



Plymouth Bridge Replacement Public Information Meeting

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

May 19, 2025

Introductions

Rob Young, P.E.

VTrans Project Manager

Sheamus Fagan

VTrans Resident Engineer

Michael Cruz, P.E.

Green International
Project Manager

Cold River Bridges

Contractor

Leah Beckett

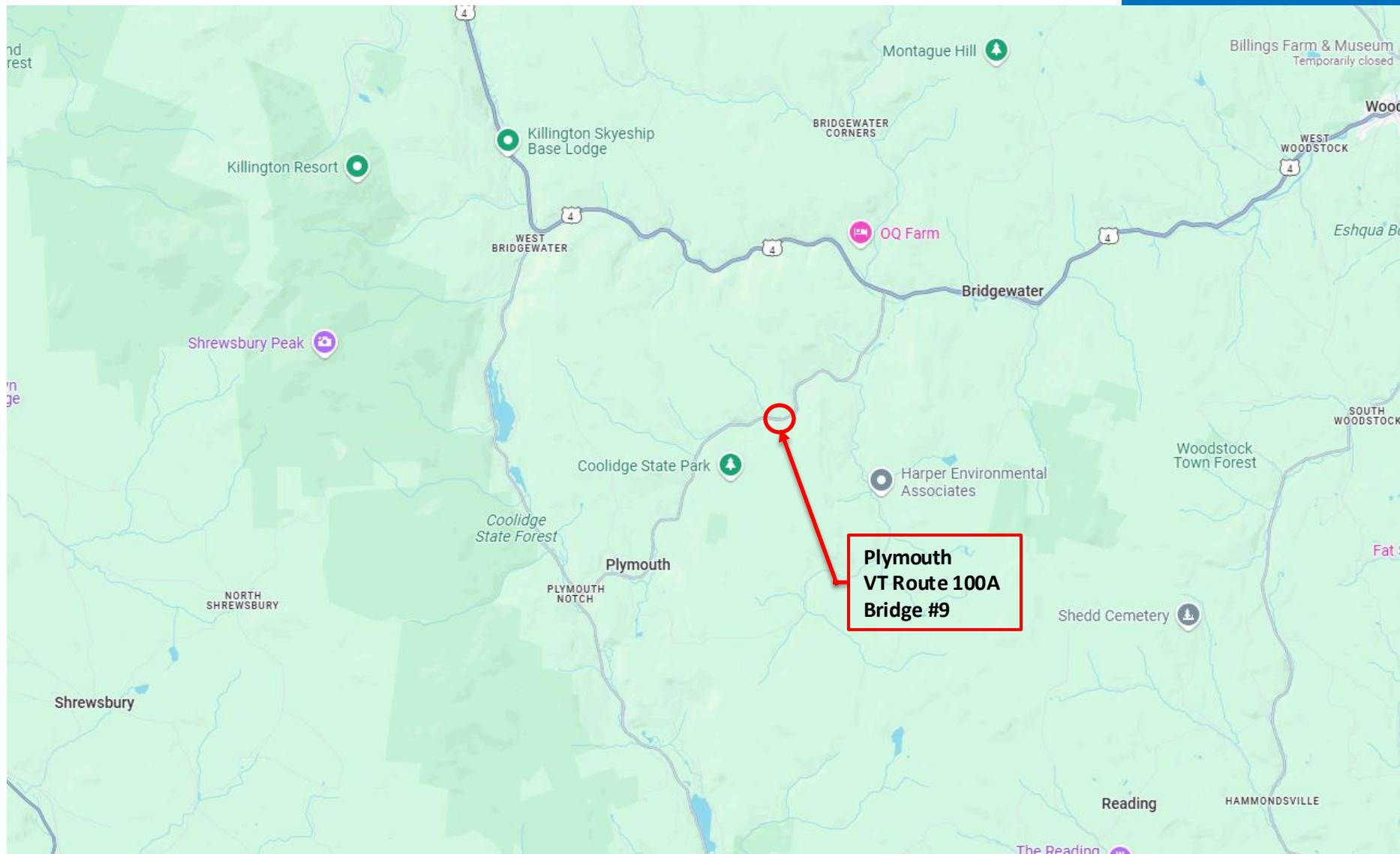
Public Information Consultant

Amanda Oka

Green International
Project Engineer

Meeting Overview

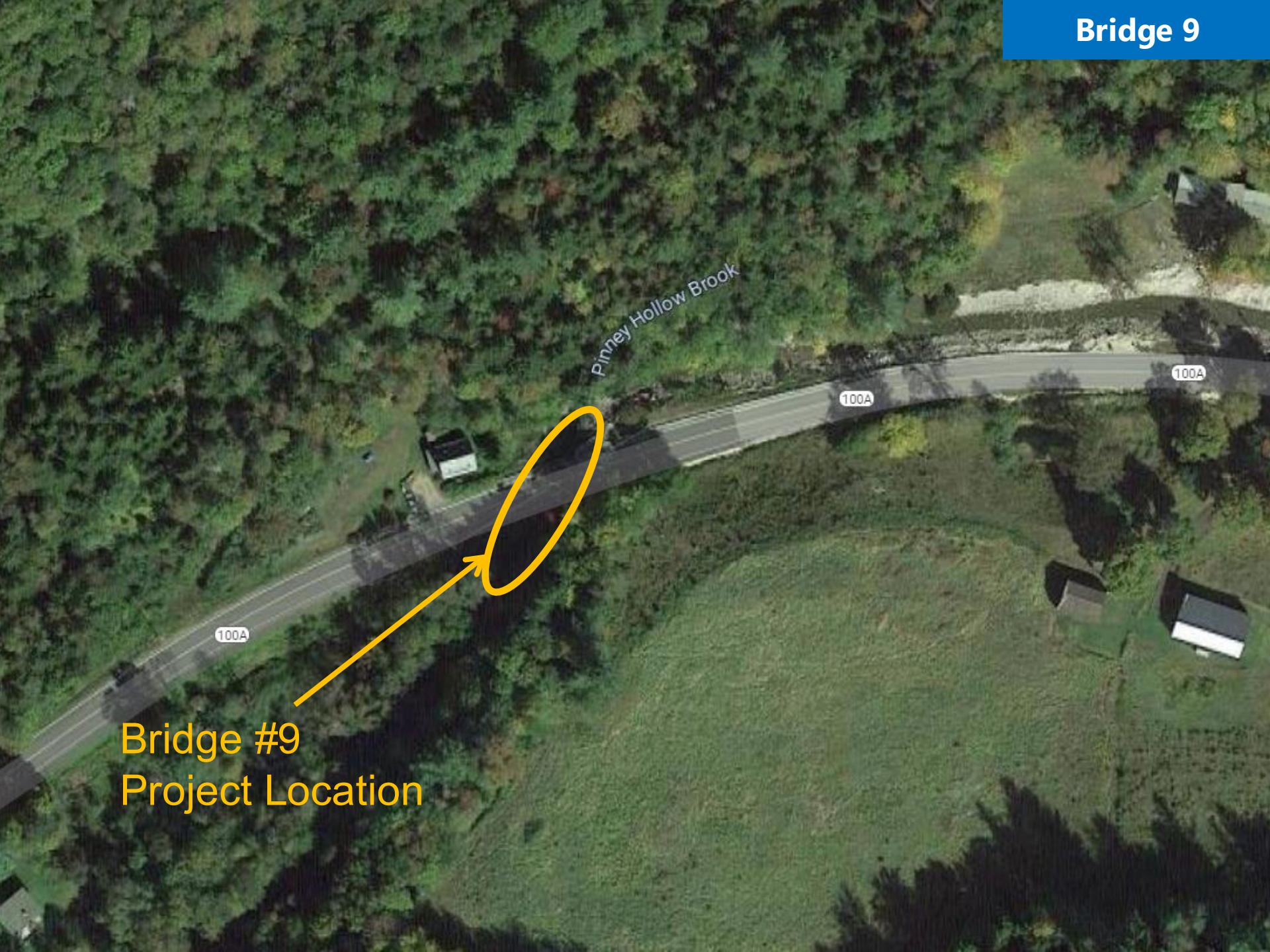
- Project Overview
 - Existing Conditions
 - As Designed
- Maintenance of Traffic during Closure
- Project Construction Schedule
- Public Information Consultant Contact Info
- Questions



Location Map

2.95 Miles south of VT Route 4

Bridge 9



Bridge #9
Project Location

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



Existing Conditions *Looking East*

- 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



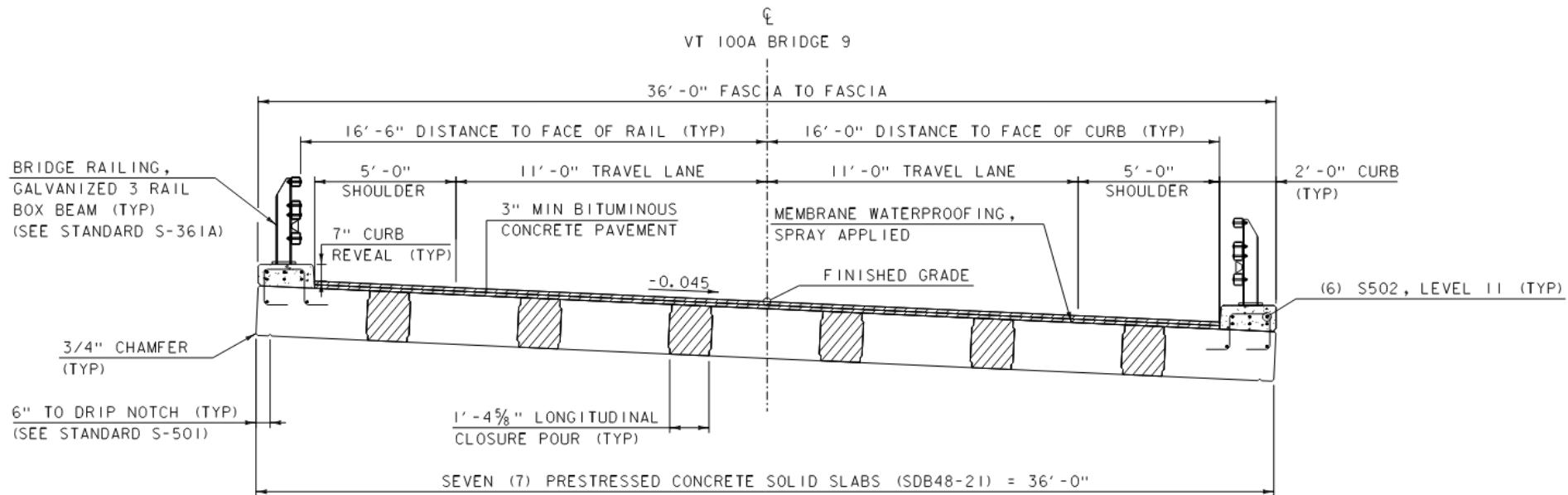
Existing Conditions *Abutment 2 Upstream Wingwall*

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

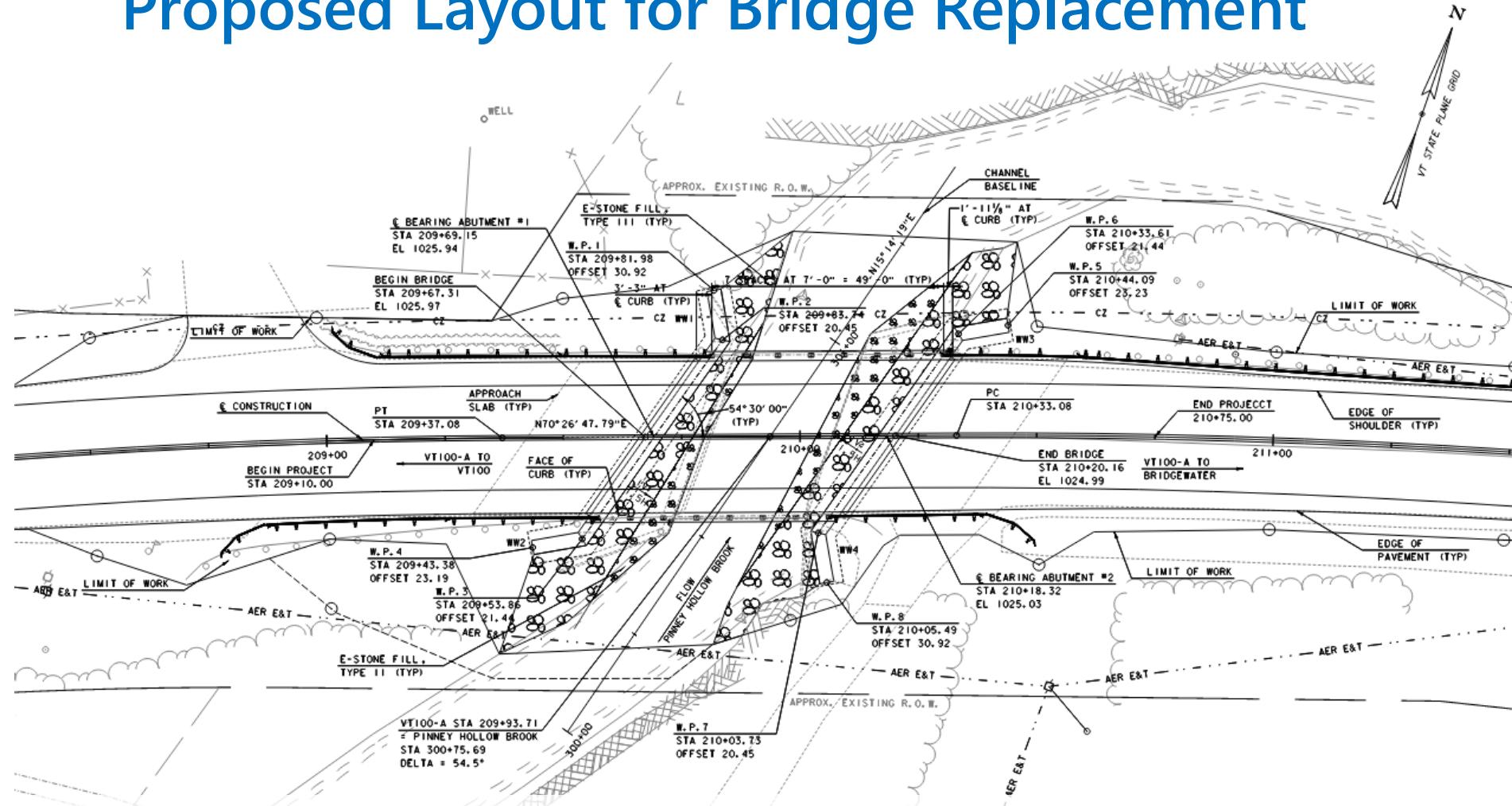
Project Summary

- 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

Proposed Bridge Typical Section

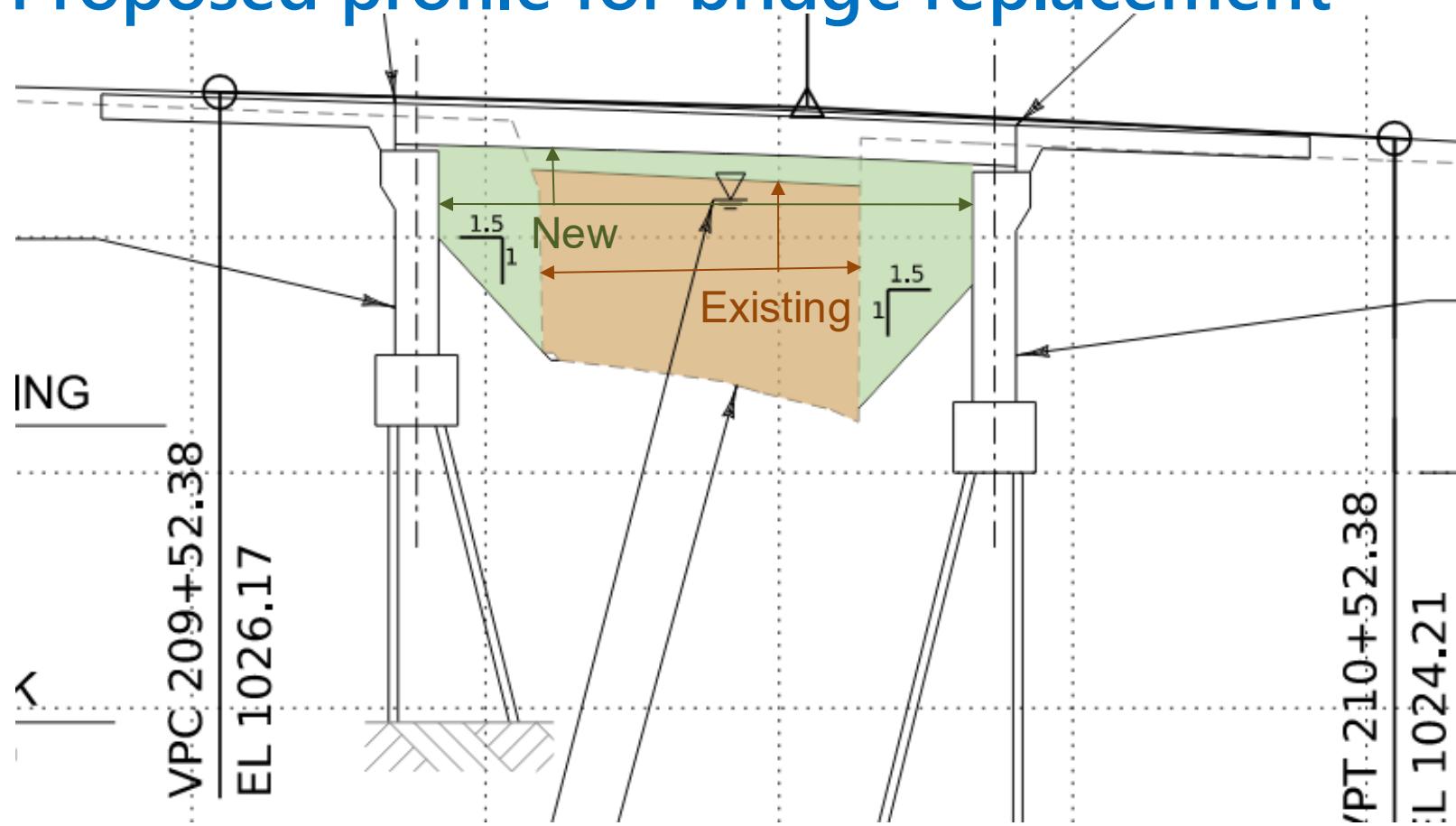


Proposed Layout for Bridge Replacement



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

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





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

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.



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

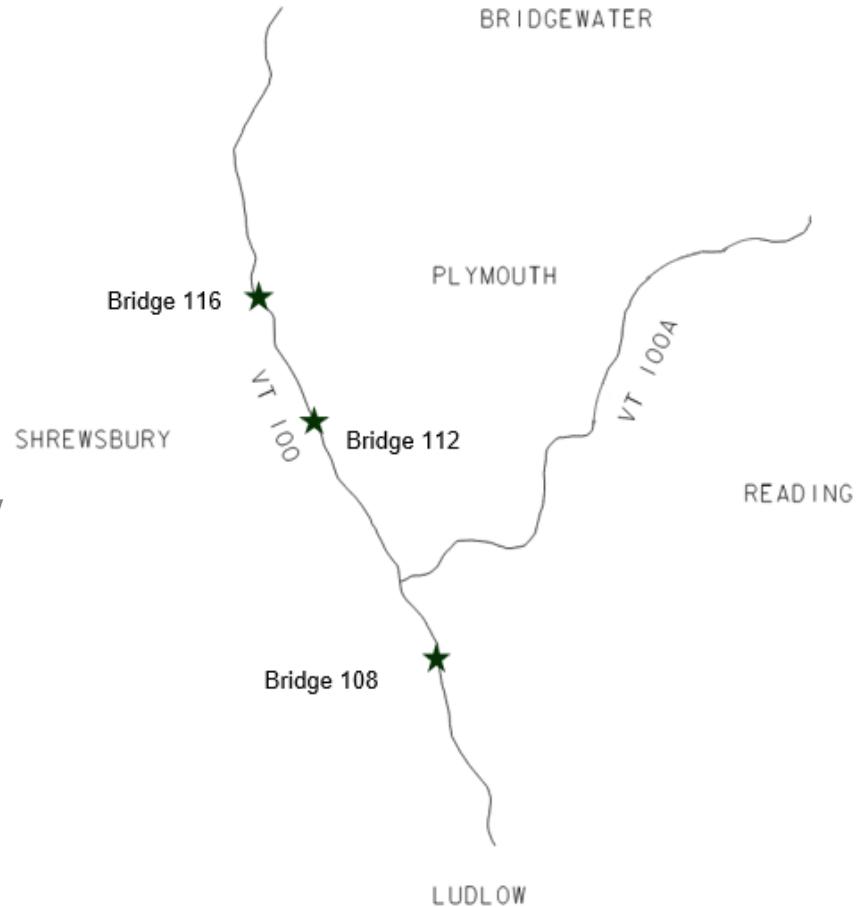
Project Urban Planner, FHI Studio

Tom Knight, P.E.

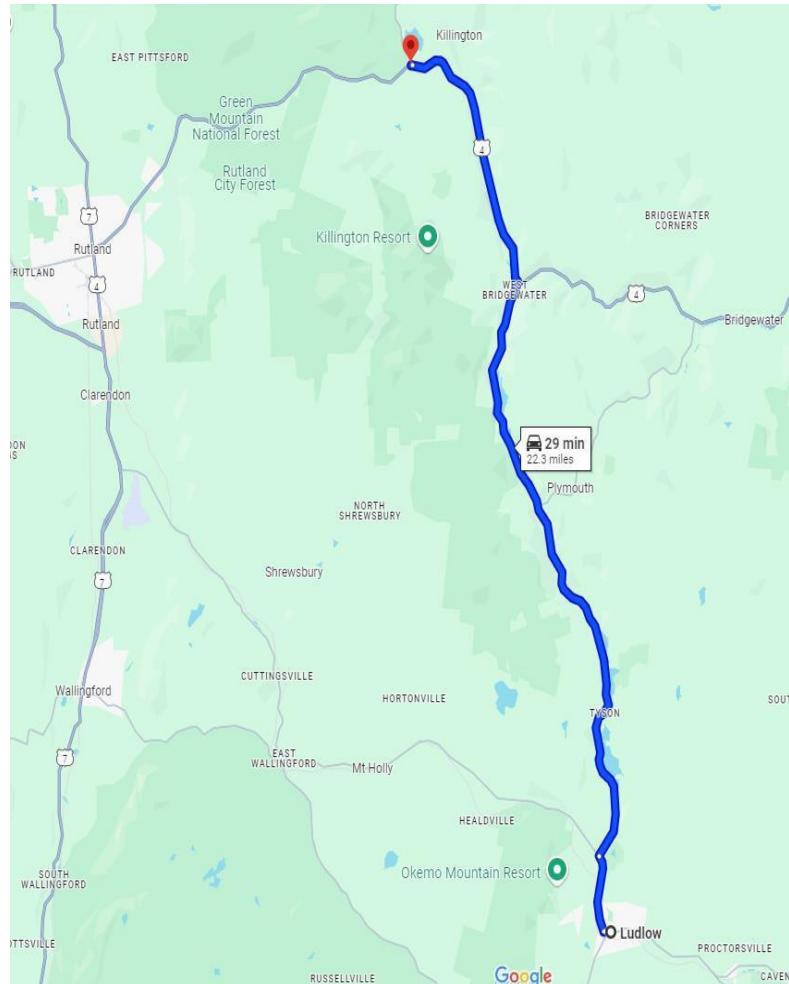
Principal Transportation, Stantec

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



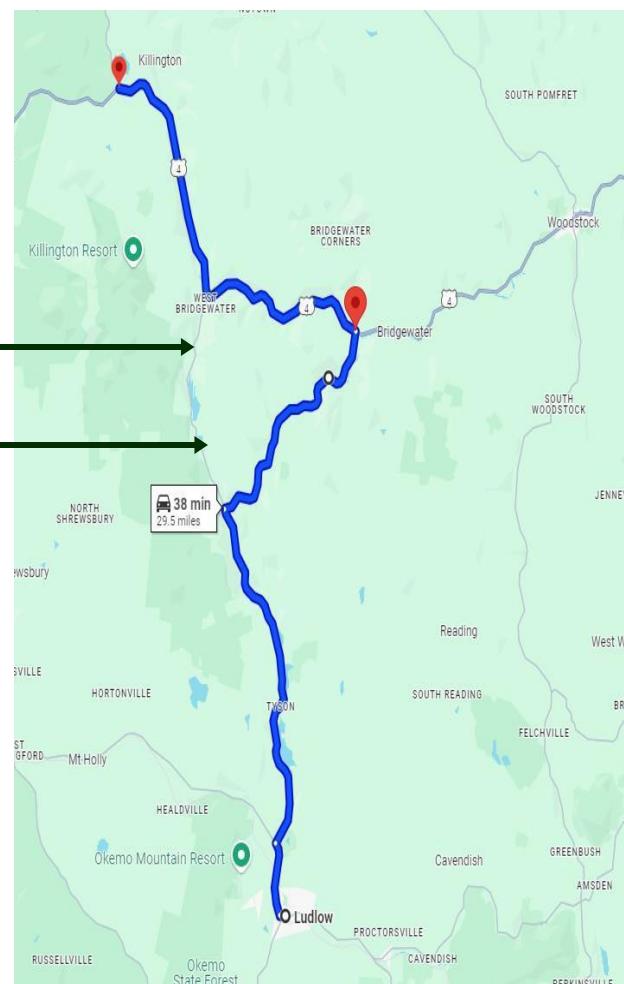
2026 VT 100 Closures



**BR 116 -
Madden Brook
Closed 45-60 Days
2026**

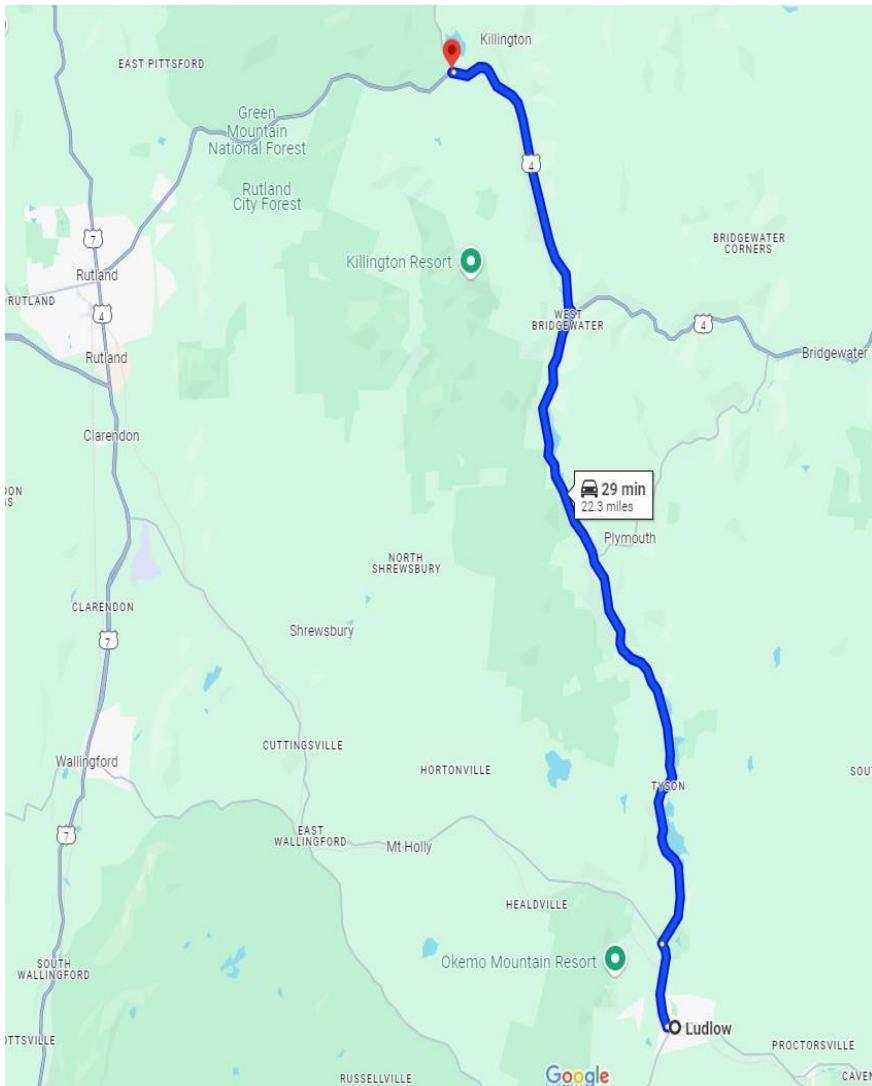
**BR 112 -
Tinker Brook
Closed 7-14 Days
2026**

No Detour
29 Minutes



Detour Via VT 100A
38 minutes

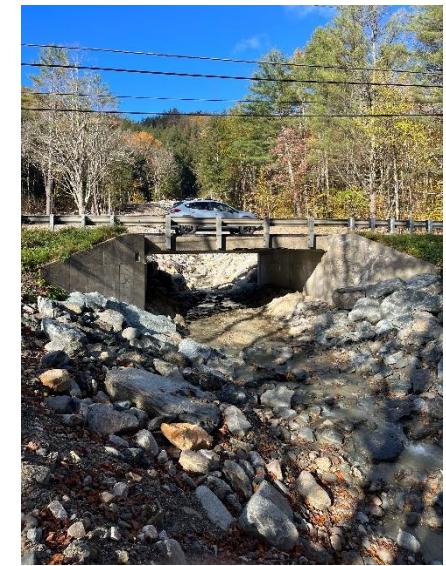
2027 VT 100 Traffic Disruption (onsite detour)



No Construction: 29 Minutes

Expected Slow Down
with Construction: +0 to 15 Minutes



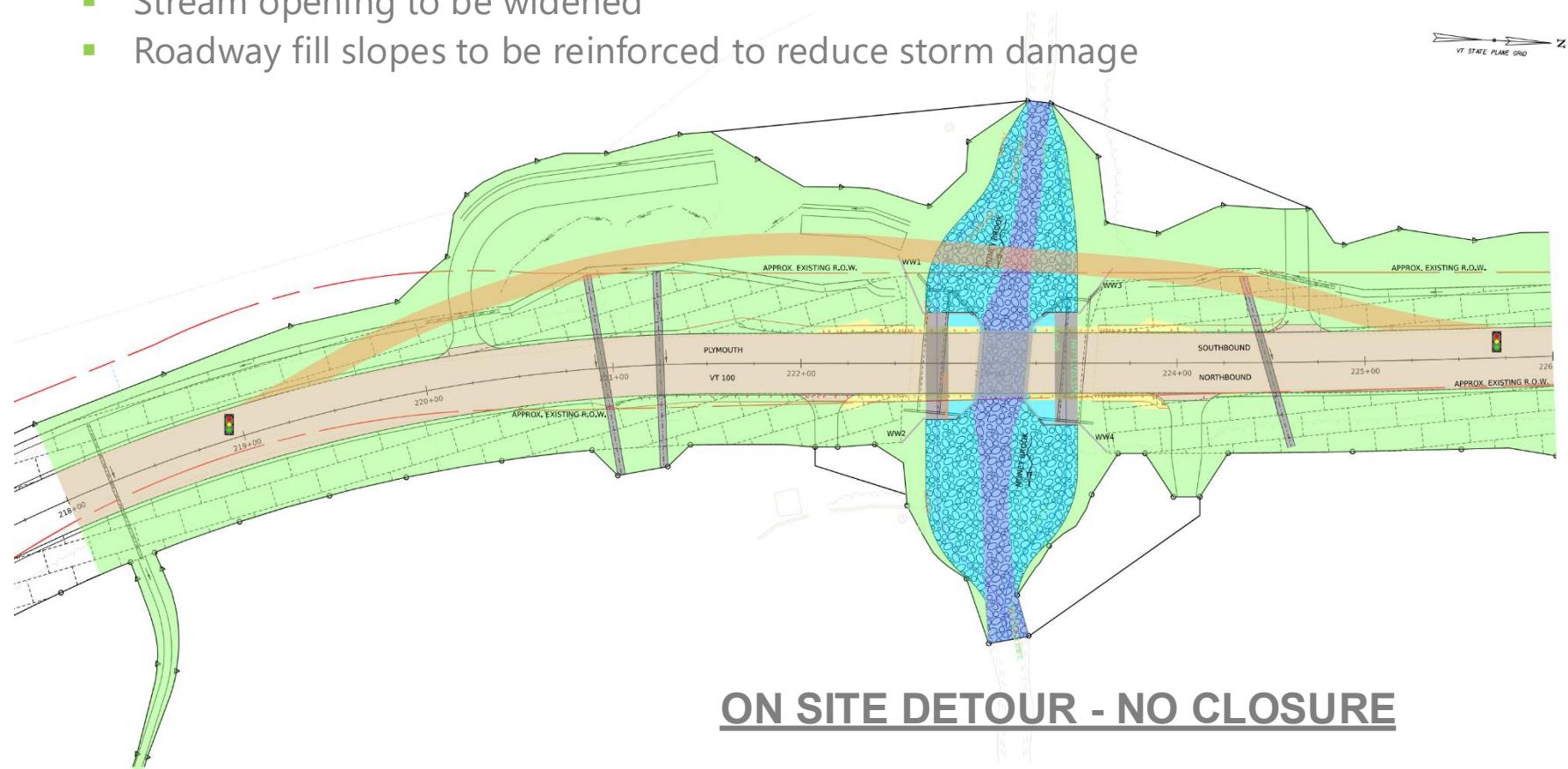


Existing Conditions / Flood Damage (Money Brook)

- 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





Existing Conditions (Tinker Brook)

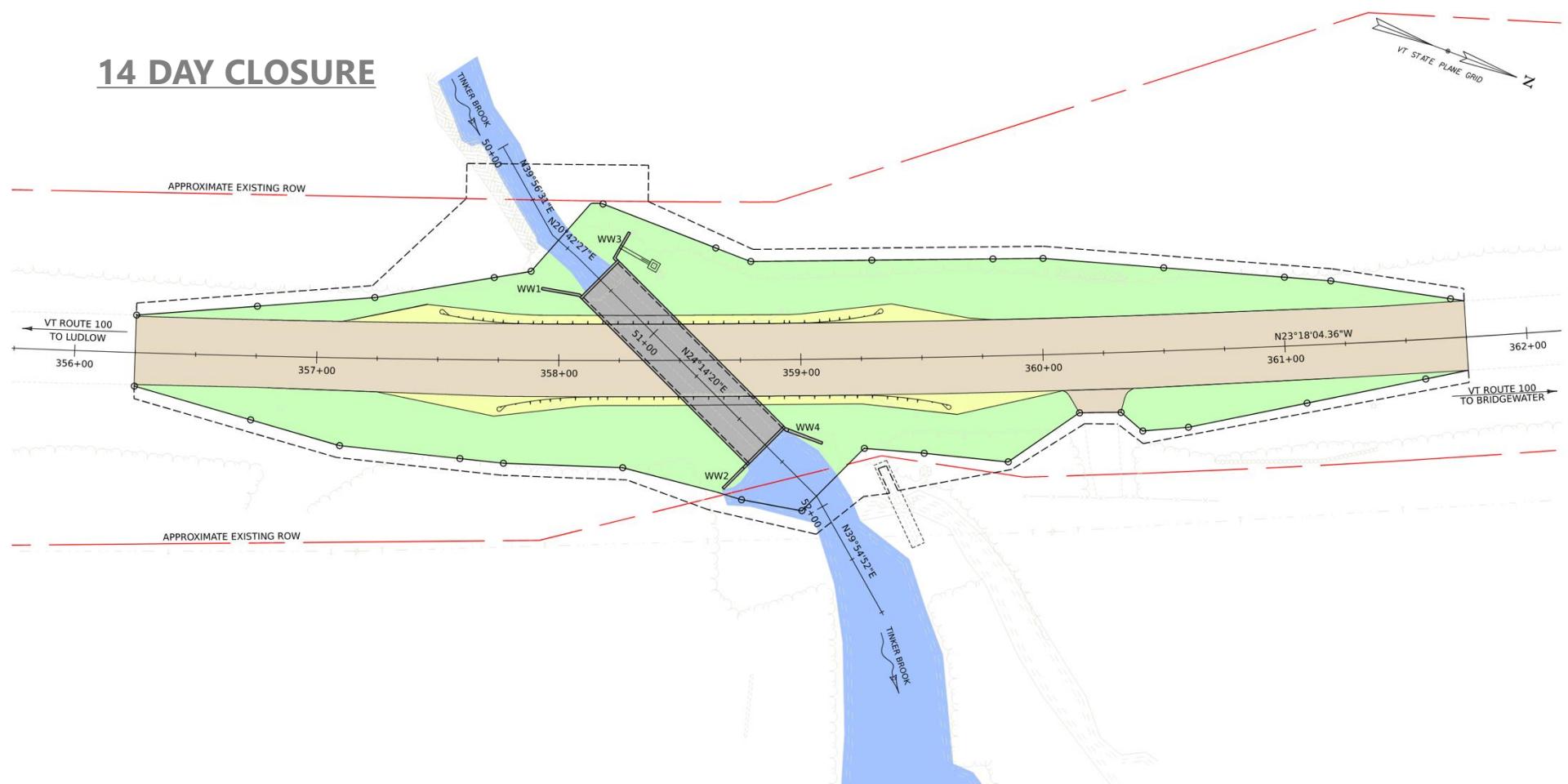
- Bridge Type – 11'x7' Galvanized Metal Plate Pipe Arch
- Deteriorated condition / hydraulically undersized
- Ownership – State Highway Agency

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

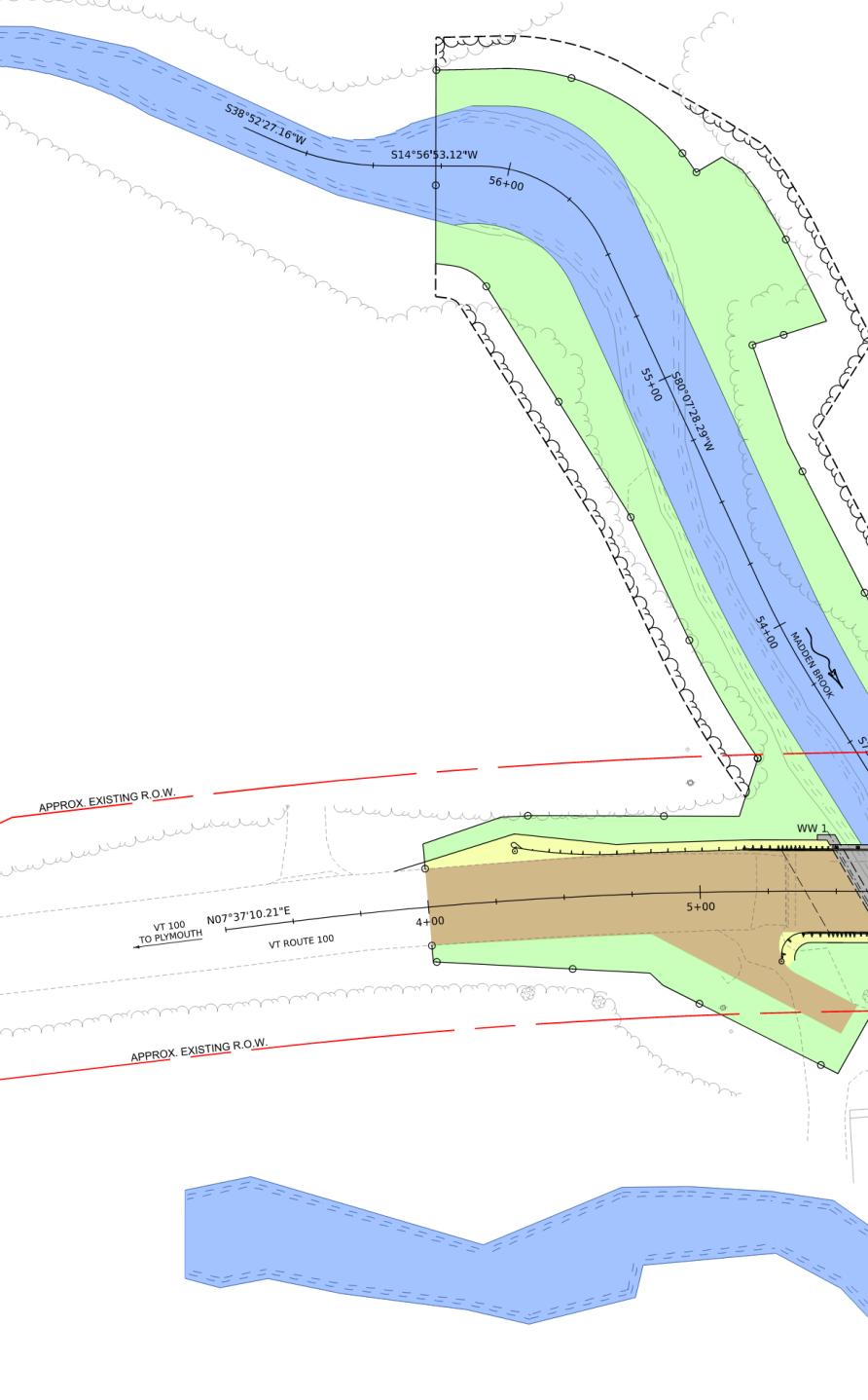




Existing Conditions / Flood Damage (Madden Brook)

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



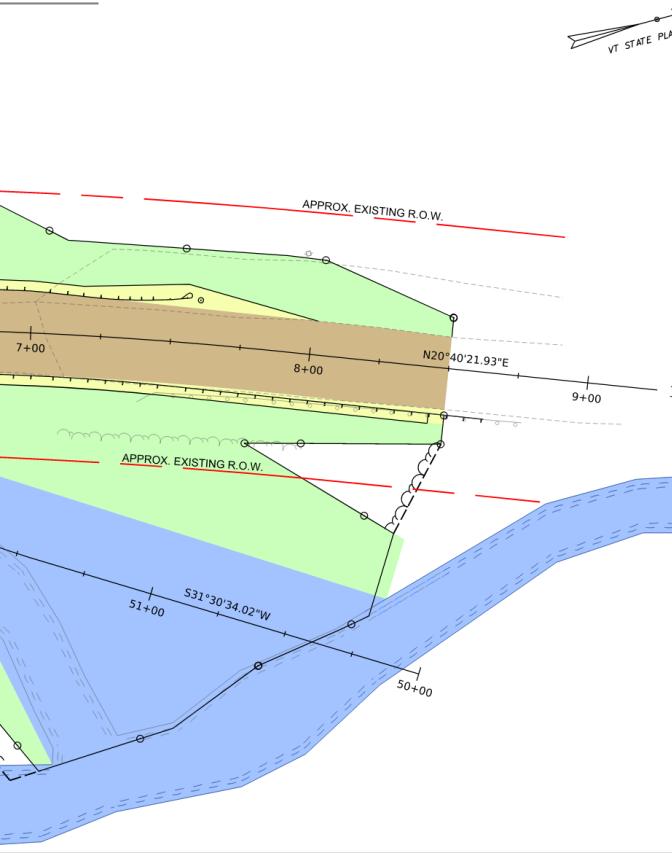


Proposed Layout

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

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?



ABC Projects

