Brunswick BF 0271(23)
Bridge 6 on VT Route 102
over Paul Stream
Public 502 Informational Hearing

Presented by
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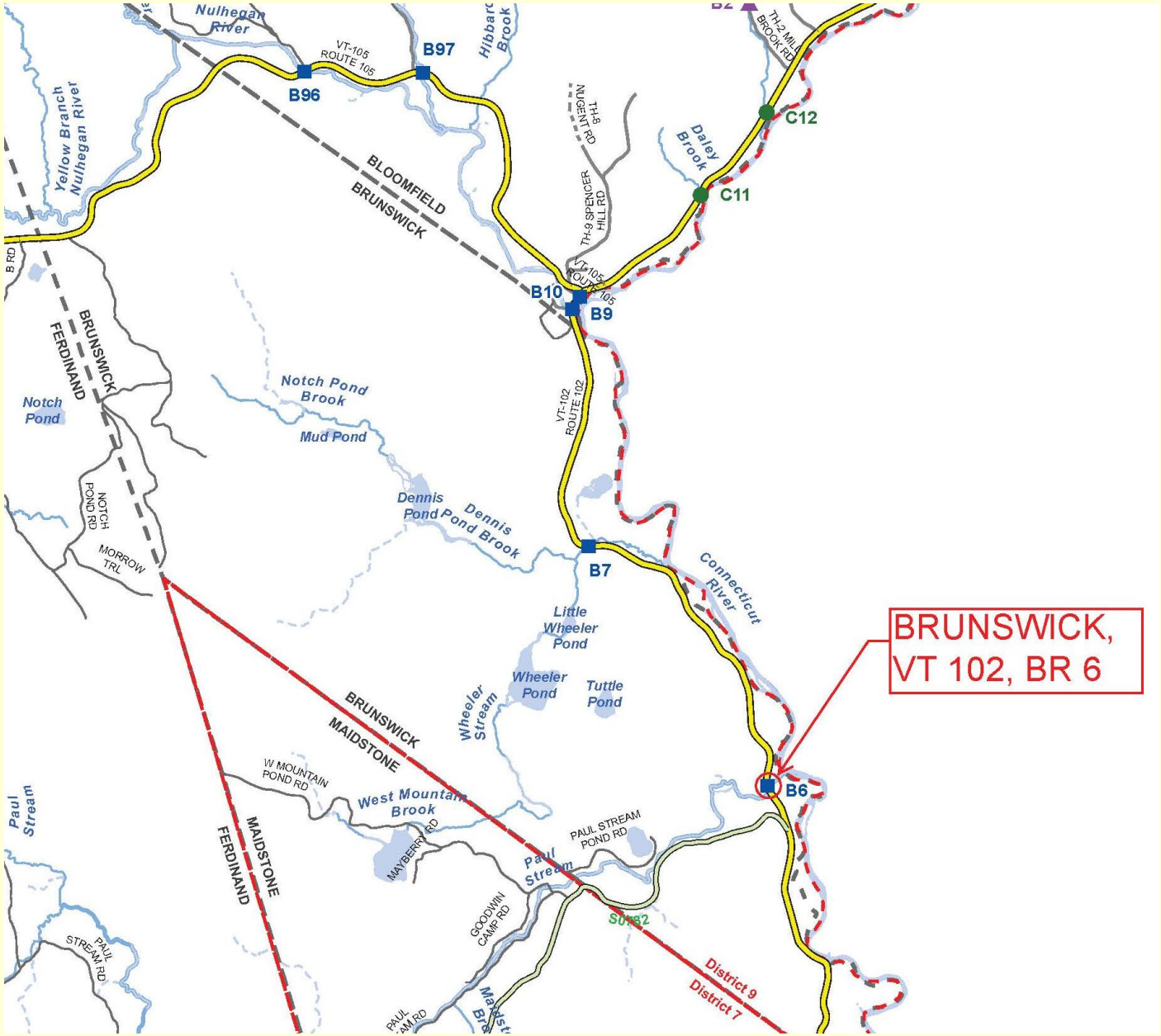
Meeting Outline

- Purpose of the Meeting
- Existing bridge information
- Proposed project information
- Next Steps
- Questions

PROJECT LOCATION



Purpose of Meeting

- Present the Conceptual plans
- Provide you with the chance to ask questions
- Provide you with the chance to voice concerns
- Build consensus for the proposed project

Phases of Development

Project Funded	Project Defined	Contract Award
Project Definition	Project Design	Construction

Identify resources & constraints

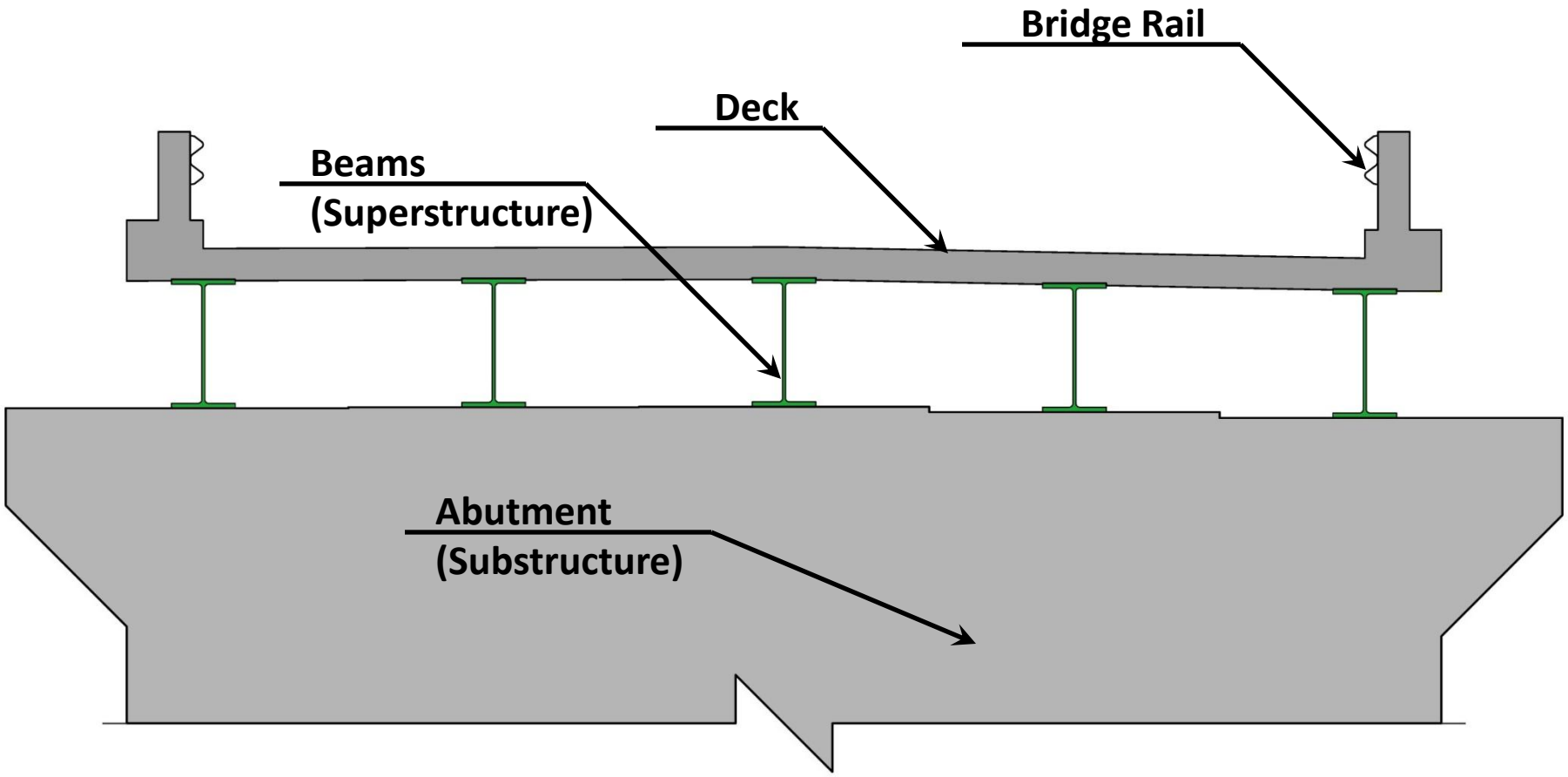
Evaluate alternatives

Public Participation

Build Consensus

- Quantify areas of impact
- Environmental permits
- Develop plans, estimate and specifications

Description of Terms Used



Cross Section of Bridge

Project Background

- The structure is owned and maintained by the State
- Funding will be 80/20 Federal/State (no local funds)
- Functionally labeled as a Rural Major Collector
- Design Speed = 50 mph (Not posted)
- Existing bridge is a three-span concrete T-beam
- Bridge length = 109 feet
- Bridge Width = 20 feet
- The bridge was built in 1932 (82 years old)

Alternatives Study

- An Alternative Presentation meeting was held on 3/13/14
- VTrans presented 3 alternatives for replacing the existing bridge and recommended a 1 span bridge while maintaining traffic on a one-lane temporary bridge with traffic signals to alternate traffic
- No opposition to this recommended alternative was voiced at the meeting or in written correspondence
- VTrans has developed Conceptual plans based on the recommended alternative.

Traffic Data

	“Current Year” 2016	“Design Year” 2036
Average Annual Daily Traffic	**550**	**580**
Design Hourly Volume	**75**	**75**
Average Daily Truck Traffic	**65**	**100**
%Trucks	**11.2**	**16.1**

EXISTING BRIDGE DEFICIENCIES

Inspection Rating Information (Based on a scale of 9)

Bridge Deck Rating	**4 Poor**
Superstructure Rating	**5 Fair**
Substructure Rating	**5 Fair**

Rating Definitions

9 Excellent
8 Very Good
7 Good
6 Satisfactory
5 Fair
4 Poor
3 Serious
2 Critical
1 Imminent Failure

Deficiencies

- **The bridge is structurally deficient with a Poor deck rating and the Superstructure and Substructure only rated Fair.**
- **The bridge is too narrow for the roadway classification and design speed**
- **The bridge does not meet hydraulic standards**
- **The horizontal alignment is substandard**

Looking north over Bridge

Looking south over Bridge

Hole in deck at curb

Underside of Deck & Concrete T-Beam

Downstream Fascia showing pier deterioration

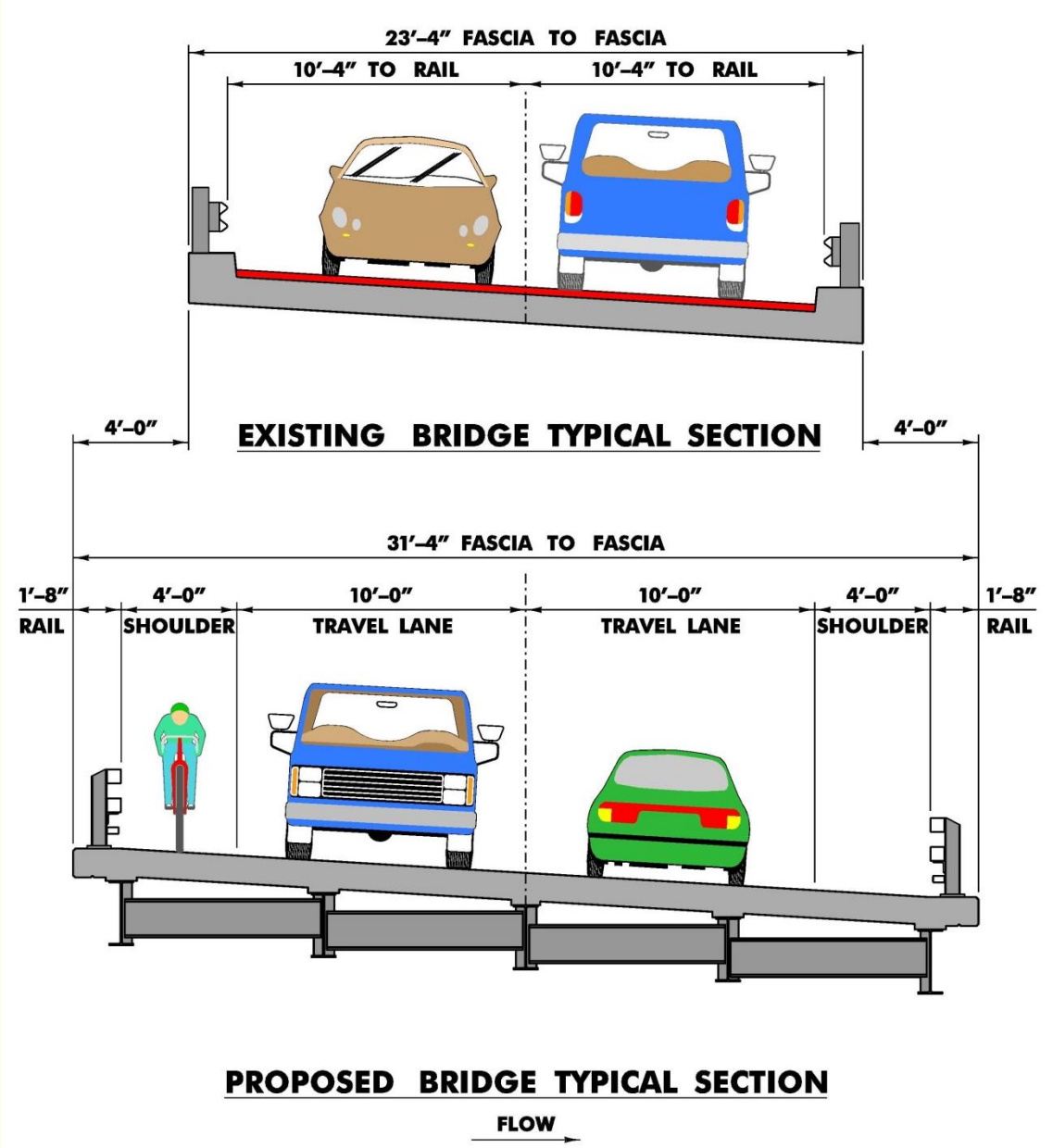
Proposed Project

- Complete bridge replacement warranted
- Use 10’ lanes and 4’ shoulders (28’ rail-rail width)
- Use 106’ single span curved bridge
- Maintain existing centerline of road (approximately)
- Raise the profile (grade) of road to improve hydraulics
- Superelevate (bank) the road as appropriate to match the curvature of the road
- Maintain one-way alternating traffic on a one-lane temporary bridge with traffic signals during construction

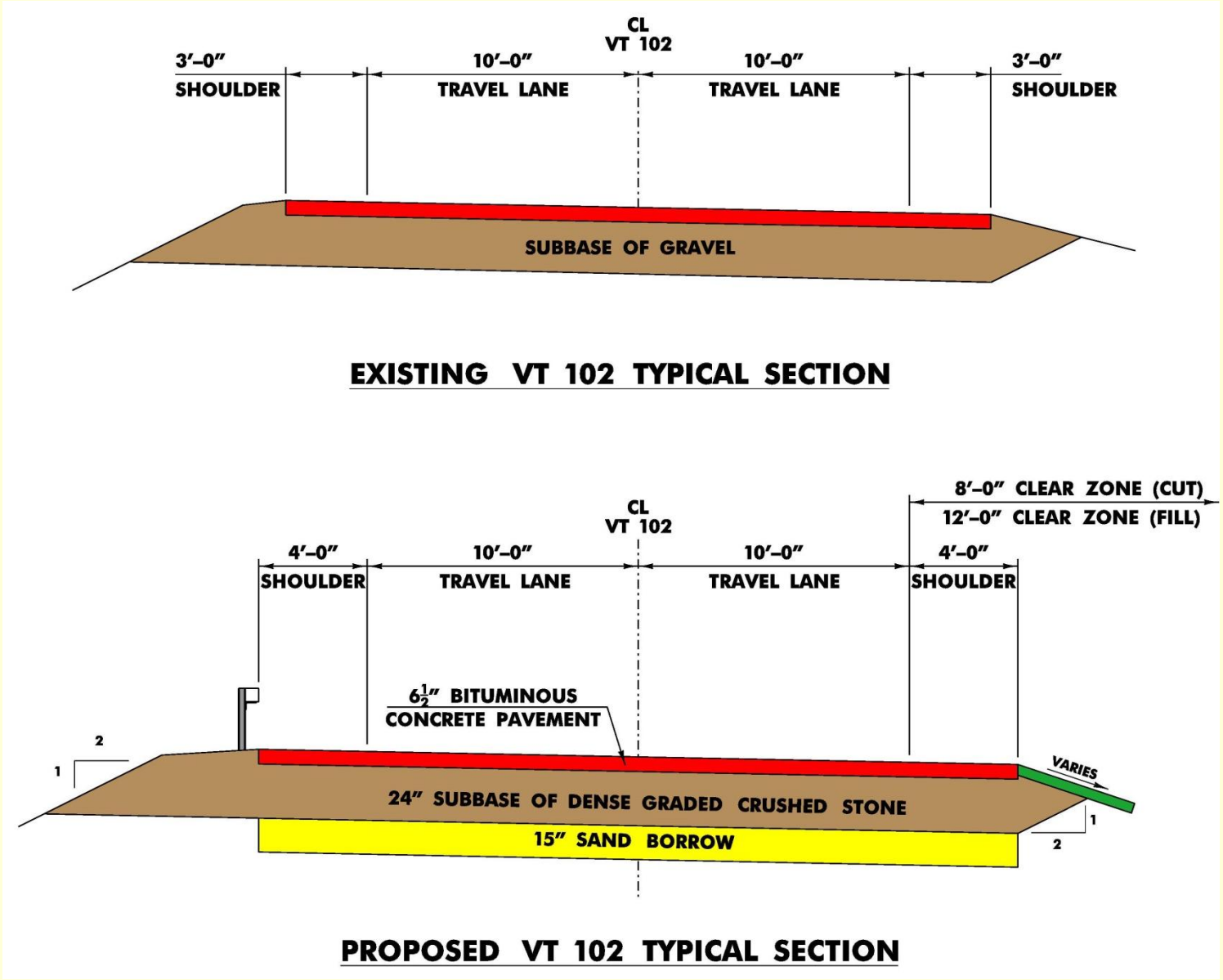
Important Issue

- Elimination of second residential drive on north end
  - There are two access points to one residential property
  - We have found no evidence that either are permitted drives
  - Access Management guidelines attempt to reduce access points
  - The guard rail transition extends across the southern access point
  - The northern access point will not be affected by the project

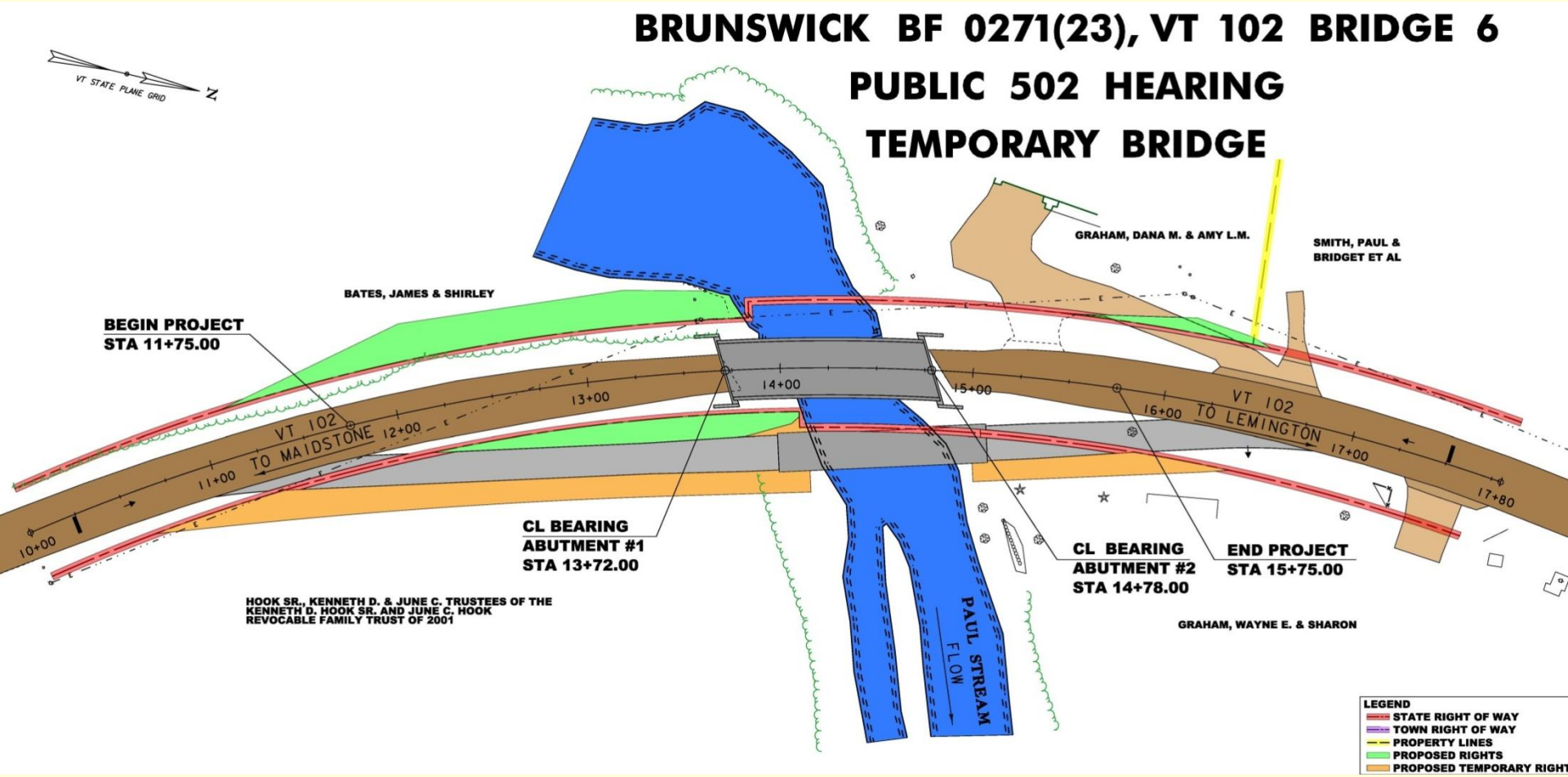
Bridge Typical



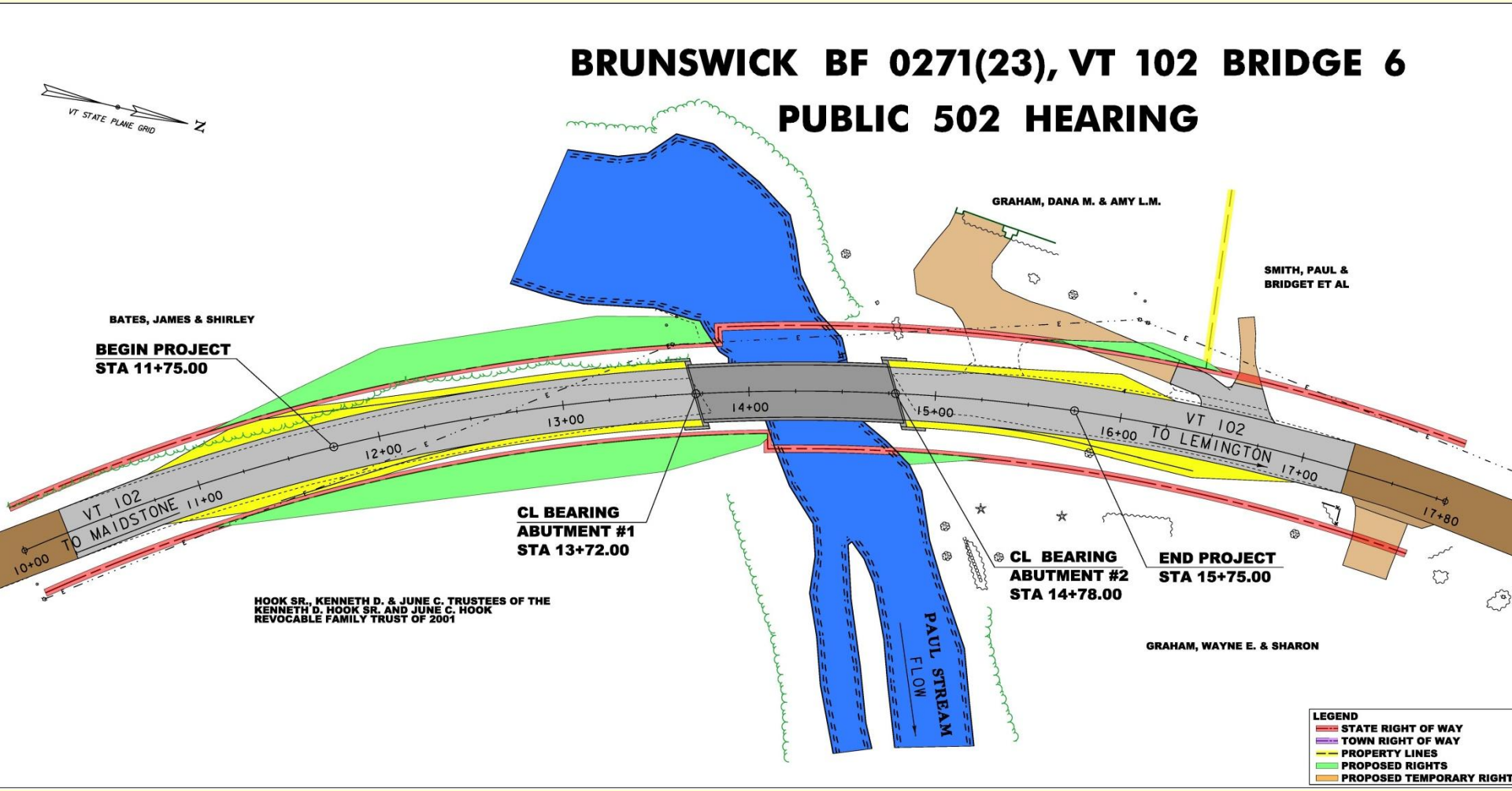
Roadway Typical



Proposed Layout showing ROW impacts

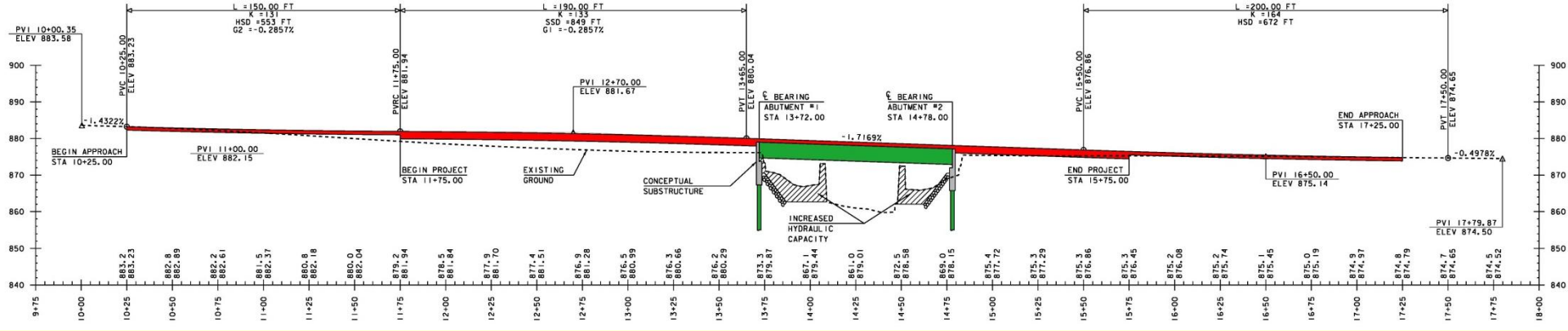


Final Conditions Layout

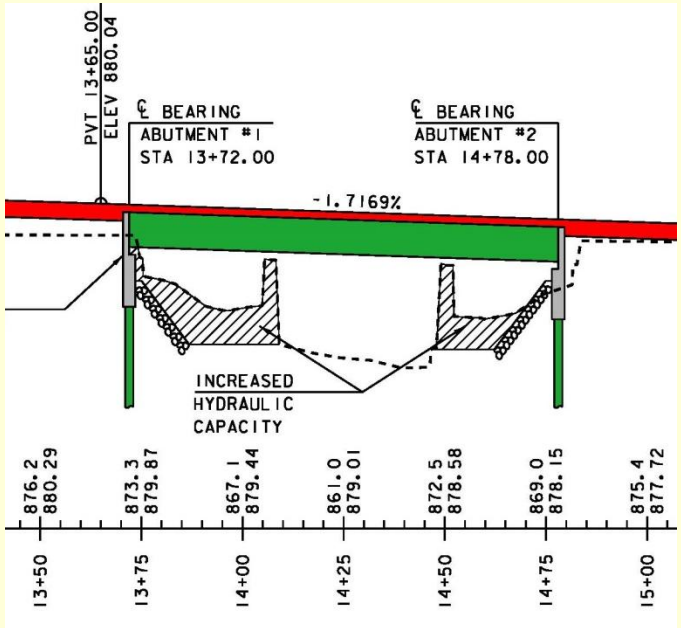


Proposed Profile

BRUNSWICK BF 0271(23), VT 102 BRIDGE 6
PUBLIC 502 HEARING



Enlarged view of bridge



Scope - Cost - Schedule

The project cost and schedule can not be determined until the scope of the project is clearly defined.

Preliminary Engineering (w/ Scoping)	$ 365,000
Right-of-Way	$ 125,000
Construction w/ CE and Contingencies	$2,310,000
Total	$2,800,000

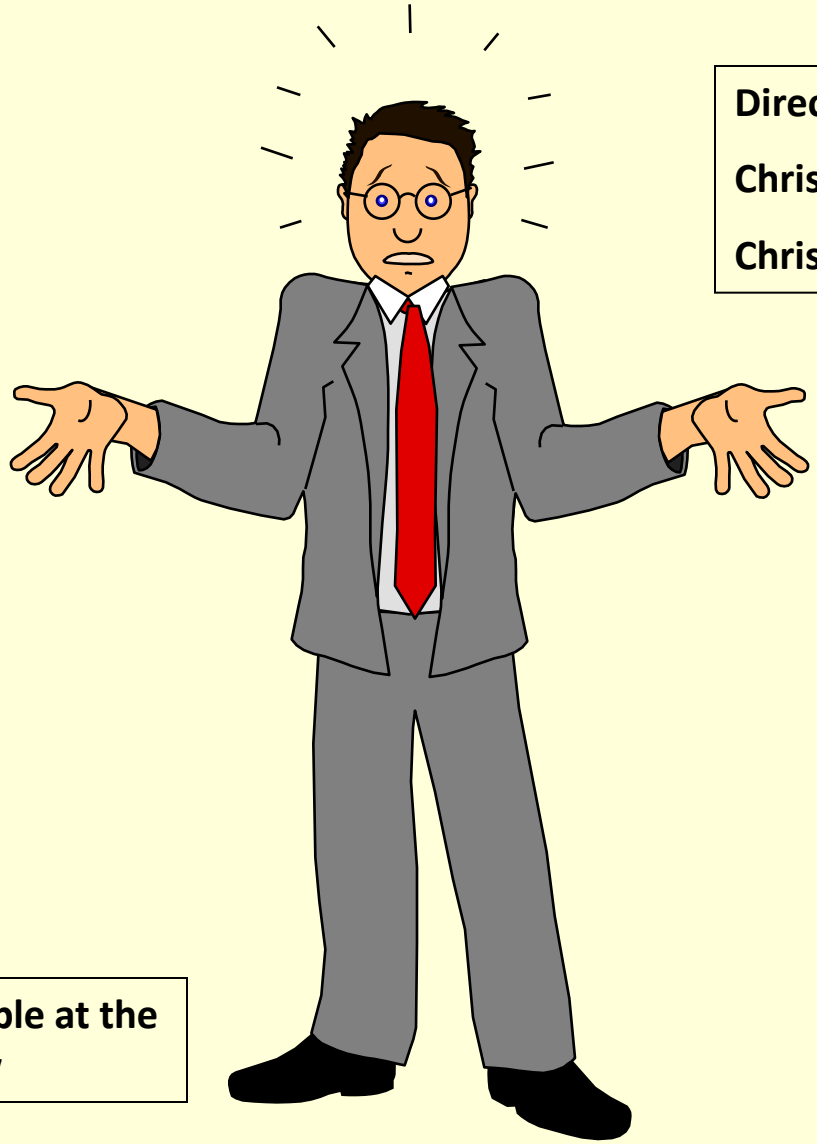
- Construction is currently scheduled for 2019
- Many factors can effect construction year
- Construction year is assuming Federal & State funding is available (project is funded 80% Fed – 20% State)

Next Steps

This is a list of a few important activities expected in the near future and is not a complete list of activities.

- Consider comments received at this Public Hearing
- Provide written response to Town with decisions
- PROJECT DEFINED
- Develop Preliminary Plans
- Environmental permitting process
- Meet with adjacent property owners
- Right-of-Way acquisition process
- Final design details

Questions



Direct any questions to:

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This presentation is available at the web address shown below

https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/13C056