

US ROUTE 4 – BRIDGE 61 OVER OTTAUQUECHEE RIVER

OCTOBER 3, 2019

QUECHEE GORGE

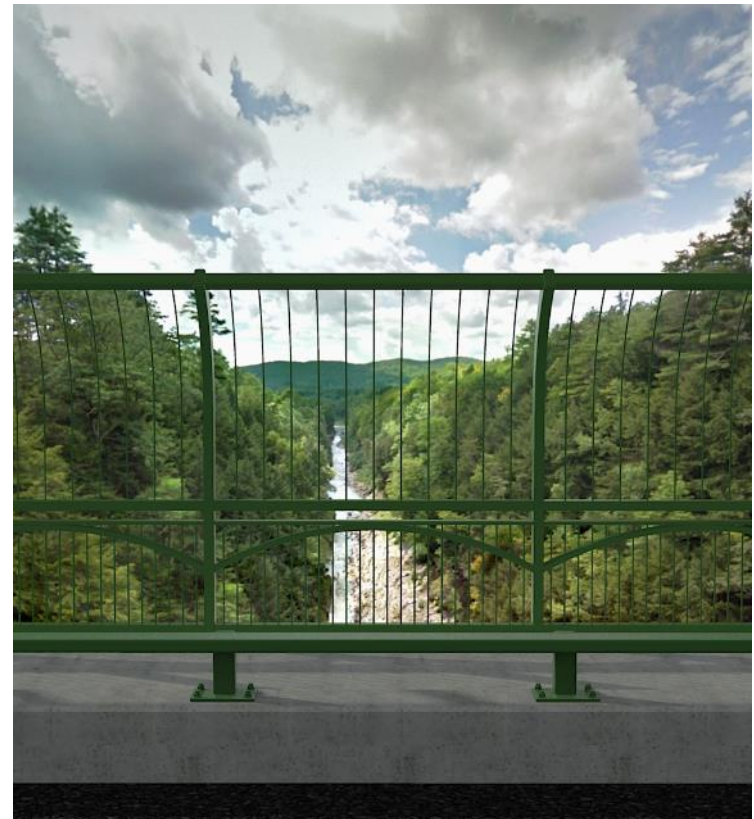


Semi-Final Plans
Public Information Meeting

October 3, 2019

Tonight's Agenda

- Introductions
- Project Status
 - Budget
 - Schedule
 - Development Process
- Public Survey Results – FHI
- Preliminary Plans Update – Gill
 - Project Scope
 - Project Decisions
 - Lower Treatment Options
 - Safety Barrier Color
- Next Steps
- Discussion



Potential Barrier Design

Introductions

Vermont Agency of Transportation

- J. B. McCarthy, P. E., Project Manager

Gill Engineering

- Amy Spera, P. E.

Fitzgerald & Halliday, Inc. – Public Outreach

- Jill Barrett
- Shawna Kitzman, AICP

Project Status

- Budget

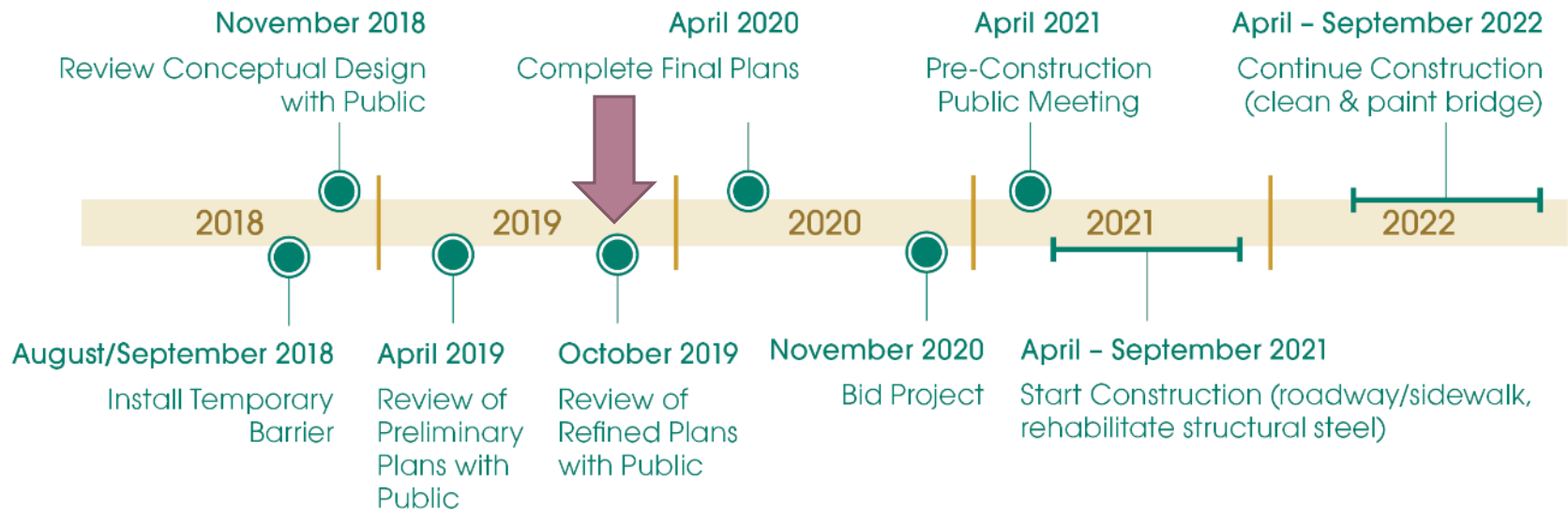


Phase	Programmed	Spent-to-Date
Scoping	\$50,000	\$45,076
PE	\$675,000	\$208,829
ROW	\$0	\$0
Construction	\$8,135,000	\$0
TOTAL	\$8,860,000	\$253,905

Project Status

- Schedule

QUECHEE BRIDGE PROJECT SCHEDULE



Project Development Process

Preliminary Design:

Site plan and construction limits

Barrier refinement

Property owner meetings (none needed)

Right-of-Way process (not needed)

Public input on preliminary design

Final Design:

Design/detailing of bridge components (Fall '19 - Spring '20)

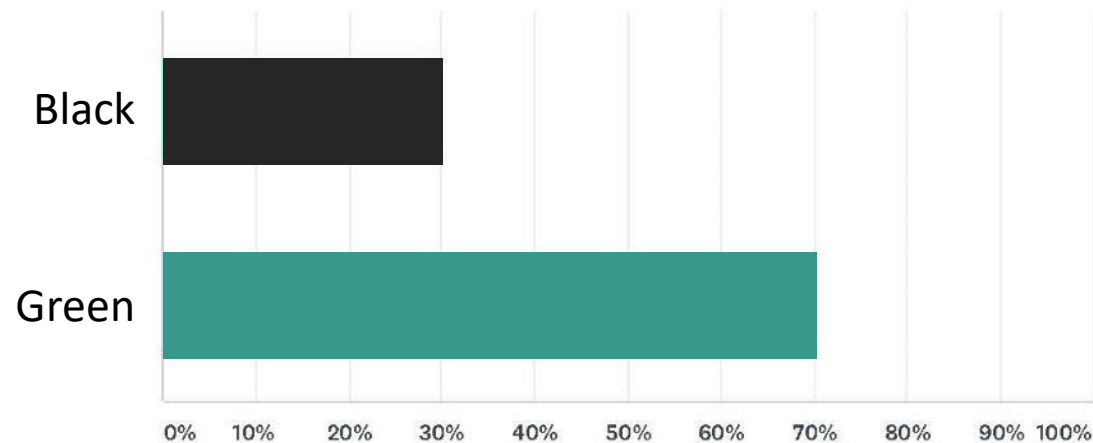
Develop Final plans, specifications, and construction estimate

Secure ALL environmental permits and utility clearances

Public Survey

Survey Results

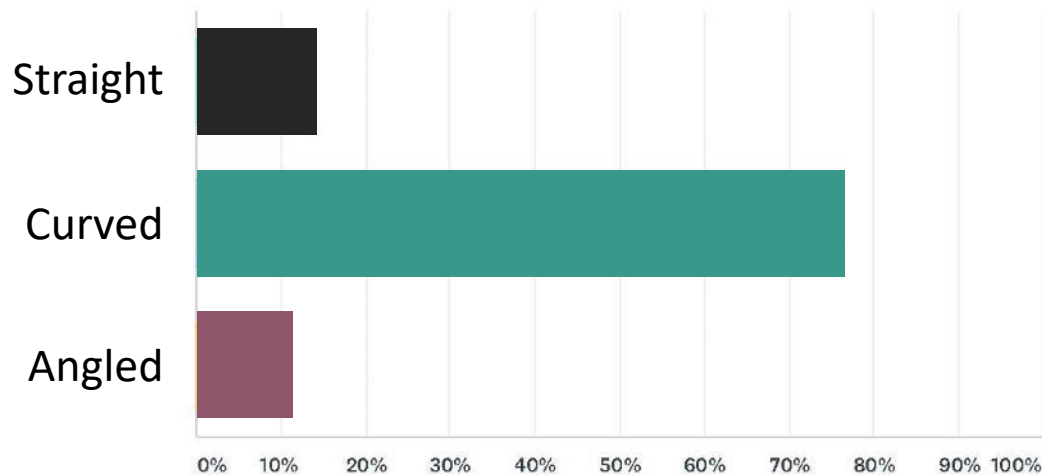
- Which barrier color do you prefer?



ANSWER CHOICES	RESPONSES	
Black	29.87%	178
Green	70.13%	418
Total Respondents: 596		

Survey Results

- Do you prefer a straight, curved, or angled upper barrier?



ANSWER CHOICES	RESPONSES	
Straight	13.59%	81
Curved	76.17%	454
Angled	11.07%	66
Total Respondents: 596		

Upper Barrier Design



Straight



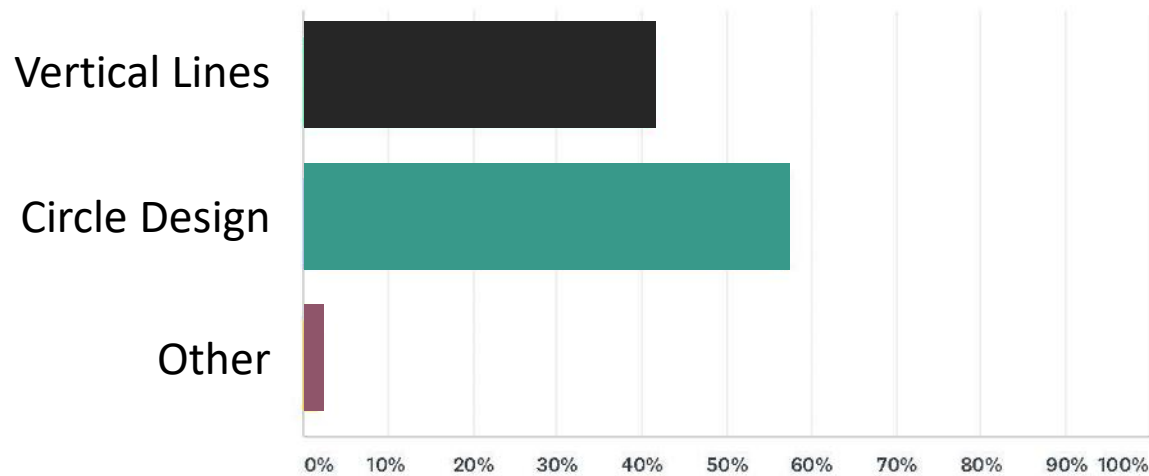
Curved



Angled

Survey Results

- Do you prefer a lowered barrier with vertical lines or a circle design?



ANSWER CHOICES	RESPONSES	
Vertical Lines	41.28%	246
Circle Design	57.38%	342
Other	1.68%	10
Total Respondents: 596		

Lower Barrier Design



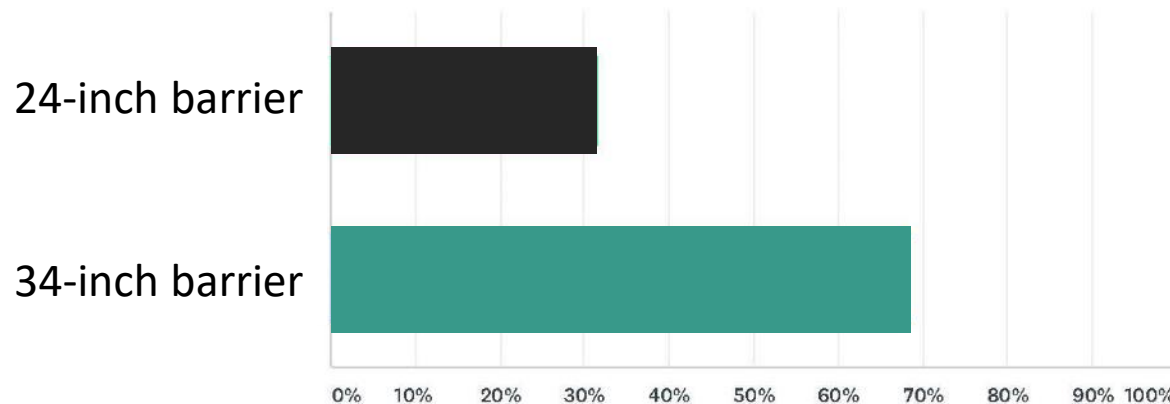
Vertical Lines



Circle Design

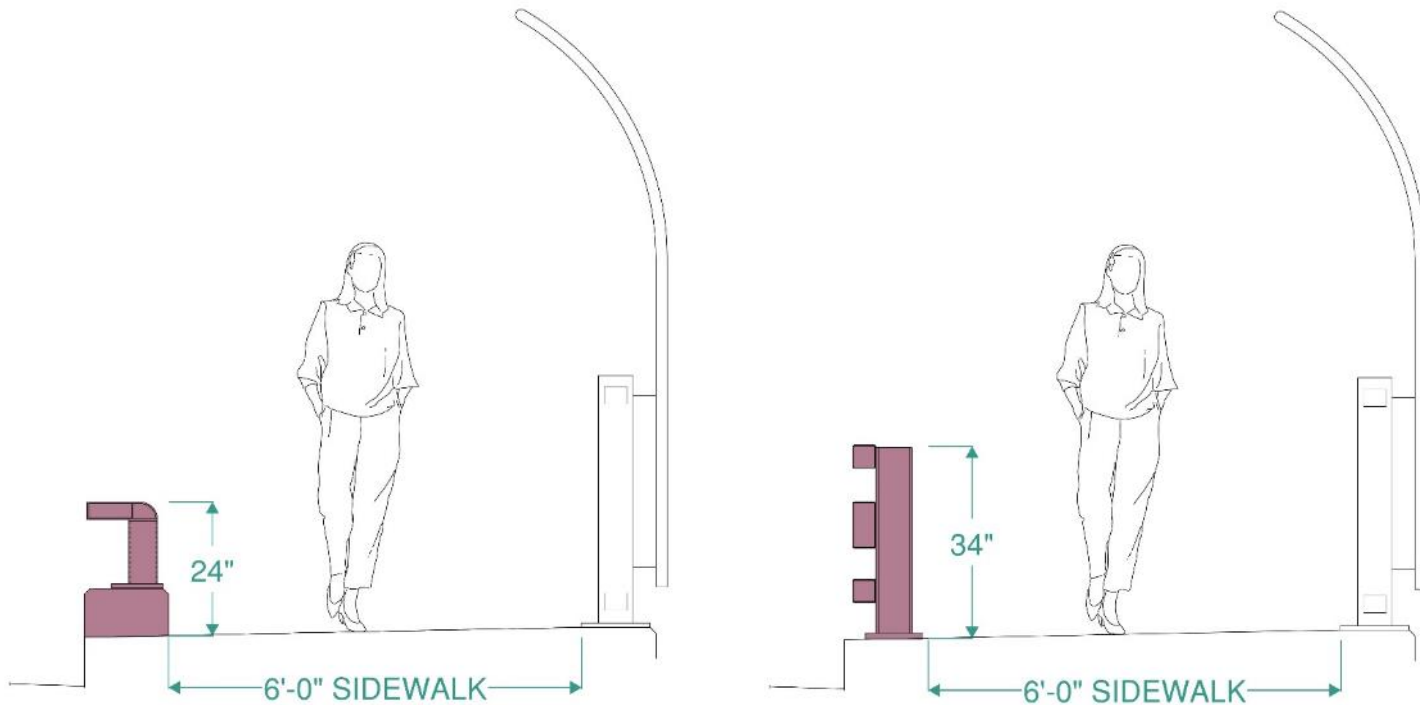
Survey Results

- Would you like the vehicle barrier height to be 24 inches or 34 inches?
[Note: This element under design review. A 34-inch rail may not be feasible with crosswalks close to the ends of the bridge.]



ANSWER CHOICES	RESPONSES	
24 inch barrier	31.54%	188
34 inch barrier	68.46%	408
TOTAL		596

Comparison: Vehicular Barrier Height



Considerations:

- Number of rails and visibility (taller barrier has three railings)
- Size of transition at the end of the bridge (bigger transition for taller railing)

Vehicular Barrier Example



Preliminary Plans Update

Project Design - Gill Engineering

Bridge Preservation – “Forever Bridge”

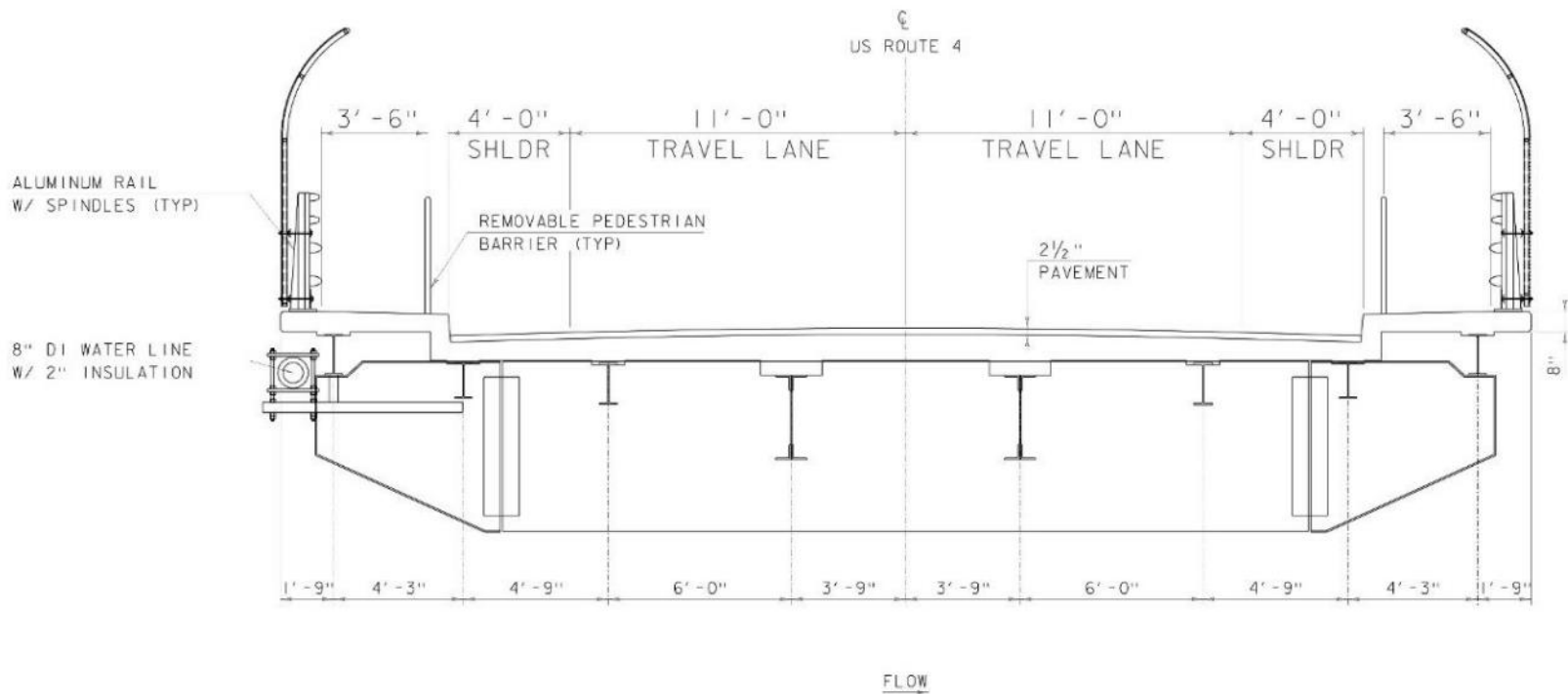
- Repair steel arch truss members
- Replace deck (partial width) and new wider sidewalks
- Replace joint and bearing
- Waterproof membrane and pave
- Clean and paint bridge
- Stabilize the eastern shale slope
- Apply water-repellant to substructures, sidewalks and fascias

Project Design - Gill Engineering

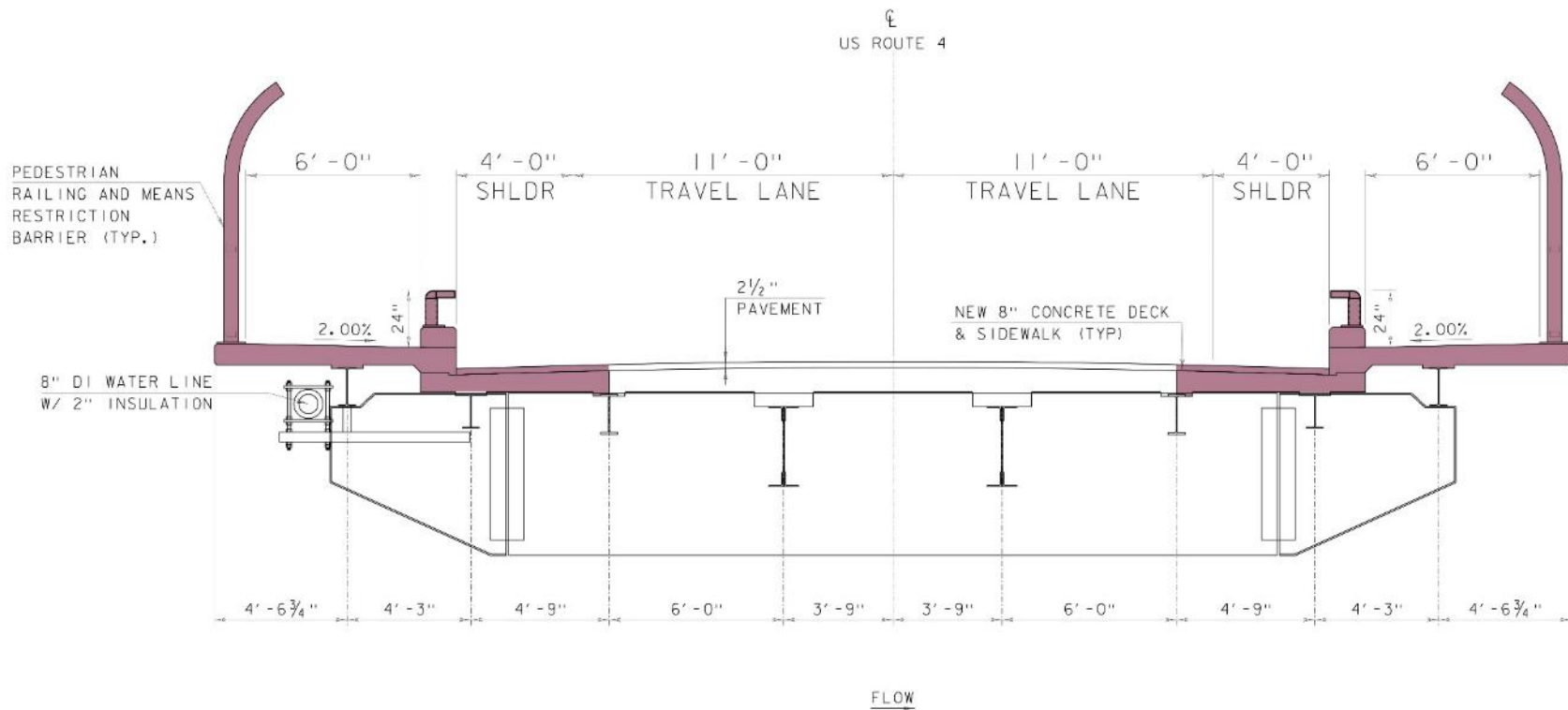
Safety Improvements

- Curb-mounted vehicular railing
- Increased sidewalk width = 6'-0" (existing = 3'-6")
- Pedestrian safety barrier
- Sidewalk extensions to parking lots (West) and Visitor's Center (East)

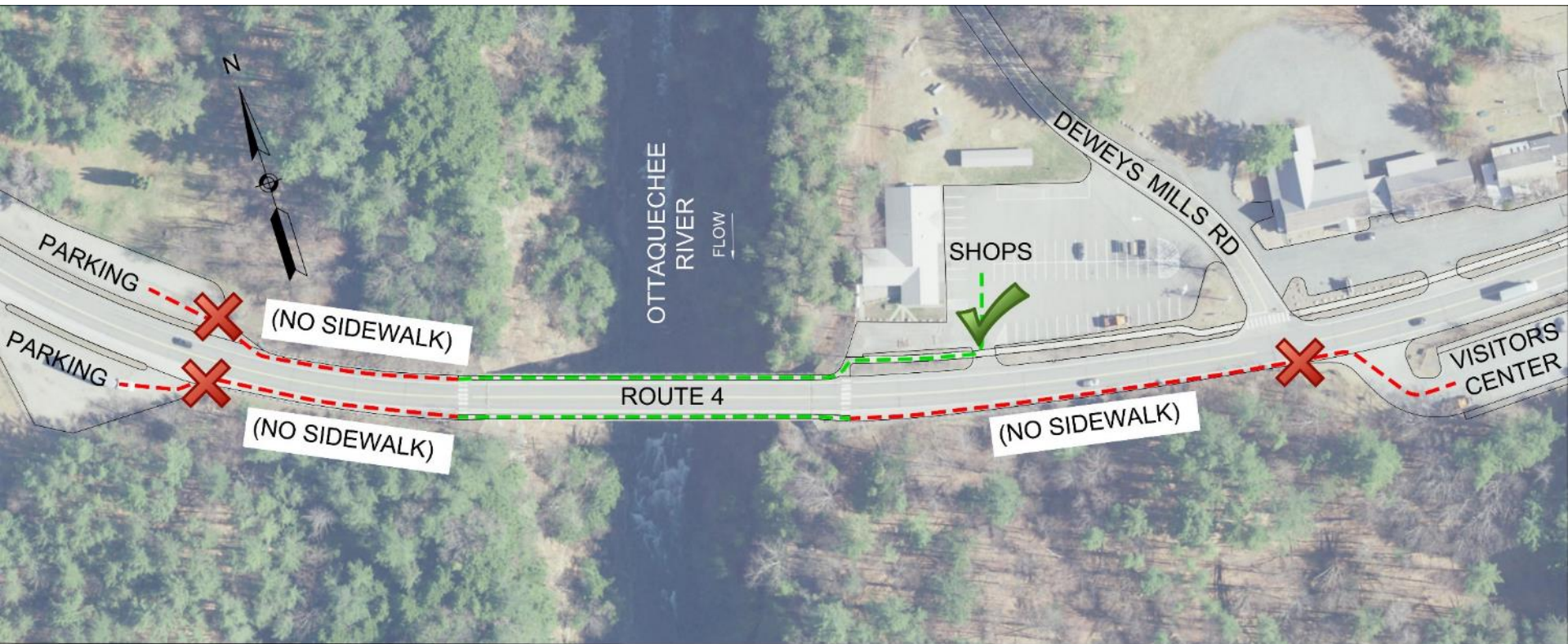
Existing Bridge Cross Section



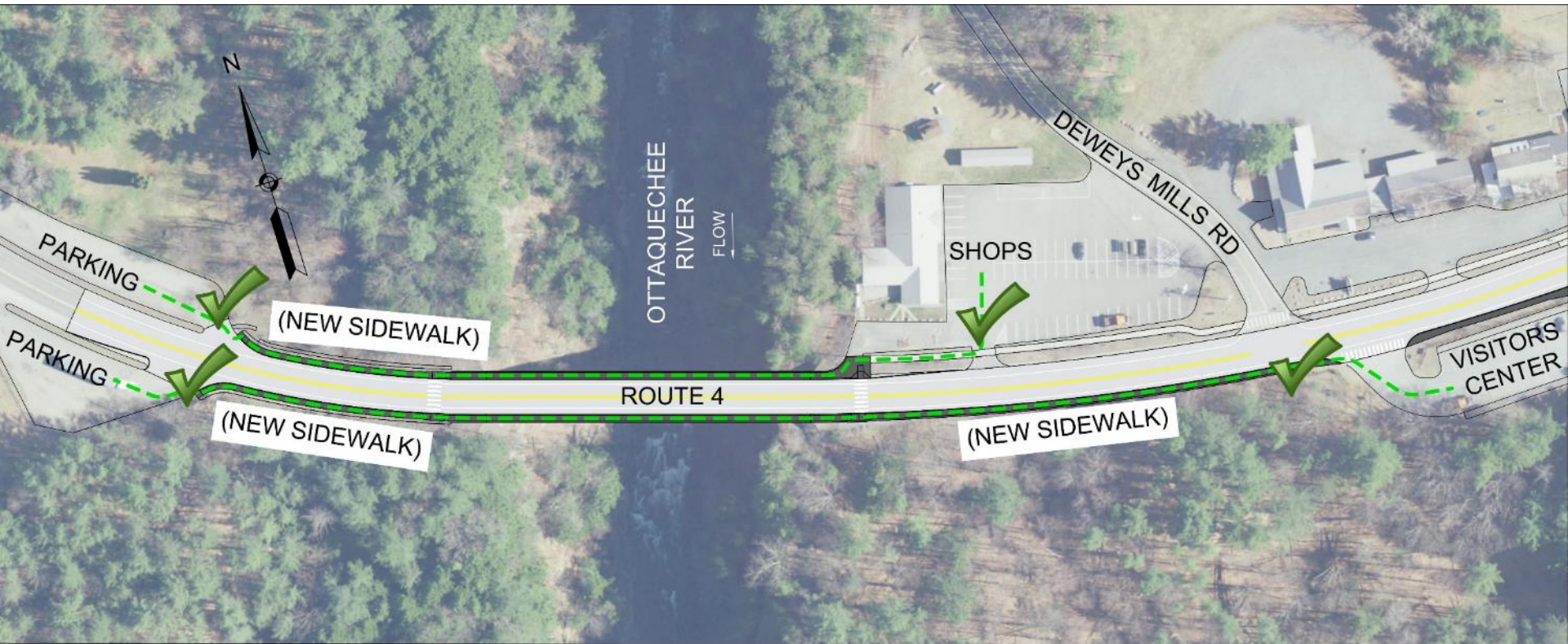
Proposed Bridge Cross Section



Existing Sidewalk Connectivity



Proposed Sidewalk Connectivity



Approach Sidewalks (design is in progress)



Pedestrian Safety Barrier

Barrier Design Considerations:

- Total Height = 9'
 - Maximum height for bridge inspection equipment
- Upper portion (above 42") will consist of vertical steel balusters, spaced 8" on center
- Must have locations of removal panels for recovery access
- Lower portion will serve as a pedestrian railing, and as such:
 - Must have a rail 42" above the top of sidewalk
 - Must be composed of horizontal and vertical elements that are arranged so that a 4" diameter sphere cannot pass through the clear opening

Design Decisions to Date

Paint Color: Green
Upper Barrier Treatment: Curved



Seeking Your Input On

Lower Barrier Treatment

Option 1: Lower Barrier Treatment – Circles



Option 2: Lower Barrier Treatment – Bar



Option 3: Lower Barrier Treatment – Arch



Option 4: Lower Barrier Treatment – Arch + Bar

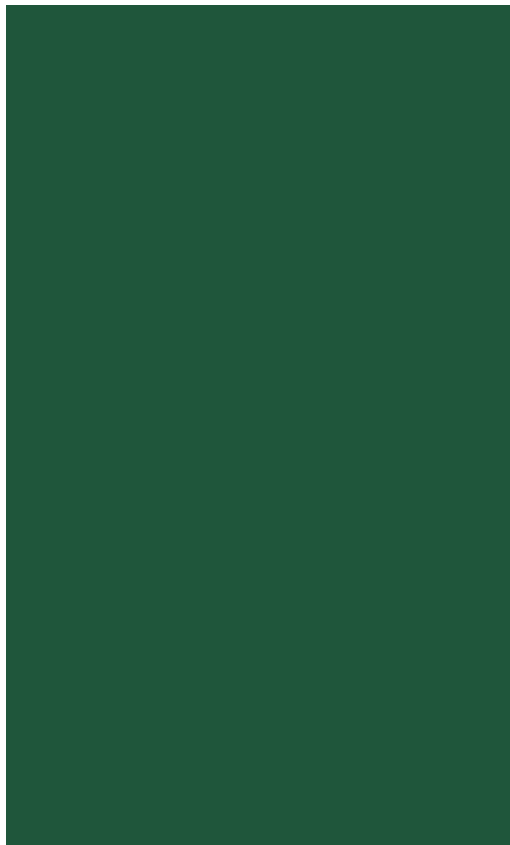


Summary:

Lower Barrier Treatment Options



Barrier Color – Green



14062



14090



14110

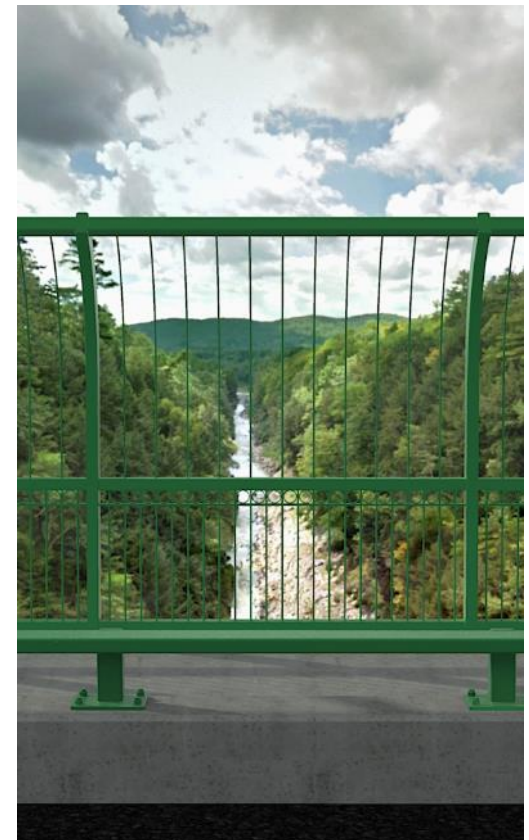
Barrier Color – Green



14062



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Seeking Your Input On

Pedestrian Safety Barrier:

- Lower treatment:
 - Option 1: circles
 - Option 2: bar
 - Option 3: arch
 - Option 4: arch + bar
- Color: shade of green

Next Steps

- Complete the design
- Prepare documents for bidding
- Advertise contract
- Award bid
- Hold Pre-Construction meeting with public



Discussion

QUECHEE GORGE



[HTTP://VTRANS.VERMONT.GOV/PROJECTS/QUECHEE](http://VTRANS.VERMONT.GOV/PROJECTS/QUECHEE)