# Public Information Meeting

## Vermont Route 100B Bridge 2 Replacement

## Moretown, VT

August 5, 2019

# Presented By:

- **Rob Young, PE**

  Project Manager – VTrans

- **Fianna Barrows, PE**

  Lead Design Engineer – Vtrans

- **Jennifer Zorn, AICP**

  Public Information Consultant– McFarland Johnson

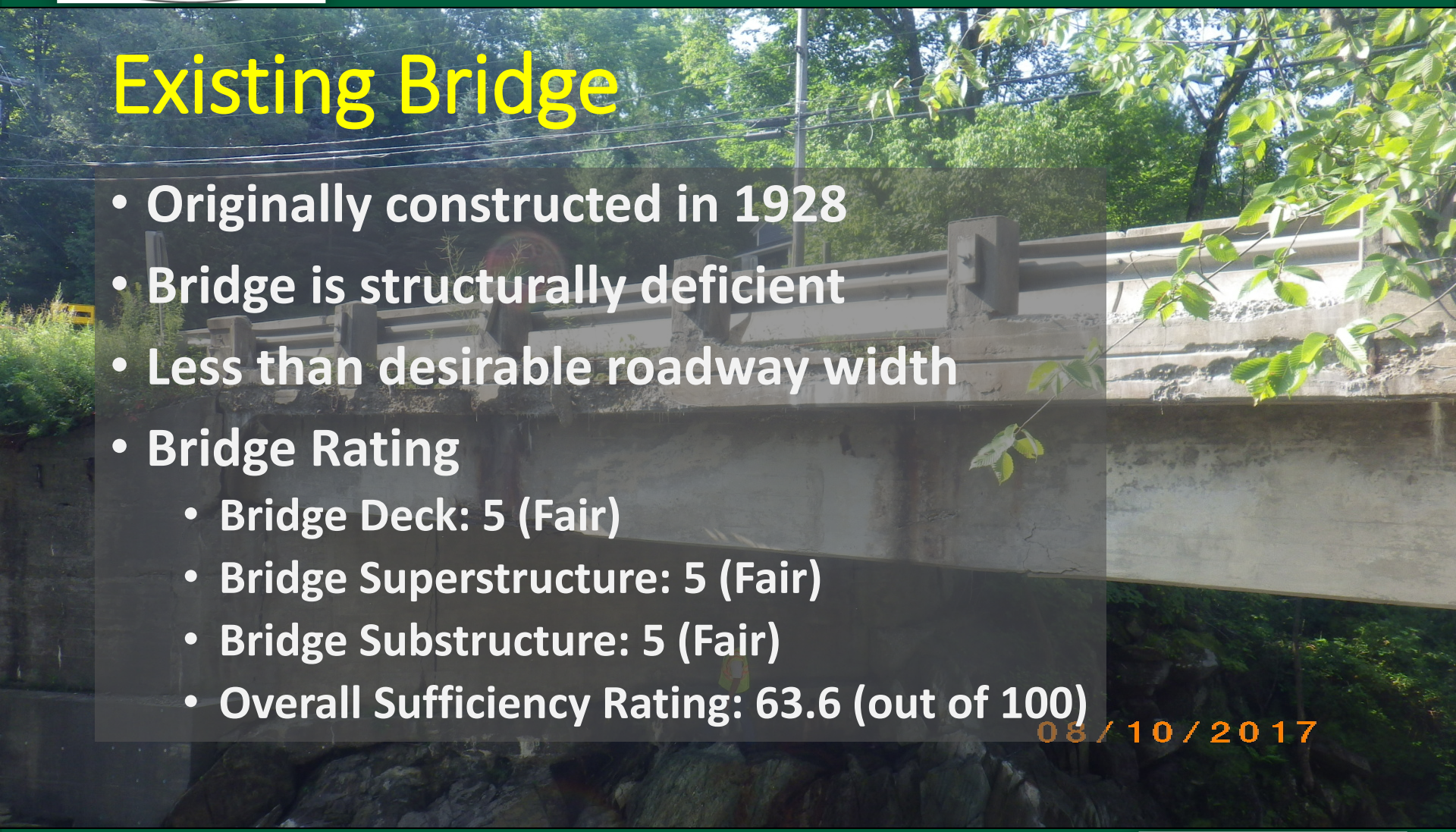
# Agenda

- Introductions
- Existing Bridge Condition
- Proposed Replacement Structure
- Remaining Project Schedule
- Proposed Detour Route
- Questions and Comments

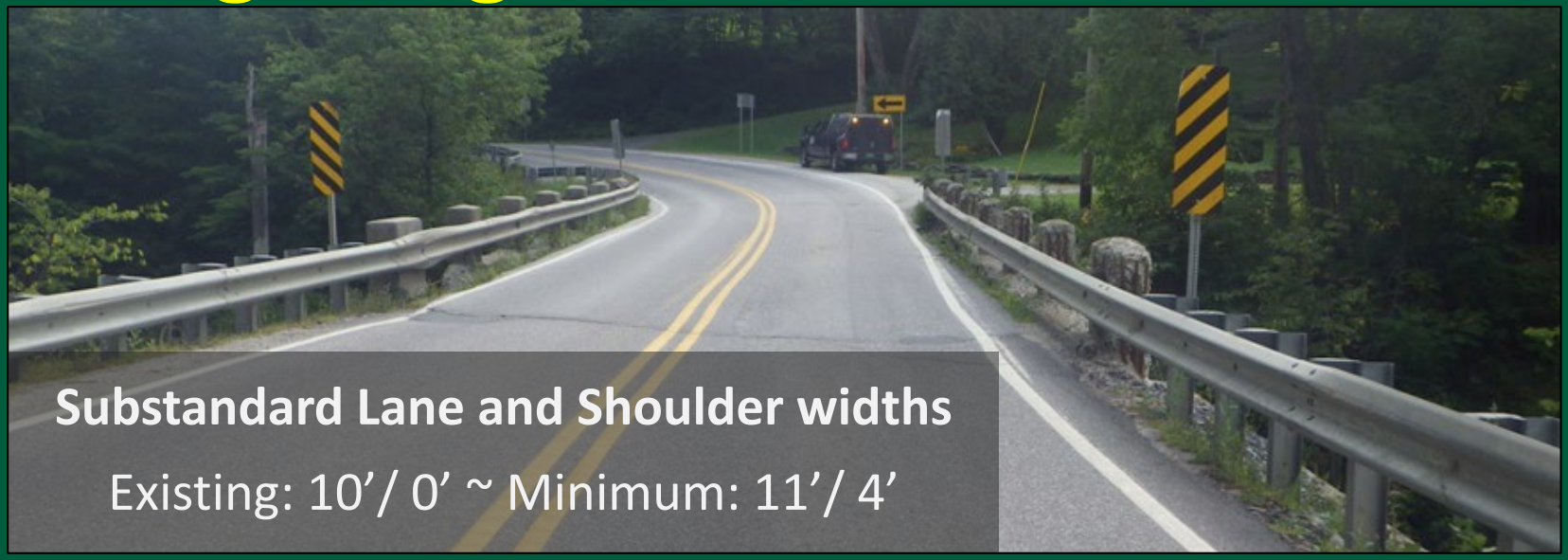
# Bridge Site – Existing

# Existing Bridge

- Originally constructed in 1928
- Bridge is structurally deficient
- Less than desirable roadway width
- Bridge Rating
  - Bridge Deck: 5 (Fair)
  - Bridge Superstructure: 5 (Fair)
  - Bridge Substructure: 5 (Fair)
  - Overall Sufficiency Rating: 63.6 (out of 100)



# Existing Bridge Deficiencies



**Substandard Lane and Shoulder widths**

Existing: 10’/ 0’ ~ Minimum: 11’/ 4’

Currently
1 lane

Accelerated Bridge Program
VTRANS

# Existing Bridge Deficiencies

Heavy spalling in curbs, fascia's, bridge railing, and T-Beams


# Existing Bridge Deficiencies

## Substructure Concrete Cracking, Spalling, and Loosing Connection with Ledge

# Existing Site Deficiencies

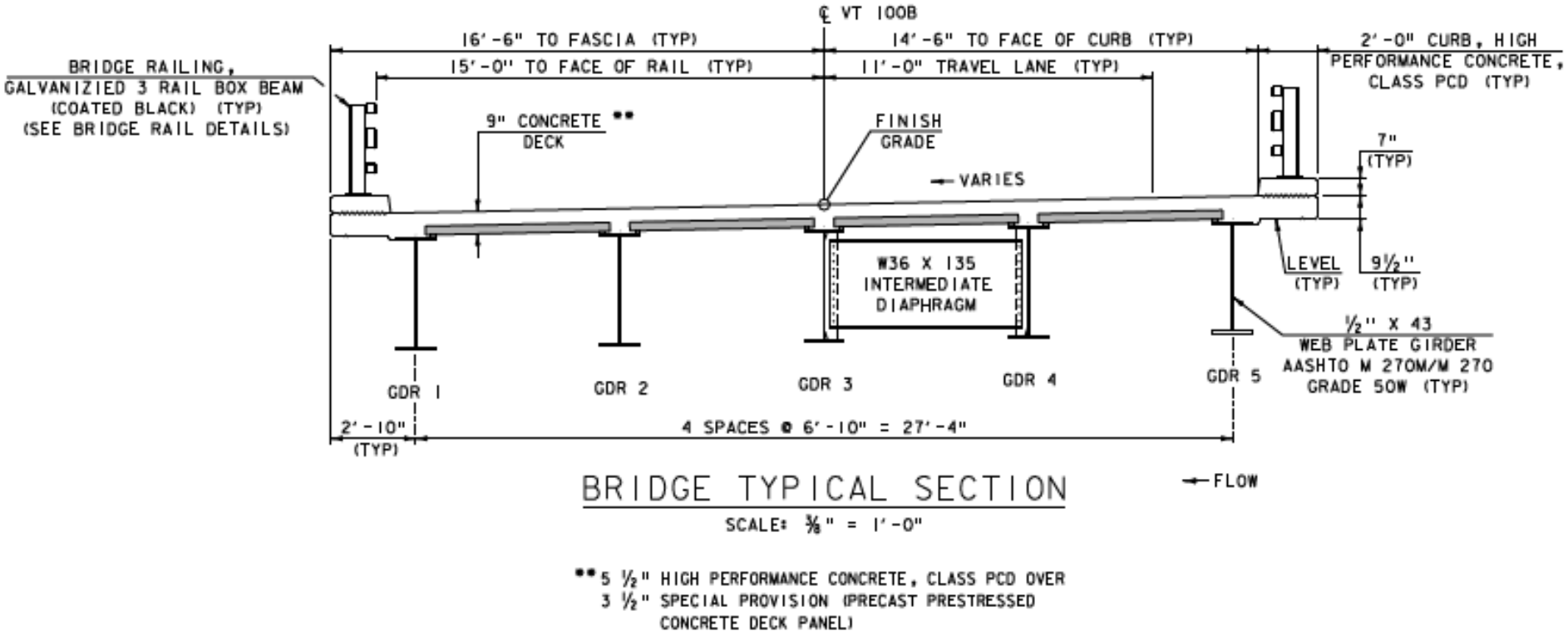
**Blocks used to Retain Roadway Approach Fill**

***Could Wash out in High Water***

# Proposed Bridge

- Concrete Deck on Steel Girders
- Spread Footings on Ledge
- Longer Span (92’ from 59’)
- Increase Bridge Width, Lane and Shoulders
- Safer Alignment
- Construct Retaining Wall

# Proposed Bridge Typical Section

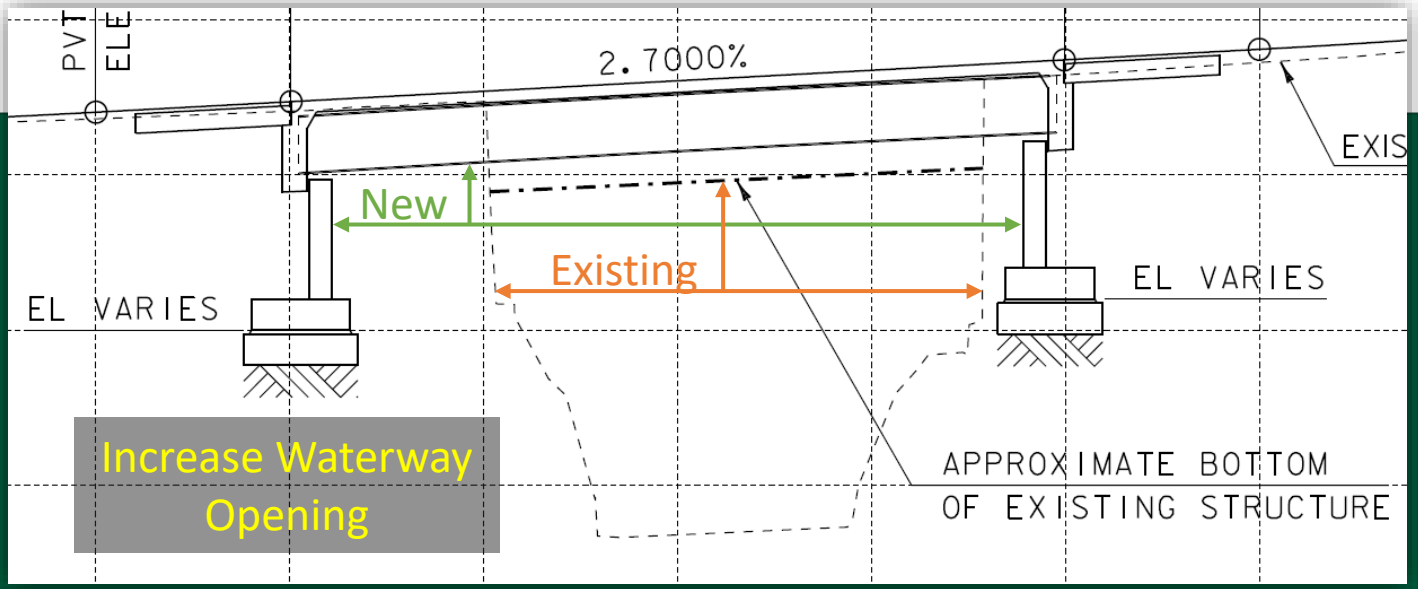


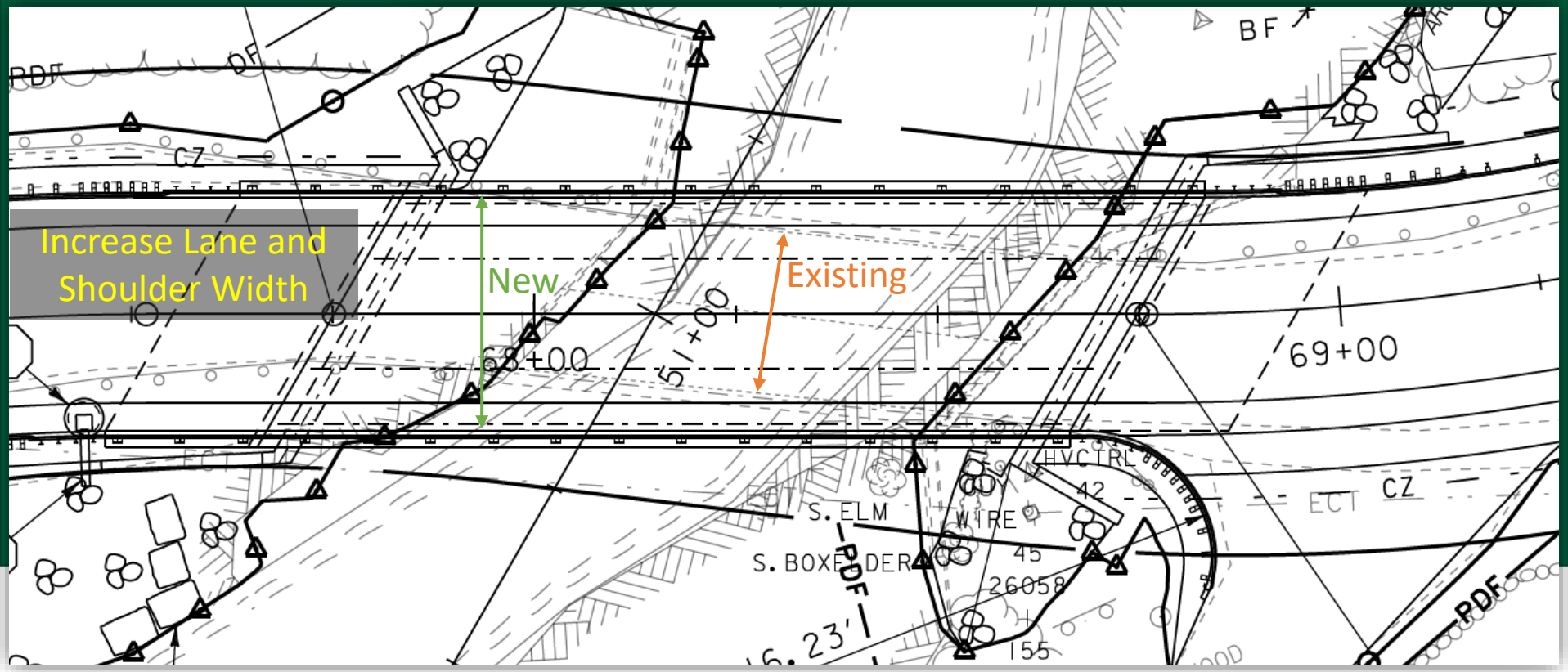

BRIDGE TYPICAL SECTION

SCALE: ⅜" = 1'-0"

** 5 ½" HIGH PERFORMANCE CONCRETE, CLASS PCD OVER 3 ½" SPECIAL PROVISION (PRECAST PRESTRESSED CONCRETE DECK PANEL)

# Proposed Bridge

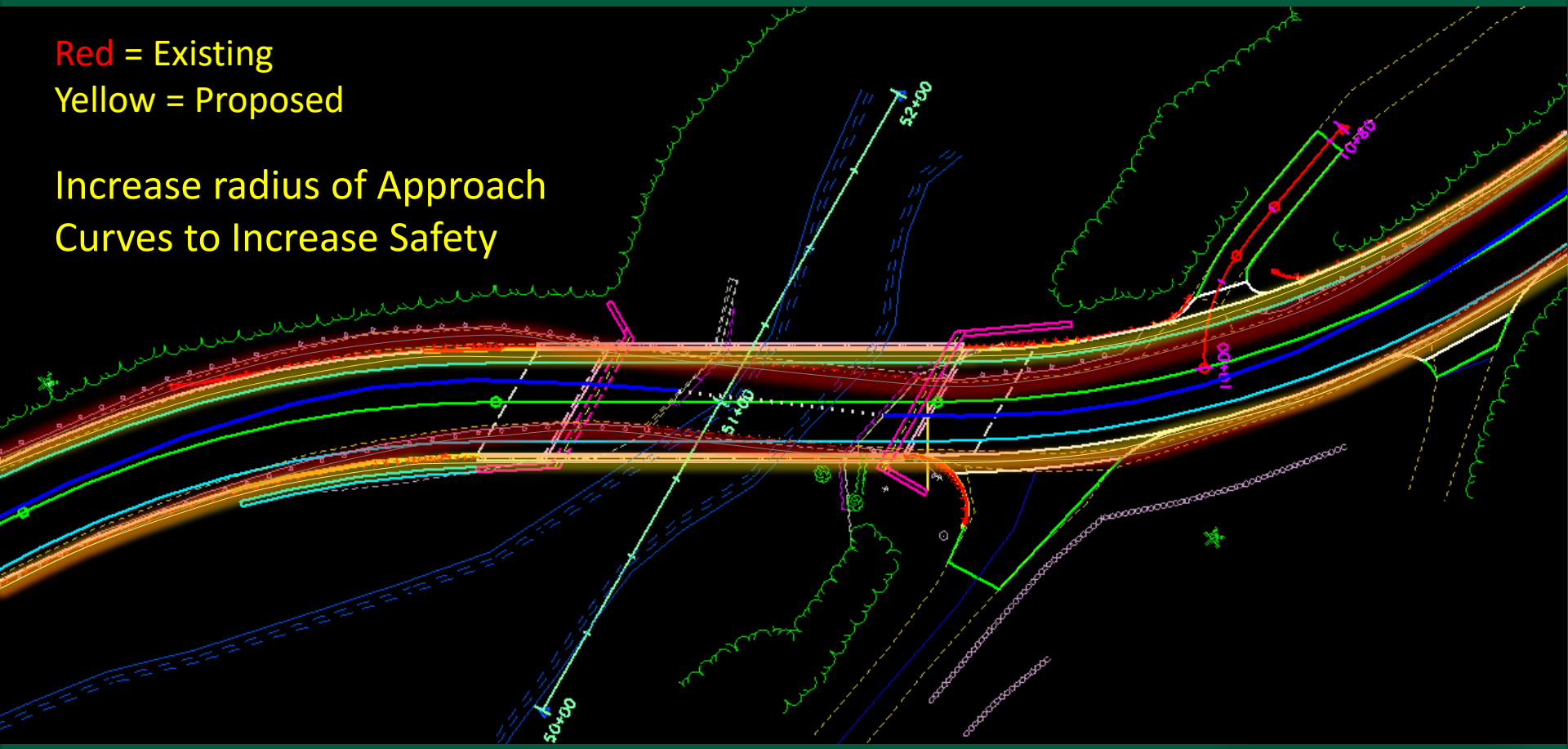


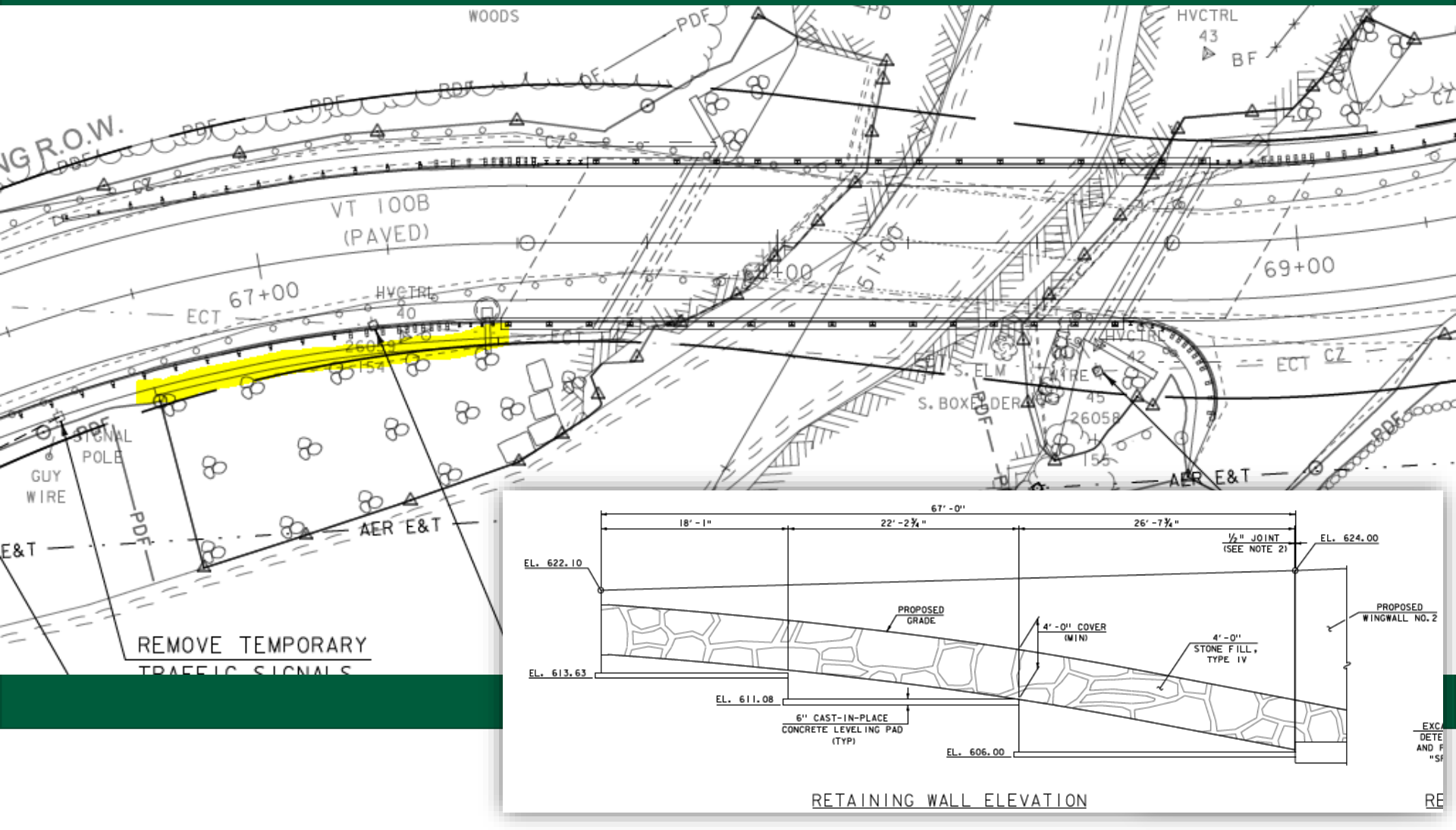
# Proposed Bridge Alignment Change

Red = Existing
Yellow = Proposed

Increase radius of Approach Curves to Increase Safety



# Proposed Bridge Retaining Wall



# Methods of Construction

***Combination of Accelerated Bridge Construction and Conventional Construction.***

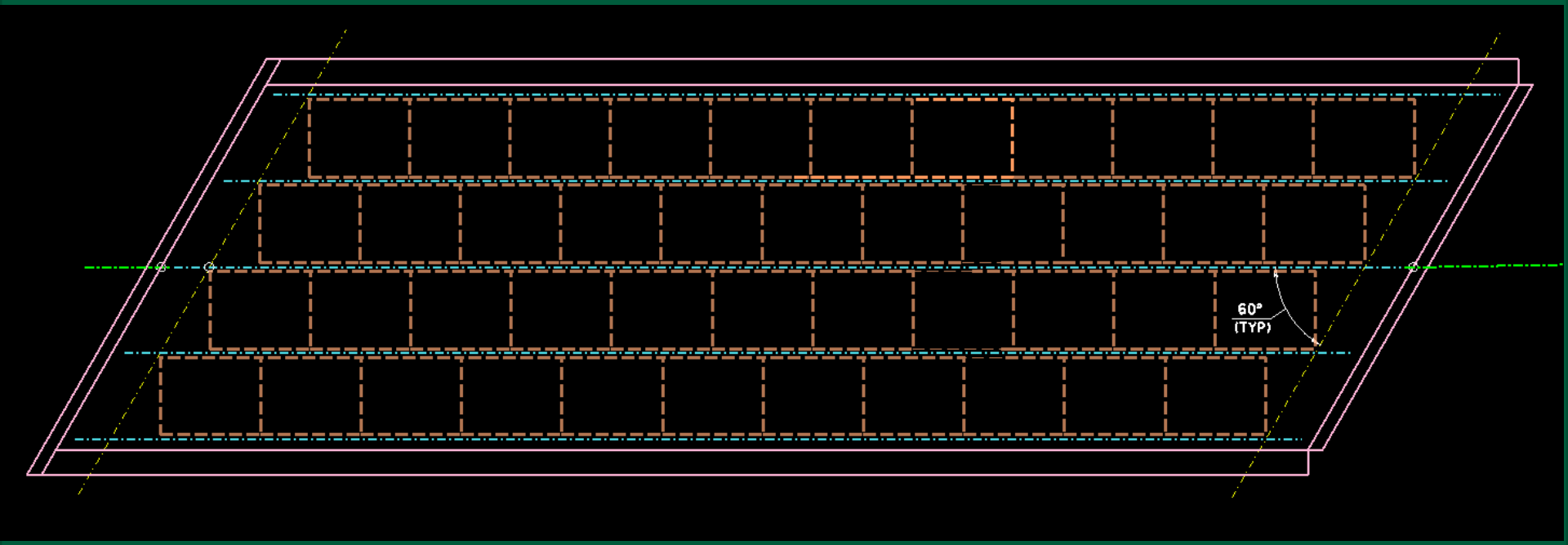
- **Overall Goals:**
  - Implement Accelerated and Conventional Components Efficiently
  - Maximum Construction Duration of 60 days to Avoid Bus Detour
- **Accelerated Elements (where feasible)**
  - Precast Footings, Deck Panels, and Approach Slab Elements
  - Rapid Setting Concrete
- **Conventional Components (due to site complexity)**
  - Cast-in-place subfooting to ensure connection to bedrock
  - Cast-in-place deck over pour for smooth, safe ride

# Accelerated Component

# Accelerated Component

# Accelerated Component

## Precast Deck Panel Layout




Accelerated Bridge Program
VTRANS

# Accelerated/ Conventional Component

## Deck Over Pour

# Conventional Component

# Final Bridge Will Look Similar To:

# Project Schedule

**Project Advertised**
- October 2019

**Begin Construction Activities**
- April/May, 2020

**Bridge Closure**
- Close: June 22, 2020
- Open: August 21, 2020

**Project Completion**
- September 2020

***Special Schedule Details:***

- ***Allowed Bridge Closure Duration – 60 Days***
- ***Financial Incentives and Disincentives included in Contract to encourage early completion***

# Detour

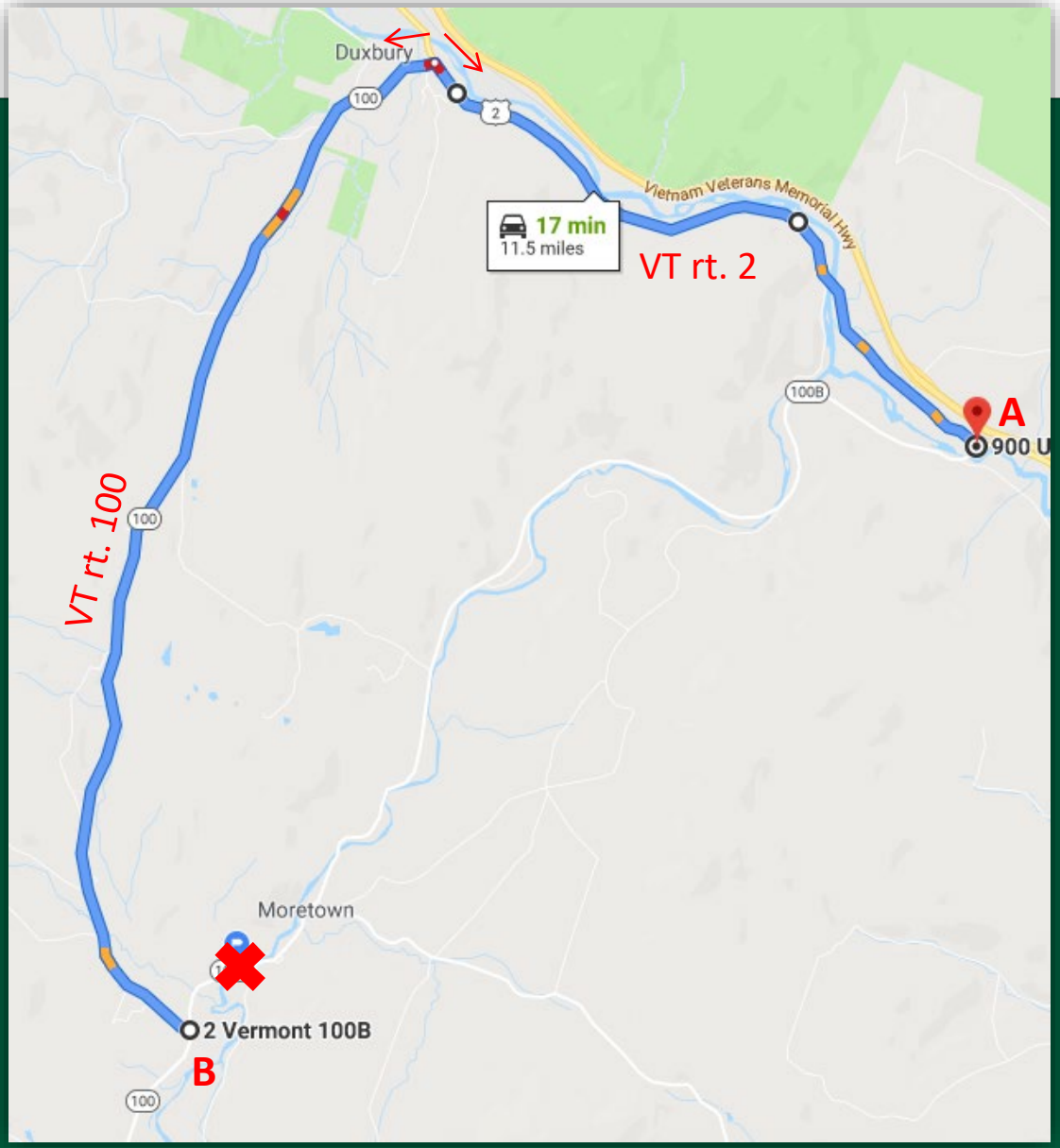
## Summary

A to B current: 7.9 Miles

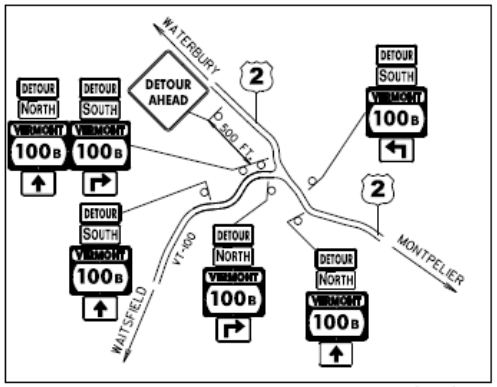
A to B detour: 11.5 Miles

Added: 3.6 miles

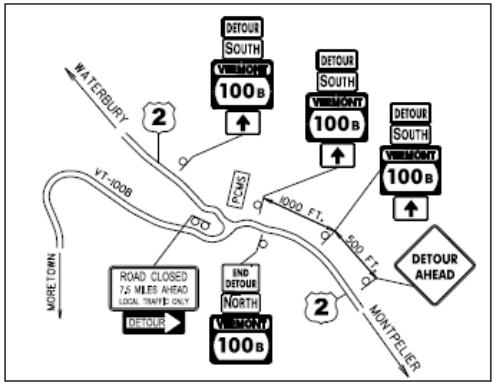
End to End 19.4 miles



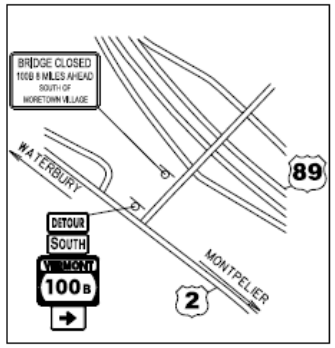
# Traffic Control Plan




D DETAIL
NTS



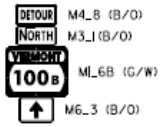

B DETAIL
NTS




C DETAIL
NTS

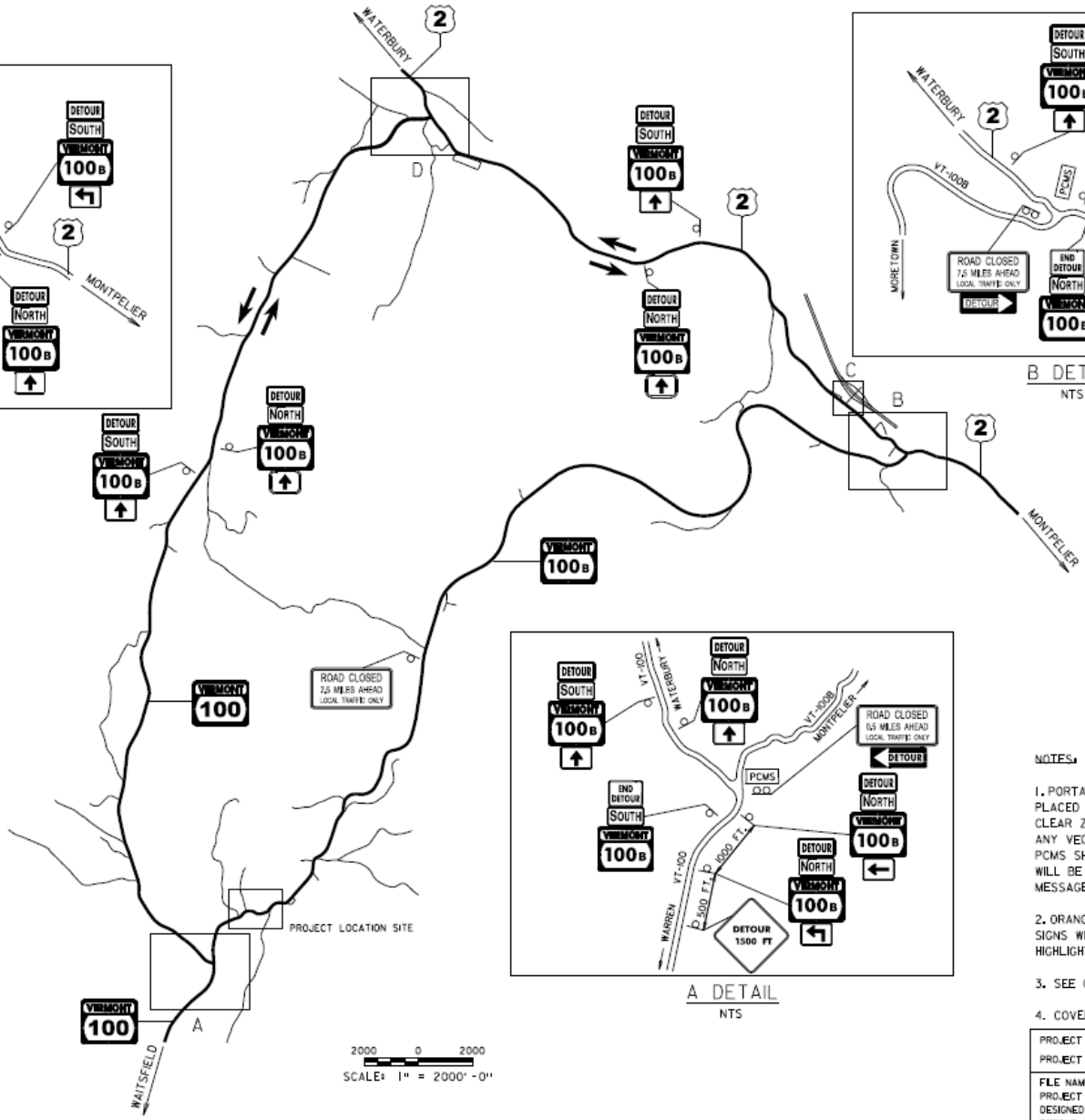



A DETAIL
NTS




TYPICAL NORTH
DETOUR ASSEMBLY


TYPICAL SOUTH
DETOUR ASSEMBLY




N
VT STATE PLANE GRID

NOTES:

1. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED OFF THE EDGE OF THE ROADWAY, OUTSIDE THE CLEAR ZONE, BUT SHALL BE VISIBLE FROM THE ROADWAY. ANY VEGETATION THAT INTERFERES WITH VISIBILITY OF THE PCMS SHALL BE REMOVED. REMOVAL OF THE VEGETATION WILL BE INCIDENTAL TO ITEM 641J5, "PORTABLE CHANGEABLE MESSAGE SIGN".

2. ORANGE FLAGS SHALL BE USED WITH TEMPORARY DETOUR SIGNS WITH BLACK LETTERING ON WHITE BACKGROUNDS TO HIGHLIGHT INFORMATION FOR THE TRAVELING PUBLIC.

3. SEE CONTRACT DOCUMENTS FOR CLOSURE DATES.

4. COVER ALL SIGNS CONFLICTING WITH DETOUR

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|---|---|
| PROJECT NAME: | MORETOWN |
| PROJECT NUMBER: | BF 0167(16) |

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|---|---|---|---|
| FILE NAME: | sl6b010detour.dgn | PLOT DATE: | 27-JUN-2019 |
| PROJECT LEADER: | R. YOUNG | DRAWN BY: | D. KARABEGOVIC |
| DESIGNED BY: | D. KARABEGOVIC | CHECKED BY: | F. BARROWS |
| DETOUR | | SHEET | 21 OF 72 |

# Public Outreach

Public Information Consultant - **Jennifer Zorn**

To Sign up for emails with project updates – send an email to jzorn@mjinc.com

Jennifer's Contact information

Direct Phone #: (603) 931-3943

Email: jzorn@mjinc.com

# Questions and Comments?