

## **VTrans Quechee Gorge Bridge Rehabilitation Project**

### **Public Information Meeting Hartford Town Hall, White River Junction October 3, 2019**

A meeting to review design criteria and options for design elements of Quechee Gorge Bridge Rehabilitation Project was held on Thursday, October 3, in Hartford Town Hall in White River Junction. Jill Barrett introduced the night's meeting agenda and team members. Representatives from the team included VTrans Project Manager JB McCarthy, VTrans planner Matt Langham, engineer Amy Spera of Gill Engineering, public outreach consultants Jill Barrett and Shawna Kitzman of Fitzgerald & Halliday, Inc (FHI).

#### **Project Survey**

Jill Barrett reviewed the public survey gauging public preference for bridge design elements. Design elements that the public weighed in on included barrier design, lower barrier design, barrier color, and vehicular barrier height.

The survey was promoted on the VTrans website, project website, and social media. VTrans collected 596 responses, from both residents and visitors.

Online survey results generally reflected in-person polling conducted at the April 2019 public meeting. Ms. Barrett was incredibly pleased with the amount of responses received, and that the small group is a good cross section of representatives.

The survey results indicated the following:

- people overwhelmingly preferred the arched design for the upper pedestrian barrier
- people wanted the lower section of the pedestrian barrier to have another design element in addition to vertical bars
- the majority wanted the bridge to be painted green
- a taller (34") vs (24") vehicle railing was preferred if that height was feasible

#### **Engineering**

Amy Spera introduced the vehicular bridge rail, explaining the engineering that determines the termination of the bridge rail.

Amy reviewed the extent of project design updates related to this "forever bridge", including repairs and rehabilitation components, some of which will be on the underside of the bridge, not visible to travelers. Safety improvements include curb mounted vehicular railing, increasing the sidewalk width to 6', adding the 9' tall pedestrian barriers, and extending the length of the sidewalks on both sides.

Amy discussed the potential approach sidewalk rendering. The handrail attached to the guardrail is in design revision now, pending crash test analysis. Must meet standards defined by Federal Highway Administration (FHWA).

A citizen commented that the guardrail is not complementary to the bridge design. A tailored guardrail treatment would better complement the bridge design than the standard galvanized surface.

Ms. Spera and Mr. McCarthy noted the guardrail is a standard safety element used for roadway approaches to bridges. Ms. Spera noted that adding a guardrail screening while accommodating the new sidewalk would require significant engineering given the steep gorge slopes. The structure would need to withstand the impact of a vehicle crash, which guardrails are designed for.

Police Chief Phillip Kasten noted that the guardrail mimics existing conditions.

A member of the public inquired about the height of the vehicular barrier. Ms. Spera noted that this design elements of this project must meet the standard of the FHWA to qualify for funding. The attendee expressed concern for children “hip checking” each other and causing a pedestrian accident into the roadway. Another woman noted that as a mother, typically kids on a bridge are under close supervision due to the inherent safety risk. JB McCarthy noted that the rail is installed in a curb, and a person’s foot would hit the curb first.

JB noted that the vehicular barrier will not visually dominate.

Ms. Spera continued to review the design criteria. Safety barrier considerations include an upper barrier of 9’ tall. This height will accommodate VTrans’ Servi-Lift equipment required for inspection and maintenance. A handrail is required at 42”. Horizontal and vertical components will be incorporated. Lower barrier design will limit ability for climbing and require that a sphere with no greater than 4” diameter. A removable panel is needed on each side of the bridge to accommodate emergency recovery.

Ms. Spera reviewed the four lower barrier treatments including the circles (Option 1), bar (2), arch (3) and arch & bar (4). Attendees were invited to view the PPT closer, for a more detailed look.

The audience chose the arch design (Option 3) as the winner. In general, the public consider Option 4 too busy.

An attendee emphasized the that the arch iconography is so important to the community and should be incorporated as much as possible.

When discussing the width between upper barrier verticals, a woman asked if 8” would allow a thin person or child to pass through. Ms. Spera noted that it would be very unlikely, and that a similar design was applied successfully on a bridge in Gloucester. The project team will investigate further.

### **Color: Shades of Green**

Amy moved into the discussion of bridge color, including three shades of green. The color will likely be applied with a powder coat technique, which is durable. Regardless of application, over time, the paint color will fade.

The community prefers darker green unanimously.

A member of the community ask that the paint or application should be graffiti resistant. Mr. McCarthy and Ms. Spera noted that an acrylic top-coat can be applied to deter marking.

## **Next Steps**

Ms. Spera and Ms. Barrett reviewed next steps. When the bid is awarded, the pre-construction meeting with the public will be an opportunity to meet the contractor and begin to establish a positive relationship. Ms. Barrett noted that contractors generally desire to have a good rapport with the community in which they work.

No alternate truck or bus route is anticipated. The road will be narrow, but passable, during construction. Two lanes will be open most of the time. Some of the work will be completed at night, requiring less single-lane closures. Typically, the contractor can accommodate community rush hours with scheduling.

The design team will further engineer bridge elements, considering the feedback gathered at the meeting.

## **Community Discussion**

A member of the public asked if the septic infrastructure was considered, since the bridge is being upgraded. Certain businesses do not have the septic. Mr. McCarthy and Town Manager Brannon Godfrey mentioned that this question had not been presented to the Town. The Town would need to coordinate directly to issue a request with VTrans. From an engineering consideration, Ms. Spera noted that it could be accommodated on the rehabilitated bridge.

The team demonstrated the 24" vehicular barrier with a tape measure. The conversation continued about the aesthetics vs. the safety of a higher barrier termination.

A member of the public asked if there is funding for the project. The team noted that the funding is available now, but is an annual consideration to be determined, in part, by elected officials.

A person asked about traffic speeds in the bridge area, which by his calculation, is getting worse. Chief Kasten says his department can do a short-term correction, by siting marked cars near the bridge. He also noted that the improved design will indicate to drivers to slow down. Chief Kasten could provide traffic counts.

Another citizen noted that commercial trucks are a continuous issue. Chief Kasten noted that the Police Department can collaborate with DMV staff to ensure compliance, with temporary weigh stations, as well as by directly contacting repeat offender trucking companies.

A member of the public inquired about traffic calming measures, including signage and markings. Mr. McCarthy will return to the traffic operations department at VTrans to determine applications for this project. Ms. Spera noted that the extended sidewalks and wider crosswalks with distinct marking will be a natural indicator to slow traffic.

Shoulder rumble strips could be another solution, even in the interim.

Call box for suicide help is overgrown on the Woodstock side. JB McCarthy indicated that these are the VTrans Department of Planning's responsibility, and could remove it, especially considering the existence of the safety fence. Ms. Barrett noted that if it's in the ROW, it would be the District's responsibility. Jill committed to getting in touch with VTrans' District maintenance staff. Mr. Langham noted that he would connect with VTrans' Jackie Cassino.