TARGET AUDIENCE: ***This training webinar was developed for owners and policy makers.***

March 24, 2015; 11:00am-noon (MST)

Today's Agenda:

>Welcome/Overview (~5 min.)

>Owner/Policy Maker Perspective Presentation (~40 min.)

>Questions & Answers (~15 min.)

>Next Steps (~3 min.)

SLIDE IN BRIDGE CONSTRUCTION (SIBC) FROM THE OWNER/POLICY MAKER PERSPECTIVE

Administrative Items

- To join the audio, click the "Communicate" option from the menu bar and select either "Teleconference" (for phone) or "Audio Broadcast" (for "VOIP")
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- During the webinar, please use Q&A box for questions (see panel on right side of WebEx screen)
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Slide LAT

BRIDGE
LATERAL MOVE
TECHNOLOGY

Accelerated Bridge Construction (ABC)

U.S. Department of Transportation
Federal Highway Administration

SLIDE-IN BRIDGE CONSTRUCTION (SIBC) FROM THE OWNER/POLICY MAKER PERSPECTIVE

March 24, 2015; 11:00am MST

CDOT COLORADO Department of Transportation

SIBC Webinar Series

- Owner/Policy Maker Perspective
  - November 2013 (complete)
  - Today, March 24, 2015
- Engineer/Designer Perspective
  - January 2014 (complete)
  - April 2014 (complete)
  - 3rd session scheduled for July 2015
- Contractor/Constructor Perspective
  - March 2014 (complete)
  - June 2014 (complete)
  - 3rd session scheduled for November 2015

Webinar Agenda

- Featured Presentation:
  Owner/Policy Maker Perspective (~40 min.)
- Questions & Answers (~15 min.)
- Next Steps (~3 min.)

HARTFORD I-91 BRIDGES

SLIDE-IN BRIDGE

CONSTRUCTION

Vermont Agency of Transportation (VTrans)

Kristin Higgins, P.E., Project Manager

Presentation Outline

- VTrans Accelerated Bridge Program
- Hartford Bridge Replacement Project - Planning
- Alternative Project Delivery
- Partnering and Collaborating
- Project Plans and Special Provisions
- Public Outreach
- Lessons Learned

VTRANS' ACCELERATED BRIDGE PROGRAM

Kristin [illegible]

VTrans Accelerated Bridge Program

- Initiated in 2012 by Vermont's Secretary of Transportation
- Expedite project delivery
  - Minimize project development and construction costs
  - Utilize proven expedited project delivery strategies (C-19)
  - Utilize Accelerated Bridge Construction (ABC) technologies
  - Standardize project plans (SHRP2-RO4)
  - Utilize alternative project delivery
- Since 2012 - 28 projects totaling $44 million

Goals and Objectives

- Be a leader for innovation at VTrans and Nationally
  - Maximize use of technology
  - Maximize flexibility in project delivery
  - Create a culture that values new ideas
  - Document successful innovations
  - Be an early adopter of research
- Be transparent to stakeholders and customers
  - Implement best practices in public outreach
  - Develop and maintain validated and credible project schedules
  - Partner with internal and external stakeholders
  - Partner with Contractors and Fabricators to deliver best value

HARTFORD BRIDGE REPLACEMENT PROJECT PLANNING

Project Background

- Project programmed for replacement in 2012
- Both structures on I-91 have pin and hanger type connections and are considered fracture critical

Project Background

- Project scoping report called for complete replacement with single span structures vs new superstructures on existing substructures
  - Desired wider bridges for future maintenance
  - Future Rte. 5 project based on removal of bridge piers
- Site constraints were steering us toward ABC
- Slide-in bridge construction seemed feasible

Resources and Guidance

- FHWA had just published the **Slide-In Bridge Construction Implementation Guide – Planning and Executing Projects with the Lateral Slide Method**
  - Table 1.1 Common Applications of SIBC
- ABC Solutions must be feasible & practical
- ABC not always appropriate
- Sought input from industry experts like FHWA & lead adopter states
- Neighboring state of NY had recent SIBC experience

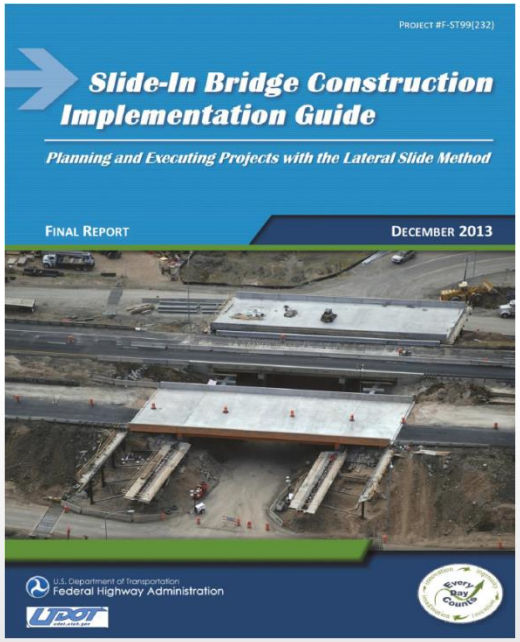


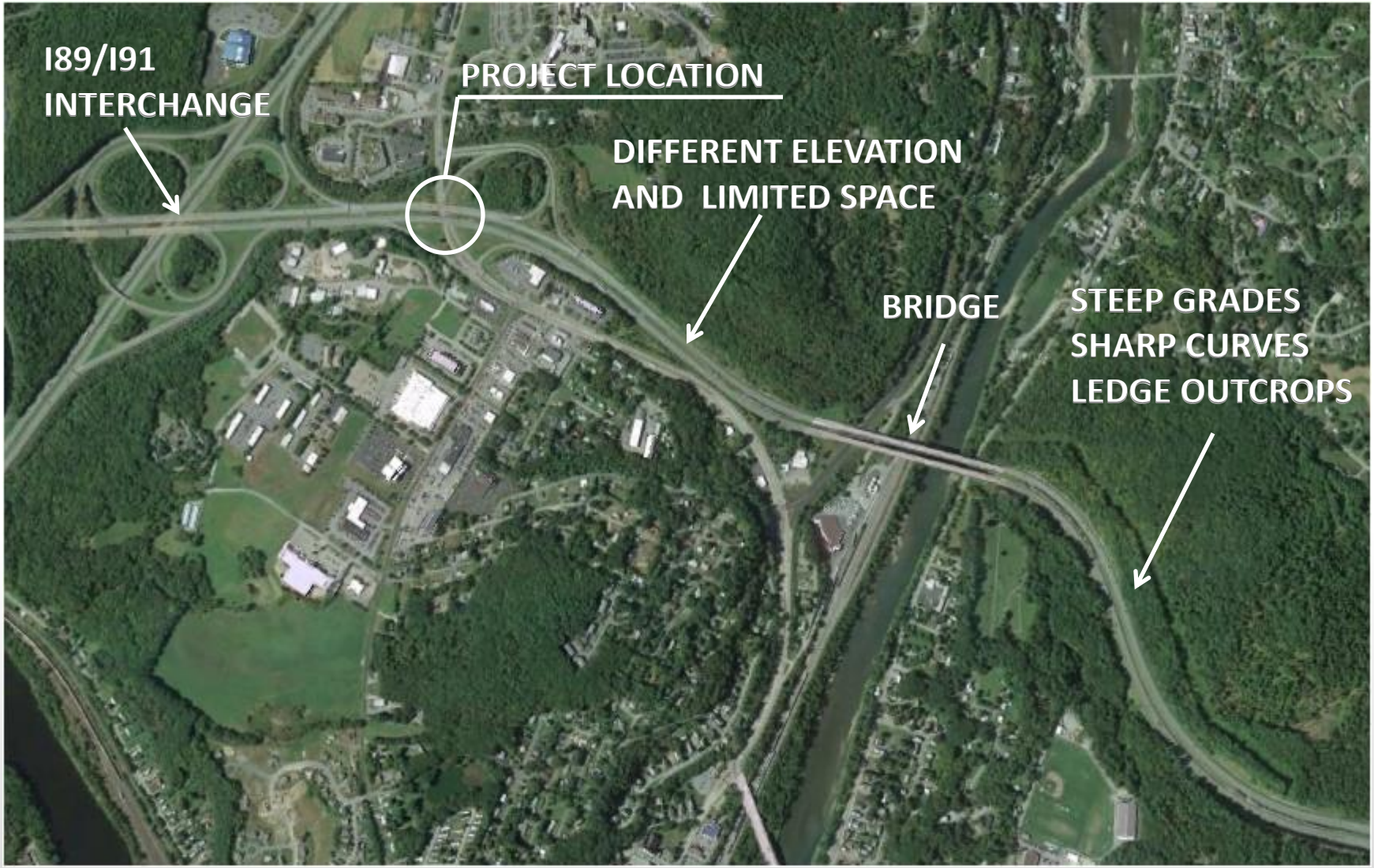
Table 1-1
Common Applications of Slide-In Bridge Construction

Application	Description	Reason
More traffic over the bridge than under the bridge	SIBC typically has greater benefits for bridges where the roadway over the bridge has a lower annual average daily traffic (AADT) than the roadway under the bridge.	If traffic volume on the bridge is a significant issue, SIBC reduces the mobility impacts and user costs. However, for traffic under the bridge, SIBC still requires closures for beam and deck placement on the new bridge, and closure during the existing bridge demolition, new bridge slide, and for post-slide demolition removal and cleanup.
High user cost location	SIBC is generally applicable when user costs are a major consideration.	With fewer detours and work-zone traffic delays, SIBC results in lower user costs than traditional construction.
Elevated safety concerns	SIBC is generally applicable for bridges with extended duration impacts, complex traffic shifts, or other safety concerns.	SIBC increases safety by constructing the superstructure away from traffic, not reducing lane widths, and avoiding merges and potentially confusing lane configurations.
Long detour or no available detour	SIBC is generally applicable for bridge replacements that require a long detour or where no detour route is available due to geography or construction on adjacent routes.	SIBC significantly reduces the duration that a detour is required for the traveling public. If a short-term bridge closure can be sustained without the need for a detour, then SIBC provides a viable solution when no detour is available.
Temporary bridge avoidance	SIBC is generally applicable when a temporary bridge is either unfeasible or cost-prohibitive.	SIBC allows for a short closure period and avoids the need for a temporary bridge to maintain traffic during construction.
No phased construction	SIBC is generally applicable for bridge replacements where phased construction is not permitted or not desired.	If phased construction is not an option due to structure type, constructability issues, or schedule, SIBC provides a viable solution.
Limited on-site construction time	SIBC is generally applicable when the on-site time during construction is limited.	SIBC generally reduces the construction duration when compared to phased construction. This streamlined construction timeframe provides an effective solution to sensitive environments, work required in railroad ROWs, and highly populated commerce, residential, or recreation areas.
Narrow bridge	SIBC is generally applicable for bridges with a limited width.	A narrow bridge may make traffic control during phased construction unfeasible or unsafe. SIBC precludes the need for extended periods of traffic control on the bridge.
Railroad bridge	SIBC is generally applicable for bridges that carry railroad traffic.	Closure of a railroad bridge stops all related train traffic until the bridge is reopened, which greatly affects the transport of both people and products. SIBC reduces the duration of the bridge closure for railroad bridges.
Replacement bridge shorter than existing	SIBC is generally applicable for replacement bridges that are shorter than the existing.	SIBC facilitates the construction of new substructures under the existing bridge while it remains in service to minimize closure time.
Site conditions and geometric constraints	SIBC is generally applicable for bridges with site conditions or geometric constraints that preclude traffic shifts.	SIBC does not require traffic shifts. Therefore, it is a favorable alternative for bridges with site constraints that preclude traffic shifts.

- **Geometric Constraints/Safety**
  - ✓ **No room for crossovers or temporary bridge**
- **Traffic on Bridge significant**
- **High User Costs**
- **Replacement Bridge shorter than existing**

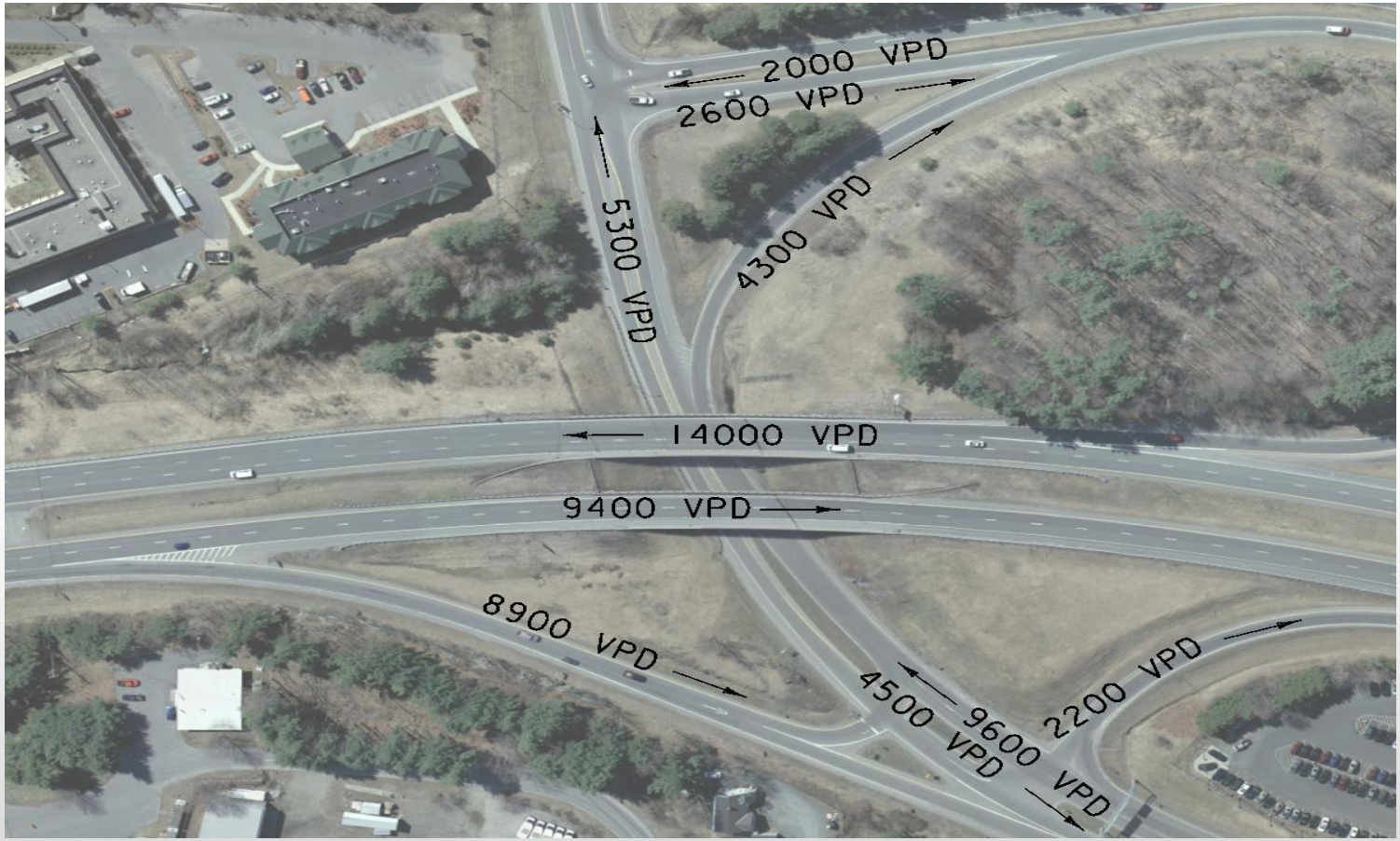
Geometric Constraints

- No room for crossovers or temporary bridge
- Knew we had to get creative with construction
- Desired an approach that would limit construction to single construction season (April – October)


I89/I91
INTERCHANGE
PROJECT LOCATION
DIFFERENT ELEVATION
AND LIMITED SPACE
BRIDGE
STEEP GRADES
SHARP CURVES
LEDGE OUTCROPS

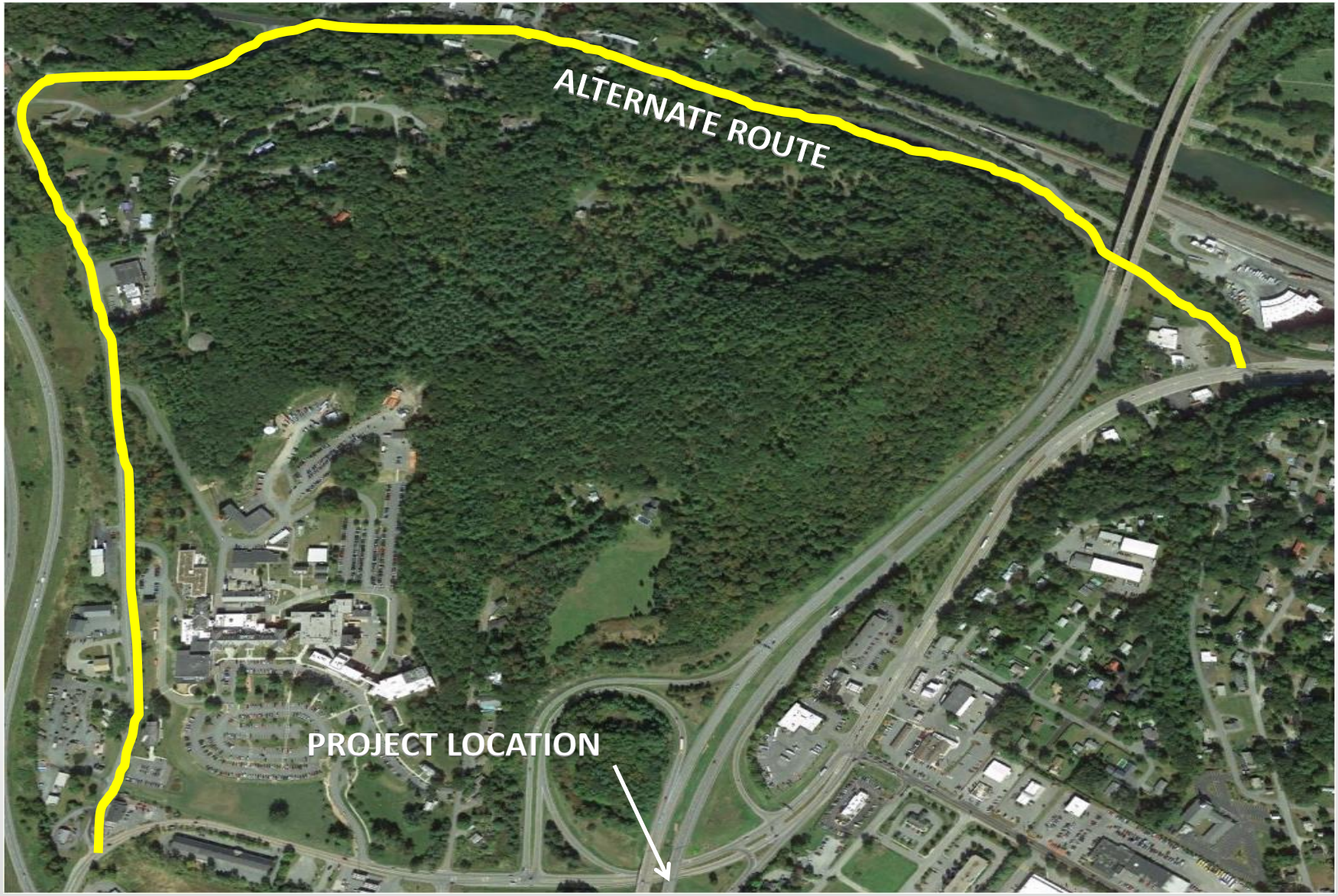
Traffic Volumes

- High traffic volumes over and under the bridge



Traffic Volumes

- Closing Route 5 or long delays not desirable due to heavy traffic
- Hospital in close proximity to project
- Available local route around project if absolutely necessary but would not accommodate truck traffic


ALTERNATE ROUTE
PROJECT LOCATION

Bridge Spans

- Future project planned for Route 5
  - Increase width of typical section
  - Sidewalk being added
  - Bike lane
- Current span configuration precludes planned improvements
- Piers need to be removed
- New abutments set between existing piers and abutments
- New bridge spans will be shorter than existing spans

ABC Alternatives Considered

- Self Propelled Modular Transport
  - Large lots may be available and are fairly close to project location
  - Approach grade is level
  - Traffic would need to be rerouted for a significant amount of time
  - No economic benefit
- Precast Bridge Units
  - Could be set quickly and at night
  - Would require splicing due to proposed 128’ span length and unit weight
- Selected alternative - Slide-in Bridge Construction
  - Room to construct bridges adjacent to existing structures
  - Met criteria from FHWA SIBC Implementation Guide
  - Support VTrans’ goal of utilizing ABC technologies

Concerns

- Lack of design experience with slide-in bridge construction
  - What needs to be engineered up front
  - What should be left to the contractor
  - What type of details should be shown
- Lack of local contractor experience with slide-in bridge construction
  - Vermont is a small state and has limited resources
  - Concern with “Low Bid” atmosphere
  - Large risk associated with this type of contracting

Solutions

- Seek advice from industry experts with slide-in bridge design and construction experience
  - Reached out to FHWA, NY DOT and Utah DOT
  - HNTB designed a project for NY and was quite helpful
    - Provided project plans
    - Provided project special provisions
- Alternative project delivery method of Construction Manager/General Contractor (CM/GC) was recommended by FHWA as an Every Day Counts initiative
- Opted to pursue alternative project delivery for this project

CONSTRUCTION MANAGER/ GENERAL CONTRACTOR (CM/GC)

Construction Manager/General Contractor

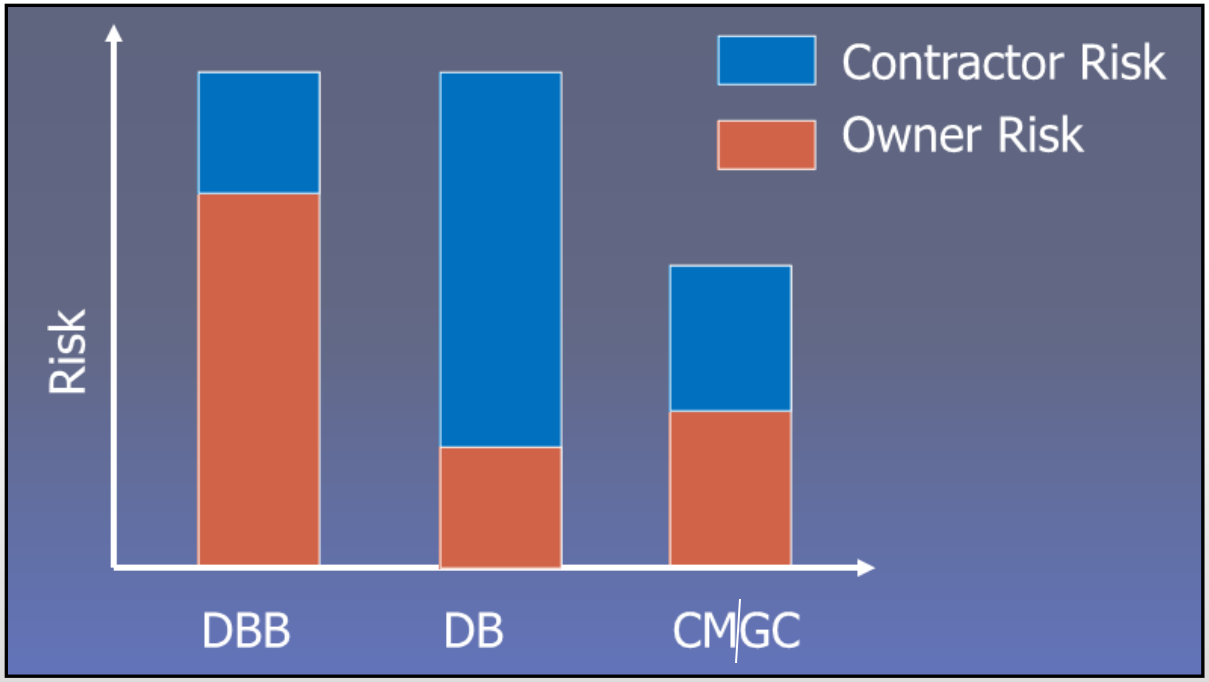
- FHWA Every Day Counts Initiative
- Based off Vertical CMAR Delivery
- Contractor Involved with Design and Construction
  - Phase 1 - Pre-Construction Services
  - Phase 2 - Construction Services

What the Owner Gets with CM/GC

- Pre-Construction Services
  - Cost Estimating During Design
  - Constructability Input & Reviews
  - Value Engineering Components
  - Construction Schedule Preparation
- Construction Services
  - Manage Construction Phase
  - Build the Project

CM/GC Basics

- Risk Allocation
  - Difference Between D-B-B, D-B, and CM/GC?
  - CM/GC Shared Risk Approach



CM/GC Procurement

- Informational meeting for contractors
- Request for proposals issued by VTrans
  - Qualifications based
- Four firms provided technical proposals
- Two firms selected for interviews
- Winning firm - PCL Civil Constructors, Inc
  - Extensive bridge move experience
  - Could reduce closure to single weekend
  - Emphasized maintaining traffic on Route 5 during construction and closure
- Pre-Construction Services January 2014 – December 2014

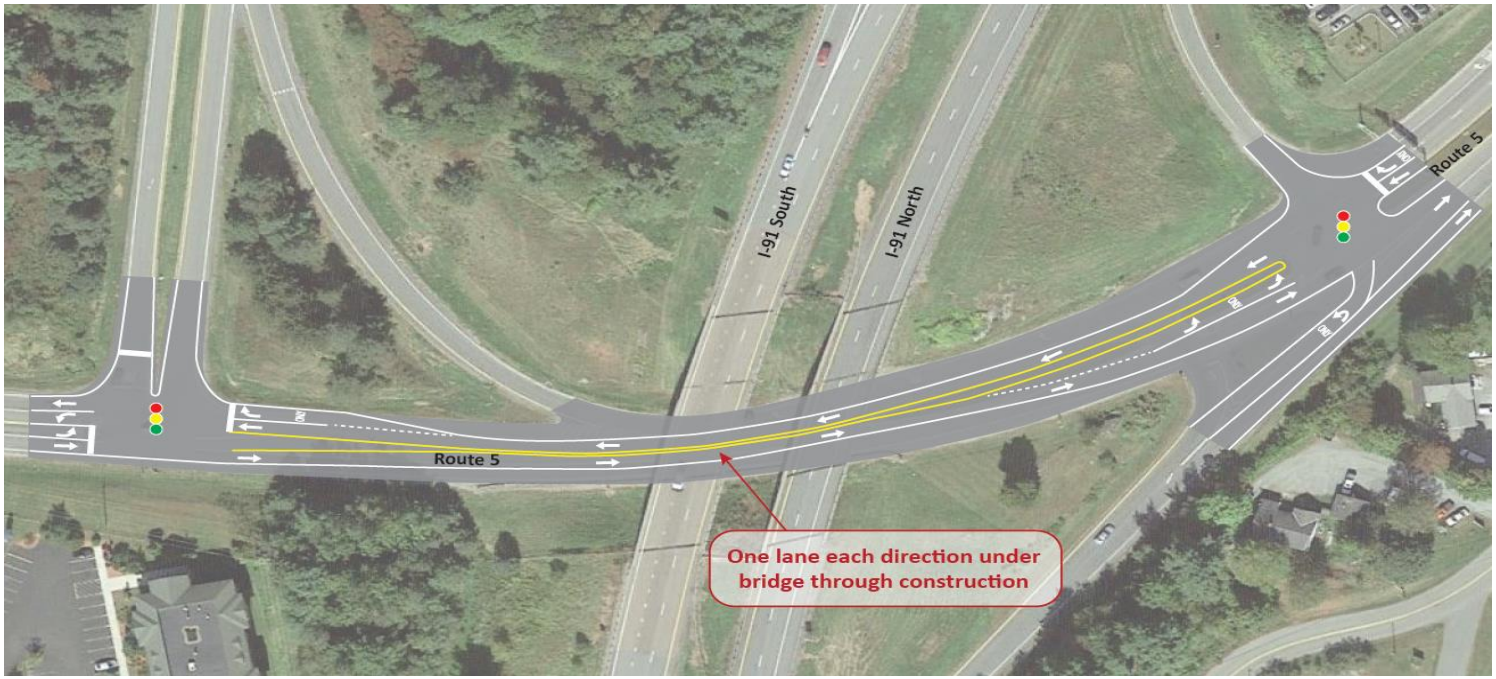
PARTNERING

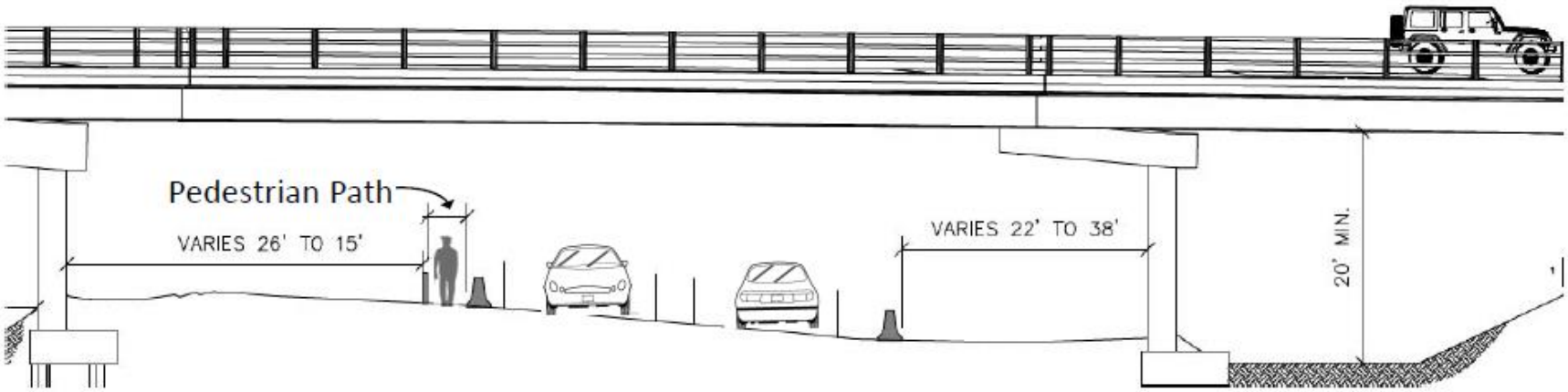
&

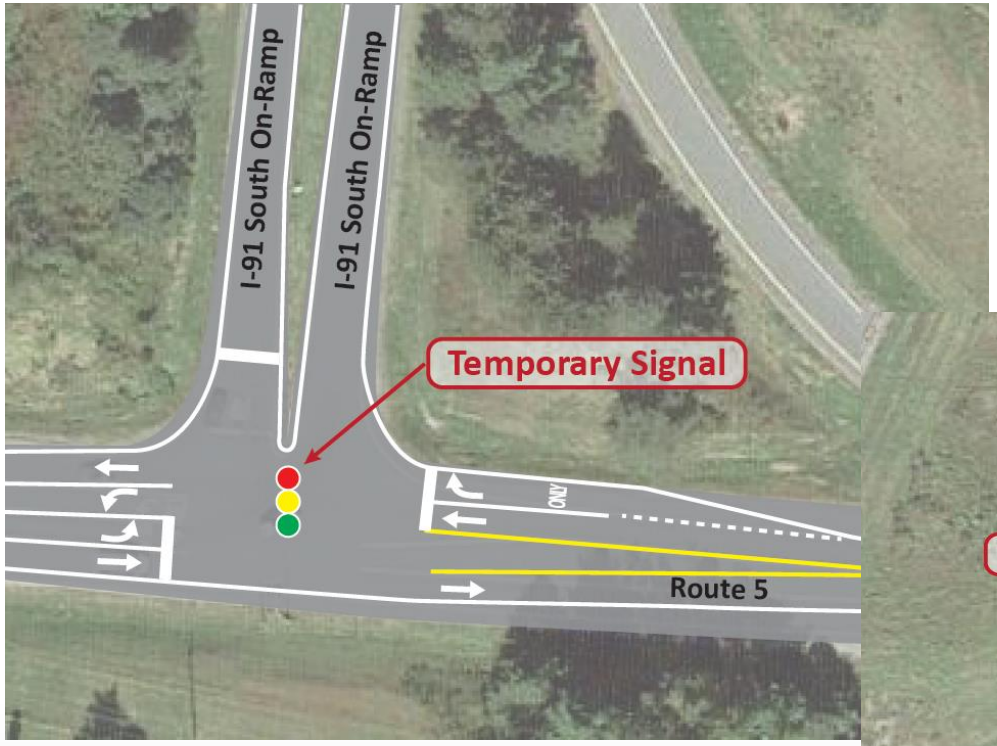
COLLABORATING

Benefits of CM/GC Contracting

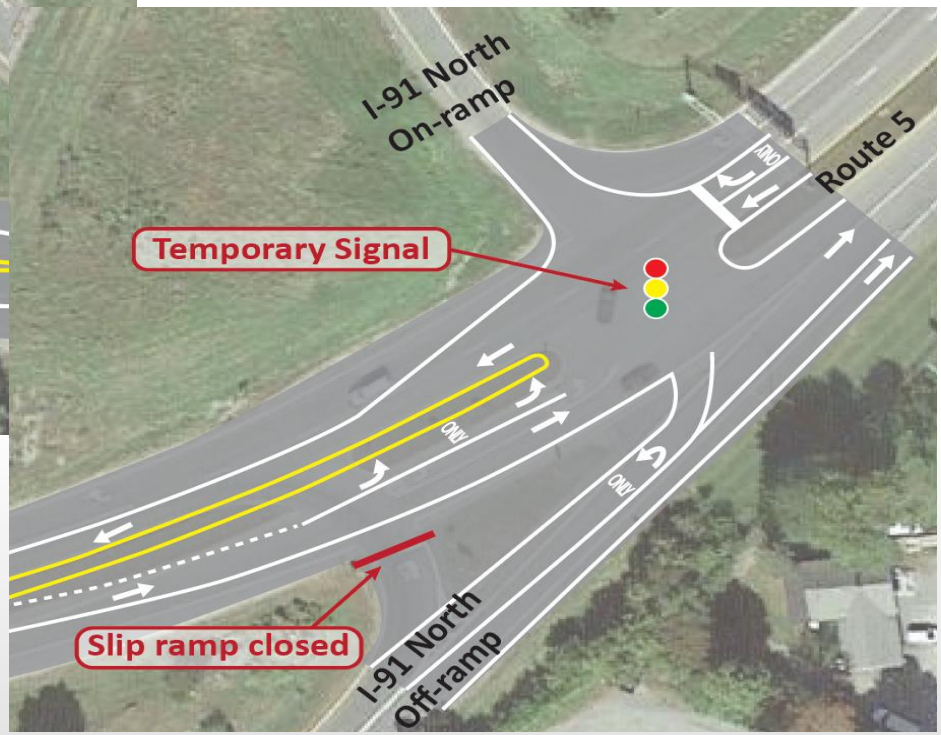
- Engage a contractor with heavy lift experience in design
- Collaborate to develop fully vetted traffic control plans in design phase
- Publicly present traffic control plans as partners
  - Credible coming from the contractor
  - Contractor has ownership of the plan from the start


I-91 South
I-91 North
Route 5
Route 5
One lane each direction under bridge through construction


Pedestrian Path
VARIES 26' TO 15'
VARIES 22' TO 38'
20' MIN.



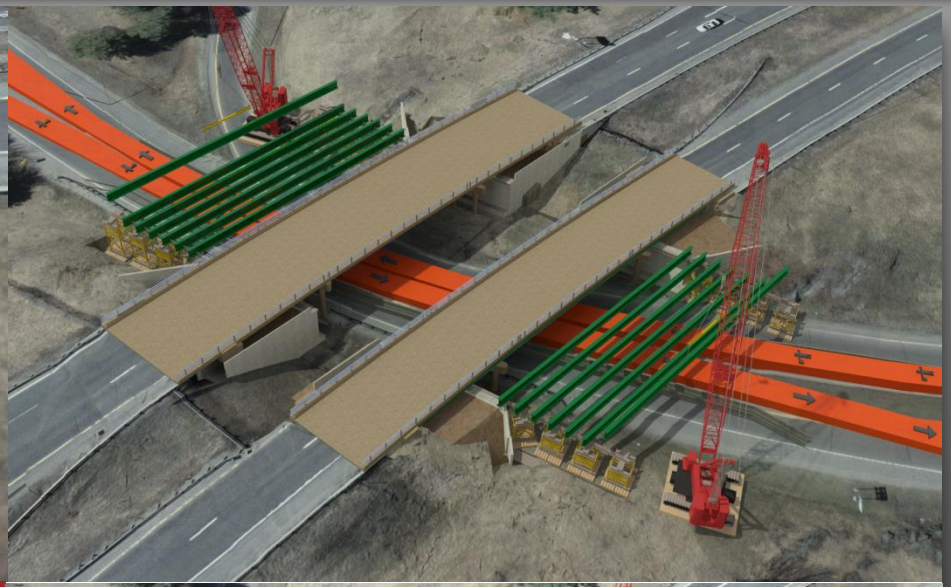
TEMPORARY SIGNAL AT SOUTHBOUND RAMPS

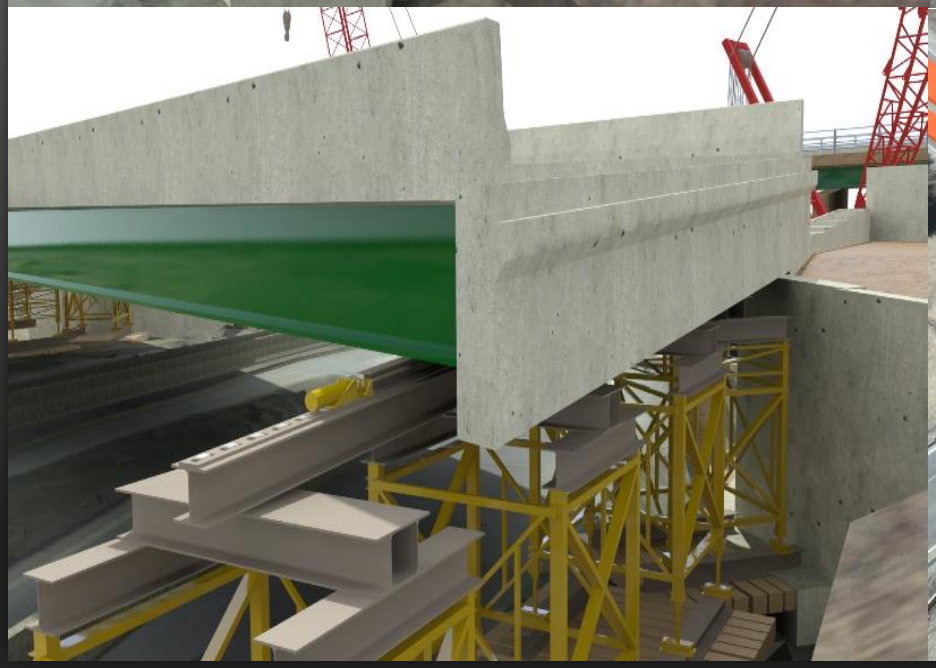


TEMPORARY SIGNAL AT NORTHBOUND RAMPS

Benefits of CM/GC Contracting

- Partner in design to develop a constructible project
- Identify construction risks early in design
- Eliminate project risk and potential claims through collaboration in design
- Develop project construction schedules during design that meet the project goals and can be presented publically





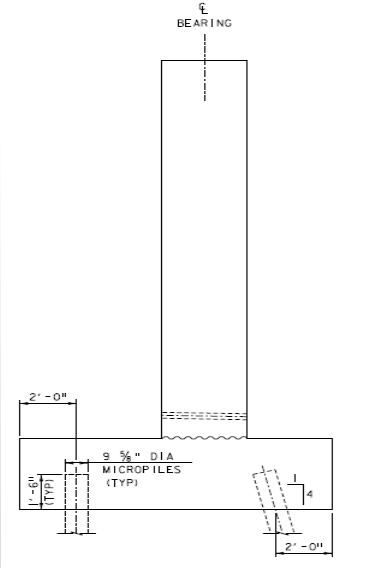
PROJECT PLANS

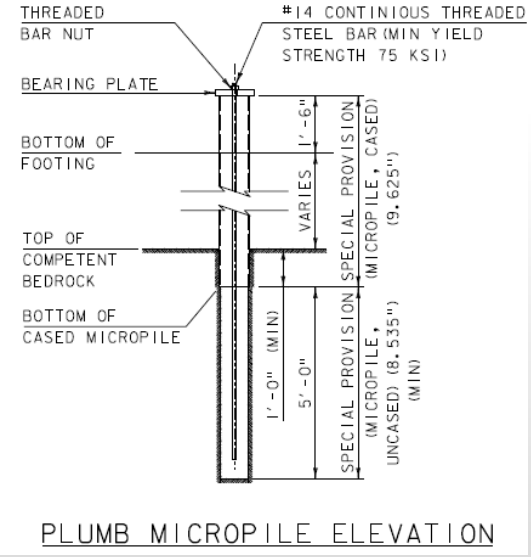
AND

SPECIAL PROVISIONS

Project Plans:

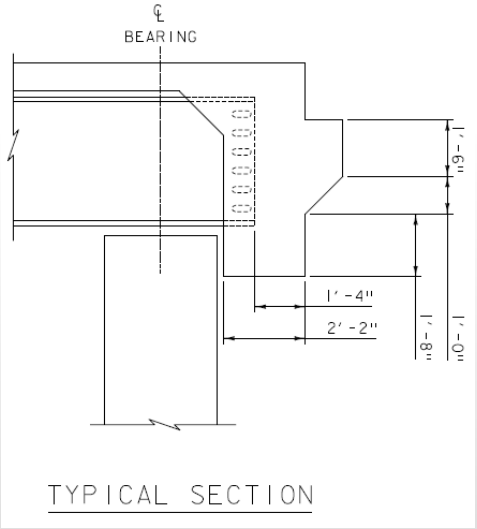
- Foundation
  - Conceptual foundation plan - MSE walls with a shallow foundation
  - Contractor recommended micropiles due to space constraints for wall reinforcing strips
  - VTrans and PCL worked together to design and detail appropriate size based on machinery necessary to install under existing bridges





Project Plans:

- Steel and Concrete Superstructure Geometry
  - VTrans recommended suspended backwall similar to what is shown in the SHRP2 “tool kit”
  - Worked together with PCL to ensure clearance for slide and added a bearing stiffener to be fabricated at slide bearing location



Project Details:

- Bridge Deck
  - Contractor requested SIP precast deck forming panels
  - VTrans incorporated them into the plans and worked out all details together
- Project Specific Notes
  - Contractor reviewed all project notes
  - Project notes were modified based on Contractor comments
- Plan Reviews
  - Contractor actively participated in plan reviews and constructability meetings

Project Special Provisions

- Temporary Support and Horizontal Slide
  - Developed as performance specification
  - Placed all responsibility on contractor
  - Nothing specifically shown in plans
  - Sought input from states with SIBC experience to develop specification
- High Early Strength Concrete
  - Original plan was to slide approach slabs
  - Contractor requested placing it after but within the closure
  - Performance based specification requiring 4000 psi before loading

Project Special Provisions

- CPM Schedule specification
  - Contractor was aware of the construction schedule requirement in the contract
  - Hourly breakdown during closure started early in design allowing all to see critical path activities
  - Changes were made in design to the eliminate risk of not opening the bridge in time
  - Determined which activities would be completed during night time hours so it could be communicated to the public

PUBLIC OUTREACH

VTrans Public Outreach Policy

- Tailored public outreach plan for all high profile projects
  - Project Outreach Coordinators
  - Project websites
  - Project factsheets
  - Pre-closure public information meetings
  - Weekly construction updates

Hartford Public Outreach

- Hired Public Outreach Coordinator for this project
  - Early collaboration with stakeholders
  - Meetings with stakeholders and public officials
  - Developed a list of interested parties wanting to be informed throughout construction
  - Coordinated with local newspaper at the onset of the project
- Public outreach with the contractor
  - Contractor was at the first public meeting and presented the project with VTrans
  - Contractor added credibility to construction approach and maintenance of traffic

VALLEY NEWS

Slip and Span:
I-91 Bridge Project To Use New 'Slide' Process

By Maggie Cassidy, Valley News Staff Writer
Saturday, May 24, 2014 (Published in print: Sunday, May 25, 2014)

White River Junction — Imagine the construction of two new bridges carrying Interstate 91 over Route 5 near the Veterans Affairs Medical Center, with only one weekend of interstate detours on the northbound side and a separate weekend of interstate detours on the southbound side, with Route 5 never closed.

Wishful thinking, you say?

Reality, officials respond.

Workers will use a relatively new construction process, never before employed in the Twin States, to replace the aging structures next summer.

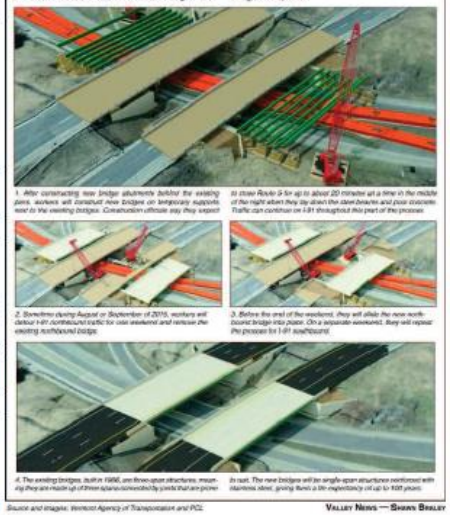
"The way we're building this project is unique to Vermont," Kristin Higgins, of the Vermont Agency of Transportation, said during a public meeting about the project at the Bugbee Senior Center last week. "We're very excited about it."

Lateral slide construction, as it's known, entails four major steps: building new bridge supports under the old bridges, building new bridges next to the old bridges, demolishing the old bridges, then sliding the new bridges onto the new supports.

Advocates say the benefits are plenty: In addition to minimizing the impact on commuters and travelers, lateral slide construction is significantly safer than conventional bridge replacement, they say, because it moves the bulk of construction away from traffic and reduces the risk of vehicles crashing into work sites.

THE BIG SLIDE

Replacement of the Interstate 91 bridges over Route 5 in Hartford will mark the first time that a process called lateral slide construction is used in the Twin States. Also known as bridge slide-in construction, the process essentially entails building new bridges next to the old bridges, demolishing the old bridges, then sliding the new bridges into place.



1. After constructing new bridge abutments behind the existing piers, workers will construct new bridges on temporary supports next to the existing bridges. Construction officials say they expect to close Route 5 for up to about 20 minutes at a time in the middle of the night when they lay down the steel beams and pour concrete. Traffic can continue on I-91 throughout this part of the process.

2. Sometime during August or September of 2015, workers will detour I-91 northbound traffic for one weekend and remove the existing northbound bridge.

3. Before the end of the weekend, they will slide the new northbound bridge into place. On a separate weekend, they will repeat the process for I-91 southbound.

4. The existing bridges, built in 1966, are three-span structures, meaning they are made up of three spans supported by piers that are poorer in rust. The new bridges will be single-span structures reinforced with stainless steel, giving them a 90+ expectancy of up to 100 years.

Source and images: Vermont Agency of Transportation and PCL

Valley News — Shawn Bradley

Indeed, Higgins said, the I-91 bridges were chosen as Vermont's first foray into lateral slide construction largely for two reasons: First, there was enough room around the bridges for the construction to take place, which often isn't the case, Higgins said.

And second, there's "a lot of things going on in one area" with the interchange connecting I-91 and I-89, underscoring the need for a safety-centered construction approach.

"The safety is the big one, and the interchange … sometimes it's really hard," said Higgins, the structures project manager for the agency's Accelerated Bridge Program, in an interview after last week's presentation. "So now you throw in a traffic pattern change and cones and barrels, and next thing you know you've got a truck ramming through the medians because they don't know."

The advantages, though, come with a significant cost: Higgins said current estimates for the project are around $3 million per bridge, or $6 million total.

continued next page...

- Front Page of local the Sunday newspaper
- Link to the article in the project website
- Successful in building excitement over new technology
- Another story in the works as we move into construction phase

Hartford Public Outreach

- Project Website
  - http://www.i91wrj.vtransprojects.vermont.gov/library.html
  - Website developed early during project development
  - Website updated regularly with new information
  - Fact Sheets created for website and public distribution
  - Link to interactive road closure map
- Social Media
  - Facebook and Twitter (VTrans)

- About the bridge
- Schedule and Calendar
- Document Library
- Stay Informed
- Frequently Asked Questions
- Glossary and Related Links

I-91 Hartford BRIDGES PROJECT

BRIDGE PROJECT WILL DEBUT INNOVATIVE CONSTRUCTION METHODS

Hartford Project Fact Sheet

Project Factsheet May 2014

PROJECT MILESTONES

- **Preliminary Plans**
  April 2014
- **Permitting**
  August 2014
- **Right-of-Way Complete**
  August 2014
- **Final Design**
  October 2014
- **Contract Award**
  March 2015
- **Target Construction Schedule**
  2015

I-91 Hartford BRIDGES PROJECT

VERMONT AGENCY OF TRANSPORTATION

HARTFORD (WHITE RIVER JUNCTION) I-91 BRIDGES
(Hartford IM 091-2(79) project)

Project Location: Town of Hartford in Windsor County on Interstate 91 over Route 5 in White River Junction approximately one half mile north of the junction of I-91 and I-89.

Project Purpose: The purpose of this project is to replace the existing bridges that carry Interstate 91 north and southbound over US Route 5 in Hartford, safely, efficiently and with the least possible impact to road users and the surrounding community. The structures were built in 1966. Age, weather and use have taken a toll on the concrete deck, beams and abutments of the two bridges. Two new bridges will be built during the 2015 construction season.

Accelerated Bridge Program (ABP): The Hartford I-91 Bridges Project has been assigned to the Vermont Agency of Transportation (VTrans) Accelerated Bridge Program, an approach that delivers projects faster, often using innovative techniques and always in collaboration with local communities. Typically, fast track bridge projects are completed in approximately half the time that it would take by conventional construction, often in just one construction season.

By reducing the time it takes to construct a new bridge, VTrans has been able to save money spent on design, utility and ROW impacts, and road closures as well as minimize disruption to travelers and commerce. The ABP encourages streamlining, standardizing design and plan preparation while exploring innovative contracting and construction techniques.

Partnership is a hallmark of the ABP program – with contractors, innovators from other states and local communities. To date, 12 bridges have been rebuilt using the ABP since the program was established in 2012, with 13 planned in 2014.

www.i91wrj.vtransprojects.vermont.gov

A Vermont First!

LATERAL SLIDE CONSTRUCTION

A construction method known as a lateral slide, will be used to replace the I-91 Hartford Bridges for the first time in Vermont. The slide will take place over two weekends, one for each bridge, but there will be a lot going on at the bridge site before the new bridges are slid into place. Here's how the project will work.

In the spring of 2015, construction will begin under the existing highway bridges. A new foundation (piers and abutments) or substructure will be built for each bridge. In addition, the replacement superstructure (bridge deck and support beams) will be constructed on temporary supports right next to the existing highway bridges. Both I-91 bridges will remain in service while construction is going on underneath and next to the bridges. Travel lanes on US Route 5 will be reduced from three lanes to two, but traffic will still flow in both directions throughout construction.

Once the new foundation and decks are constructed, the lateral, or sideways slide, can begin. VTrans will close a portion of the Interstate and reroute traffic onto the established detour route. Then the contractor will remove the existing bridge and slide the new superstructure into place on top of the substructure by physically pushing or pulling the bridge into place along lubricated rails.

One bridge, either the northbound or southbound bridge, will be moved at a time. This will require a short closure period of I-91 over one weekend while the bridge is moved into place. The other bridge will remain open while the slide is occurring. Once securely in position, the bridge will be reopened to traffic. The lateral slide will be repeated for the second bridge on another weekend. Traffic on I-91 will resume in both directions when the both bridges have been installed.

The lateral slide method was chosen because it will cause the least possible impact to the road users and the surrounding community.

Step 1: Construct superstructure next to existing bridges

Step 2: Detour traffic and demolish the existing bridge

Step 3: Slide the new superstructure into place and reopen the bridge

BETTER ROUTE FOR BIKES & PEDESTRIANS

Besides building new highway bridges, VTrans is working with the Town of Hartford to improve the roadway environment for bicyclists and pedestrians along US Route 5. The span of the interstate bridges will be designed to accommodate a future 5' sidewalk and 5' grass buffer along US Route 5.

During construction there will be some changes to the I-91 southbound onramp that may become a permanent fixture. Potential bicycle and pedestrians improvements are still being reviewed.

DETOUR ROUTE

Road closures and detours for this project will be limited to two weekends. The detour routes are still under investigation and not yet finalized.

VERMONT AGENCY OF TRANSPORTATION

Continued Public Outreach

- Public Outreach during construction
  - Smart work zone implemented to relay real time information to traveling public
  - Outreach Coordinator participates in weekly meetings with owner and contractor
  - Weekly updates outlining the next weeks construction activities
  - Information sent to all stakeholders for personal planning
  - Social Media for information
  - Public Pre-closure meetings

LESSONS LEARNED

Lessons Learned

- Don't be afraid to admit ignorance when using a new technology and seek guidance from FHWA, other states or experts with experience
- Don't get caught up in an aggressive project delivery schedule when using a complicated new technology
- CM/GC is a great tool for trying new innovations like SIBC
  - VTrans engaged experts in heavy lift to deliver the project and we are confident the project will be successful

Lessons Learned

- Estimating is difficult on a project involving a new technology and was further complicated by the CM/GC process
- Estimating process led to discussions about demolition which led to decisions about lane closures and starting demo earlier
- Public outreach is the key to success
- More lessons learned after construction

QUESTION & ANSWER PERIOD

Travis Boone/Kevin Thompson, AECOM Moderators (~15 minutes)

Q&A Panel

- Jocelyn Berglund, PCL Civil Constructors, INC
  813.264.9500, JABerglund@pcl.com
- Tim Davis, PCL Civil Constructors, INC
  813.264.9500, TMDavis@pcl.com
- Kristin Higgins, Vermont Agency of Transportation
  802.828.0053, Kristin.higgins@state.vt.us
- Wayne Symonds, Vermont Agency of Transportation
  802.828.0503, Wayne.symonds@state.vt.us

NEXT STEPS

Travis Boone, AECOM (formerly URS) (~3 minutes)

Websites/Resources

- SIBC Webinar Training Project Website
  - www.slideinbridgeconstruction.com
  - Future webinar registration, a recording of today's webinar, presentation slides, video, and Q&A results will be posted within 10 business days
- FHWA SIBC Representative
  - Mr. Jamal Elkaissi, Resource Center, Lakewood, CO
  - 720-963-3272
  - jamal.elkaissi@dot.gov
- FHWA SIBC Website
  - http://www.fhwa.dot.gov/construction/sibc/
  - SIBC Implementation Guide now available
  - Recently released: Slide-In Bridge Construction Cost Estimation Tool Guidelines (and spreadsheet)

Future SIBC Training

- Engineer/Design Perspective
  - Tentatively set for July 2015
- Contractor/Construction Perspective
  - Tentatively set for October 2015
- Web-based Training
  - 3 Modules: SIBC Part 1, Part 2, and Part 3
  - Each goes "live" with the associated webinars above
  - Module 1 is available now at http://slideinbridgeconstruction.com

FIU ABC Center Training

NEXT WEBINAR

Thursday, March 26, 2015 (1:00 – 2:00 pm Eastern)

Featured Presentation:

Utah DOT's Experience with UHPC
(Ultra High Performance Concrete)

By

Carmen Swanwick, P.E., Utah DOT

Cheryl Hersh Simmons, P.E., Utah DOT

Eric Wells, Granite Construction Co.

To register, visit:
https://attendee.gotowebinar.com/register/4215399287683742 73

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U.S. Department of Transportation
Federal Highway Administration

THANK YOU FOR YOUR PARTICIPATION!

For issues or questions regarding this training or the www.slideinbridgeconstruction.com website, please e-mail sibc@urs.com

COLORADO Department of Transportation