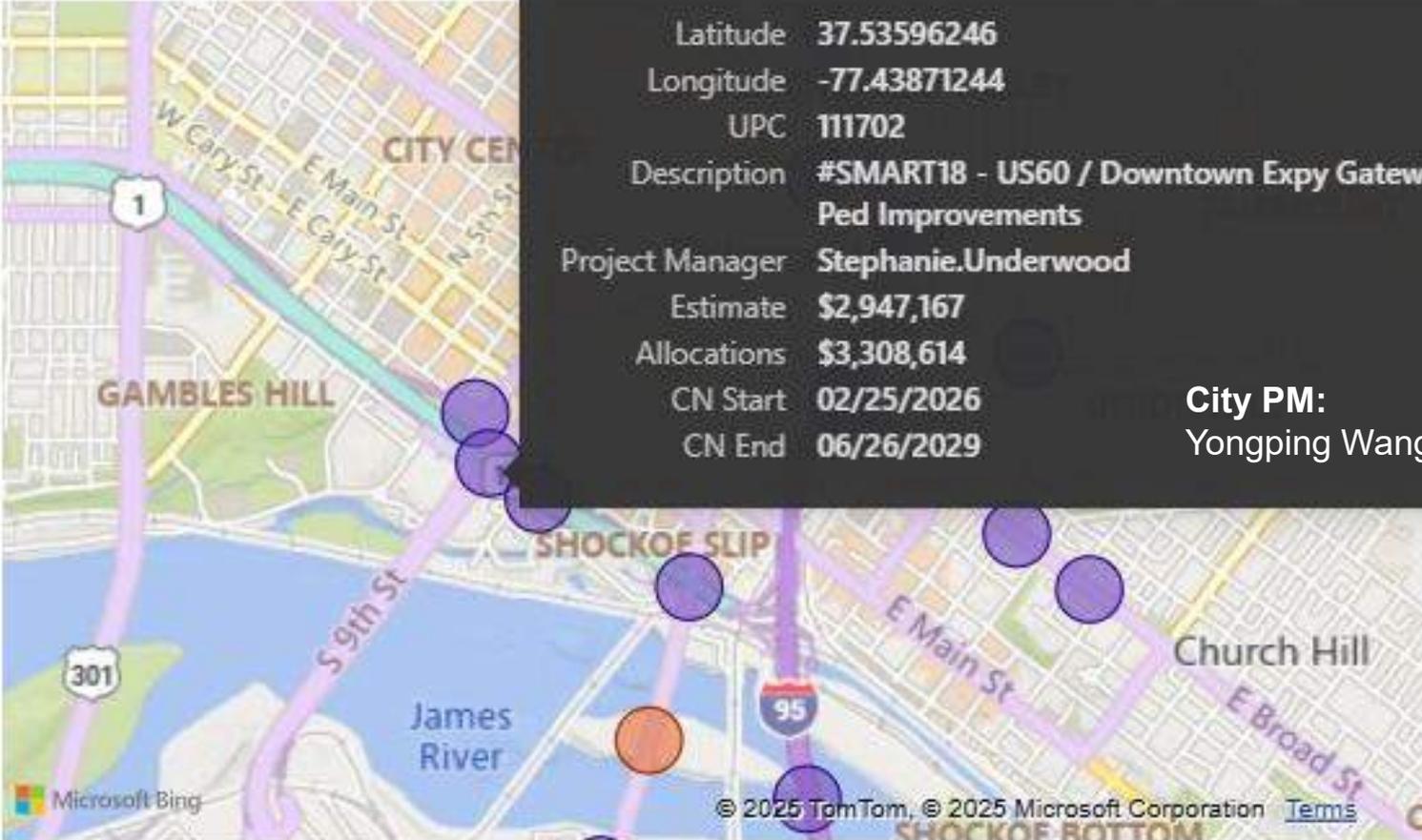
**Map Mode**

- Site
- Bridges
- Projects

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# US 60/Downtown Expressway Gateway

## Location Map and Other Map Links



Latitude 37.53596246  
Longitude -77.43871244  
UPC 111702  
Description #SMART18 - US60 / Downtown Expy Gateway  
Ped Improvements  
Project Manager Stephanie.Underwood  
Estimate \$2,947,167  
Allocations \$3,308,614  
CN Start 02/25/2026  
CN End 06/26/2029

City PM:  
Yongping Wang

Map Mode

- Site
- Bridges
- Projects

Logos: FEMA, USGS, AASG

Map Mode buttons: Site, Bridges, Projects

Map labels: CITY CENTER, GAMBLES HILL, SHOCKOE SLIP, Church Hill, James River, W Cary St, E Main St, S 9th St, E Broad St, I-95, US 301

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# Commerce Road Streetscape

## Location Map and Other Map Links

The image shows a map interface with a data popup. The popup contains the following information:

Latitude	37.52269740
Longitude	-77.44082105
UPC	118946
Description	#SMART22 - Commerce Road Streetscape #FLT
Project Manager	James.Maiden
Estimate	\$12,441,459
Allocations	\$12,441,459
CN Start	10/14/2027
CN End	09/19/2030

City PM: Adel Edward

Map Mode

- Site
- Bridges
- Projects

Logos: FEMA, USGS, ASG, Microsoft Bing

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# Hull Street Streetscape

## Location Map and Other Map Links

Latitude	37.52490014
Longitude	-77.43786321
UPC	111703
Description	#SMART18 - US360 Hull St Streetscape, 9th St - Mayo Bridge
Project Manager	Stephanie.Underwood
Estimate	\$4,742,825
Allocations	\$4,566,718
CN Start	07/27/2026
CN End	12/31/2027

City PM:  
Winston Philips

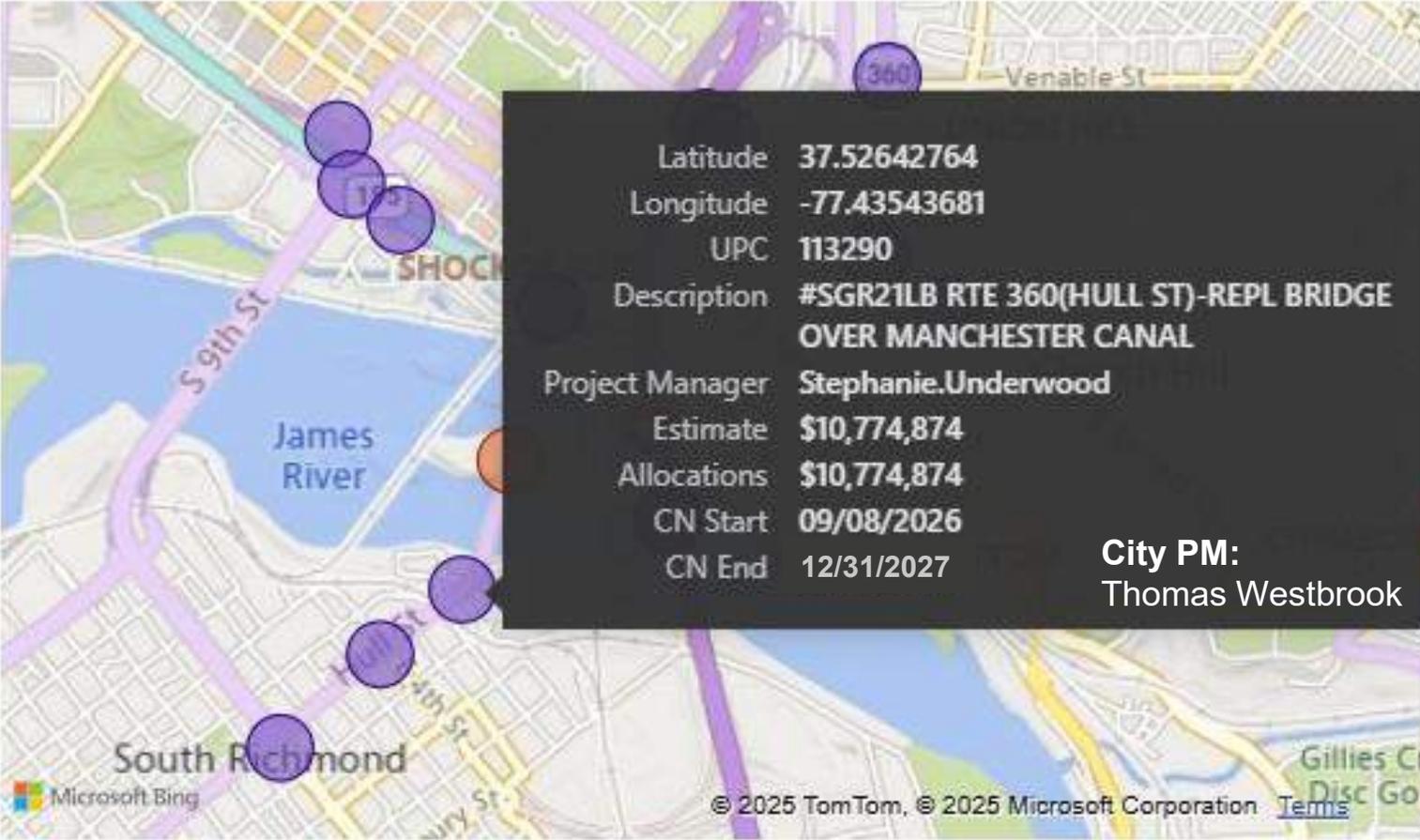
Logos: FEMA, USGS, AASG

Map Mode:  
Site  
Bridges  
Projects

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# Manchester Canal Bridge Replacement

## Location Map and Other Map Links



Latitude	37.52642764
Longitude	-77.43543681
UPC	113290
Description	#SGR21LB RTE 360(HULL ST)-REPL BRIDGE OVER MANCHESTER CANAL
Project Manager	Stephanie.Underwood
Estimate	\$10,774,874
Allocations	\$10,774,874
CN Start	09/08/2026
CN End	12/31/2027

City PM:  
Thomas Westbrook



### Map Mode

- Site
- Bridges
- Projects

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# CONCEPTUAL RECOMMENDATION

**Construct the Mayo Bridge per current section, alignment and detailing**



# Appendix A – Public Survey

## Number of Responses

1310

## Related Comments

I avoid it so I don't get run over by a car

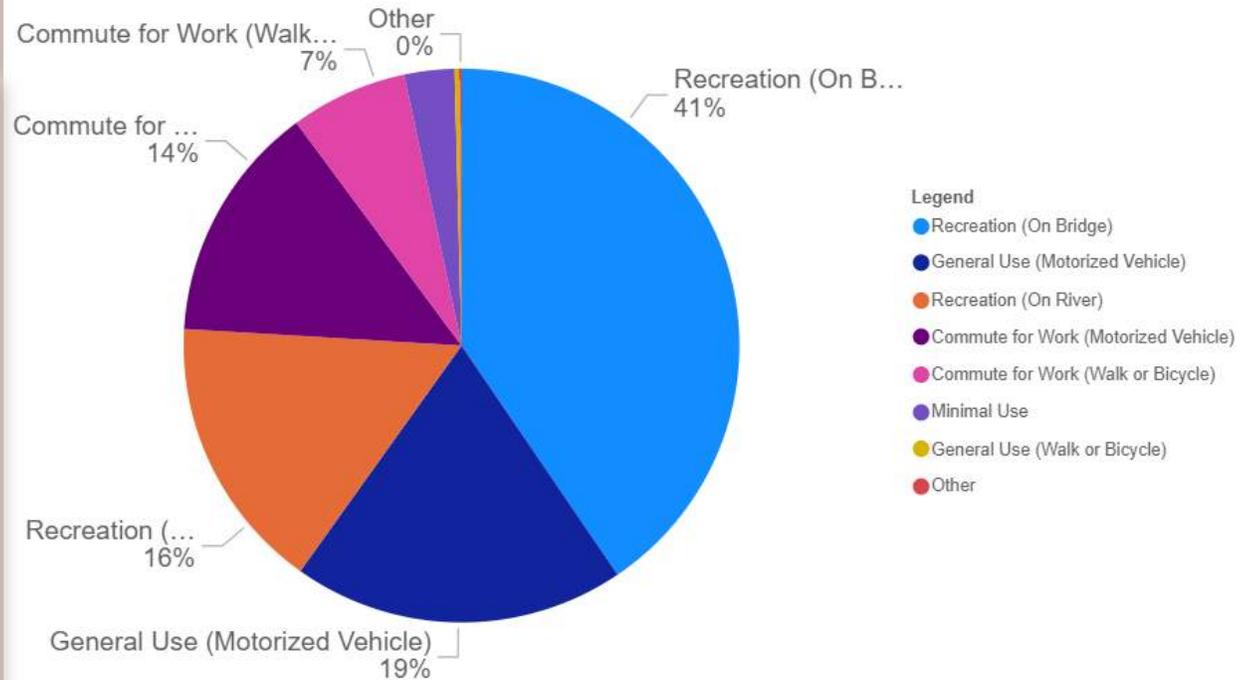
I occasionally drive across it, however I tend to avoid this bridge at all costs because it's much faster to just take the Belvidere bridge and definitely less dangerous.

I specifically avoid using the current bridge.

My husband and I would ride a bike back and forth for work if it was safe and wouldn't give us flat tires

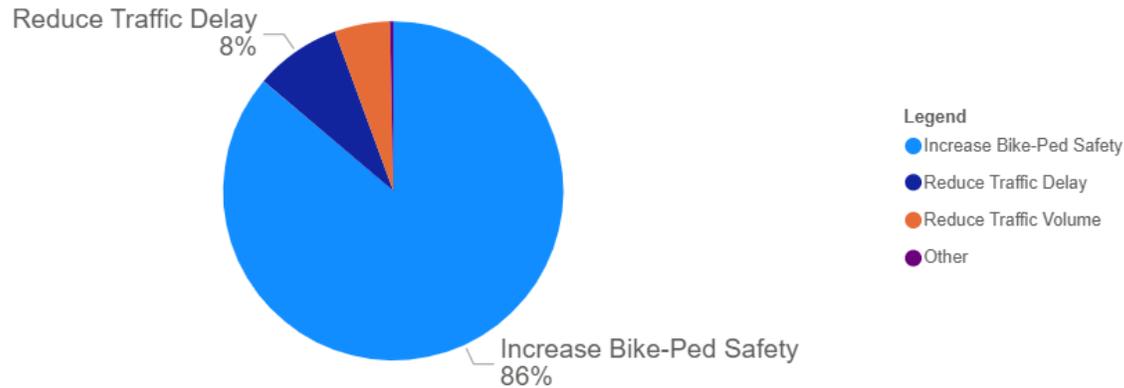
Rarely walk on it because it isn't safe but would like to use it to walk to downtown.

## Existing Bridge Use Summarized



# Appendix A – Public Survey

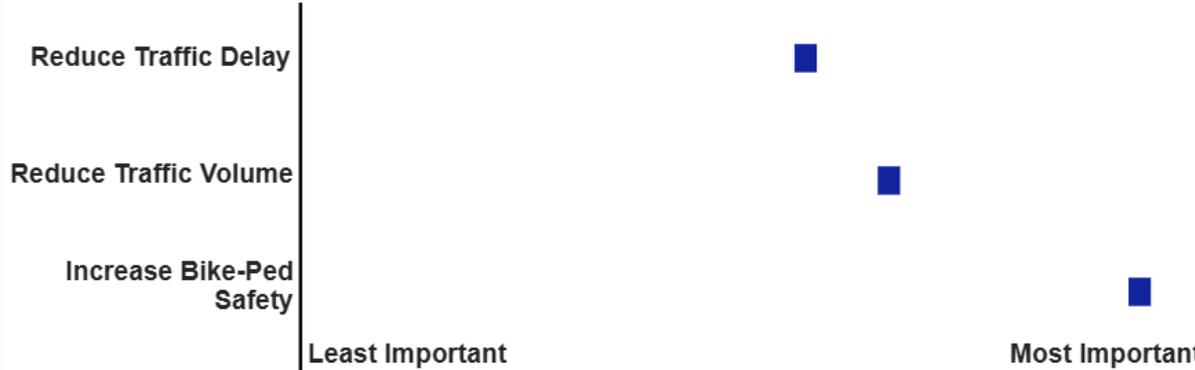
## Highest Priority for Traffic Considerations



## Bridge User Filter

- Select all
- Commute for Work (Motorized Vehicle)
- Commute for Work (Walk or Bicycle)
- General Use (Motorized Vehicle)
- General Use (Walk or Bicycle)
- Minimal Use
- Other
- Recreation (On Bridge)
- Recreation (On River)

## Average Level Importance for Traffic Considerations



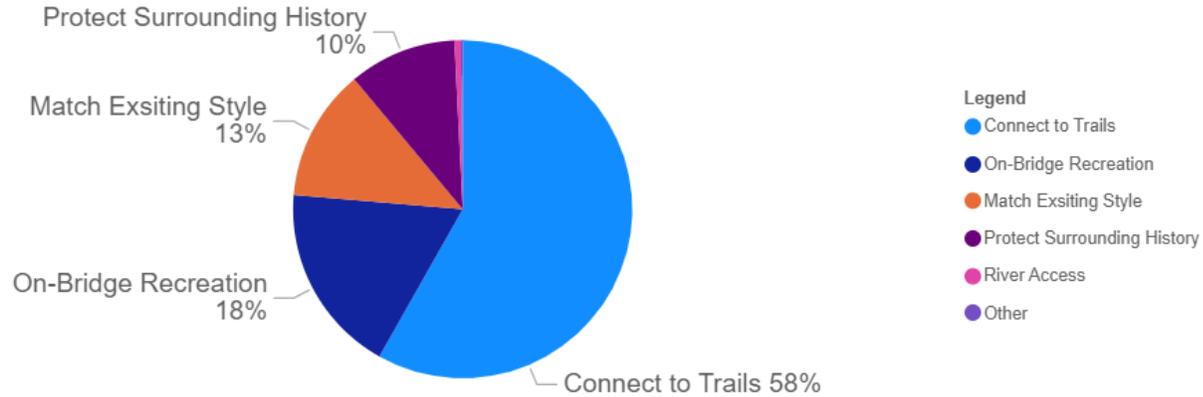
## Related Comments

Make is structurally sound - in my experience, the bridge traffic is fine - it's the pre-manchester traffic and bottleneck in the slip that's terrible

Traffic delays are on Hull Street not bridge

# Appendix A – Public Survey

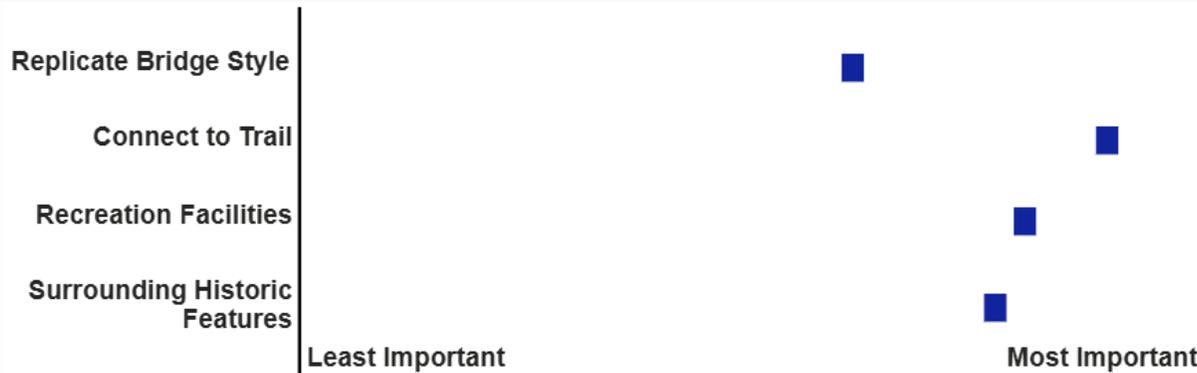
## Highest Priority for Community Considerations



## Bridge User Filter

- Select all
- Commute for Work (Motorized Vehicle)
- Commute for Work (Walk or Bicycle)
- General Use (Motorized Vehicle)
- General Use (Walk or Bicycle)
- Minimal Use
- Other
- Recreation (On Bridge)
- Recreation (On River)

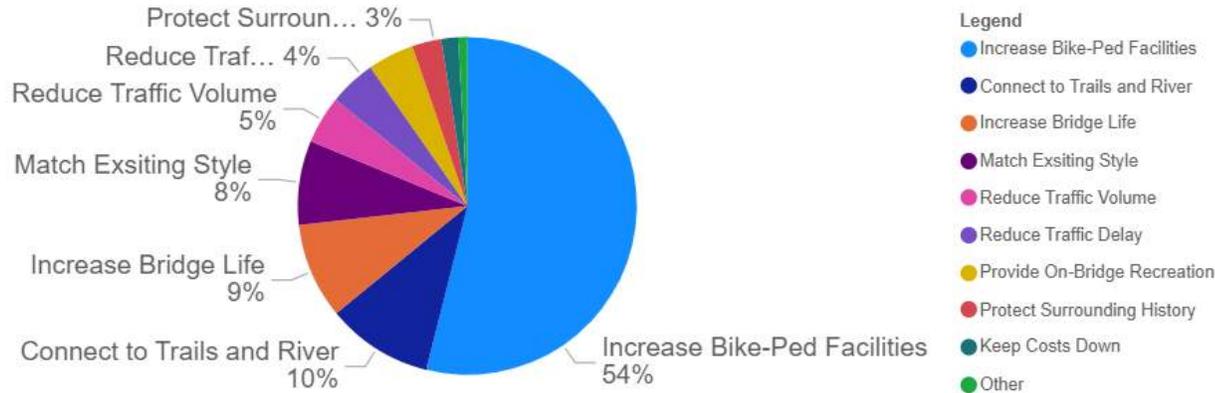
## Average Level Importance for Community Considerations



## Related Comments

# Appendix A – Public Survey

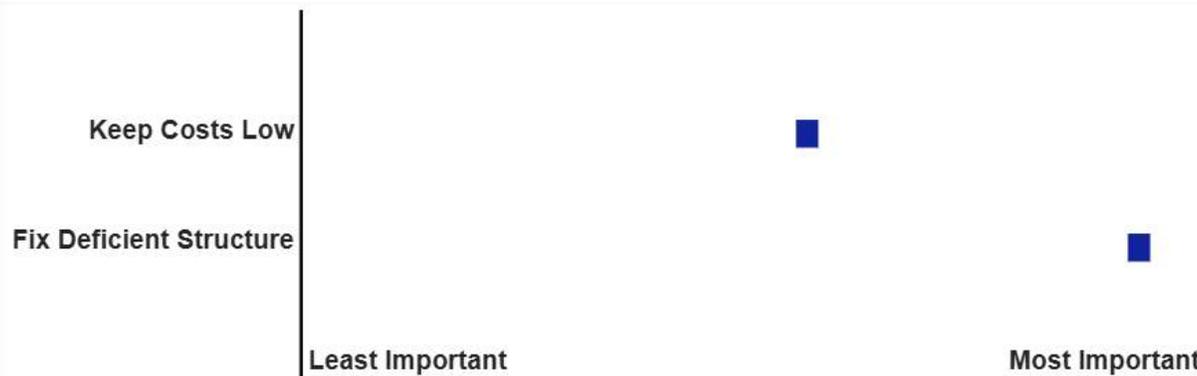
## Highest Overall Priority



## Bridge User Filter

- Select all
- Commute for Work (Motorized Vehicle)
- Commute for Work (Walk or Bicycle)
- General Use (Motorized Vehicle)
- General Use (Walk or Bicycle)
- Minimal Use
- Other
- Recreation (On Bridge)
- Recreation (On River)

## Average Level Importance for Other Considerations



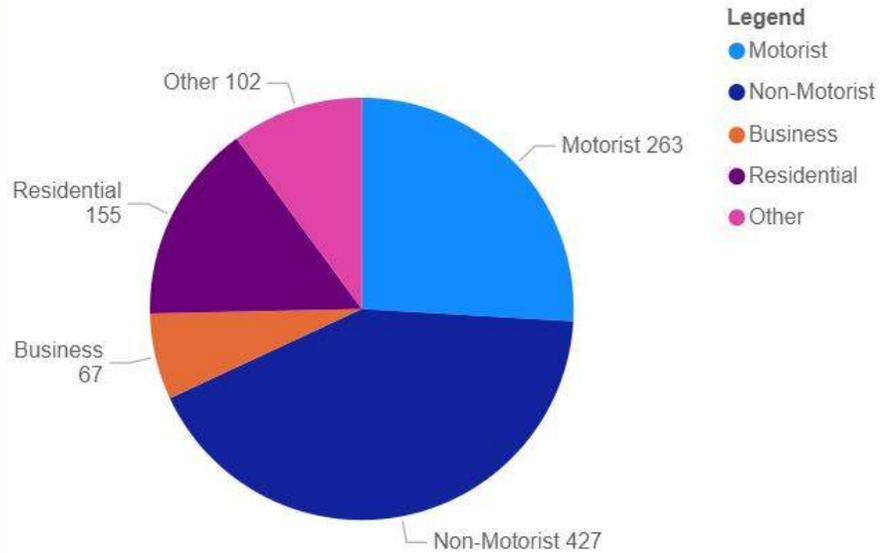
## Related Comments

Structurally sound at a reasonable price for quality. Don't skimp or waste money, build a good bridge. I bet Baltimore wishes they'd spent a little more on dolphins

This will be expensive- no way around that. So at least make it good. Don't just do cheapest possible for everything.

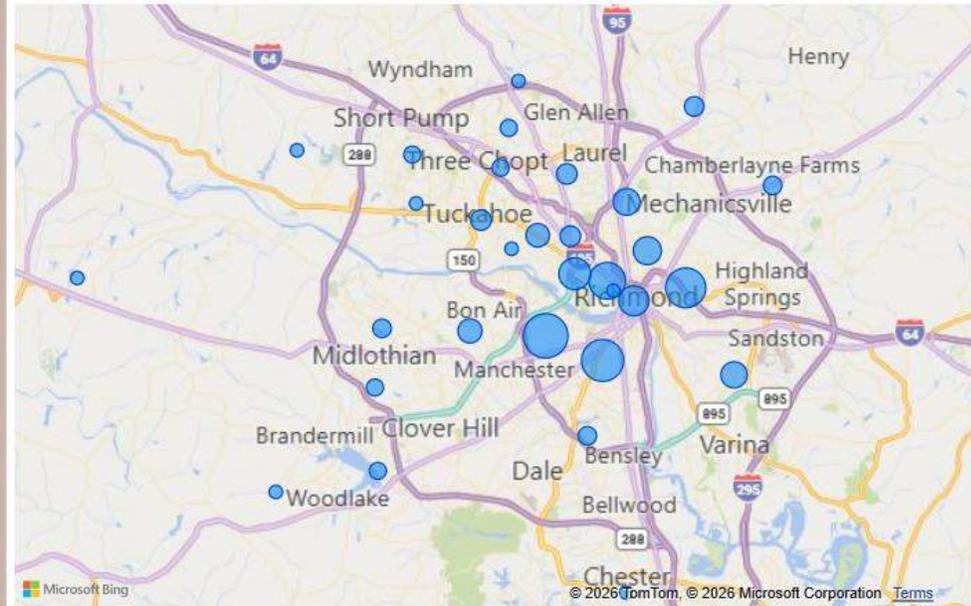
# Appendix B – CIM Comments

## Reason for Project Interest



Click on a zip code dot to filter results based on proximity to the bridge

## Responder General Location



### Which of the following best describes your interest in this project? (Choose all that apply)

- I am an owner/employee of a business that is located on or near Mayo Bridge/Mayo Island
- I own or rent residential property on or near Mayo Bridge/Mayo Island.
- I am a frequent motorist (car, bus, etc) of Mayo Bridge.
- I am a frequent non-motorist(walk, cycle, etc) of Mayo Bridge.
- Other

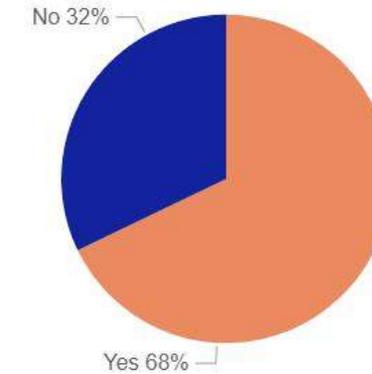
### Description Provided for Other

- All of the above.
- Also a river user under Mayo
- boater under the bridge
- Citizen , infrequent user
- Citizen who does not frequent the bridge because it is hostile to pedestrians/cyclists
- City lover and former resident

# Appendix B – CIM Comments



## Concerns about Concept



## Specified Reason for Response

22 ft lanes will become a race way for cars. Make the lanes 12ft and allocate the extra space for recreational use.

4 very wide travel lanes not enough room for other uses to safely access the bridge

8' of rec space is not enough. Fishers have to have space for equipment. Not enough space for [?] directional wheelchair under PROWAG and updated ADA

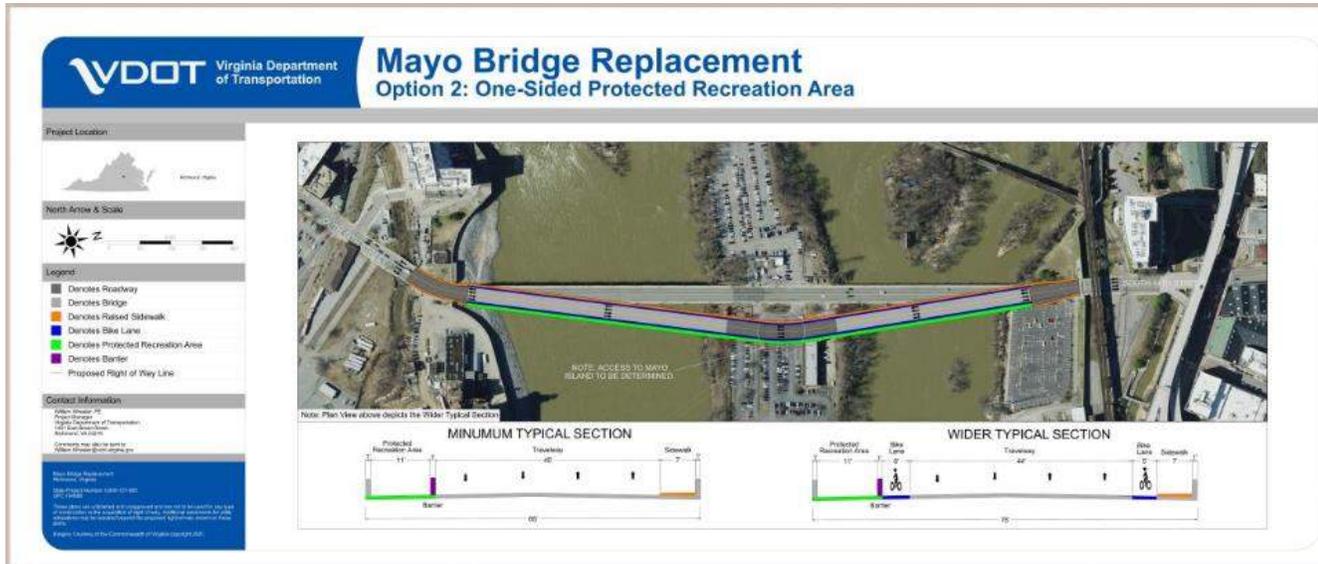
a 44' wide roadway for 2 lanes is BEGGING drivers to speed. Right next to an unprotected bike lane. A great way to NOT achieve the goals of Vision Zero. 2 lanes of traffic @ 12' is 24'. You have 10' to add a bike lane barrier and expand Rec. Area.

A recreation area is not need on both sides.

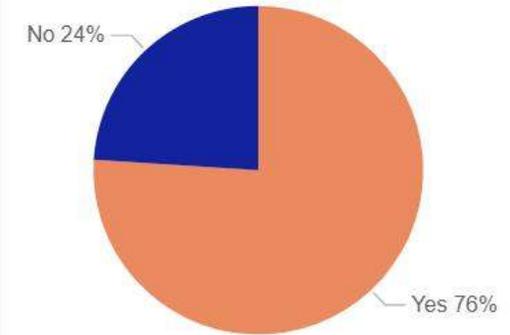
A reduction in lanes will reduce speeding. the wider section is ideal.

A safe and secure sidewalk is a great idea

# Appendix B – CIM Comments



## Concerns about Concept



## Specified Reason for Response

- 2 lanes aren't needed and given how much this bridge is used by cyclists and pedestrians there needs to be protected bike bed going both directions
- 2 sided is better than one. Protected bike lanes
- 2 sided protection would be ideal
- 4 lanes isn't necessary
- 4 travel lanes is unnecessary, and bike lanes still on the wrong side of the barriers
- 76' has no barrier for bikes. Do not want 2 travel lanes unless 1 is transit lane
- A four lane bridge with unprotected bike lane. Absolute garbage that improves nothing. Was this designed by a lifted Dodge Ram with Punisher stickers?
- A four lane speedway and dangerous bike gutters through a park is an abhorrent design. This design is negligent and fails to adequately consider the needs and safety of anyone outside of a

# Appendix B – CIM Comments

The image shows a project plan view of the Mayo Bridge Replacement Option 3: Widened Sidewalks. It includes a legend with categories: Denotes Roadway (grey), Denotes Bridge (light blue), Denotes Raised Sidewalk (orange), Denotes Bike Lane (blue), and Proposed Right of Way Line (dashed line). Below the plan view are two cross-section diagrams: 'MINIMUM TYPICAL SECTION' and 'WIDER TYPICAL SECTION'. The minimum section shows a 10-foot sidewalk, a 4-foot travelway, and another 10-foot sidewalk. The wider section shows a 10-foot sidewalk, a 5-foot bike lane, a 4-foot travelway, another 5-foot bike lane, and a 10-foot sidewalk. A note on the plan view states: 'NOTE: ACCESS TO MAIWO ISLAND TO BE OBTAINED'.

### Concerns about Concept

A pie chart showing the distribution of concerns about the concept. The chart is divided into two segments: a blue segment representing 'No' at 26%, and an orange segment representing 'Yes' at 74%.

Response	Percentage
No	26%
Yes	74%

### Specified Reason for Response

A road-diet should be considered with shoulders. The bike lanes should be protected, or maybe explore an even wider sidewalk to accommodate recreation, walking, and biking--maybe a multiuse path. Recreation bump-outs should be explored.

A wider sidewalk is better but this design does almost nothing to improve upon the current bridge and arguably makes it worse by adding dangerous bike lanes. This design will kill people if implemented. Bike lanes should be protected and separated.

Again - no barriers as protection for cyclists or pedestrians for a highly utilized connection bridge to public parks and city. Dangerous for all non car users.

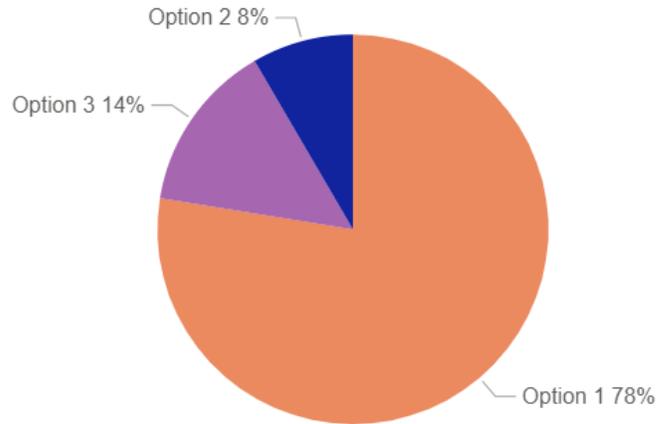
Again no protected bike lanes and forcing riders into traffic

Again, bike facilities need a hard physical buffer (not paint, not bollards) between them and vehicle traffic. I also oppose two lanes of car travel in both directions. If two lanes in each direction exist, one each way should be bus only.

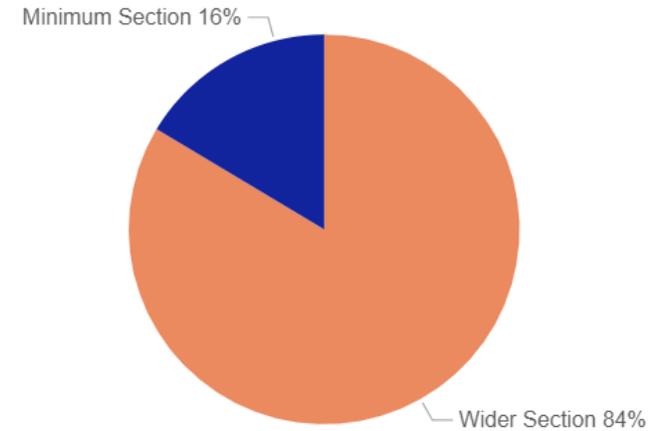
Again, CREATE PROTECTED AREA FOR CYCLISTS AND PEDESTRIANS ON BOTH SIDES OF THE BRIDGE!!

# Appendix B – CIM Comments

## Concept Preference



## Width Preference



## Specified Reason for Response

"Best meets the needs of my community"? None, unfortunately. My son would state that none of the options protect non-motorized vehicles nor position Richmond as a leader in a climate fraught world.

#3 with no walls

1's the least car-centric (though still very car-centric) the lanes are too wide, and crossings in the middle aren't considered

4 lanes are great. Ped/bike/recreational should be shared use area both sides

Again I'm not sure I understand the purpose of the recreation area. I think the priority should be the safe and comfortable ability of pedestrians and bicyclists to cross the road. The second priority should be transit connectivity.

## Specified Reason for Response

"Best meets the needs of my community"? None, unfortunately. My son would state that none of the options protect non-motorized vehicles nor position Richmond as a leader in a climate fraught world.

'Wider is safer!

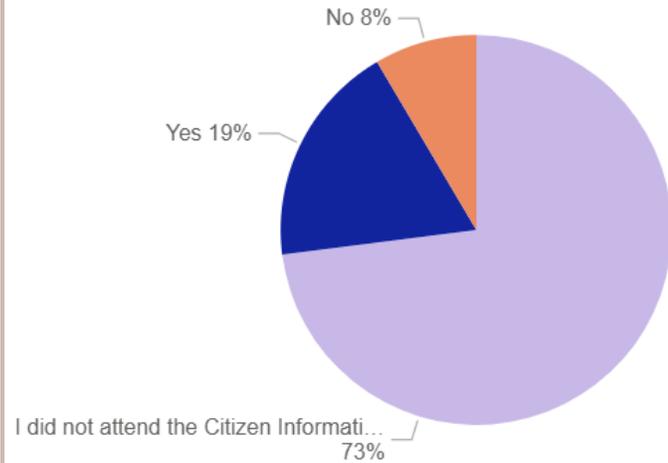
2 lanes w/protected bike lanes

76' wide bridge is for next 75 years providing 4 lanes (2 car and 2 transit/bike) . Adequate sidewalk bike and recreational area on both sides

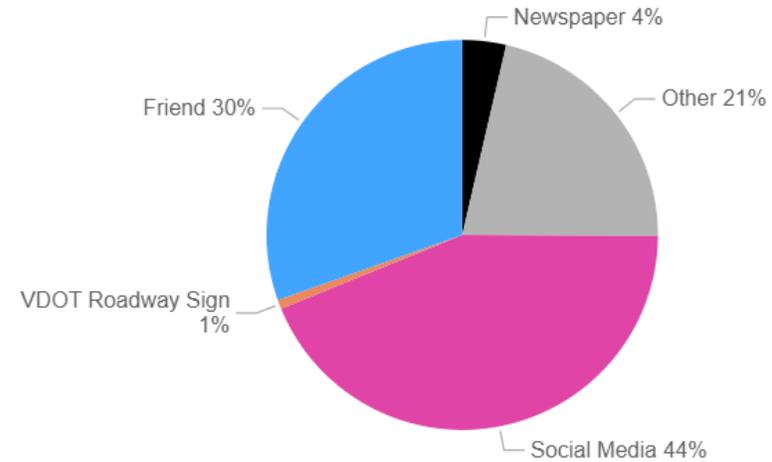
A ~15% increase in cost feels absolutely worth the additional space and safety created for all users by the increased width.

# Appendix B – CIM Comments

## Sufficient Information Provided



## Meeting Notification



## Specified Reason for Response

None of my questions were sufficiently answered

- 1.) Pedestrian, cyclist and motor access to the future Mayo Island Park must be evaluated
- 2.) No design for one lane [?] way provided
- 3.) No option for barrier protection bike lanes provided
- 4.) No bump outs provided for fishing/recreation
- 5.) No description of the aesthetic/design of what can be an iconic bridge

All my questions and concerns were addressed

All of the survey results - which I did participate in - demonstrate a community desire for the prioritization of ped/bike/bus facilities. I'm disappointed that the 3 options presented don't adequately reflect that desire.

## Other Specified

- Axios Richmond
- Bike Walk RVA
- Bike Walk Virginia/Sportsbackers
- Bike/Walk RVA
- City email
- Community Group (Bike/Walk RVA)
- Email
- Email, wife