2018 Construction Update

PRESENTED TO
Middlebury Selectboard

PRESENTED BY
VTrans, VHB, and Kubricky

March 27, 2018
Meeting with you today

- **Kristin Higgins**, PE, Structures Program Manager, *VTrans*
- **Aaron Guyette**, PE, Design Project Manager, *VHB*
- **Mark Alexander**, Senior Project Manager, *Kubricky Construction*
- **John Whittaker**, Project Manager, *Kubricky Construction*
Project Overview

Project Dimensions

Overall length: 3,550 feet
Tunnel length: 360 feet
Construction Area: 6.1 Acres
2018 Construction Activities

- Tree cutting
- Drainage infrastructure
- Temporary access roads
- Aerial utility relocations
2018 Tree Cutting
2018 Pre-Construction Activities

- Building inspection and vibration monitoring
- Temporary traffic control signing
- Temporary erosion prevention and sediment control
2018 Drainage infrastructure

- Drainage outfall/receiving shaft 1
- Drive 1
- Drive 2
- Drive 3
- Launch shaft
- Receiving shaft 2
- Receiving shaft 3
2018 Microtunneling Activities

- General Sequence
  - Launch Shaft – complete microtunnel drives – set manhole/backfill
  - Receiving Shaft 1 – microtunnel drive 1 – construct Headwall
  - Receiving Shaft 2 – microtunnel drive 2 – set manhole/backfill
  - Receiving Shaft 3 – microtunnel drive 3 – set manhole/backfill
NOTE:
1. PAYMENT FOR THE REMOVAL, TRANSPORTATION, AND STORAGE OF THE TUNNEL AMENITIES INCLUDING THE CURB, BERRIES, PLANTERS AND TRASH RECEPTACLE WILL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR ITEM NO. 645 "SPECIAL PROVISION REMOVAL AND STORE PARK AMENITIES".
2. LAUNCHING PIT SHALL BE EXTENDED TO THE RAILROAD TRACKS AND BE ERODED DOWN TO THEIR ELEVATION FOR REMOVAL OF LAUNCH SHAFT MATERIAL. COSTS SHALL BE INCLUDED IN ITEM NO. 649 "SPECIAL PROVISION CONSTRUCTION LAUNCH SHAFT 11".
3. AREA OF CONCRETE SIDEWALK/CONCRETE SLAB TO BE REMOVED. PAYMENT FOR REMOVAL, WILL BE MADE UNDER ITEM NO. 645 "SPECIAL PROVISION ROCK EXCAVATION".
4. EXISTING LAYOUTS BUILDING FREE STANDING NORTH, EAST AND WEST FENCING MASONRY TO BE REMOVED. PAYMENT FOR REMOVAL WILL BE MADE UNDER ITEM NO. 645 "SPECIAL PROVISION ROCK EXCAVATION".
5. THE 60' STEEL CASING PIPE THAT IS INSTALLED FROM END OF THE MICRO TUNNEL TO THE DRAINAGE STRUCTURE WILL BE PAID FOR UNDER ITEM NO. 645 "SPECIAL PROVISION Casing Pipe".
6. THE 42' POLYETHYLENE PRODUCT PIPE THAT IS INSTALLED UNDER THE EXISTING PAVEMENT FOR MICRO TUNNELLING WILL BE PAID FOR UNDER ITEM NO. 645 "SPECIAL PROVISION PRODUCT PIPE".
7. THE COST FOR STEEL SLEEVE THAT IS INSTALLED WITHIN THE LIMITS OF MICRO TUNNELING SHALL BE INCLUDED IN ITEM NO. 645 "SPECIAL PROVISION MICRO TUNNELING - WASHOUT" AND NO. 645 "SPECIAL PROVISION MICRO TUNNELING - ROCKS".
8. TEMPORARY SUPPORT OF EXCAVATION SHOWN IS BASED ON 30' DESIGN PROVIDED BY THE CONTRACTOR.
9. LIMITS OF MICRO TUNNELLING SHAFTS ARE APPROXIMATE ONLY. FINAL DESIGN AND DIMENSIONS SHOULD BE COMPLETED BY THE CONTRACTOR.
42" DIA. POLYETHYLENE WITHIN MICRO TUNNEL, SEE DRAINAGE LAYOUT SHEET.
M 1:1 SCALE 6:40-60
Launch Shaft Construction

- Fencing in Printer’s Alley: End of April 2018
- Earth Excavation: Late April 2018
- Drilling and blasting in Printer’s Alley: May – July 2018
- Microtunneling start: August 2018
- Set manhole structure and backfill: March and April 2019
- Construction activity in Printer’s Alley: April 2018 – April 2019
2018 Temporary outfall access road

Park area undisturbed during construction
Receiving Shaft 1 Construction

- Installation of access road and tree clearing: April 2018
- Soil excavation: May 2018
- Drilling and blasting: June 2018
- Completion of microtunnel drive 1: August 2018
- Removal of temporary access road: Spring 2019
Receiving Shaft 2 Construction

- Removal of park amenities: end of April 2018
- Installation of fencing around Triangle Park: end of April 2018
- Support of excavation (minipiles): May 2018
- Soil excavation: May and July 2018
- Drilling and blasting: August 2018
- Completion of microtunnel drive 2: October 2018
- Set manhole structure and backfill: January 2019
Receiving Shaft 3 Construction

- Installation of fencing and barriers: May and June 2018
- Support of excavation (minipiles): May and June 2018
- Soil excavation: August 2018
- Drilling and blasting: September 2018
- Completion of microtunnel drive 3: November 2018
- Set manhole structure and backfill: February 2019
2018 Traffic, pedestrian, and parking impacts
Water Street Temporary Access Road

- Construction: Summer of 2018
- Access to railroad corridor and lower Battell Block parking area
Summer 2018 Temporary access road
Aerial Utility Relocations

- Electric and telecommunications relocations
- Printer’s Alley area
- Merchants Row crossing
Summary of 2018 Downtown Impacts

- Short term closures of Printer’s Alley
- Utility duct bank installation across Merchants Row
- Intermittent truck traffic downtown
- Minor construction noise during daytime working hours
- Normal working hours: 7:00am – 5:00pm
  - Isolated extended hours and weekends
2018 Downtown Events

- Construction Activities will work around these events
  - Festival on the Green
  - Peasant’s Market
  - Lion’s Club Auction
Questions?