Virginia Passenger Rail Authority (VPRA)
Virginia Passenger Rail Authority

• Created by 2020 General Assembly
• Given all powers necessary for carrying out its statutory purposes:
  • Design, build, finance, and maintain rail facilities
  • Direct recipient of USDOT Grants
  • Eminent domain powers in Virginia
• Will own rail assets and right of way
• Will partner with others to operate passenger and commuter rail service
• Governed by a 15-Member Board
Project Background
The Project corridor is separated into four areas to reflect the varying site conditions and the transition from parkland to an urban context.

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Project Schedule

DDOT Led

2011-2016 Pre-NEPA
- 2011 FRA ARRA Grant
- Phase I Study 2012-2015
- Phase II Study 2015-2016
- DDOT-DRPT Partnership through MOU

2016-2020 NEPA
- 2016 FRA TIGER Grant
- FEIS/ROD Complete September 2020
- Long Bridge Act December 2020
- Identified Mitigation Commitments & Permit Identification

VPRA Led

2021-2023 Preliminary Engineering (PE)
- Design 15% to 30%
- Determine Project Delivery Method
- Begin Environmental Mitigation & Permits
- Agreements with Partner Organizations

2023-2030 Final Design & Construction
- Design-Bid-Build or Alternative Project Delivery
- Land Acquisition Activities
- Permitting
- Final Design & Construction

Design 15% to 30%
Determine Project Delivery Method
Begin Environmental Mitigation & Permits
Agreements with Partner Organizations
Design-Bid-Build or Alternative Project Delivery
Land Acquisition Activities
Permitting
Final Design & Construction
Area 1 Design Parameters

GW Parkway Railroad Bridge
- Compatible vocabulary with George Washington Memorial Parkway
- Steel through-plate girder structure

GW Parkway Bicycle-Pedestrian Bridge
- Pre-fabricated truss spans
- Connection to Long Bridge Park and Long Bridge Aquatics & Fitness Center
- Connection to Mount Vernon Trail
Area 2 Design Parameters

Potomac River Railroad Bridge
- Consistent, compatible vocabulary with historic railroad bridge
- Steel through-plate girder structure
- Piers & retaining walls similar in size and form to historic piers and walls

Potomac River Bicycle-Pedestrian Bridge
- Pre-fabricated truss spans
- Single-column concrete piers w/concrete caps
- Opportunity for interpretive displays to communicate Long Bridge corridor history
Area 3 Design Parameters

**East & West Potomac Parks**
- Use of retaining walls to reduce footprint
- Design walls to be compatible with character of existing resources and appropriate for context of the Monumental Core
- Design landscaping to mitigate visual impacts to East and West Potomac Parks
**Maine Avenue SW Area**

- Use of retaining walls to reduce footprint
- Design of walls to be compatible with character of existing resources and appropriate for context of the Monumental Core
Existing Conditions
Potomac River Rail Bridge

Long Bridge (1904)

Existing Potomac River Pier
East & West Potomac Parks: I-395 Rail Bridge

District Department of Transportation, “14th Street Bridge Complex (Various),” DDOT Historic Collections, accessed May 10, 2022, https://ddotlibrary.omeka.net/items/show/39

Rail Bridge over I-395 (1959)
East & West Potomac Parks: Washington Channel Bridge
Maine Avenue SW Rail & Pedestrian Bridge

Rail Bridge over Maine Avenue SW (1905)

Pedestrian Bridge (1928), Privately Owned
Design Intent: Landscaping, Walls, & Bridges
Design Intent: Landscaping, Retaining Walls, Bridge Type

**Landscaping**

- Restore historic landscapes planned in parkland around rail corridor
- Screen existing and proposed rail bridges and walls
- Bicycle-Pedestrian Ramp landscaping design to address safety concerns and maximize visibility of users

**Retaining Walls, Piers & Abutments**

- Granite block masonry stone cladding proposed
- Design vocabulary within the GW Parkway will be consistent with Parkway design vernacular
- Approximate, without replicating, the existing historic rail corridor not the surrounding highway corridor.

**Bridge Type**

- Weathering steel girders
- Through girders over GW Parkway, Potomac River, I-395
- Deck girders over Ohio Drive SW (East), Washington Channel, Maine Avenue SW
GW Parkway

Potomac River Rail Bridge & Wall A

Rendering of Proposed Rail Bridge Over GWMP Roadway. Rendering intended to show massing not proposed stone pattern.

Weathering Steel Arched Through Girder

Proposed stone pattern: Piers and Wall A

END WALL "A" STA. 4017+93.3
BEGIN WALL "A" STA. 4016+73.0

PROPOSED TOP OF RAIL

APPROXIMATE FINISH GRADE

Wall A Elevation & Landscaping

N

I-395 N Bridge

Proposed Bicycle-Pedestrian Bridge

Charles R. Fenwick Bridge

Proposed Potomac River Two-Track Rail Bridge

Wall A Plan & Landscaping
Existing Long Bridge
Potomac River Rail Bridge

- Elements to approximate structure, material, form, through girders, and pier spacing
East & West Potomac Parks

Proposed Stone Cladding

NPS Parking Lot C to be redesigned
Proposed Rail Bridge over WMATA/I-395

- Steel through plate girders
- Concrete column piers and concrete abutments
- Granite block masonry stone cladded walls
3 East & West Potomac Parks

Wall F, G, H & I

Proposed Stone Cladding
Ohio Drive SW & Washington Channel Proposed Rail Bridges
Weathering steel deck plate girders
Granite block masonry stone cladding for walls
Proposed Rail Bridge
Weathering steel girders
Granite block masonry stone cladding for walls
Maine Avenue SW

Wall J & K

Proposed Wall “J”

Proposed Wall “K”

Proposed Stone Cladding
**Maine Avenue SW**

**Wall L**

Note: Landscaping along Wall “L” not shown

**Design Intent Note:**
- Adjacent property owner coordination is on-going
- An architectural panel may be installed atop the wall to visually screen the railroad from the residential use.

Elevation View showing landscape buffer along Wall “L”
Design Intent: Maine Avenue SW Pedestrian Bridge
Maine Avenue SW Pedestrian Bridge

- Design Intent: Coordination with private owners of pedestrian bridge on the Design Intent is ongoing.
- Existing pedestrian bridge is privately owned by Portals Development Associates Limited Partnership and serves Republic Properties and the Mandarin Oriental Hotel.
- Existing rail and pedestrian bridges to be removed and replaced.
- The current pedestrian bridge does not provide an accessible route.
  - Options for accessible routes are being explored.
- South end includes stairs and a 6ft-wide accessible ADA ramp.
  - Including both a ramp and stairs reduces the potential conflicts for the ramp users.
Design Intent: Potomac River Bicycle-Pedestrian Bridge
Existing Bicycle-Pedestrian Network
Ramps and stairs will connect the bridge to the Mount Vernon Trail.

Ramp from bridge to Ohio Drive SW (West) will end in a T-intersection.

Prefabtricated truss and pier shapes will match the bridge.

Renderings are for illustration purposes only. Design details will be refined based on comments.
Design Intent

- A safe, effective pedestrian and bike crossing
- Low profile and simple structure that blends with the surrounding bridges
- Truss size is based on span length determined by pier alignment
- Top chord is placed above eye-level
Potomac River Bicycle-Pedestrian Bridge

Proposed Color Options

DDOT light gray, Federal Standard No. 26408.
Potomac River Bicycle-Pedestrian Bridge

Proposed Color Options


Historic Note: Existing 1904 Long Bridge was a truss bridge, originally painted red.
Potomac River Bicycle-Pedestrian Bridge

Proposed Color Options

DDOT Brown, Federal Standard No. 37056.
Next Steps

• **May/June 2022**
  • CFA Concept Submission & Review
  • Public Meeting
  • Continue Private Property Owner Coordination

• **July 2022**
  • NCPC Concept/Preliminary Review

• **Fall/Winter 2022**
  • Continue CFA and NCPC reviews and Public Outreach

• **Early 2023**
  • 30% Preliminary Engineering Design Complete