Belmont Bridge Replacement

VDOT Proj. 0020-104-101

When is a bridge more than a bridge?

March 5, 2020
Our Team
Difficult Past and a Stalled Project

City to hire new firm to design Belmont Bridge
Sean Tubbs | Tuesday, October 07, 2014 at 8:33 p.m.

An engineering firm will design a replacement for the Belmont Bridge.

"We’ve terminated the contract for the replacement of the Belmont Bridge," said Tina Trolbert, development services.

Calls to MMN Design for the bridge’s replacement project returned before press time.

Trolbert said MMN Design’s contract has been terminated due to the lack of a design for the replacement of the bridge.

A public process kicked off with a community meeting last month.

It’s baaaack: Belmont Bridge design RFP goes out

Council OKs replacement Bridge, shoots down urban design services

Calls to MMN Design for the bridge’s replacement project returned before press time.

Trolbert said MMN Design’s contract has been terminated due to the lack of a design for the replacement of the bridge.

A public process kicked off with a community meeting last month.

Perhaps the bridge design will be completed in 2015 and the new Belmont Bridge will be finished in 2016.

Lisa Provence
12/16/15 at 1:00 AM

More than a decade after a 2003 study determined the Belmont Bridge was deteriorating and needed to be replaced, and more than six years after a company was chosen to design the bridge, the project has been repeatedly rejected by the community. Charlottesville is again seeking bids to design the bridge.
How many stakeholders does it take to build a bridge?
Process/Schedule

**PHASE 1**

**JAN**

**STEP 1**
AWARENESS AND OPPORTUNITY
Identifying values, issues, and opportunities

Community Engagement
- Committee Meetings
- Stakeholder Group Meetings
- Mobility Fair
- MetroQuest Survey

**FEB**

**STEP 2**
CRITERIA AND INITIAL CONCEPTS
Exploring and evaluating design alternatives

- Committee Meetings
- Stakeholder Group Meetings
- Design Charrette

**MAR**

**STEP 3**
REFINEMENT AND REINFORCEMENT
Selecting a preferred concept

- Committee Meetings
- Stakeholder Group Meetings
- Community Open House

**APR**

**STEP 4**
ENDORSEMENT AND ACTION
Advancing a preferred concept

- Committee Meetings
- Stakeholder Group Meeting
- Planning Commission
- Board of Architectural Review
- City Council

**MAY**

**JUN**

**JUL**

**AUG**

**SEP**

**OCT**

**NEXT PHASES**

Engineering Permits
Construction
Steering Committee

Participate
- Attendance is important.

React
- Share your thoughts.

Advise
- Provide input to the Technical Committee.

Engage
- Serve as project ambassadors during critical public engagement activities.

Technical Committee

Synthesize
- Steering Committee, stakeholder, and public input.

Absorb
- design team of operational and performance expectations.

Inform
- a preferred concept design.

Recommend
Understanding Project Constraints/Project Overview

- Existing 7 Span Steel Girder Bridge – 453 LF Total Bridge Length
- Old Avon Street, Buckingham Branch RR & Water Street
- Existing bridge deck configuration functionally obsolete
- Major signalized intersections within 300’ of bridge
- Superstructure experiencing significant deterioration
- $26 million budget (local, state and federal funds)
City Design Criteria

- Bridge is the **gateway** into downtown
- Maintain 25 MPH **speed** limit
- **Two lanes** – one in each direction
- **Views** to the mountains and of the railroad tracks should be preserved
- **Innovative**, entertaining design
- **Separate pedestrian, vehicles, and bicycles**
- Reduce the **bridge length**
- **Enhance the landscape** design elements on the approaches
- **Accent lighting** to showcase the bridge
- Bike lanes **10’**, pedestrian lanes **10’** and traffic lanes **11’**
Outreach & Engagement

Since February 2017

- **3,500+** touch points
- **30,500+** individual data points
- **1,250+** written comments

**Steering Committee Meetings** x4

**Small Stakeholder Group Meetings** x18

**Mobility Summit** 100+ attendees

**MetroQuest Survey** 896 responses

**Design Charrette** 3 days + 3 public sessions

**Open House** 60+ attendees

**Topical Online Survey** 244 responses

Belmontbridge.org
- **2,196 unique users**
- **8,053 page views**
Public Input: Common Themes and Key Takeaways

- Design a functional, integrated design
- Improve connectivity – emphasis on relationship between downtown and neighborhoods
- Design focus on multimodal functionality and safety
- Create safe bike and pedestrian facilities
- Include improved, safe street crossings – calm traffic to reduce travel speed
- Improve intersections and approaches (traffic functions, bike/pedestrian safety, aesthetics)
- Do not negatively impact access to local businesses
- Create opportunities for landscaping and public spaces
- Address short term and long term parking needs
Project Planning/Concept

- Shorten bridge to 3 Span – 236 LF (+/-) total length
- Minimize right-of-way acquisition
- Close Old Avon Street from South to Levy
- Limit access to Graves Street
- Maximize surface parking and on-street spaces
- Pedestrian / bike passageway crossing below 9th Street
Future Compatibility

- Modified street pattern and block structure
- Parcel modifications: acquisition / parcel assembly scenarios
- Potential integration of vertical circulation with new buildings on development sites
- Improved parking scenarios with potential shared parking on development sites
- Increased activation at street level = improved security and placemaking opportunities
Public Hearing Level Design
Design Elements – Decorative MSE Walls - Southwest

- Locust Avenue
- Old Avon St.

26' Height 258 LF
19' Height 275 LF

Pedestrian Passageway
Design Elements – Decorative MSE Walls - Southwest

Southwest Elevation of Bridge Wall

Panel Enlargement

- Color: Silversmoke 8084 Grey (Davis Colors)
Design Elements – Stairs - Southwest
Design Elements – Stairs – Bike Runnels

4” WIDE BIKE RUNNEL, FLUSH WITH NOSE OF STAIR TREADS

Precedent Image of Bike Runnel at stair cheek wall
Design Elements – Knuckle Pedestrian Bridge
Design Elements – Knuckle Pedestrian Bridge

- Illustrative View of Knuckle from Water Street- Looking East
- View of Knuckle from Below – Axon View
- Key Plan
- Perspective View

ILLUSTRATIVE VIEW OF KNUCKLE FROM WATER STREET-LOOKING EAST

VIEW OF KNUCKLE FROM BELOW – AXON VIEW

KEY PLAN

PERSPECTIVE VIEW
Design Elements – Stairs - North Abutment
Current Status

• Currently in R/W Negotiations for 3 Parcels
• In discussions/review by Buckingham Branch Railroad
• Resolving comments on 90% Plans by VDOT, City and FHWA

Next Steps

• Complete R/W Acquisitions (End of 1st Quarter)
• Complete Franchise Utility Relocation Design In-Plan (Early 2nd Qtr.)
• Obtain Approvals - City, VDOT, FHWA and Buckingham Branch (End of 2nd Qtr.)
• Advertise for Construction – Summer 2020
• Construction – Fall 2020 to End of 2022