Plymouth Bridge Replacement Public Information Meeting

VT Route 100A – Bridge #9 over Pinney Hollow Brook

May 19, 2025

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AGENCY OF TRANSPORTATION

Introductions

Rob Young, P.E.
VTrans Project Manager

Cold River Bridges
Contractor

Sheamus Fagan
VTrans Resident Engineer

Leah Beckett
Public Information Consultant

Michael Cruz, P.E.
Green International
Project Manager

Amanda Oka
Green International
Project Engineer

Meeting Overview

- Project Overview
  - Existing Conditions
  - As Designed
- Maintenance of Traffic during Closure
- Project Construction Schedule
- Public Information Consultant Contact Info
- Questions

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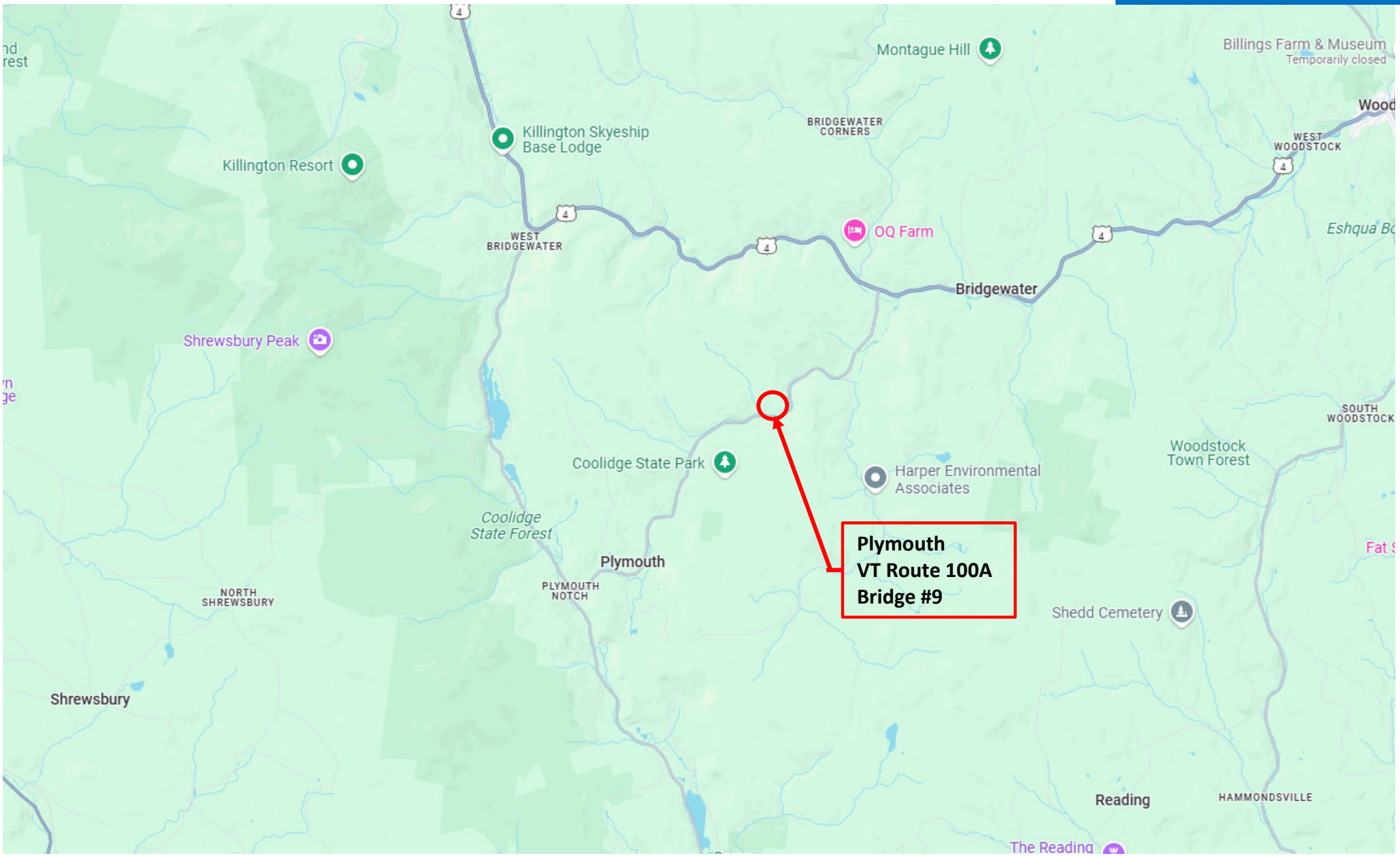
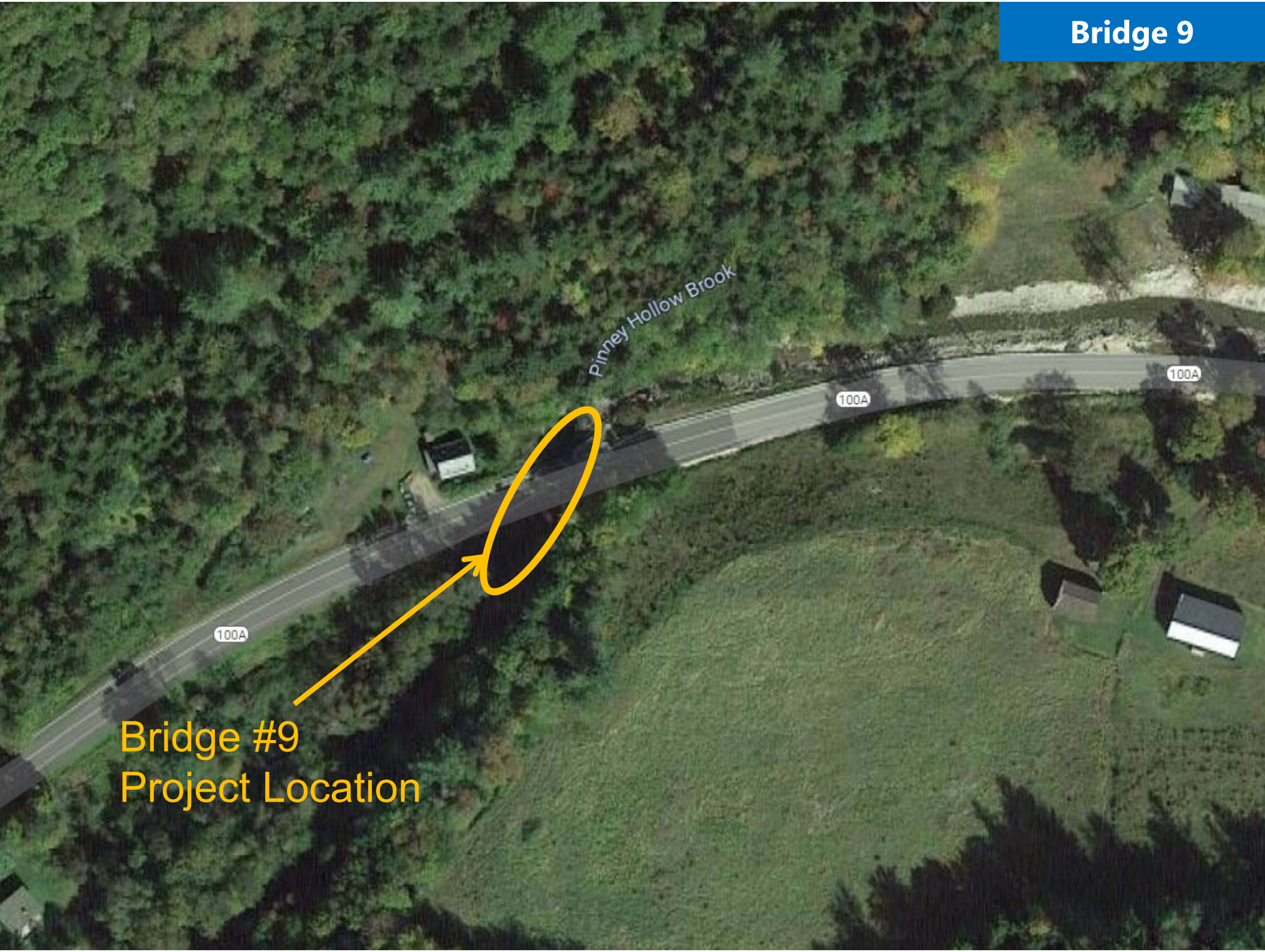
Bridge 9

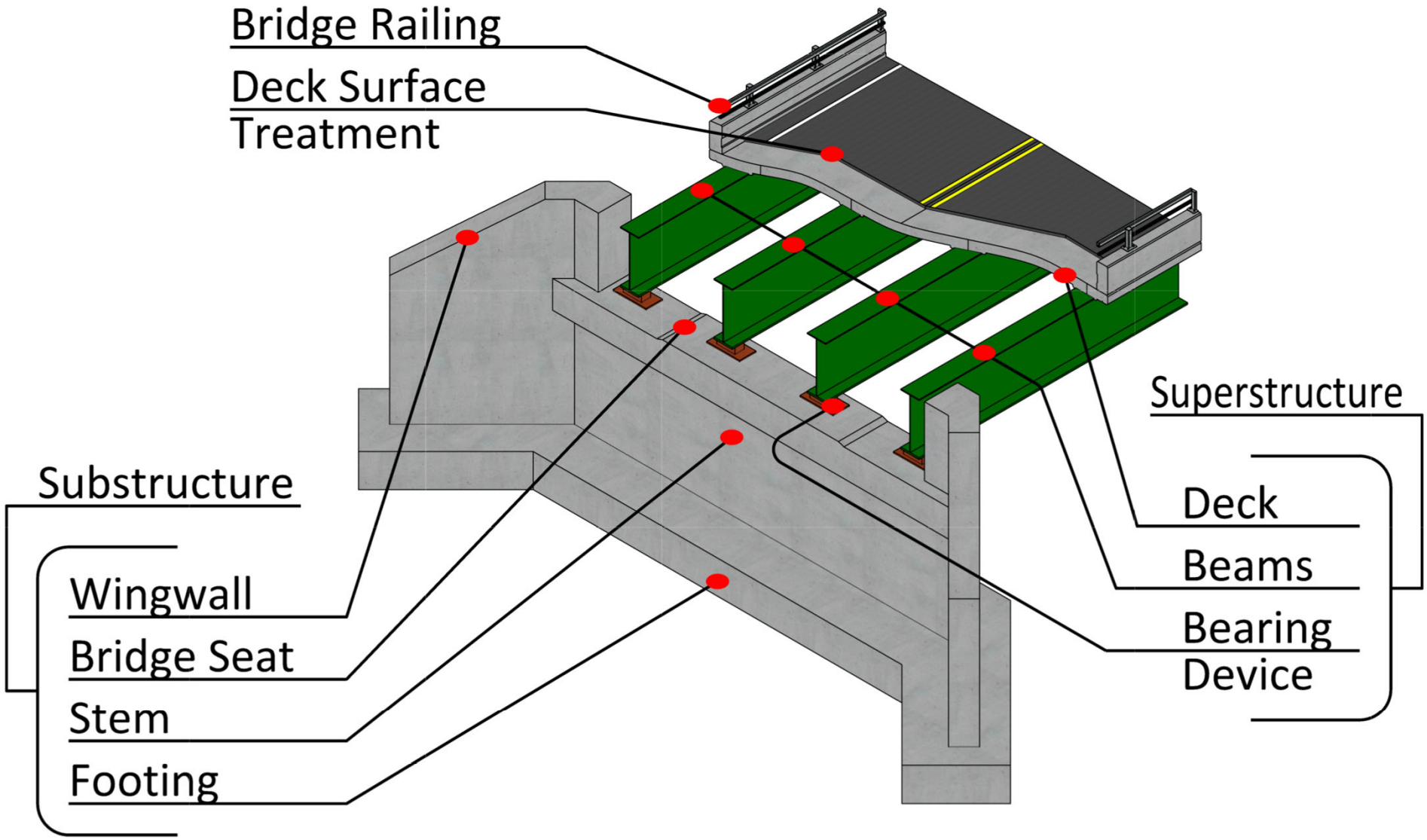


Location Map

2.95 Miles south of VT Route 4


Bridge 9
Pinney Hollow Brook
100A
100A
100A
Bridge #9
Project Location

Description of Terms Used



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Bridge 9

Existing Conditions *Looking East*

- Roadway Classification – Rural Major Collector
- Bridge Type – Single Span, Concrete Slab
- Structure Length – 31’
- Ownership – State Highway Agency
- Constructed in 1984

Bridge 9

Existing Conditions *Looking East over*

- Aerial Utilities

Existing Conditions *Condition Ratings*

- Deck Rating 7 (Good)
- Superstructure Rating 7 (Good)
- Substructure Rating 6 (Satisfactory)

Existing Conditions *Underside of Deck*

- Cracking with leakage along center of bridge
- Upstream fascia has spalls with exposed rebar

Existing Conditions *Abutment 2 Upstream Wingwall*

- Both abutments have areas of scaling
- Abutment 1 has cracking & saturation on ends
- Abutment 2 has spall with exposed rebar and areas of delamination

Project Summary

- Bridge Replacement
  - 49’-2” Span Length
  - 36’ Out-to-Out Deck Width
  - 11’ Travel Lanes
  - 5’ Shoulders
  - 75-year design life
  - Project Construction Cost - $3,459,333.00

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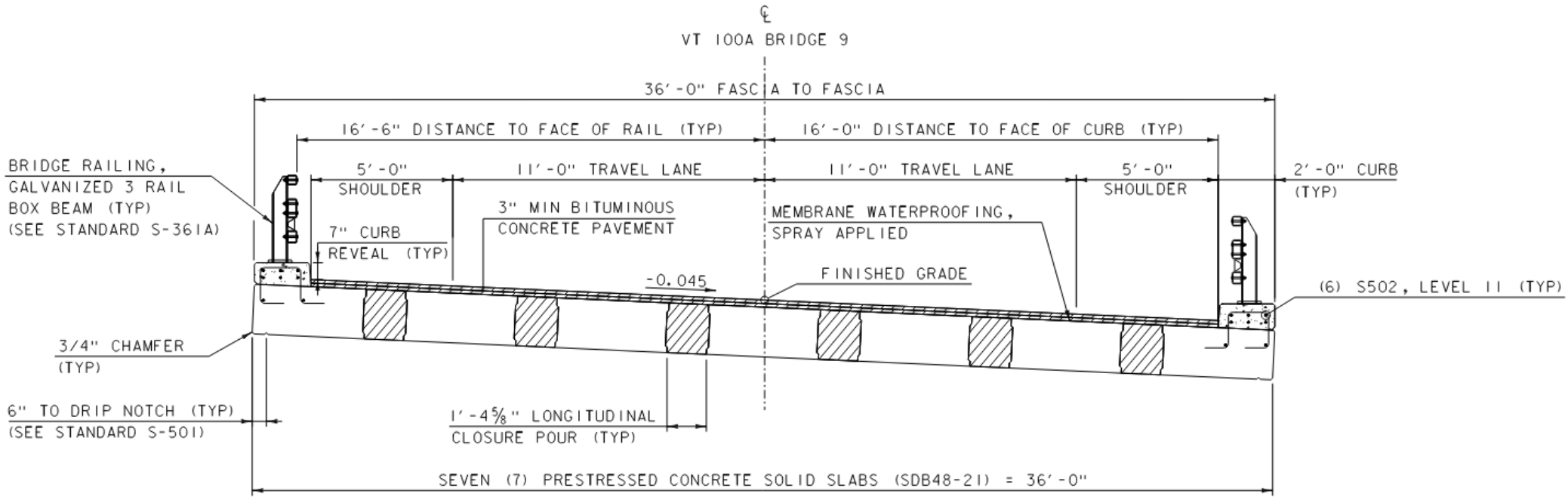
Proposed Bridge Typical Section



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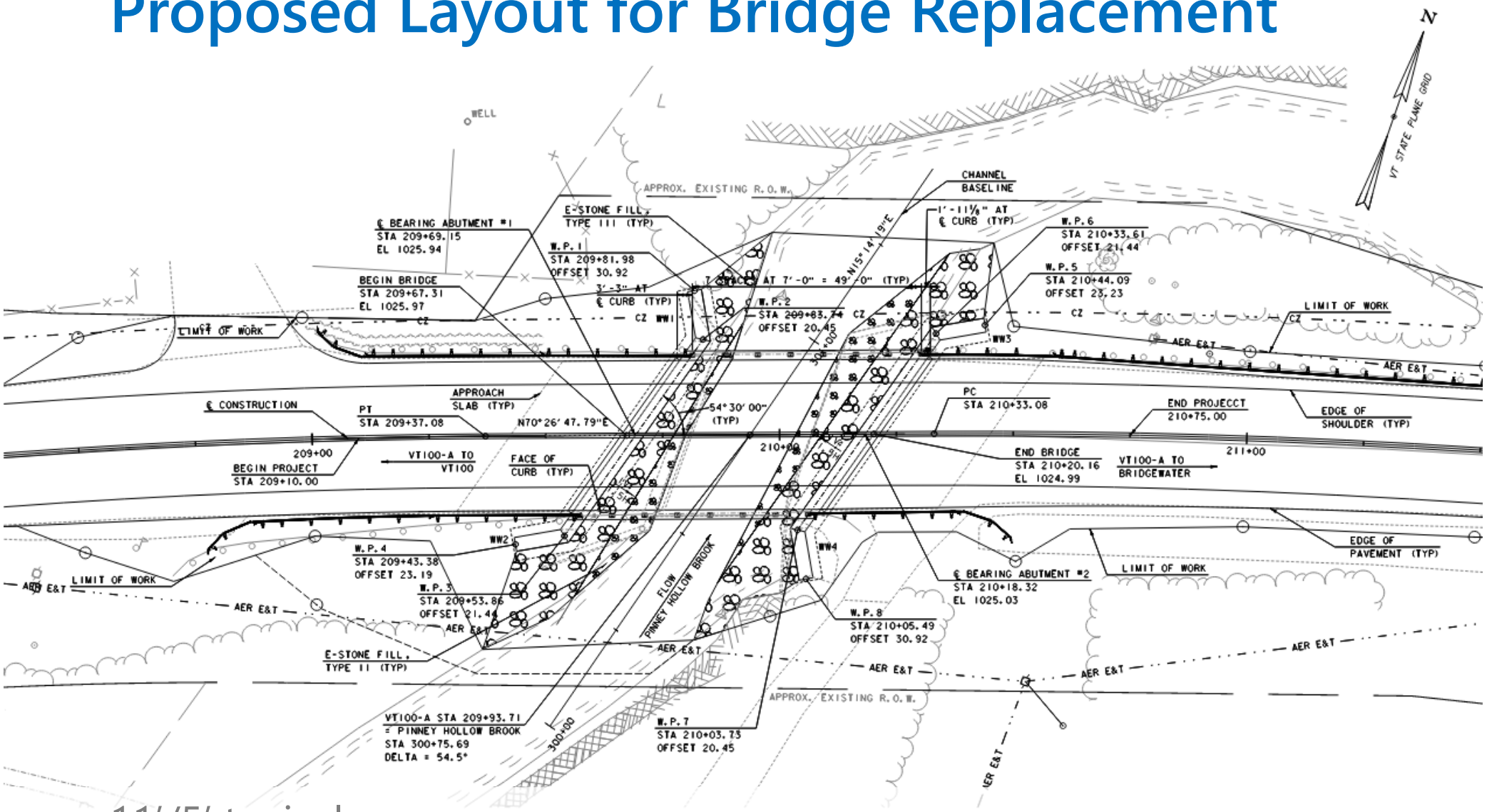
Proposed Layout for Bridge Replacement



- 11′/5′ typical
- 75-year design life

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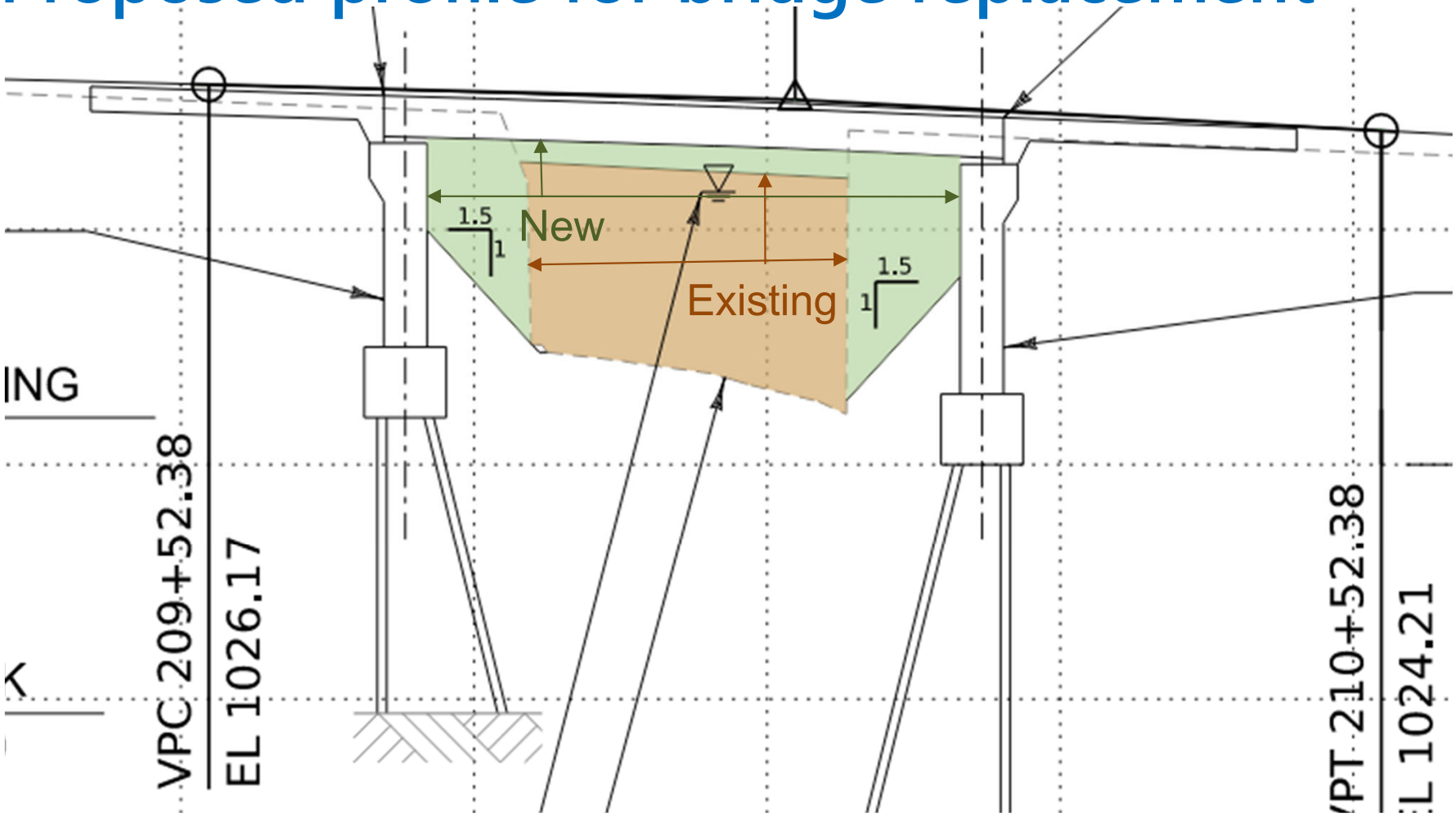
Proposed profile for bridge replacement



- Match existing vertical alignment
- Increase waterway opening

Methods of Construction

Combination of accelerated bridge construction and conventional construction techniques

- Accelerated Elements
  - Abutments – Precast
  - Approach Slabs – Precast
  - Beams – Precast
- Conventional Components
  - Cast-in-place footings

Similar Precast Solid Slabs

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Road Closure *Selected Method of Traffic Maintenance*

- Detour chosen and signed by State
- 42-day closure
- 17.9 miles end-to-end

Traffic Control *Regional Detour*

- **Route:** VT Route 100A, to US-4, VT Route 100, back to VT Route 100A.
  - 7.0 Miles Through Route
  - 11.0 Miles Detour Route
  - 17.9 Miles end-to-end
  - 4.0 Miles Added

Lane Closure *Traffic Maintenance*

- Traffic reduced to one lane prior to closure for micropile installation
- No ROW needed

Project Construction Schedule

- Construction Milestone Dates (based on initial CPM Schedule)
  - Pre-closure work – May 12
  - Begin Southbound Lane Closure using Temporary Traffic Signals – May 20
  - Bridge Closure Begins – July 7
  - Bridge Closure Ends – August 18
  - Project Complete – September 19

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Project Construction Schedule (Continued)

- Work Hours
  - Standard: Hours 7am to 5pm, 5 days a week
    - Longer hours or Saturday work as needed to stay on schedule
  - During 42-Day Closure: Hours 6am to 7pm, 7 days a week.

Plymouth,
Bridge 108

Plymouth,
Bridge 112

Bridgewater,
Bridge 116

VT100 Plymouth/Bridgewater Bridge Improvement Projects Public Information Meeting

VT Route 100 – Bridge 108, 112, and 116

Introductions

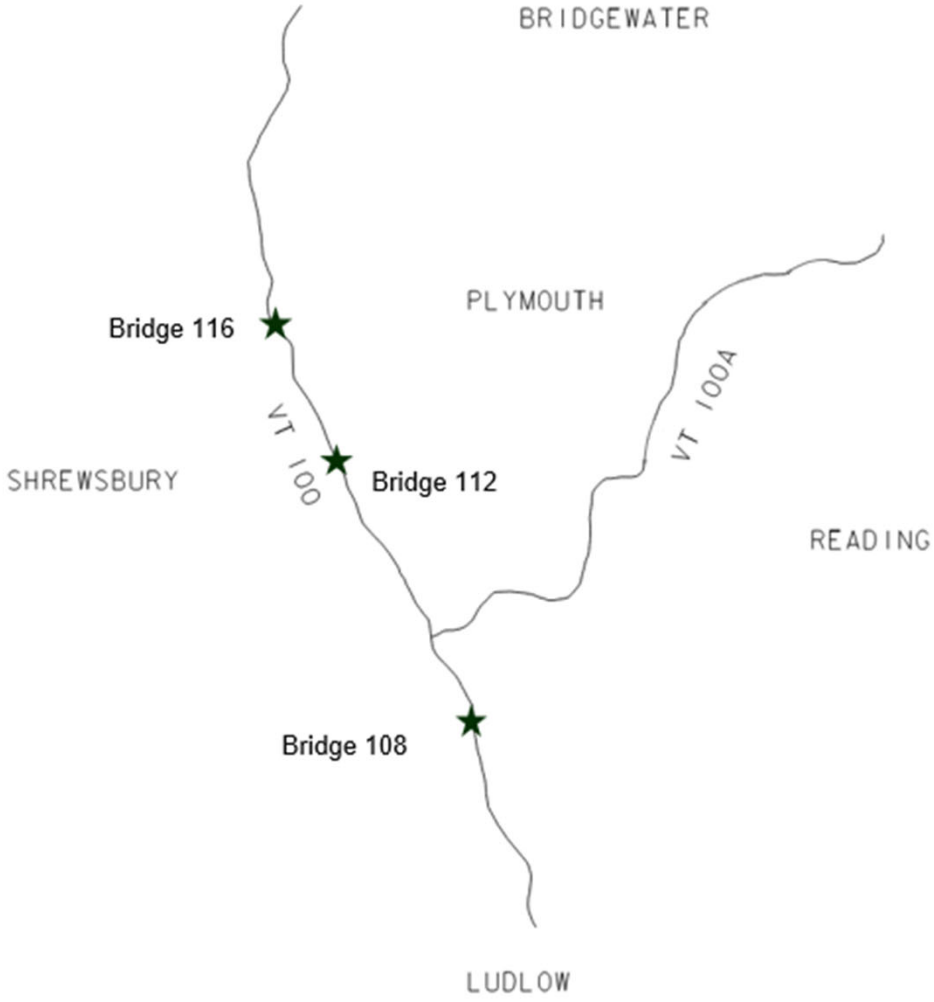
Gary Laroche, P.E.
VTrans Structures Project Manager

Leah F. Beckett
Project Urban Planner, FHI Studio

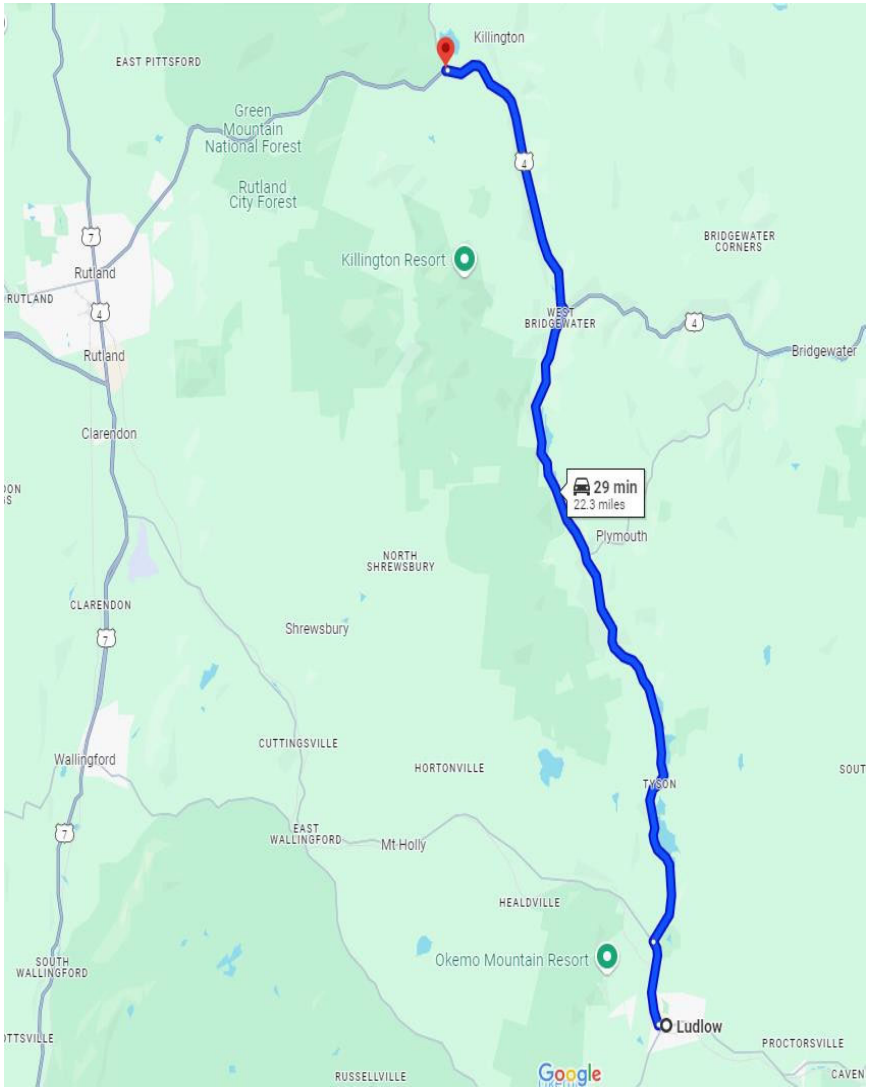
Tom Knight, P.E.
Principal Transportation, Stantec

Location Map

- PLYMOUTH ER P23-1(333), VT Route 100, Bridge 108 over Money Brook
- PLYMOUTH ER P23-1(332), VT Route 100, Bridge 112 over Tinker Brook
- BRIDGEWATER ER P23-1(302), VT Route 100, Bridge 116 over Reservoir Brook



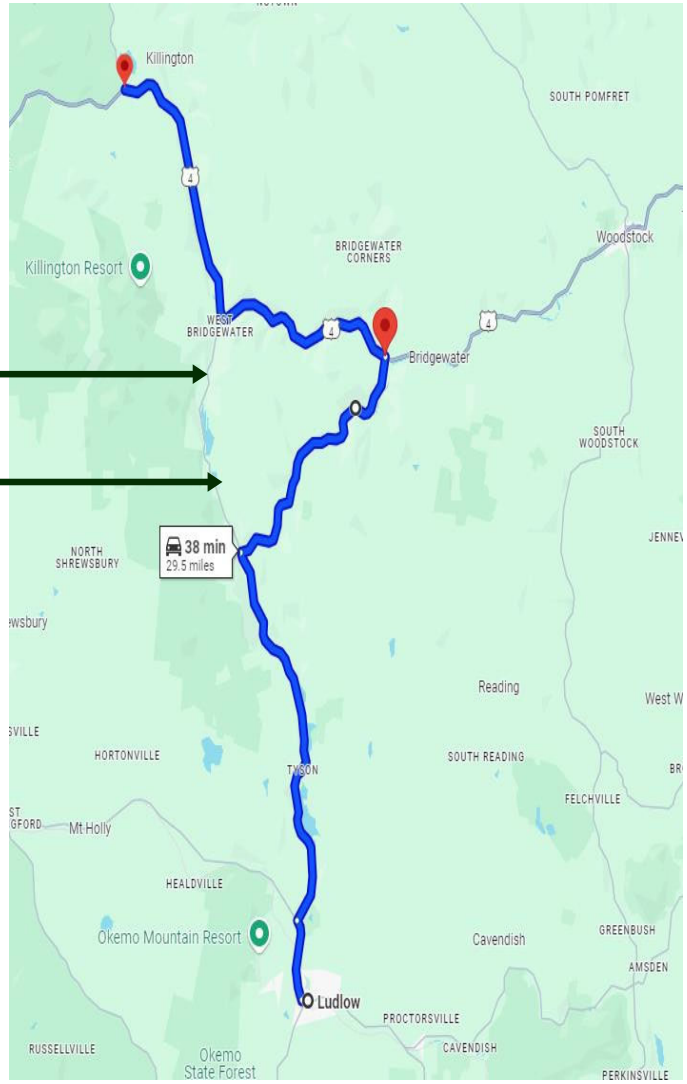
2026 VT 100 Closures



No Detour
29 Minutes

BR 116 - Madden Brook Closed 45-60 Days 2026

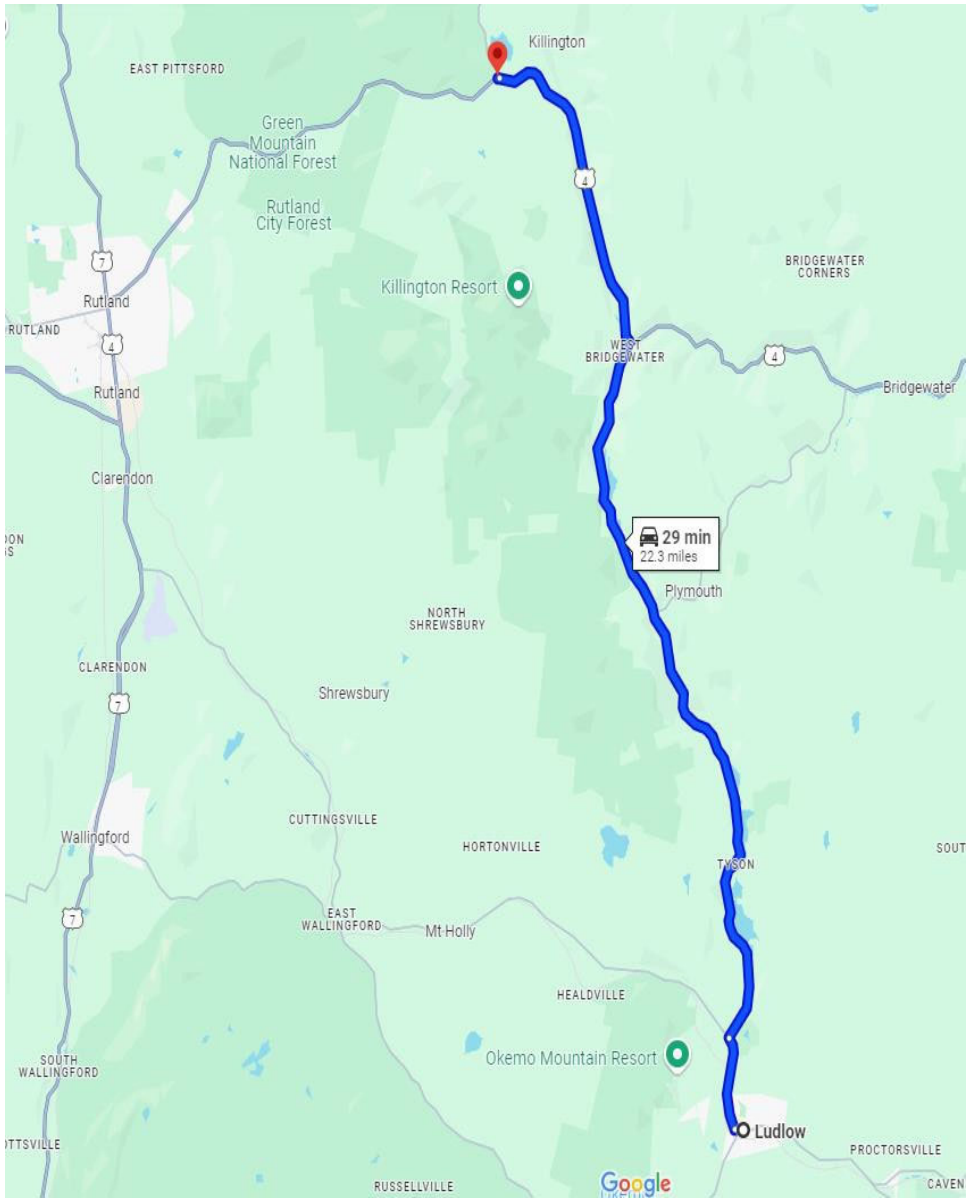
BR 112 - Tinker Brook Closed 7-14 Days 2026



Detour Via VT 100A
38 minutes

Bridge 108

2027 VT 100 Traffic Disruption (onsite detour)



No Construction: 29 Minutes

Expected Slow Down with Construction: +0 to 15 Minutes

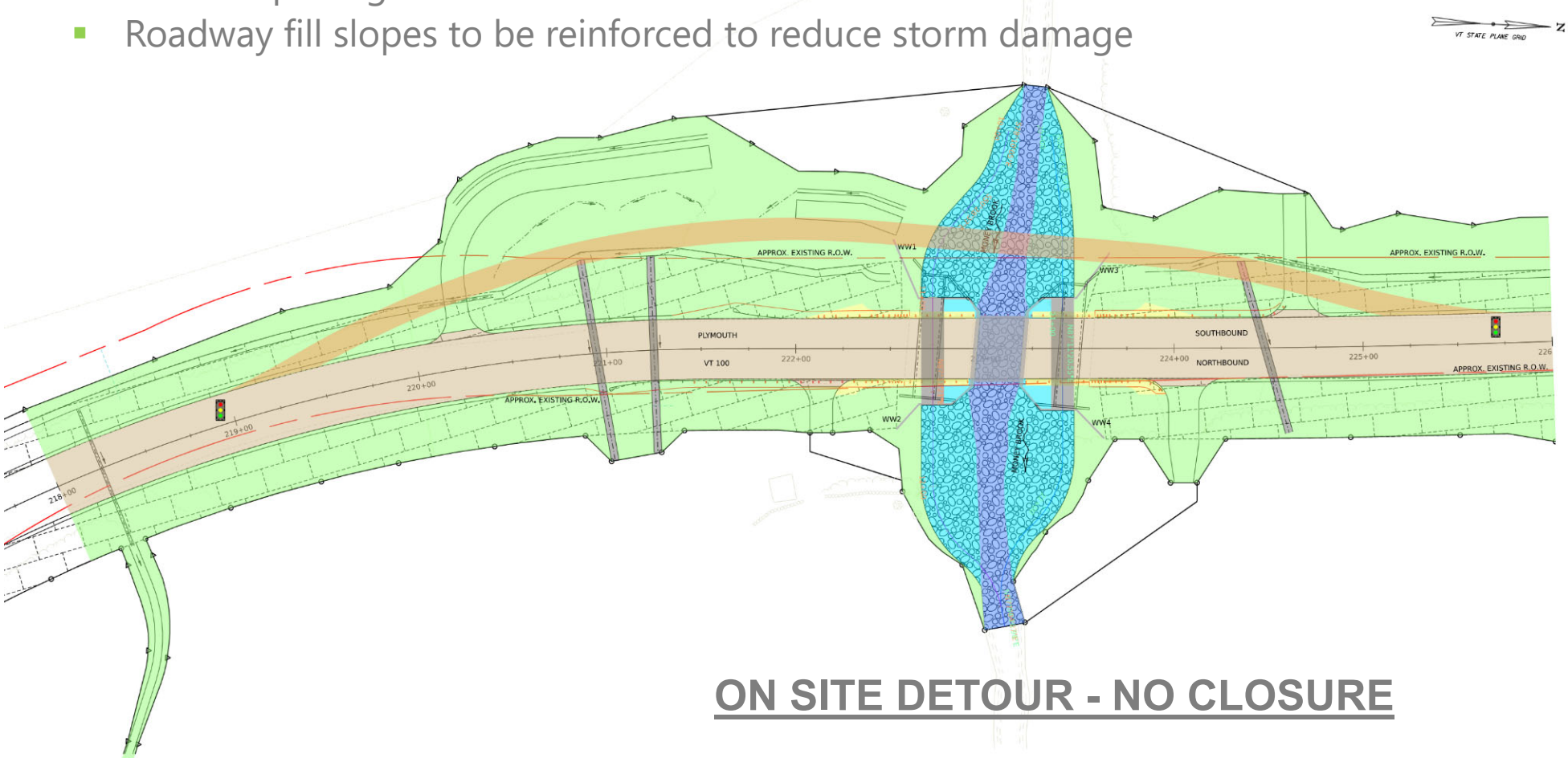
Bridge 108

Existing Conditions / Flood Damage (Money Brook)

- Bridge Type – Single Span, Concrete Slab
- 24-foot span
- Ownership – State Highway Agency
- Constructed in 1982

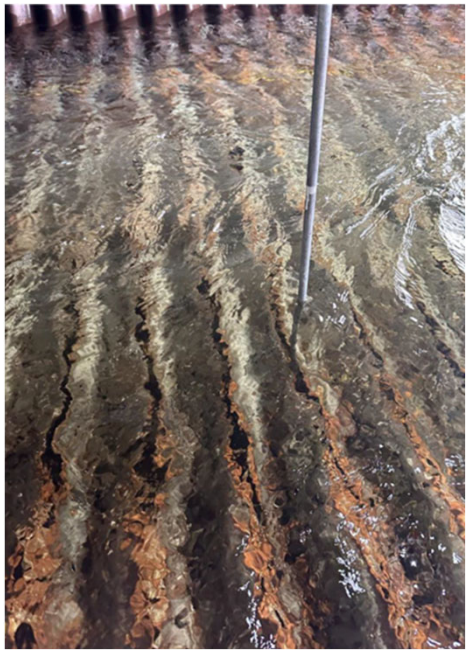
Proposed Layout

- Bridge #108 – Expanding waterway opening with additional culverts
- 11’/5’ typical (Lane/Shoulder)
- 24’ Span Length (Existing), adding culverts.
- Stream opening to be widened
- Roadway fill slopes to be reinforced to reduce storm damage



ON SITE DETOUR - NO CLOSURE

Bridge 112



Existing Conditions (Tinker Brook)

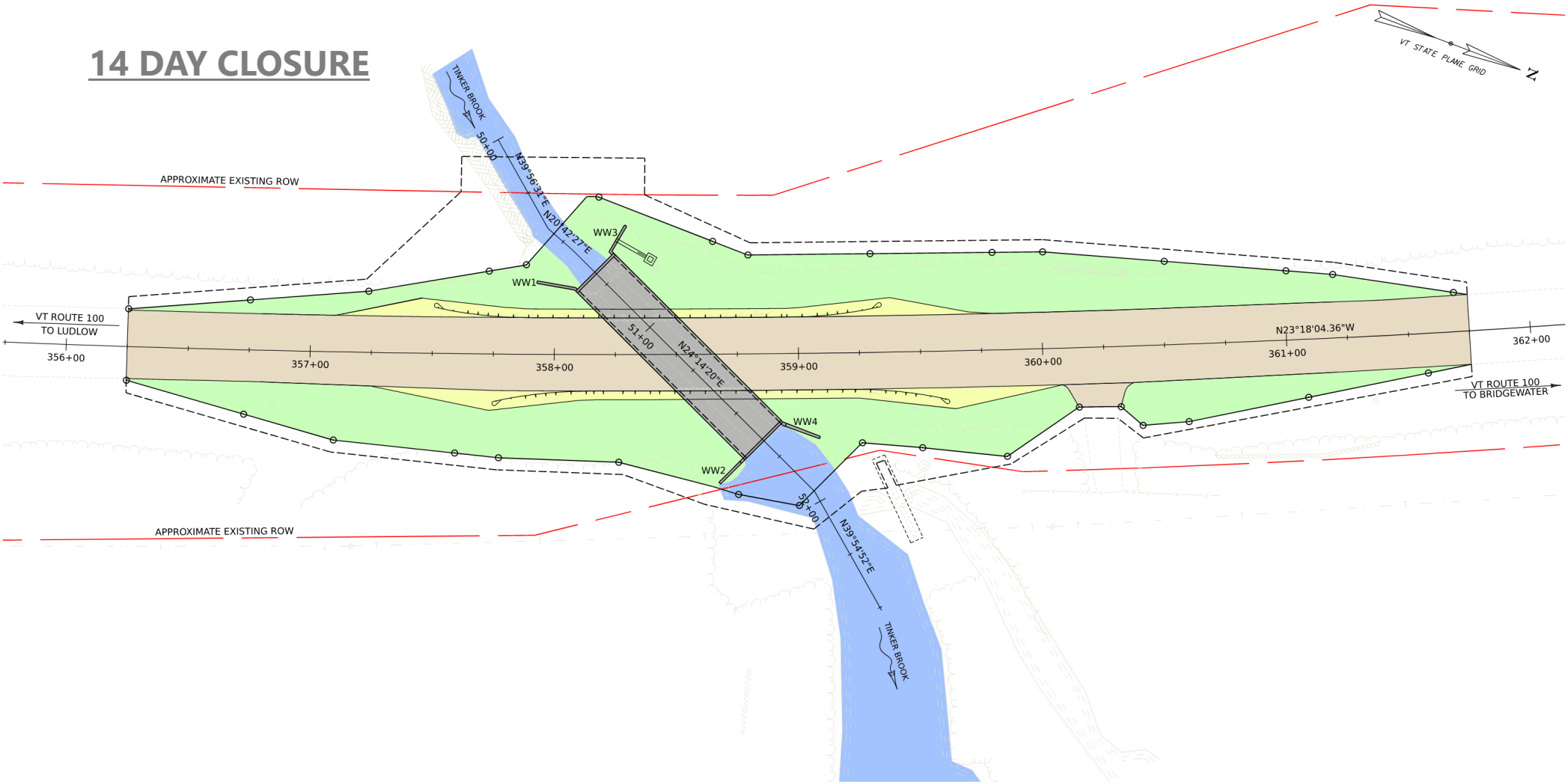
- Bridge Type – 11’x7’ Galvanized Metal Plate Pipe Arch
- Deteriorated condition / hydraulicly undersized
- Ownership – State Highway Agency

Proposed Layout

Full Bridge Replacement

- 11’/4’ Typical (Lane/Shoulder)
- 20’ Span Length box culvert with Natural Stream Bottom
- Stream to be re-established in current location.

14 DAY CLOSURE



Bridge 116

Existing Conditions / Flood Damage (Madden Brook)

- 11’x7’ Pipe Arch Bridge Damaged / Removed
- Temporary Bridge Installed After Flood

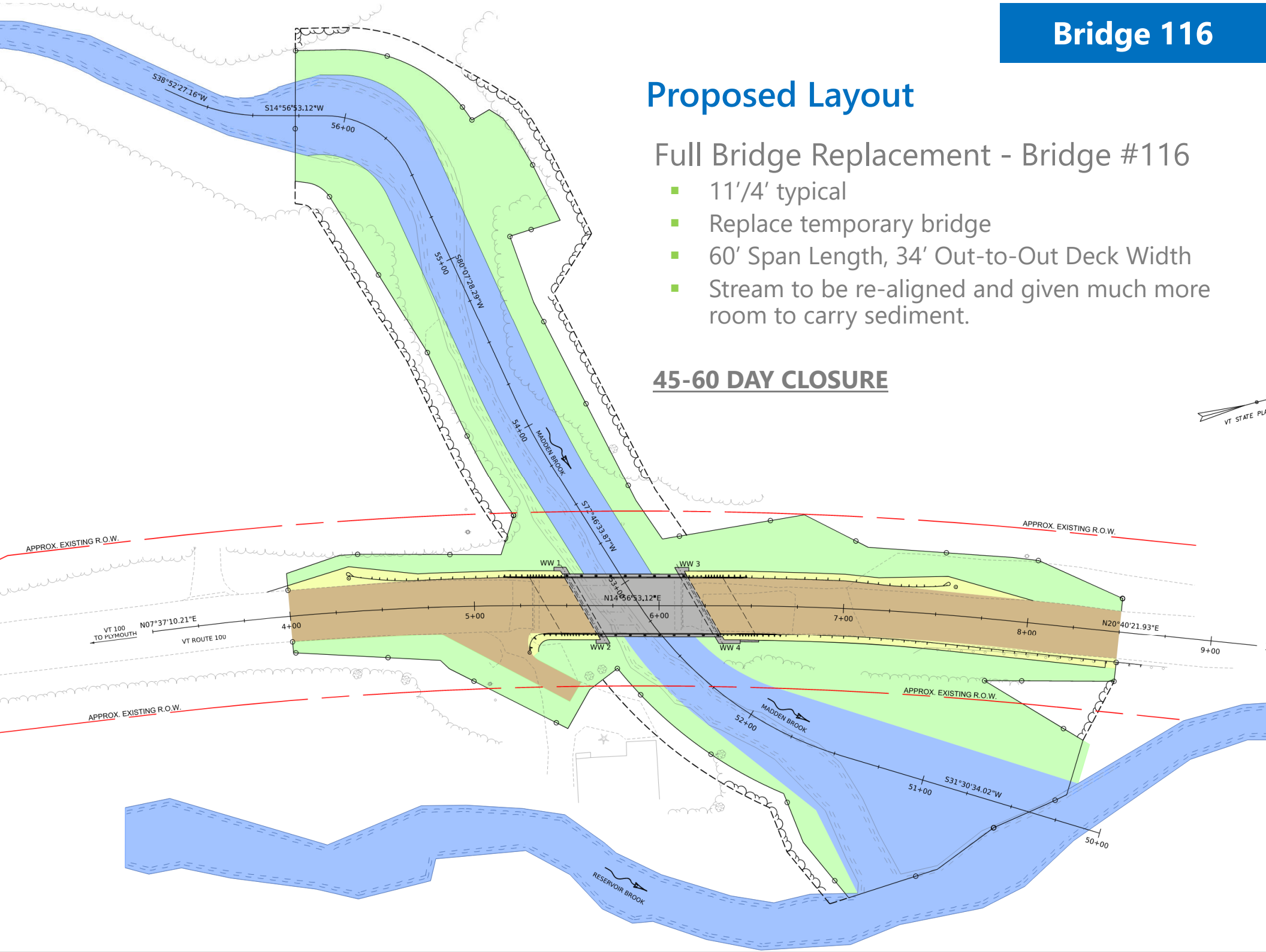
Bridge 116

Proposed Layout

Full Bridge Replacement - Bridge #116

- 11’/4’ typical
- Replace temporary bridge
- 60’ Span Length, 34’ Out-to-Out Deck Width
- Stream to be re-aligned and given much more room to carry sediment.

45-60 DAY CLOSURE



Public Outreach

- Public Outreach Consultant – Leah Beckett
  - To sign up for emails with project updates – send an email to: Leah.F.Beckett@imegcorp.com
  - Phone: 801-734-4119

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Thank you!

To join the newsletter list,
scan the QR code or visit this website:
https://shorturl.at/8C49r

For more project information:
https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/23B757

Questions?

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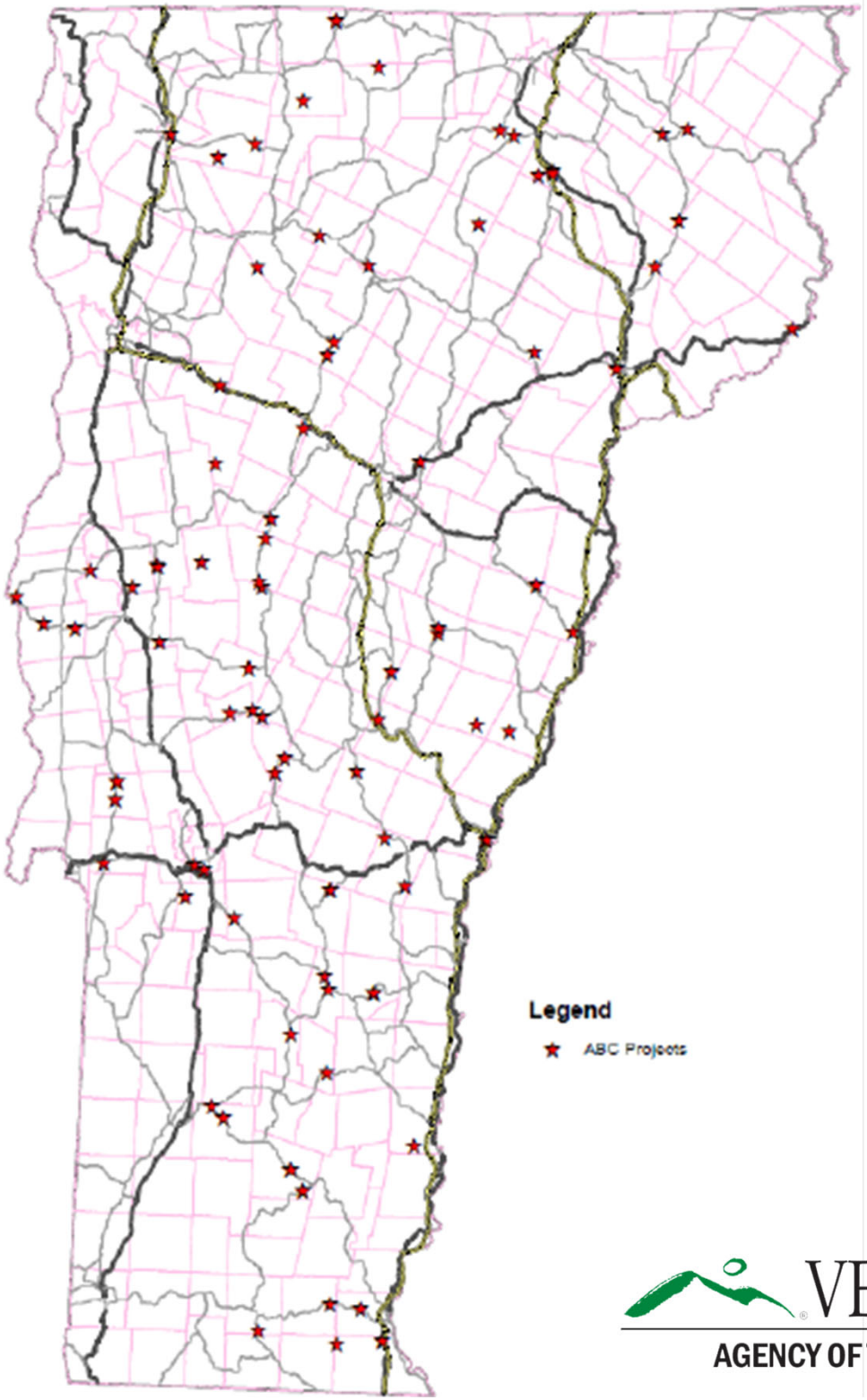
ABC Projects



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