



CONSTRUCTION LEADERS

LETTER OF TRANSMITTAL	
DATE: May 7, 2015	PCL JOB NO: 5515002
ATTN: Chris Barker	TRANSMITTAL NO: 069

To: **State of Vermont Agency of Transportation**
 One National Life Drive
 Montpelier, VT 05633-5001
 (802) 828-0053

Re: Hartford Lateral Slide
 Project No.: IM 091-2(79)
 Contract ID.: 12A132

County: Windsor

PCL FILE NO: 5515002-45

WE ARE SENDING Attached Under separate cover via **Email & SP** the following:
 Shop drawings Prints Plans Samples Specifications
 Copy of Letter Change Order Other

COPIES	SPEC.	REVISION	DESCRIPTION
1	Sheet 5, Note 73		Combined Traffic Control Plans

TRANSMITTED for as checked below:

For approval Approved as submitted Resubmit 1 Copies for approval
 For your use Approved as noted Submit Copies for distribution
 As requested Returned for corrections Return Corrected prints
 For review and comment

Remarks:

The combined Traffic Control Plans are attached for reference. This is being submitted for information only as the individual submittals have already been approved.

By: **Erich Heymann**, Project Engineer

COPY TO: Project Files



CONSTRUCTION LEADERS

SUBMITTAL NO. : 45
Combined Traffic Control Plans

Item No.	Specification	Description
1	Sheet 5 Note 73	Combined Traffic Control Plans

PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

MAY 7, 2015

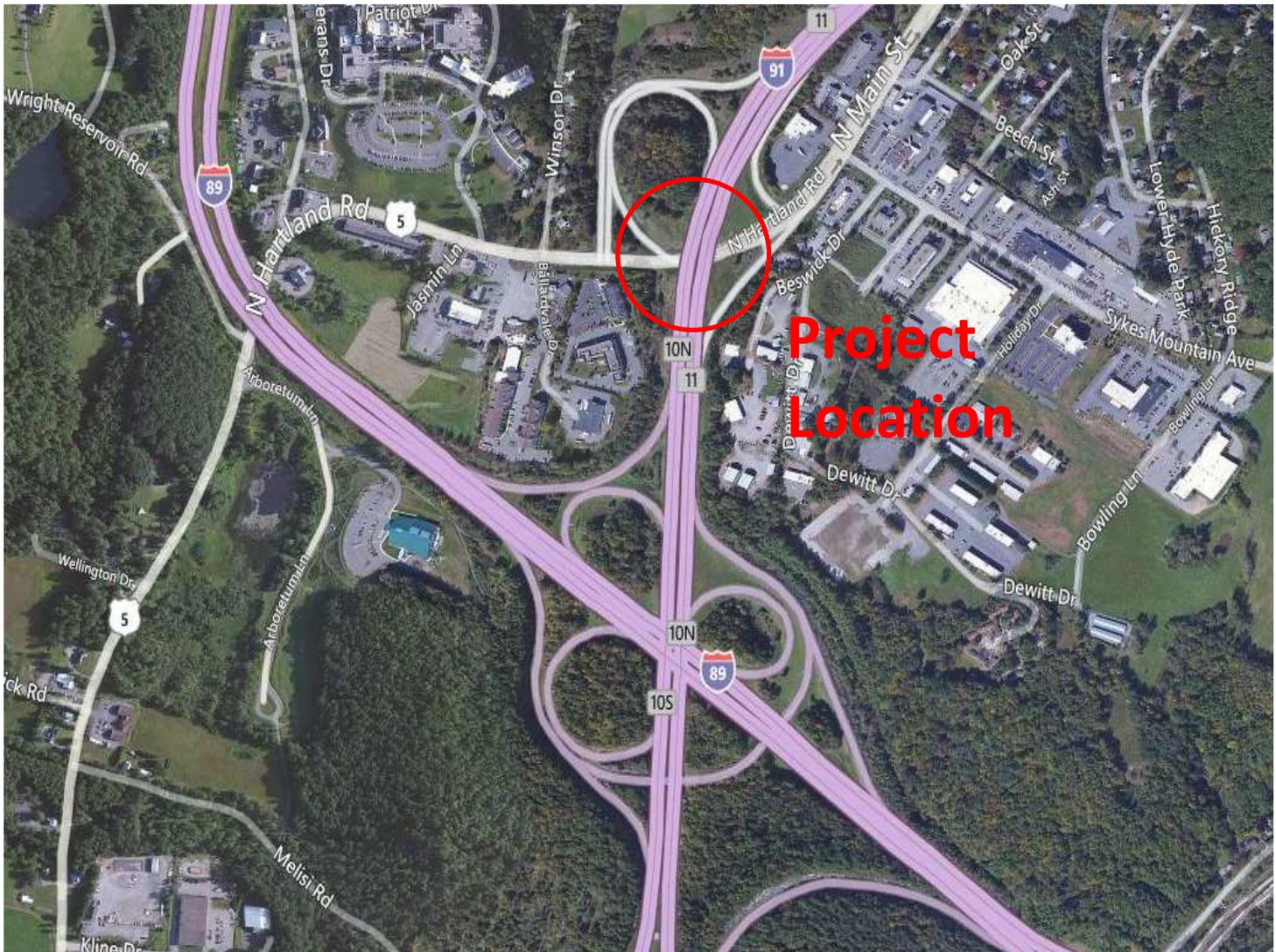
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TRANSPORTATION MANAGEMENT PLAN (TMP)

FOR

Hartford IM 091-2(79) I-91, Bridge 43N & 43S over US-5 Hartford, Vermont



Revised April 13, 2015

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1.0 Project Description

The Hartford IM 091-2(79) project consists of the replacement of Bridges 43N & S on I-91. These bridges carry I-91 over US-5 in an urban area of Hartford, VT between Sykes Mountain Avenue and Windsor Drive. Bridges 43N & S will each be replaced utilizing the innovative accelerated construction technique of Slide-In bridge construction. A significant portion of the new bridge abutments will be constructed under the existing structures while traffic is maintained on I-91 and US-5. New superstructures will be constructed adjacent to the existing structures; and over the course of one weekend per bridge the existing bridges will be removed, the new bridges slid into place, approach work completed, and traffic restored. The construction is scheduled to start March 23, 2015 and end by October 30, 2015.

There is a significant amount of traffic on I-91 over the bridges as well as on US-5 below the bridges (see section 2.0 for traffic volumes). While there are trees and grass buffers within the State Right of Way adjacent to the bridges, the site is surrounded by a commercial district composed of service related businesses a hospital and several hotels.

This project will have direct impact on I-91 and US-5 traffic. Secondary impacts will occur to Sykes Mountain Avenue east of the project, Windsor Drive, Ballardvale Drive and Veterans Drive west of the project and I-89 south of the project. Signed detours will be in place on I-89, US 4 and US-5. See Appendix B and C.

The traffic pattern on US-5 will be reconfigured to two lanes at the start of the project to allow room for constructing the new structures. US-5 will be restricted to one lane with alternating traffic or completely stopped for short durations with the use of flagging operations between April and October to accommodate certain construction activities. Activities having the greatest impact on the traveling public such as steel girder erection and concrete placement are being scheduled between 9:00 PM and 6:00 AM to avoid delays. See Section 5.1 Temporary Traffic Control for restrictions of delays and other additional information.

I-91 at the bridge locations will be closed for two weekends to slide the new bridges into place (one weekend for the northbound bridge and the second for the southbound bridge). Two days prior to each closure, I-91 will be reduced to one lane to accommodate pavement removal and other preparation for structure demolition.

The contractor will select a separate Bridge Closure Period (BCP) for each bridge and provide written notice two weeks in advance so the public can be warned accordingly. The BCP will begin at 6 pm on the Friday of the closure weekend and traffic will be restored on the new bridge on I-91 by 6 am the Monday of the same weekend. Approved closure dates are as follows:

August 7 – August 10
August 14 – August 17
August 21 – August 24
August 28 – August 31
September 11 – September 14
September 18 – September 21

Hartford-Sharon IM SURF(46) is a resurfacing project on I-89NB beginning at the Vermont/New Hampshire line and continuing north to Sharon. The project has a completion date of July 24, 2015. The Alternate Route to I-91 utilizes I-89 to Exit 1 and will only be activated if extreme backups occur at exit 11 on I-91.

No other identified projects are scheduled that would have traffic impacts on/from this project.

This is classified as a significant project based on the criteria in the Vermont Agency of Transportation *Work Zone Safety & Mobility Guidance Document* and the Federal Highway Administration *Developing and Implementing Transportation Management Plans for Work Zones*. As such, this Transportation Management Plan (TMP) contains the following work zone impact management strategies:

- 1.** Temporary Traffic Control Plan (TTC)
- 2.** Public Information and Outreach (PI)
- 3.** Transportation Operations (TO)

These strategies are outlined in section 5.0

2.0 TMP Team—Roles and Responsibilities

This section includes contact information and roles and responsibilities for major personnel involved in the project

TMP Development Managers	
Vermont Agency of Transportation (VTrans)	Consultant
Name/Title: Kristin Higgins, Project Manager Unit: VTrans – Structures Section Phone: (802) 828-0053, (802) 498-3398 cell Email: Kristin.higgins@state.vt.us	Name/Title: Jeremy Mackling, Project Manager Unit: PCL Civil Constructors, Inc. Phone: (813) 810-1142 cell Email: JMackling@pcl.com
Roles and Responsibilities: Agency/Contractor personnel with the primary responsibility for developing this TMP.	

TMP Implementation/Monitoring Managers	
VTrans	Contractor
Name/Title: Chris Barker, Resident Engineer Unit: VTrans - Construction Phone: (802) 279-8161 cell Email: chris.barker@state.vt.us	Name/Title: Erich Heymann, Project Engineer Unit: PCL Civil Constructors, Inc. Phone: (407) 235-5843 cell Email: EWHeymann@pcl.com
Roles and Responsibilities: Agency/Contractor personnel primarily responsible for implementing the TMP.	

TMP Implementation Task Leaders	
VTrans	Contractor
Name/Title: Nate Dagesse, Chief Inspector Unit: EIV Technical Services Phone: (802) 683-9967 cell Email: ndagesse@eivtech.com	Name/Title: Ron Gibbens, Superintendent Unit: PCL Civil Constructors, Inc. Phone: (727) 224-2324 cell Email: RRGibbens@pcl.com
Roles and Responsibilities: Implement detour around project site in the event there is an incident at the project site causing traffic restriction	

Hartford IM 091-2(79)
Bridges 43 North and South

VTrans TOC	Regional Traffic Manager (RTM)
Name/Title: Transportation Operations Center Unit: VTrans - Operations Phone: (802) 828-2648, (802) 250-4667 pager Internal Email: AOT.OPSTOC@state.vt.us	Name/Title: Nancy Avery Unit: VTrans – Traffic Operations Phone: (802) 279-5991 Email: nancy.avery@state.vt.us
Roles and Responsibilities: Emergency VTrans resource request, social media and PCMS activation.	Roles and Responsibilities: Coordinates traffic management efforts.

Public Information Officer	
VTrans	Consultant (POC)
Name/Title: Erik Filkorn, Public Outreach Manager Unit: VTrans – Public Outreach Phone: (802) 498-5988 Internal Email: erik.filkorn@state.vt.us	Name/Title: Jill Barrett, Public Outreach Coordinator Unit: Fitzgerald & Halliday, Inc. Phone: (802) 272-1248 cell Email: jbarrett@fhiplan.com
Roles and Responsibilities: Agency personnel who provide real-time public awareness of the work zone, including detection, prevention, and response to incidents.	

Emergency Service Contacts	
Fire and Emergency Medical Services (FEMS)	Police Department (PD)
Name/Title: Steven Lock, Fire Chief Unit: Town of Hartford Fire Department Phone: NON-EMERGENCY (802) 295-3232 Email: slocke@hartford-vt.org	Name/Title: Phillip Kasten, Chief of Police Unit: Town of Hartford Police Department Phone: NON-EMERGENCY (802) 295-9425 Email: pkasten@hartford-vt.org
Fire and Emergency Medical Services (FEMS)	Vermont State Police
Name/Title: Scott Smith, Director Unit: Town of Hartford Emergency Communications Center Phone: (802) 295-9425 Email: ssmith@hartford-vt.org	Name/Title: Lt. William Jenkins Unit: Vermont State Police, Royalton Barracks Phone: (802) 234-9933 Email: William.Jenkins@state.vt.us
Roles and Responsibilities: Resource contacts in the event of an emergency.	

Emergency Service Contacts Continued	
VTrans Maintenance District 4 – White River Jct.	Windsor County Sheriff
Name/Title: Melvin Darling, Maintenance Sup. Unit: VTrans- Operations Phone: (802) 777-4909 cell Email: melvin.darling@state.vt.us	Name/Title: Michael Chamberlin, Sheriff Unit: Windsor County Sheriff Phone: (802) 457-5211 Email: Michael.Chamberlain@state.vt.us
Roles and Responsibilities: Resource contacts in the event of an emergency.	

Additional Key Personnel	
Town of Hartford, VT	Public Works Dept., Hartford, VT
Name/Title: Hunter Rieseberg, Town Manager Unit: Town of Hartford Phone: (802) 295-9353 Email: hrieseberg@hartford-vt.org	Name/Title: Richard Menge, Director Unit: Town of Hartford Dept. of Public Works Phone: (802) 295-3622 Email: rmenge@hartford-vt.org
New Hampshire Department of Transportation	Hartford-Sharon IM SURF(46)
Name/Title: Alan Hanscom Unit: District 2 Engineer Phone: (603) 448-2654 Email: ahanscom@dot.state.nh.us	Name/Title: Sandra Schmitt, Resident Engineer Unit: VTrans- Construction Phone: (802) 249-2564 cell Email: sandra.schmitt@state.vt.us
White River Junction VA Medical Center	Town of Hartland, VT
Name/Title: Mary Hamisevicz, Emergency Management Coordinator Unit: White River Junction VA Medical Ctr. Phone: (802) 295-9363 x5976* Email: mary.hamisevicz@va.gov *After hours ask for VAMC Police	Name/Title: Robert (Bob) Stacey, Town Mgr. Unit: Town of Hartland Phone: (802) 436-2119 Email: bstacey@hartlandvt.org

Dartmouth-Hitchcock Medical Center	New Hampshire State Police
Name/Title: Dan Dahmen, Director Unit: DHMC - Security Phone: (603) 650-7896 Email: Daniel.k.dahmen@hitchcock.org	Name/Title: Troop D Unit: NH State Police Phone: (603) 271-1162 Email: TroopD@dos.nh.gov
Name/Title: Gary Smith, Chief Unit: Lebanon Police Department Phone: (603) 448-1212 Email: gary.smith@lebcity.com	Name/Title: Lt. Garry Scott Unit: Vermont State Police, Traffic Operations Phone: (802) 872-4056; (802) 238-3042, cell Email: Garry.Scott@state.vt.us

Roles and Responsibilities: Contact if the opening of I-91 is delayed or in the event sudden closure of US Route 5 or I-91.

Public Transportation Organizations:

- Advance Transit (802) 295-1824 chrisa@advancetransit.com
- Connecticut River Transit (802) 376-3043 etarvit@crtransit.org
- Stagecoach Transportation Services (802) 728-3773 dferris@stagecoach-rides.org
- Greyhound Lines, Inc. (802) 295-3317 Brian.Barrow@greyhound.com

Local Media Outlets:

- Valley News (603) 298-8711 newseditor@vnews.com
- Caledonian Record (802) 748-8121 grayd@caledonianrecord.com
- Brattleboro Reformer (802) 254-2311 news@reformer.com

Trucking Organizations:

- VT Truck and Bus Association (802) 479-1778 paula@vtba.org

3.0 Existing Conditions

3.1. Roadway Characteristics

Roadway Classification	Rural Principal Arterial - Interstate
Year of Construction	1966
Bridge Type	3 span rolled beam bridge
Bridge Length	202'
Width of Bridge	37.3' (43N) & 42' (43S)
Width of Roadway Approach	39' (43N) & 47' (43S)
Ownership	State of Vermont

3.2. Traffic

A traffic study of this site was performed by the Vermont Agency of Transportation. The traffic volumes are projected for the years 2015 and 2035.

Bridge	AADT		DHV		%T		%D		ADTT		ESALs	
	2015	2035	2015	2035	2015	2035	2015	2035	2015	2035	(2015 ~ 2035)	(2015 ~ 2055)
43N	7600	9100	1200	1500	10.0	14.8	100	100	1000	1800	7,165,000	17,331,000
43S	11,500	13,900	1500	1900	10.5	15.5	100	100	1200	2200	7,704,000	18,573,000

US-5 traffic data were procured from the 2010 Route Log AADT. Between Sykes Mountain Avenue and Veterans Drive there was an AADT of 14,900 in 2008 and 13,200 in 2010.

3.3. Traffic Operations

I-91 has no traffic control signing other than a posted 55 MPH speed limit and 40 MPH speed minimum for the two through lanes in each direction.

US-5 in the immediate project area consists of a northbound and southbound through lane. There is a dedicated right hand turn lane for southbound US-5 traffic to I-91 northbound onto Ramp “D” prior to the bridges. Under the bridges there is also a dedicated right hand turn lane for southbound US-5 traffic to I-91 southbound via Ramp “A”. Northbound US-5 traffic has a dedicated left hand turn lane for I-91 southbound via Ramp “B”, prior to the bridges; and, a dedicated left hand turn lane for I-91 northbound via Ramp “D”. The speed limit on US-5 within the project work area is 35 MPH, 40 MPH beyond the project work area.

Ramp A from US-5 onto I-91 SB has a yield with Ramp B. There is a dedicated left- hand turn lane from US-5N to Ramp B for I-91 SB. Ramp C, Exit 11 from I-91 NB splits into a slip lane with an added lane condition to US-5N and a stop condition to turn left onto US-5S. Ramp D from US-5S is a dedicated right-hand turn lane. Traffic from US-5N enters I-91 NB via Ramp D from a dedicated left-hand turn lane, crossing US-5S. I-91 SB Exit 11 Ramp F traffic stops at the end of the ramp and turns right onto US-5S or left onto US-5N.

A traffic signal is located at the intersection of US-5 and Sykes Mountain Avenue, approximately 800 feet north of I-91. Currently there is no coordinated signal timing for this signal.

3.4. Crash Data

The intersection of US-5 and Sykes Mountain Avenue is listed in the *VTrans High Crash Report Sections and Intersections 2006-2010*. Over the 5 year reporting period there were 28 crashes resulting in no fatalities, 3 injuries and property damage averaging \$14,511.

According to the *General Yearly Summaries – Crash Listing* for the period of January 2008 through December 2012 there were 19 crashes with no fatalities and only 1 injury in the vicinity of the project area. The majority of these crashes were left turn and thru broadside, and rear end collisions.

3.5. Pedestrian/Bicycle and Transit Facilities

There are no sidewalks or dedicated bicycle facilities within the project limits or adjacent to the project. There is a well-worn path behind the guardrail on the south side of US-5 under the I-91 overpasses. According to *Draft Scoping Study Hartford EH11(5)*, dated September 18, 2012; over 170 pedestrians were observed walking along US-5 during a pedestrian count conducted by VTrans from 6 am to 6pm in June 2010. Very little bicycle traffic was observed.

There are several transit providers serving the I-91/US-5 area. Stagecoach Transportation Services stops at the White River Junction VA Medical Center (WRJ VAMC). Connecticut

River Transit serves the WRJ VAMC and points north on their Upper Valley Commuter line. Advance Transit has stops north of the project in White River Junction and the WRJ VAMC.

There are no transit stops within the project limits.

3.6. Truck Routes

Although I-91 and US-5 receive moderate truck traffic, neither are considered a major truck route.

3.7. Local Community and Business Concerns/Issues

- Bob Stacey, Hartland Town Manager. Communicated the possibility that the town center reconstruction project would be happening this spring/summer. He did not think this would be a problem on detour weekend. However, the intersection project was not funded and will not be under construction this summer. The town center comes up quickly and is over the crest of a hill. For people unfamiliar with the area, variable message signs or other measures alerting drivers to slow down ahead should be considered. The town manager wondered about the need for a police officer in the town center.
- Pedestrian and bicycle passage
- Covered Bridge Half Marathon (in Woodstock to Quechee) – Sunday June 7, 2015 - <http://cbhalfmarathon.blogspot.com/p/course-map.html>
- Dartmouth College Commencement Weekend, June 12-14, 2015
- Quechee Hot Air Balloon Festival, June 19-21, 2015
<https://www.quecheeballoonfestival.com/>
- The Prouty, Friday July 10-11, 2015 <http://theprouty.org/>
- Harpoon Championships of New England Barbecue, July 25-26, 2015
<http://www.harpoonbrewery.com/events-and-festivals>
- The statewide VT swim meet at the upper Valley Aquatics Center is Aug 4th weekend
- Quechee Scottish Fair Saturday, August 22, 2015,
<http://www.quecheescottishfestival.com/>
- Vermont Overland Grand Prix Bike Race, August 23, 2015
<http://www.vermontoverland.com/vogp/>
- North Branch Bluegrass Festival of Bridgewater – August 28 – Aug 31, 2015
<http://www.nbbluegrass.com/>
- Vermont State Fair, August 29-September 7, 2015 www.vermontstatefair.net
- Tunbridge World's Fair, September 10-13, 2015 <http://www.tunbridgeworldsfair.com>
- Glory Days of Railroad, September 12 – 13, 2015
- Dartmouth College Fall term move-in weekend, September 12-13, 2015

4.0 Operational Analysis

This section is intended to provide information on safety and mobility aspects within the project influence area, including traffic safety, data collection and modeling approach, traffic analysis, and other issues and concerns. This operational analysis will help identify potential work zone impacts and guide selection of TMP strategies.

4.1. Safety Analysis

A specific Safety Analysis was not completed for this project due to the limited project area. Please refer to 3.4 Crash Data for existing conditions at the site. It is anticipated that this project will not cause an increase in crashes in this segment – it is the intention of the TTC plan to manage traffic through the area in a manner that will decrease the likelihood of accidents. This should be accomplished by clear TTC signage, reduced speeds through the construction site, and the installation of the two temporary traffic signals coordinated with the existing signal at Sykes Mountain Avenue and Route 5. Ongoing monitoring of any increase in crashes is important while the TTC, TO, and PI&O are implemented to help determine if the project is negatively impacting safety.

4.2. Traffic Analysis and Modeling

In anticipation of changing traffic patterns for this project, Vanasse Hangen Brustlin, Inc. (VHB) evaluated traffic operations associated with placing two temporary traffic signals along US-5 during the construction of this project. The project study area was limited to US-5, the intersections with the I-91 southbound and northbound ramps, and Sykes Mountain Avenue. VHB evaluated traffic operations during the bridge construction period.

Based on recommendations from VHB, two temporary traffic signals are being used throughout the duration of the project. A signal will be installed at the intersection of Exit 11 NB ramp with US-5 with another installed at the intersection of Exit 11 SB ramp and US-5. These two temporary signals will be coordinated with the existing traffic signal at the intersection of US-5 and Sykes Mountain Avenue, which will be upgraded with a GPS clock and re-timed for the project. According to the results of VHB's study, some vehicle queues are expected to exceed available storage, but the proposed coordinated signal timing should prevent queues from backing up onto I-91

VHB provided signal timing for the Bridge Closure Period which may be adjusted based on the site specific TCP provided by the contractor or actual traffic patterns. The resident engineer will be involved in determining proper signal timing to ensure minimal backups occur.

4.3. Alternatives/Impact Assessment

This Project is being constructed utilizing the Accelerated Bridge Construction technique of Slide-in Bridge construction. This technique was identified during the project scoping phase as the preferred alternative. With this construction method the new substructures will be constructed in-place, working between the existing piers and abutments; and the new superstructure will be constructed adjacent to their final locations on temporary supports. During

a weekend closure (one for each bridge), the existing I-91 bridge will be removed, approach work completed, and the new superstructure slid into place.

It was identified early on in the project, that traffic must be maintained on US-5 under the I-91 bridges, including during the BCP.

Additional Concerns that this TMP is intended to address:

- **Emergency Personnel** – Emergency personnel will have access through the project site at all times outside of the BCP. The Hartford Police and Fire Departments are listed in this TMP and will be kept informed by the contractor’s staff of the project schedule with regards to traffic management and will be notified immediately if through traffic is not possible for emergency vehicles on US-5 or I-91. The Hartford Police and Fire Departments have been involved in discussions about the project and are aware they may need to be prepared to take alternate routes during construction, particularly during the BCP. See 5.3.4 for more information regarding notification.
- **Community Accessibility**—this project is localized in the area immediately adjacent to the bridges and I-91 Exit 11. As such direct impacts will be to through traffic on I-91 and US-5. Commercial access adjacent to the project is from Ballard Drive and Sykes Mountain Avenue to the west and east of the project, respectively. The nearest residential access is Windsor Drive west of the project. Veterans Drive access to the The VA Medical Center is just beyond Windsor Drive. Impacts to these points will be caused by any queuing that occurs along US-5. In order to address this, two-way traffic must be maintained on US-5 during the morning peak and afternoon peak; and a Uniform Traffic Officer will be stationed at the intersection of Veterans Drive and US-5 from 4:00 to 5:00 pm weekdays. A Uniform Traffic Officer will be stationed as directed by the Engineer at the intersection of I-91 Northbound ramps and US-5 during daylight hours for construction season to clear any queues on the I-91 Exit 11 North off-ramp. The VTrans Resident Engineer will evaluate the need for any adjustments to the temporary traffic signals throughout the project construction.
- **Pedestrians and Bicyclists**—this project will not impact any existing dedicated pedestrian or bicyclist facilities. Accommodations for this constituency are discussed in Section 6.0 Work Zone Impact management Strategies.
- **Public Transportation**—existing bus stop locations will not be impacted by this work zone. Public Transportation operations will be affected by delays from queuing along US-5. Public Transportation may also experience delays during the BCP. Alternate bus routes will be at the discretion of each organization providing services.
- **Commercial Vehicles**—Through public outreach, commercial vehicles shall be advised to avoid the project area during each BCP.

5.0 Work Zone Impact Management Strategies

This section provides an overview of various strategies deployed to improve the safety and mobility of work zones and reduce the work zone impacts on the road users, community, and businesses.

The strategies are grouped according to the following three categories.

1. Temporary Traffic Control (TTC)
2. Public Information and Outreach (PI&O)
3. Transportation Operations (TO).

5.1. Temporary Traffic Control (TTC)

The Temporary Traffic Control Plan for this project specifically addresses traffic on I-91, US-5 and that originating from Sykes Mountain Avenue and I-89. A copy of the TTC plan is included as Appendix A. The plan covers the two major project phases – construction of the new substructure in place and the superstructure on temporary supports; and each BCP.

To limit impact to travelers, the Contractor shall maintain a minimum of:

Two way traffic always during peak hours

- 6:00 AM -9:00 AM
- 3:00 PM -6:00 PM

Delays not to exceed 10 minutes

- 9:00 AM – 3:00 PM
- 6:00 PM – 9:00 PM

Delays exceeding 10 minutes but not to exceed 20 minutes

- 9:00 PM – 6:00 AM

Prior to and following the end of the Northbound BCP, the Contractor shall maintain a minimum of two-lanes, one-way traffic for I-91 North during the peak hours of 6:00am and 6:00pm and shall maintain one-lane, one-way traffic during non-peak hours. All traffic shall be maintained on the existing structure prior to the BCP. The Contractor shall only be allowed to reduce northbound traffic to one-way, one-lane during peak hours two days prior to the BCP.

Prior to and following the end of the Southbound BCP, the Contractor shall maintain a minimum of two-lanes, one-way traffic for I-91 South during the peak hours of 6:00am and 6:00pm and

shall maintain one-lane, one-way traffic during non-peak hours. All traffic shall be maintained on the existing structure prior to the BCP. The Contractor shall only be allowed to reduce southbound traffic to one-way, one-lane during peak hours two days prior to the BCP.

5.1.1. Traffic Control During General Construction

During construction, the speed limit on I-91 North will be temporarily reduced from the existing 55 MPH to 45 MPH.

Two traffic lights will be installed as part of the TTC for the project: one at the intersection of I-91 southbound Ramp “F” and US-5; and one at the intersection of I-91 northbound Ramp “C” and US-5.

To align traffic for the new temporary traffic light at the end of Exit 11 northbound, the configuration of this ramp will be temporarily changed, within the existing pavement, to accommodate two lanes of exiting traffic. The existing dedicated spur ramp for vehicles to turn onto US-5 southbound will be barricaded. Both lanes of traffic will be addressed by a temporary traffic light. The left-hand lane of the ramp will be for left-hand turn only to US-5 southbound and the right-hand lane will proceed onto US-5 northbound.

A dedicated right-hand turn lane will be constructed south of Ramp “A” to allow traffic from US-5 southbound heading to I-91 southbound to turn right onto Ramp “B”. Ramp “A” will be closed after this new configuration is in place.

US-5 will be reconfigured to allow construction activities to take place adjacent to US-5. The existing raised islands will be removed, temporary pavement installed, and traffic will flow in two lanes (one in each direction). The intersection of Ramp “C” and US-5 will be reconfigured to allow the traffic lights to function effectively with dedicated turn lanes from US-5 northbound and southbound onto Ramp “D”.

A temporary five-foot (5’) wide pedestrian walkway will be constructed along the south side of US-5 separated from the US-5 northbound travel lane by temporary traffic barrier and the southerly abutment construction locations by temporary traffic barrier and construction fencing.

5.1.2. Northbound Closure

During the northbound BCP traffic patterns will be modified. Prior to Exit 11, the I-91 northbound passing lane will be closed and traffic will be channelized to the northbound travel lane. Separation from traffic entering from I-89 will be maintained with barrels for approximately 400 feet. The lanes will be able to intermingle, and two lanes will continue down the temporary widened exit ramp. Multiple message boards will instruct drivers the left lane will be a left turn only to US-5 South. Additional message boards will instruct drivers the right lane traffic can proceed to either cross US-5 to the I-91 northbound on ramp or bear right to US-5 North. During the daylight hours a UTO will be stationed at the intersection to address concerns with the additional traffic from the project detour. See Appendix B-1.

5.1.3. Southbound Closure

During the southbound BCP, I-91 southbound traffic will take Exit 11 Ramp “F” to US-5 South to Exit 9 I-91 Hartland. During daylight hours, two UTOs shall be stationed at the intersection of VT 12 and US-5. See Appendix B-2.

Traffic destined for I-89 will take I-91 Exit 12; follow US-5 South to US 4 West to I-89 Exit 1, North or South. Ramp “A” and Ramp “B” will be closed, preventing traffic from US-5 from entering I-91 southbound. During Daylight hours one UTO will be stationed at the Junction of US 4 and I-89 Exit 1 South ramps to address concerns with the additional traffic from the Project detour. See Appendix B-3.

5.1.4. Alternate Route to I-91

The alternate route to I-91 will be activated as part of the Smart Work Zone when extended queues are detected at the I-89/I-91 interchange. I-89 northbound or southbound traffic destined to I-91 northbound will proceed to Exit 1 I-89 off-ramp, turn right at the end of the ramp and follow US 4 East to US-5 North to I-91 Exit 12 North. See Appendix B-4.

5.1.5. Control Strategies

During the course of the Project from Conceptual planning on, Temporary Traffic Control strategies were continually evaluated and improved to provide for a safe, cost-effective project while minimizing disruption to the travelling public. This evaluation process led VTrans to elect to use the full roadway closure of I-91 to replace the two deficient structures over separate weekend BCPs. To manage traffic travelling through the site prior to and during the BCP, the below traffic control techniques will be employed and continually evaluated during the Project:

A key aspect of the TTC plan is the installation of two temporary traffic lights and coordination with the existing traffic light on US-5 at Sykes Mountain Avenue.

Lane shifts or closures are primarily employed on US-5 from Ramp “C” to Ramp “B” to align traffic with the two temporary traffic lights, channelize traffic away from the substructure work just off the existing travel ways and simplify the flow of traffic through the project site.

During certain operations, such as placing the girders on the temporary supports, placing deck panels, and pouring the concrete deck, one-lane, two-way controlled operation is permitted through the project area. One-lane traffic will be limited to those times outside of the A.M and P.M. rush hours to accommodate peak travel. These activities have been scheduled to occur during night time hours.

As discussed in 5.1.4 Alternate Route to I-91 N, freeway-to-freeway interchange diversion will be employed automatically as part of the SWZ developed for this project. This will prevent traffic from backing up at the I-89/I-91 interchange, improving traffic through time, by diverting traffic from the project site when necessary. This Alternate Route will be signed as an option during the normal course of construction for traffic wishing to avoid the project area altogether.

Night work and weekend work will be allowed during the project within the limitations discussed elsewhere. The BCPs are each scheduled for a weekend so as to have the least traffic impact.

Pedestrian and bicycle traffic will be accommodated with the temporary facility constructed for this project. Restrictions similar to those for vehicular traffic on US-5 will occur, such as not being able to move under the new bridge during certain operations. Pedestrian and bicycle traffic will be accommodated during each BCP by means of a temporary shuttle paid for as part of this project.

5.1.6. Project Coordination, Contracting, and Innovative Construction Strategies

This project has been developed from conceptual to contract plans via the Construction Manager/General Contractor (CM/GC) contracting method. This process has allowed VTrans to develop contract plans, including the TTC plan and this TMP with the input of the likely General Contractor constructing the project. Utility coordination for this project has resulted in the identification of utilities in the area and the scheduled, coordinated relocation of a Town of Hartford water line. Construction of this project is occurring entirely within the State Right of Way. This project will not have impacts on other transportation infrastructure such as rail or air.

5.2. Public Information and Outreach (PI&O)

5.2.1. Public Awareness Strategies

A public awareness campaign has been initiated by VTrans working through a contracted Project Outreach Coordinator (POC). Project related information will be available on the Hartford Lateral Bridge Slide Project website: <http://www.i91wrj.vtransprojects.vermont.gov>. Ongoing coordination between the VTrans Resident Engineer, Contractor Superintendent, VTrans Project Manager, and POC will occur during the project will ensure the timely dissemination of information that may affect the travelling public.

The POC will maintain a list of local and regional contacts to provide timely updates regarding traffic delays, changes in patterns or closures through email. Additional contacts can be added to this list by visiting the Stay Informed link on the Project website: http://www.i91wrj.vtransprojects.vermont.gov/stay_informed.html, emailing jbarrett@fhiplan.com or calling (802) 272-1248.

In order to raise public awareness of the Project and listen to community concerns and comments, VTrans held a series of meetings in White River Junction. A public meeting was held on May 20, 2014. On October 9, 2014 the VTrans Project Manager and POC met with the VA Medical Center to provide them with current information regarding the Project. On February 3, 2015 there was an informational meeting with the Ambulance providers to the VA Medical Center. Documents related to these meetings can be accessed from the Project website. Another public meeting is planned for April 7, 2015 and will include the contractor. Pre-closure meetings and other informational meetings will be held throughout the construction of the project.

The POC will also coordinate outreach through various local media outlets.

5.2.2. Motorist Information Strategies

This project is implementing a Smart Work Zone (SWZ) system to assist in managing traffic flow in and around the project site; address undesirable traffic conditions as they occur; and provide the travelling public with time-sensitive information regarding delays and alternatives.

The SWZ includes the use of two (2) closed-circuit video cameras, 12 portable changeable message signs, and six (11) queue sensors.

5.3. Transportation Operations (TO)

5.3.1. Corridor/Network Management Strategies

To facilitate the smooth flow of traffic through the worksite, US-5 is being temporarily reconfigured; two temporary traffic signals are being installed and timed with the existing traffic light at the intersection of US-5 and Sykes Mountain Avenue. Ramp “C” is being reconfigured temporarily to allow for effective control with one of the proposed temporary traffic lights. Ramp “A” is being closed to avoid the merge with Ramp “B” traffic and to allow traffic at this side of the project to be controlled by the temporary traffic light at US-5 and Ramp “B” and “F”.

Since one of the proposed alternate routes for the Project involves detouring I-91N traffic further up I-89 to Exit 1, the VTrans Resident Engineer will maintain contact with Sandra Schmitt for the Hartford-Sharon resurfacing project.

5.3.2. Work Zone ITS Strategies

The PCMS will also advise of slow or stopped traffic ahead. CCTV monitoring will be available via portable video trailers with pan/tilt/zoom cameras to monitor critical traffic locations. A real-time detour will be employed as described in 5.3.5 Contingencies.

5.3.3. Work Zone Safety Management Strategies

Work zone safety for the travelling public and workers will be improved by reducing the speed limit on I-91 northbound and US-5; reconfiguring traffic on US-5 and installing temporary traffic barrier to move it away from active construction activities; installing two temporary traffic signals to manage turning movements; and providing advanced warning via the Smart Work Zone PCMS.

PCL will have a dedicated on-site construction safety supervisor identified. This TMP will be monitored by PCL and VTrans to ensure that it is meeting the goals of the safe and efficient flow of traffic through the project area. Adjustments to this TMP will be made as necessary.

5.3.4. Traffic/Incident Management and Enforcement Strategies

During each BCP a tow truck will be onsite to immediately remove any disabled vehicles within the project area.

Planned Event Protocol

- The contractor shall provide the POC by noon each Thursday project updates with planned closures for the upcoming week. The POC will inform all stakeholders of any activities scheduled that may impede traffic flow. These updates will be distributed weekly and will include those emergency services personnel.
- POC will actively seek out information about planned events likely to impact traffic, including date/time, duration, peak travel times, expected volumes, and previous experiences with congestion due to event (anything the event planner might know about the expected traffic) and communicate this information to the Regional Traffic Manager
- POC will communicate with event planner to try to mitigate traffic impacts through demand management strategies (for example, event planner could encourage attendees to seek alternate routes, or encourage car-pooling, or could try to stagger arrival/release times to reduce peak flows)
- The RTM will assess expected traffic impacts and coordinate implementation of applicable contingency plan with the TOC. POC will coordinate with VTrans Public Outreach staff on public messaging in advance of planned events, including but not limited to immediate notification on project social media pages, and delivery of same notice to VTrans for posting to their social media pages.
- The RTM will perform “after action” assessment to improve response for future events.

Unplanned Event Protocol

Procedures for managing incidents will vary, depending on the level of incident. The

Chapter 6I of the MUTCD identifies three levels of incident:

- A. Major – expected duration of more than 2 hours
- B. Intermediate – expected duration of 30 minutes to 2 hours
- C. Minor – expected duration under 30 minutes

Law enforcement officials will be the first entity contacted for all incidents within the Work Zone. The Resident Engineer will be notified (immediately during business hours) of any incident occurring in the project after law enforcement and emergency services has been contacted. Depending on the severity of the incident, other entities such as VTrans Transportation Operations Center (TOC), local officials, and media outlets may be contacted to respond or disseminate information. The contractor will contact law enforcement and the Resident Engineer directly, while additional notifications to media will be performed by the Public Outreach Coordinator.

Minor Incidents

Minor incidents typically involve disabled vehicles and minor crashes and last less than 30 minutes.

On-scene response will consist of contacting law enforcement officials and a local towing company if necessary. The appropriate PCMS within the SWZ will be activated to alert motorists of an accident ahead, and will indicate a message such as CRASH AHEAD and BE PREPARED TO STOP. Diversion of traffic onto other routes will not be required for minor traffic incidents. Incident traffic control will be the responsibility of on-scene responders. For minor incidents the Resident Engineer (RE) or Contractor may contact the Transportation Operations Center (TOC) who will then disseminate any necessary information as with an intermediate incident, but the short duration of the incident may not allow for this.

Intermediate Incidents

Intermediate incidents are typically vehicle crashes, usually blocking travel lanes, and can require traffic control on the scene to divert road users past the blockage and the duration can last up to 2 hours. Full roadway closures may be needed for short periods to allow traffic incident responders to clear the scene. However, establishing a detour to another facility is not expected. The same measures that will be employed for minor incidents will also be implemented for intermediate incidents, with the exception that traffic may need to be stopped for longer periods of time.

On-scene response will consist of contacting emergency first responders via 911 who will contact a local towing company if necessary to prevent major traffic backups or subsequent crashes. PCMS in the SWZ will be activated to alert motorists of a crash ahead, and will indicate a message such as CRASH AHEAD and BE PREPARED TO STOP. Traffic control will be the responsibility of on-scene personnel. For intermediate incidents, the RE will notify the TOC upon initial incident occurrence and also when incident has been cleared.

Major Incidents

Major incidents typically involve hazardous materials, fatal crashes, crashes involving numerous vehicles, and other natural or man-made disasters and typically last more than 2 hours. These traffic incidents typically involve closing all or part of a roadway facility. In the event of a major incident, depending on where the incident occurs traffic will be temporarily detoured based on the included contingency plan.

On-scene response will consist of contacting emergency first responders via 911 who will contact a local towing company if necessary to prevent major traffic backups or subsequent crashes. PCMS in the SWZ will be activated to alert motorists of a crash ahead, and will indicate a message such as CRASH AHEAD and BE PREPARED TO

STOP. Traffic control will be the responsibility of on-scene personnel. For major incidents, the RE will notify the TOC upon initial incident occurrence and also when incident has been cleared.

After Action Review

Each incident will be reviewed with responding agencies, within week, in an after action meeting run by the TMP Management to determine if any deficiencies in the traffic control measures are perceived and to determine if changes to the TMPs are needed to avoid recurrences in the future.

Incident Protocol - During hours of Operation
Incident detection and verification

1. **Call 911 to report any incident that may include injuries, hazardous materials, fire or other life-safety threats.** Provide the 911 operator with the following information, if known:

- Location – including closest mile marker, cross-street, and direction of travel
- Number and type of vehicles involved
- Extent of damage or injury
- Number of patients involved
- Any hazardous conditions
- The placard number on any hazardous materials placarded vehicles
- Number of lanes impacted and extent of closure

The 911 operator may ask for additional information that will help responders, including your name and phone number as a contact.

2. **Call or email the Transportation Operations Center (TOC):802-828-2648 or AOT.OPSTOC@state.vt.us**

Level	Impact to Roadway	Actions to be Taken
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<p>Minor</p>	<p>Impact to traveled roadway estimated to be less than 30 minutes with no lane blockage. --Or-- Impact to traveled roadway is estimated to be less than 30 minutes with lane blockages.</p>	<ul style="list-style-type: none"> • Call <u>911 or (802) 295-9425 Non-Emergency</u> • Dispatch will call towing truck company • RE or Contractor contacts the VTrans Transportation Operations Center (TOC) 802-828-2648 • If at all possible move the vehicle(s) out of travel way • Utilize contingency plan sign packages as needed • VTrans TOC may: <ul style="list-style-type: none"> ○ Contact : <ul style="list-style-type: none"> ▪ VTrans District 4 Maintenance Supervisors for resources ○ Update Vermont 511/Social Media ○ Activate Message Boards
<p>Intermediate</p>	<p>Impact to traveled roadway estimated to be greater than 30 minutes, but less than 2 hours with lane blockages, but not a full closure of the roadway.</p>	<ul style="list-style-type: none"> • Call <u>911 or (802) 295-9425 Non-Emergency</u> • Dispatch will call towing truck company • Establish Incident Command <ul style="list-style-type: none"> ○ First qualified on scene responder is Incident Commander until police or fire arrive on scene ○ Consider designating staging area • RE or Contractor contact the VTrans Transportation Operations Center(TOC) 802-828-2648 • Utilize contingency plan sign packages as needed • Consider implementing alternate routes • VTrans TOC will: <ul style="list-style-type: none"> ○ Contact: <ul style="list-style-type: none"> ▪ Other Area Residents Engineers ▪ VTrans District 4 Maintenance Supervisors ▪ Public Outreach Coordinator ▪ New Hampshire 511 ○ Update Vermont 511/Social Media ○ Activate Message Boards

Major	Congestive impact to traveled roadway is estimated to be greater than 2 hours or roadway is fully closed in any single direction.	<ul style="list-style-type: none"> • Call 911 or (802) 295-9425 Non-Emergency • Dispatch will call towing truck company • Establish Incident Command <ul style="list-style-type: none"> ○ First qualified on scene responder is Incident Commander until police or fire arrive on scene ○ Consider designating staging area • RE or Contractor contact the VTrans Traffic Operations Center(TOC) 802-828-2648 • Utilize contingency plan sign packages as needed • Consider implementing alternate routes • VTrans TOC will: <ul style="list-style-type: none"> ○ Contact: <ul style="list-style-type: none"> ▪ Other Area Residents Engineers ▪ VTrans District 4 Maintenance Supervisors ▪ Public Outreach Coordinator ▪ New Hampshire 511 ▪ Federal Highways ○ Update Vermont 511/Social Media ○ Activate Message Boards
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Incident Protocol - after hours of Operation

1. **Call 911 or (802) 295-9425 (Non-Emergency) to report any incident that may include injuries, hazardous materials, fire or other life-safety threats.** Provide the 911 operator with the following information, if known:
 - Location – including closest mile marker, cross-street, and direction of travel
 - Number and type of vehicles involved
 - Extent of damage or injury
 - Number of patients involved
 - Any hazardous conditions
 - The placard number on any hazardous materials placarded vehicles
 - Number of lanes impacted and extent of closure

The 911 operator may ask for additional information that will help responders, including your name and phone number as a contact.

2. **Call or email the Transportation Operations Center (TOC):802-828-2648 or (802) 250-4667 (Major Incidents Only) or AOT.OPSTOC@state.vt.us**

911 dispatch operators will contact necessary first responders including tow truck companies. Dispatch will also send an internal email to the TOC and depending on the incident level the communication protocol as during operating hours will still take effect and if necessary to

prepare for commuting traffic by notifying the media and possible implementation of traffic control or detours.

5.3.5. Contingency

Whenever traffic is queued at the interchange of I-89 and I-91, traffic will be diverted to an alternate route. When triggered by the queue sensors, the appropriate PCMS will automatically show “USE I-89 EXIT 1 WOODSTCK”/”FOR ALT ROUTE TO I-91N”. Traffic on I-89 South will be advised to take Exit 1; traffic in I-89 will continue north to Exit 1; both will follow US 4 East to US-5 North to Exit 12 I-91North. See Appendix B-4.

Should US-5 be closed beyond the allowable delays, through traffic shall be detoured around the project area via the VA Cutoff Road and US Route 4. This will require the use of three UTOs positioned at the following locations US-5/VA Cutoff Road, US 4/TH 132 and US 4 / US-5. See Appendix B-5.

6.0 Notes

7.0 TMP Implementation/Monitoring

This TMP needs to be implemented in the field, as specified, unless any changes have been approved by VTrans. To help ensure appropriate implementation, 23 CFR 630 Subpart J §630.1012(e) requires that the State/Agency and the contractor each designate a trained person at the project level who has the primary responsibility and sufficient authority for implementing the TMP and other safety and mobility aspects of the project.

Monitoring the performance of the TMP during the construction phase is important to establish whether the predicted impacts closely resemble the actual conditions in the field, and whether the TMP strategies are effective in managing the impacts. TMP monitoring is needed for both oversight and evaluation purposes, such as:

- Monitoring and documenting TMP changes during construction.
- Preparing an evaluation of the TMP, including lessons learned.
- Refining work zone impact analysis processes and models based on outcomes.

TMP monitoring includes details of any specific observational, logging, and/or recording activities conducted during the project for work zone performance measurement purposes. Examples of possible performance measures for TMP monitoring include:

- Volume
- LOS
- Queue length
- Delay
- Travel time
- Number of crashes/incidents
- Incident response and clearance times
- Type and frequency of legitimate complaints received.

The TMP Implementation/Monitoring Managers shall meet in-person or via teleconference acceptable with the Project Manager on a regular basis to discuss and assess the safety and mobility impacts of the project work zone to date. This helps to assess how well the TMP is managing the project impacts, and can help identify and address issues before they become problems. It also provides the opportunity to verify that all key stakeholders and project officials have been receiving timely notifications where required.

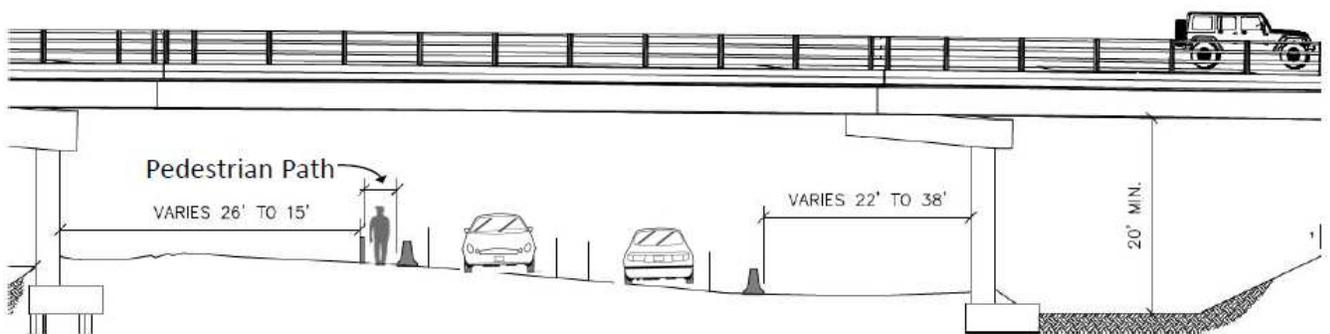
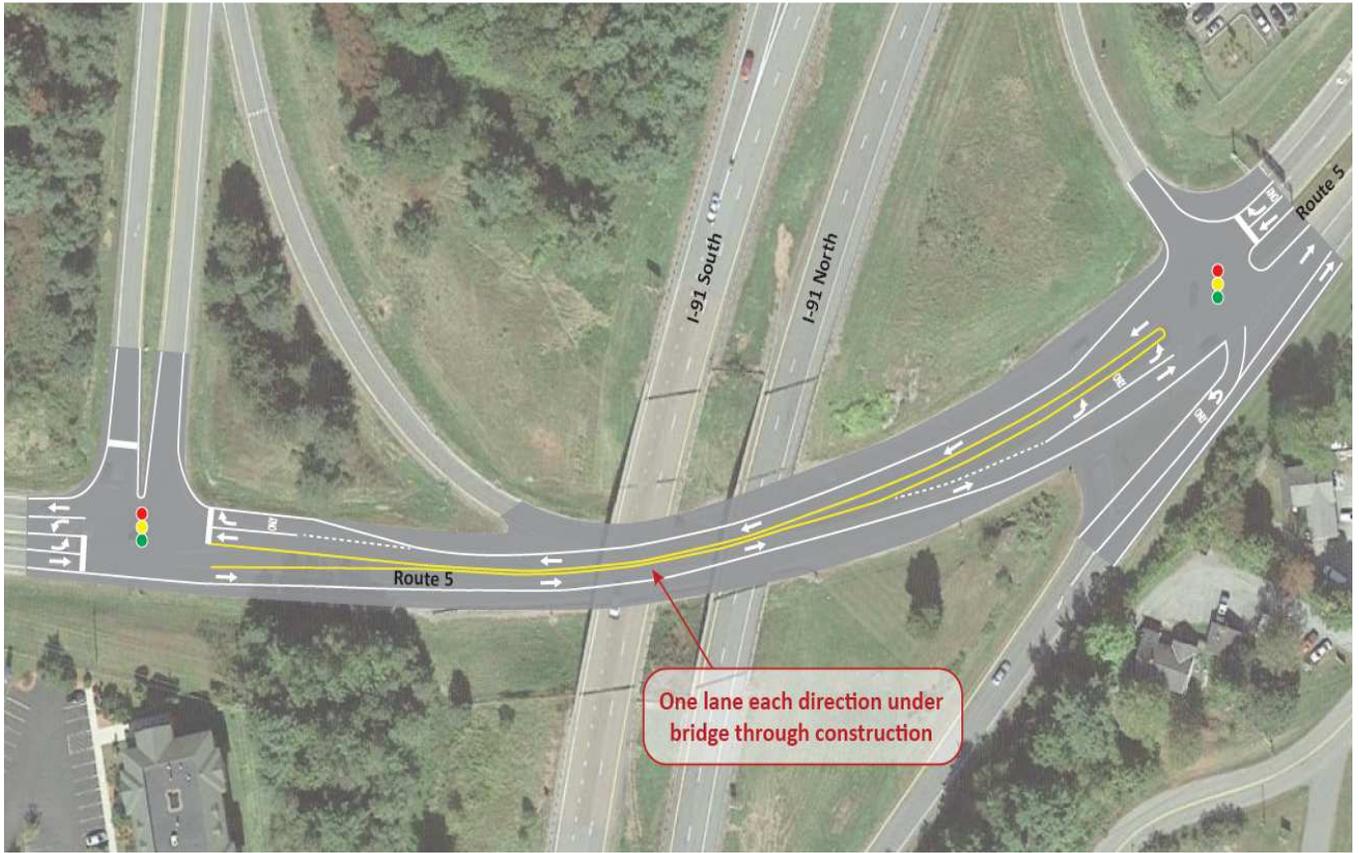
8.0 TMP Review/Approvals

This TMP, and any significant changes, must be approved by the VTrans Traffic Operations Engineer and Project Manager before they are implemented.

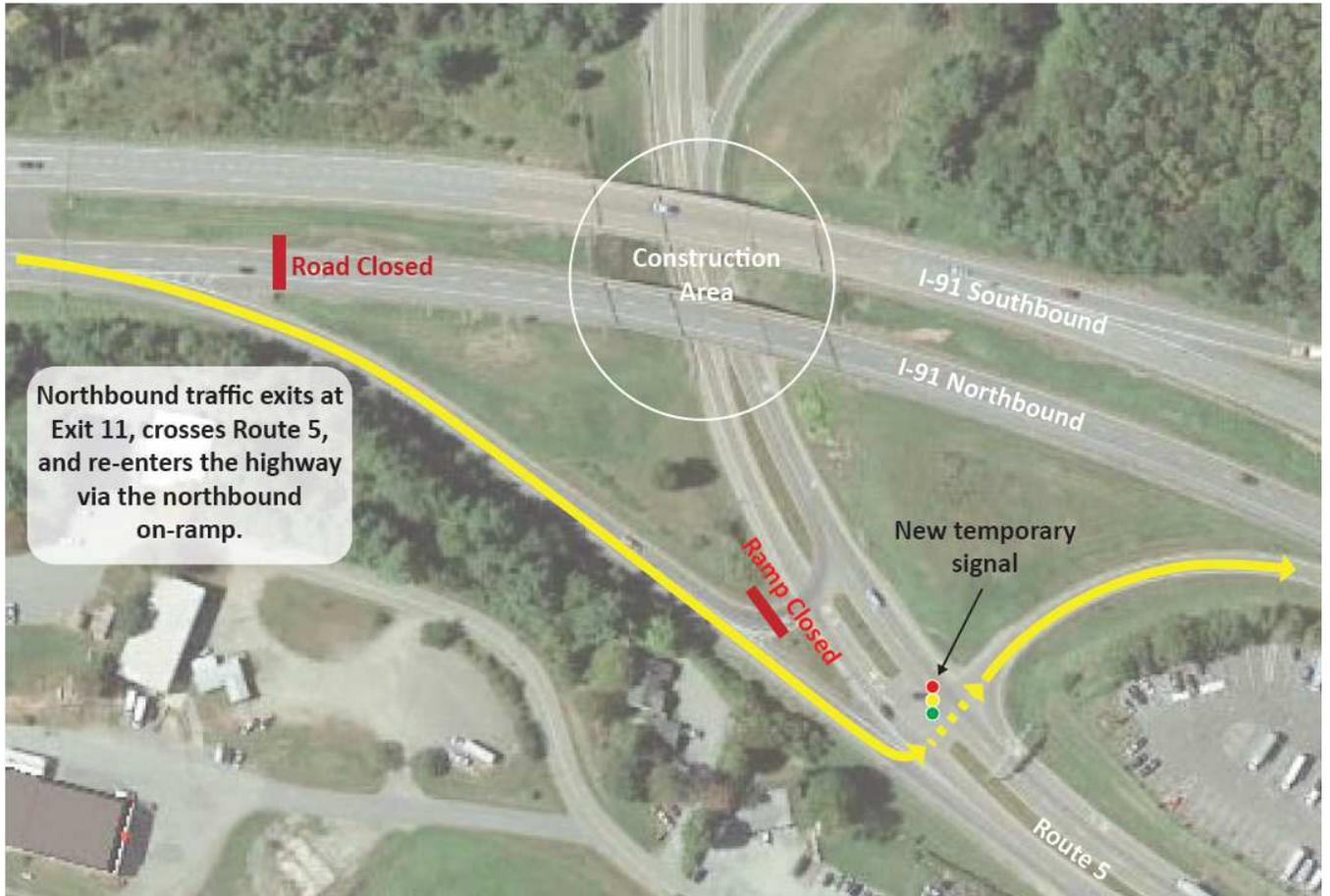
VTrans Traffic Operations Engineer			VTrans Project Manager		
All approvals must be obtained prior to the start of work					
Signature:			Signature:		
Name: Amy Gamble, PE			Name: Kristin Higgins, PE		
Date:			Date:		
Revision#	Initials	Date	Revision#	Initials	Date
1					
2					

Appendix A

Temporary US-5 Traffic Control Plan

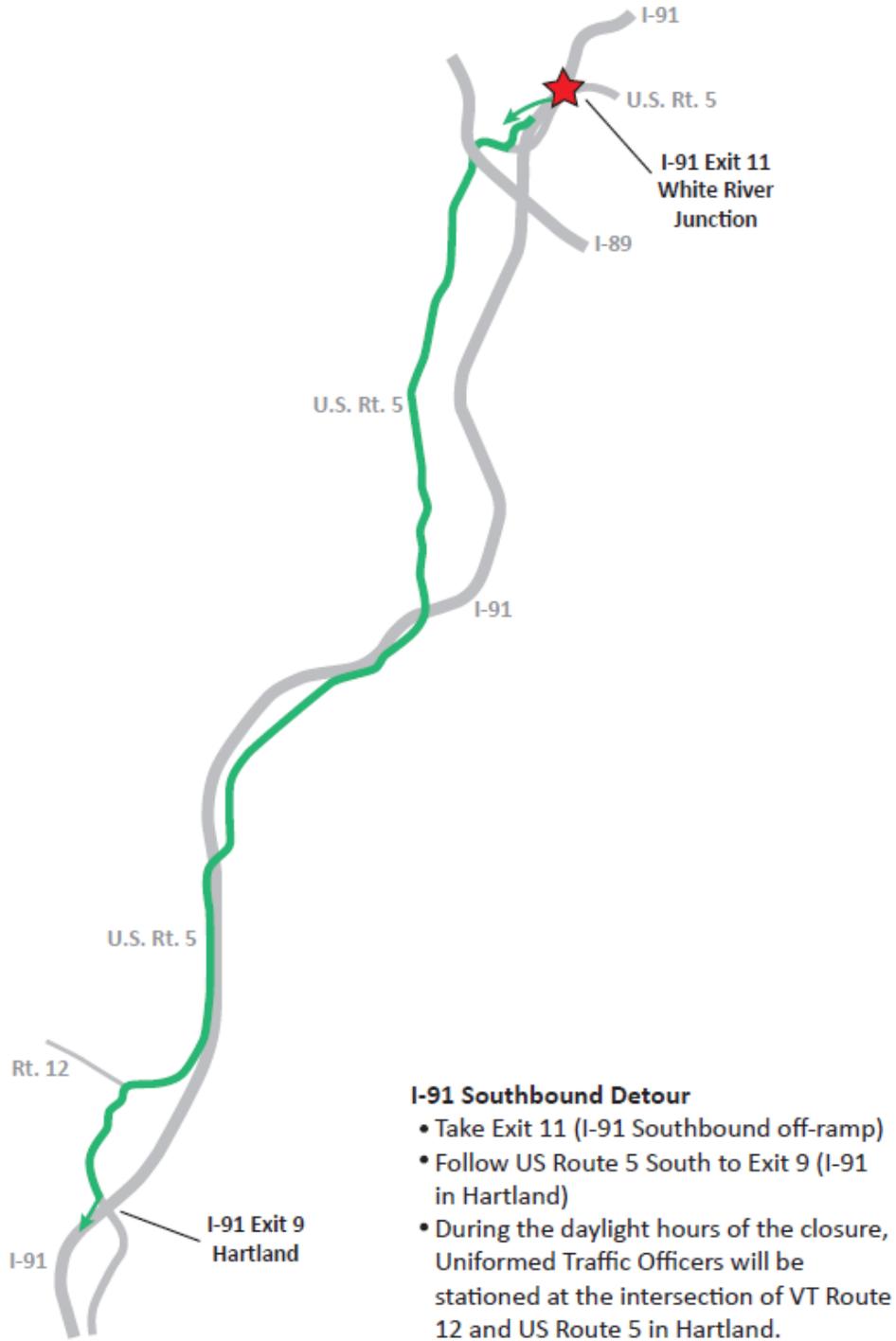


Appendix B-1 I-91 Northbound Detour



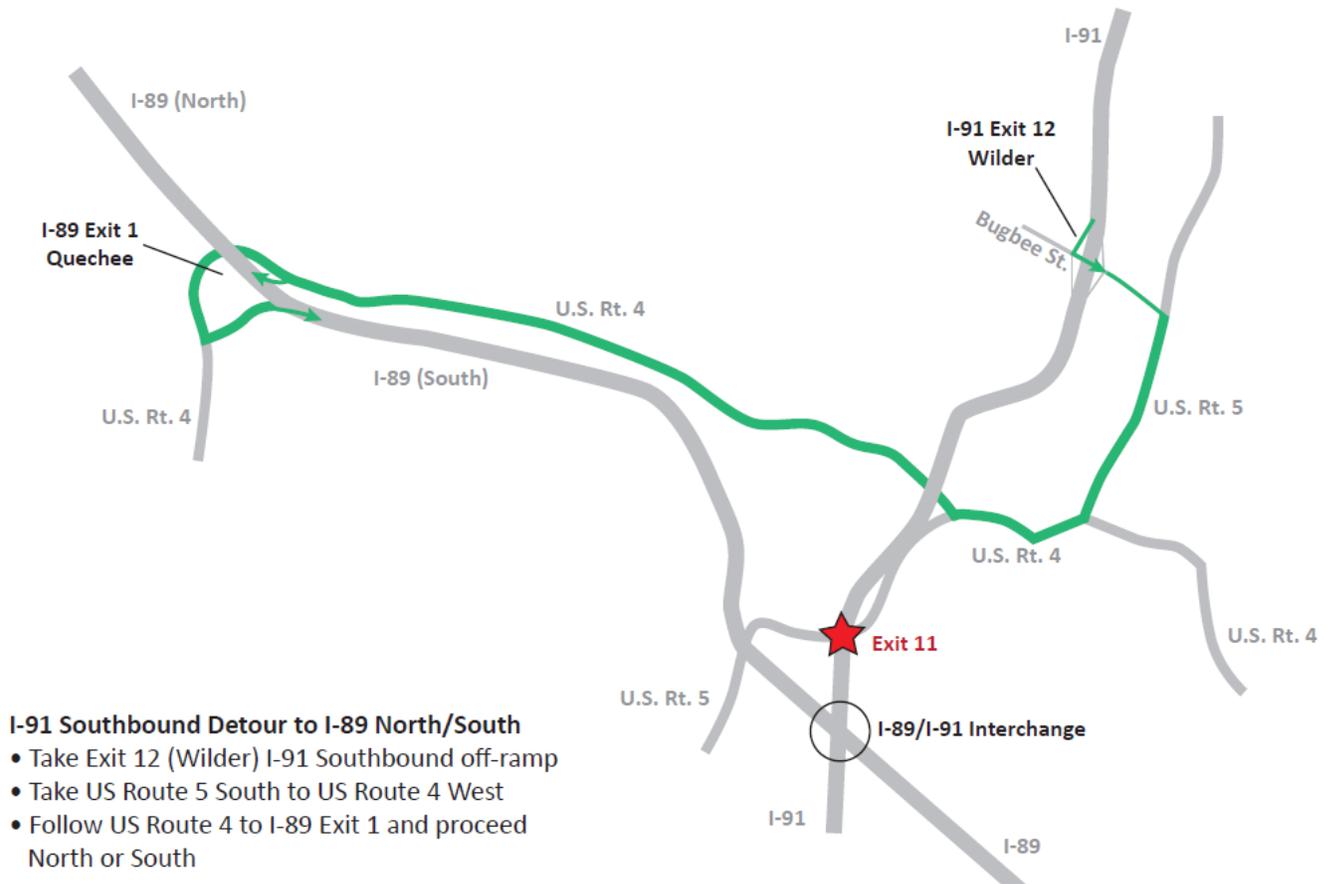
Appendix B-2

I-91 Southbound Detour



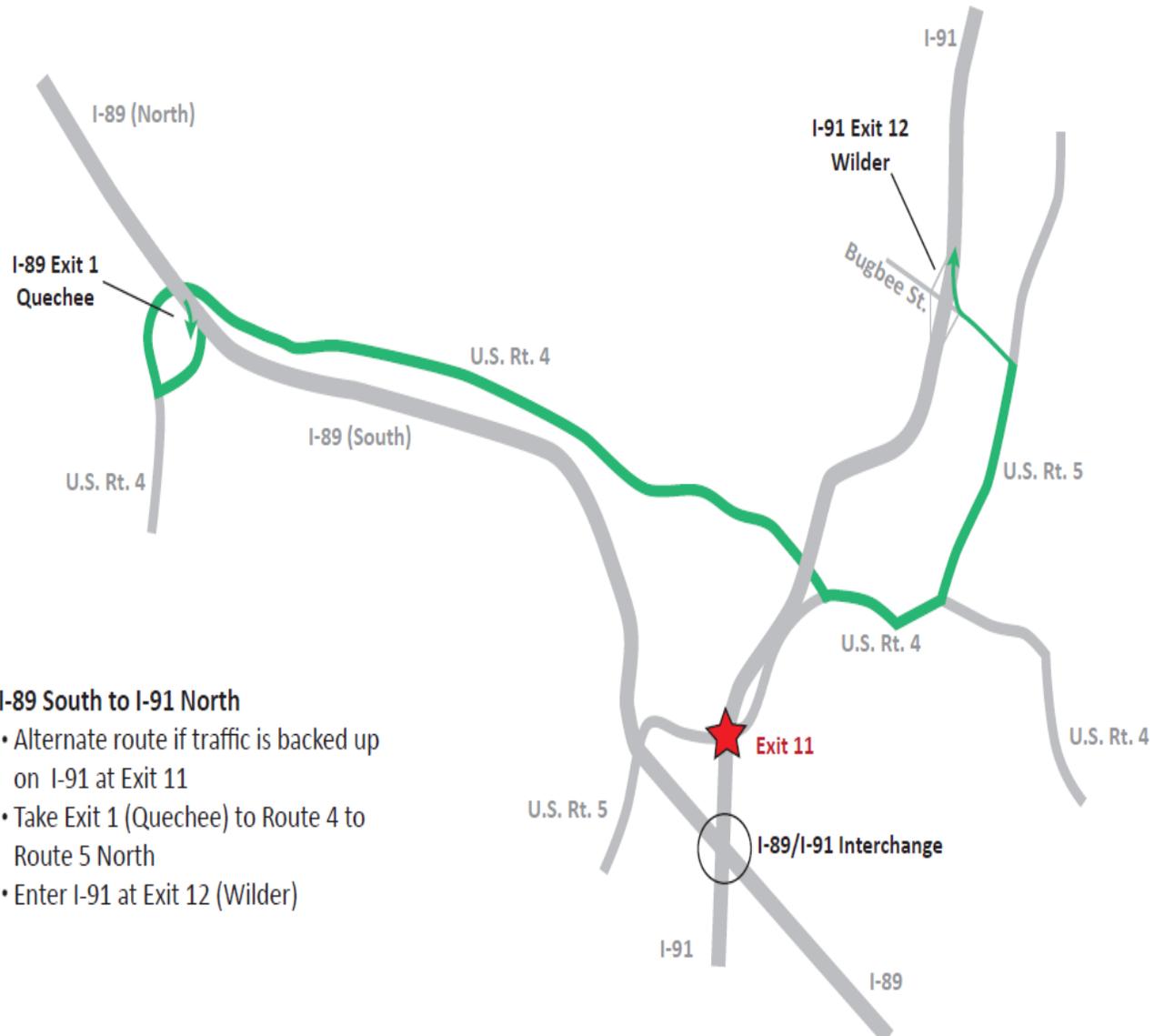
Appendix B-3

I-91 Southbound Detour to I-89 North/South



Appendix B-4

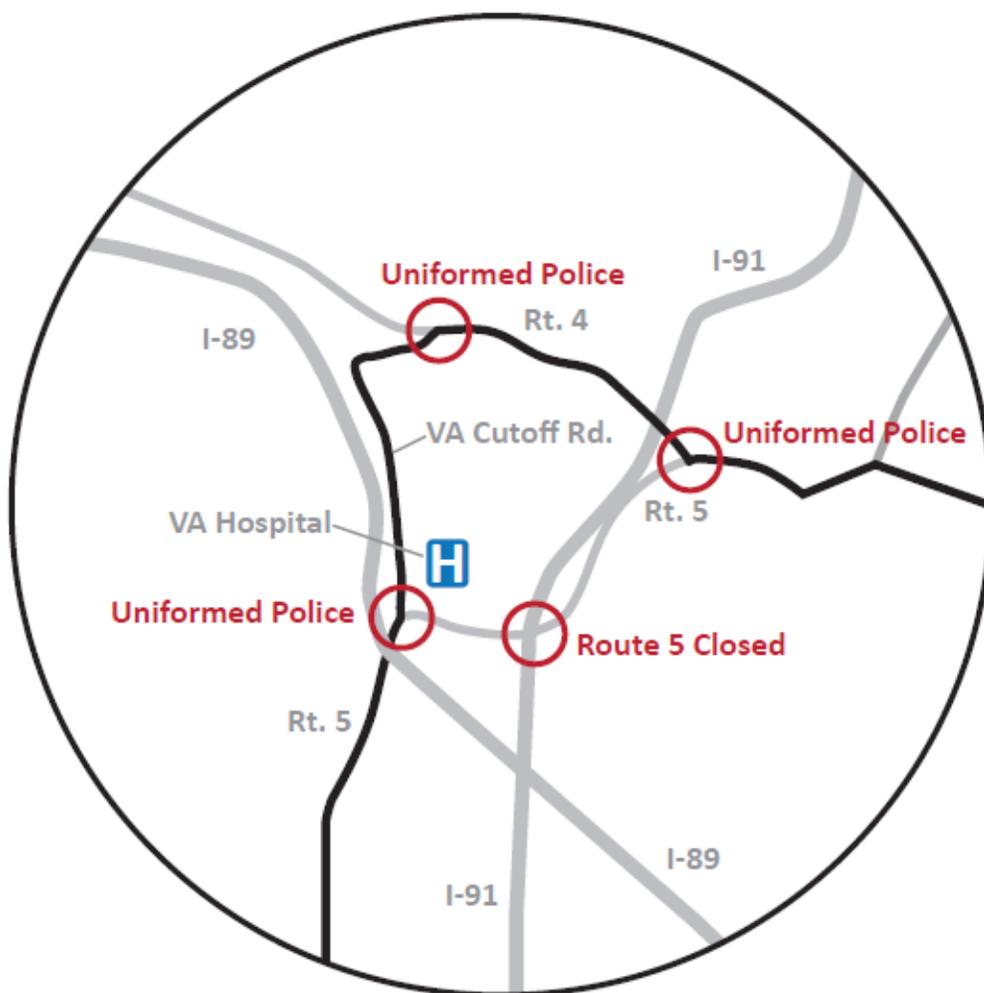
Alternate Route to I-91 Northbound



I-89 South to I-91 North

- Alternate route if traffic is backed up on I-91 at Exit 11
- Take Exit 1 (Quechee) to Route 4 to Route 5 North
- Enter I-91 at Exit 12 (Wilder)

Appendix B-5 US-5 Contingency Detour





CONSTRUCTION LEADERS

**SUBMITTAL NO. : 11.2
TCP – Item 2.2 Smart Work Zone**

Item No.	Specification	Description
1	Sheet 5, Note 73	TCP – Item 2.2 Smart Work Zone

**PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132**

**OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION**

**ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION**

**CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.**

MARCH 3, 2015

Vermont Agency of Transportation
RECEIVED
 CK'D BY MM/CB OK'D BY JS
 March 3, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-4-2015

Equipment that should be in place and running for the work that will be occurring on US Route 5.

Note: Equipment being utilized in this phase is for the activity that will be starting on US Route 5. The balance of equipment proposed to being installed once the snow subsides is directly related to activity occurring on I-91. Placement of those pieces at this time will not change the functionality or increase accuracy of Phase 1 equipment for US Route 5. Phase 1 includes PCMS's on every inlet to the work area, plus both cameras so the work area and the approaches to the work area can be monitored. There are also PQT's at the approach to the work area from I-91 and I-89 to monitor traffic flow prior to US Route 5 from I-91. There are no PQT's on US Route 5.

Location is listed, with map reference and anticipated MOT to be utilized. UTO present at all locations and follows the work.

- **PQT Q03**, located on I-91 NB Ramp from I-89. Refer to Map 2 of SWZ plans.
 - I91 NB RIGHT LANE CLOSURE
- **PTZ C01**, located on I-91 NB, mm 69.95 left. Refer to Map 2 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
- **PQT Q04**, located on I-91 NB, mm 70.05 left. Refer to Map 2 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
- **PTZ C02**, located on I-91 NB / US Route 5. Refer to Map 2 of SWZ plans.
 - I91 NB RIGHT LANE CLOSURE
- **PCMS M07**, located on I-89 SB, mm 1.2 left. Refer to Map 2 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
- PCMS M11, located on Sykes Mountain Ave., WB. Refer to Map 2 of SWZ plans.
 - NO MOT ANTICIPATED
- **PCMS M06**, located on I-89 NB, mm 0.01 left. Refer to Map 3 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
 - REMOVE EXISTING LEFT SIDE 55 MPH SPEED LIMIT SIGN
- **PCMS M02**, located on I-91 NB, mm 67.05 right. Refer to Map 5 of SWZ plans.
 - I91 NB RIGHT LANE CLOSURE
- **PCMS M10**, located on US Route 5 NB, north of Drew Rd. Refer to Map 6 of SWZ plans.
 - LANE CLOSURE, ONE LANE ROAD W/ FLAGGERS
- **PQT Q08**, located on I-91 SB, mm 70.8 left. Refer to Map 9 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
- **PCMS M03**, located on I-91 SB, mm 70.8 left. Refer to Map 9 of SWZ plans.
 - I91 SB LEFT LANE CLOSURE
- **PCMS M12**, located on US Route 5 SB, left. Refer to Map 9 of SWZ plans.
 - RT5 INSIDE LANE CLOSURE

All of the locations that are highlighted in **yellow** are areas that may need to be done between the hours of 9 am and 4:00 pm. Locations not highlighted do not require lane closures so traffic will not be affected. PCMS M06 is in a U-turn area, PCMS M07 is in a U-turn area, PCMS M11 is on US Route 5, proposing to be located at the Ford Dealership but will need permission.



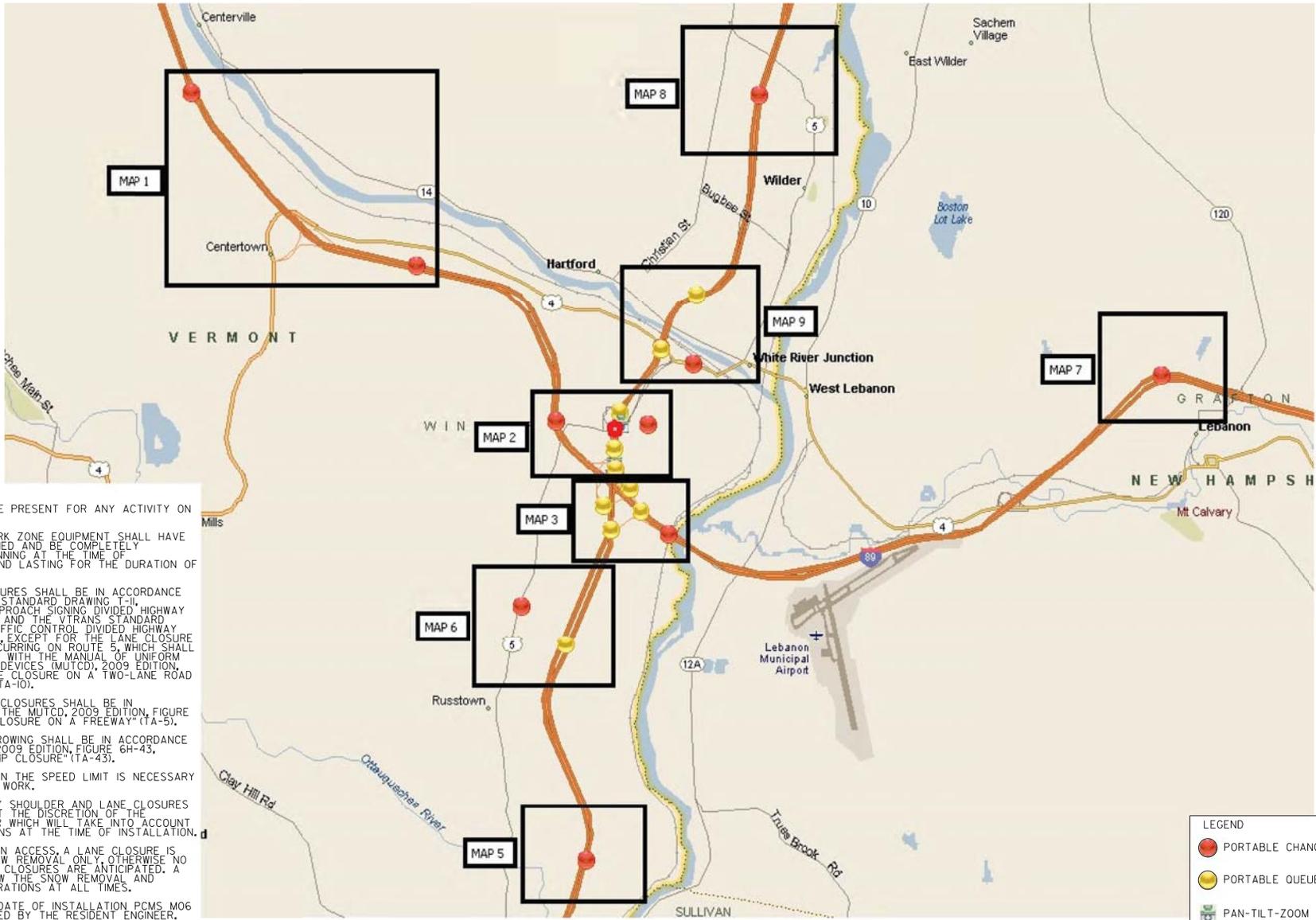
BALANCE OF EQUIPMENT

The balance of the equipment can be deployed during much safer conditions once the snow subsides. Tentatively planned for April, but required to be functional 14 days prior to any sitework is done on I-91. Those pieces are:

- PCMS M08, located on I-89 NB, mm 2.90 right. Refer to Map 1 of SWZ plans.
- PCMS M09, located on I-89 SB, mm 5.00 right. Refer to Map 1 of SWZ plans.
- PQT Q09, located on I-91 SB, mm 70.30 right. Refer to Map 2 of SWZ plans.
- PQT Q01, located on I-89 NB, mm 0.30 left. Refer to Map 3 of SWZ plans.
- PQT Q02, located on I-91 NB on-ramp from I-89 NB. Refer to Map 3 of SWZ plans.
- PQT Q05, located on I-91 NB on-ramp from I-89 SB. Refer to Map 3 of SWZ plans.
- PQT Q06, located on I-91 NB on-ramp from I-89 SB. Refer to Map 3 of SWZ plans.
- PQT Q11, located on I-91 NB, mm 69.50 left. Refer to Map 3 of SWZ plans.
- PCMS M01, located on I-91 NB, mm 59.25 right. Refer to Map 4 of SWZ plans.
- PQT Q10, located on I-91 NB, mm 68.60 left. Refer to Map 6 of SWZ plans.
- PCMS M05, located on I-89 NB, mm 56.90 right (in NH). Refer to Map 7 of SWZ plans.
- PCMS M04, located on I-91 SB, mm 72.70 left. Refer to Map 8 of SWZ plans.
- PQT Q07, located on I-91 SB, mm 71.20 right. Refer to Map 9 of SWZ plans.

All of the locations that are highlighted in green are areas that may possibly require assistance to Worksafe during deployment with a UTO. Once the snow is gone, we can confirm prior to performing with the Resident Engineer.





NOTES:

1. A UTO SHALL BE PRESENT FOR ANY ACTIVITY ON THE INTERSTATE.
2. ALL SMART WORK ZONE EQUIPMENT SHALL HAVE VISIBILITY MAINTAINED AND BE COMPLETELY OPERATIONAL BEGINNING AT THE TIME OF IMPLEMENTATION AND LASTING FOR THE DURATION OF THE PROJECT.
3. ALL LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE VTRANS STANDARD DRAWING T-11, "CONSTRUCTION APPROACH SIGNING DIVIDED HIGHWAY ONE LANE CLOSED" AND THE VTRANS STANDARD DRAWING T-12, "TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED", EXCEPT FOR THE LANE CLOSURE FOR PCMS MO OCCURRING ON ROUTE 5, WHICH SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, FIGURE 6H-10, "LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS" (TA-10).
4. ALL SHOULDER CLOSURES SHALL BE IN ACCORDANCE WITH THE MUTCD, 2009 EDITION, FIGURE 6H-5, "SHOULDER CLOSURE ON A FREEWAY" (TA-5).
5. ALL RAMP NARROWING SHALL BE IN ACCORDANCE WITH THE MUTCD, 2009 EDITION, FIGURE 6H-43, "PARTIAL EXIT RAMP CLOSURE" (TA-43).
6. NO REDUCTION IN THE SPEED LIMIT IS NECESSARY TO PERFORM THIS WORK.
7. ALL TEMPORARY SHOULDER AND LANE CLOSURES SHALL BE DONE AT THE DISCRETION OF THE RESIDENT ENGINEER WHICH WILL TAKE INTO ACCOUNT THE SITE CONDITIONS AT THE TIME OF INSTALLATION.
8. FOR ALL U-TURN ACCESS, A LANE CLOSURE IS REQUIRED FOR SNOW REMOVAL ONLY, OTHERWISE NO SHOULDER / LANE CLOSURES ARE ANTICIPATED. A UTO SHALL FOLLOW THE SNOW REMOVAL AND INSTALLATION OPERATIONS AT ALL TIMES.
9. THE TIME AND DATE OF INSTALLATION PCMS MO6 SHALL BE APPROVED BY THE RESIDENT ENGINEER.

LEGEND	
	PORTABLE CHANGEABLE MESSAGE SIGN
	PORTABLE QUEUE TRAILER
	PAN-TILT-ZOOM CAMERA

SMART WORK ZONE OVERALL PLAN I

RECEIVED

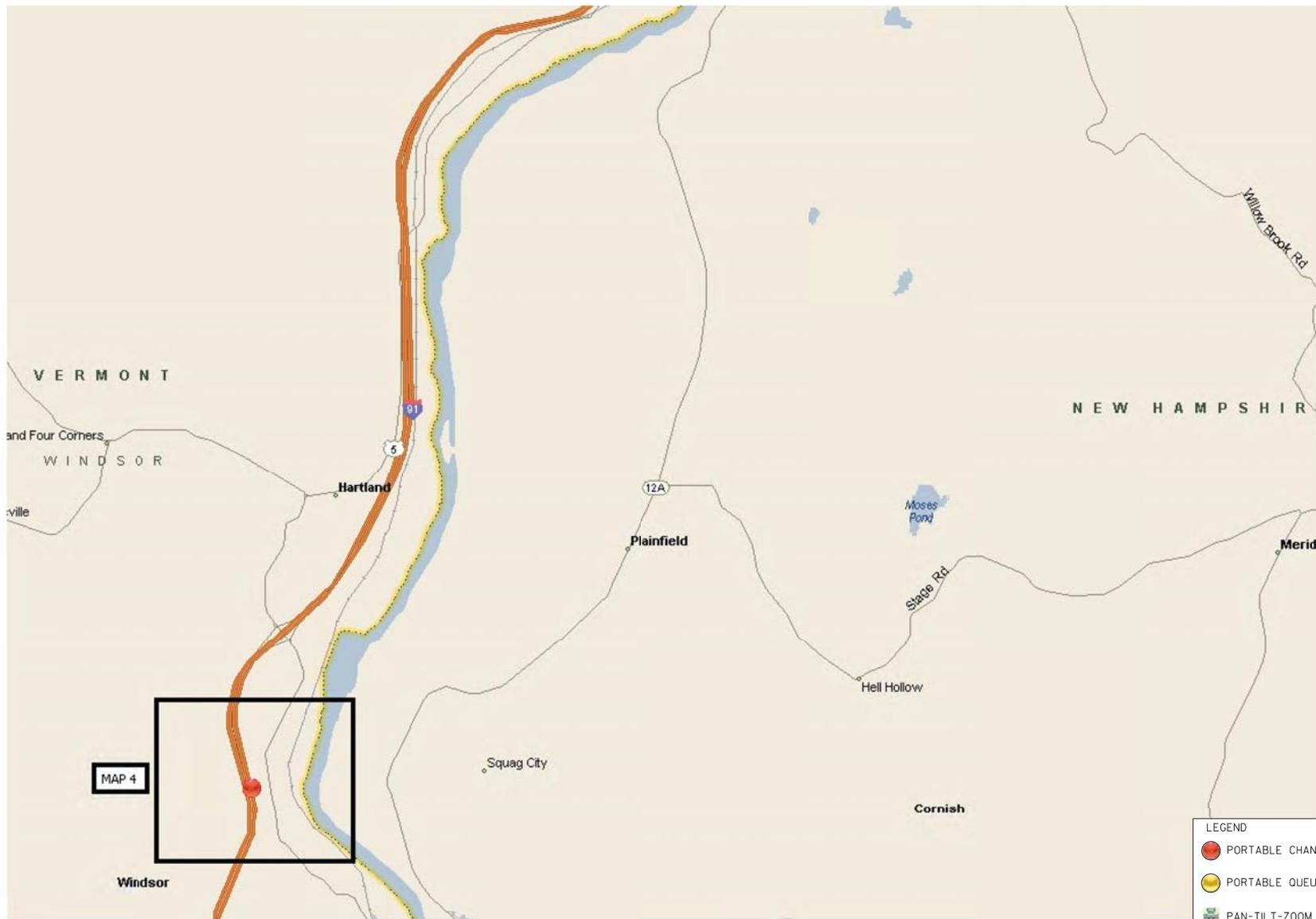
 CK'D BY MLCB OK'D BY JS

 March 3, 2015

 RESUBMIT NO Approved

 BY KH DATE 3-4-2015

DESIGNED BY: 	PREPARED BY: 	PROJECT NAME: HARTFORD PROJECT NUMBER: IM 091-2(79)	FILE NAME: si2a026_SWZ_TCP.dgn PROJECT LEADER: K. HIGGINS DESIGNED BY: S. DESCHAMPS SMART WORK ZONE TCP	PLOT DATE: 03/02/15 DRAWN BY: B. LYON CHECKED BY: S. SAWYER SHEET 4 OF ??
------------------	------------------	--	--	--



- LEGEND
-  PORTABLE CHANGEABLE MESSAGE SIGN
 -  PORTABLE QUEUE TRAILER
 -  PAN-TILT-ZOOM CAMERA

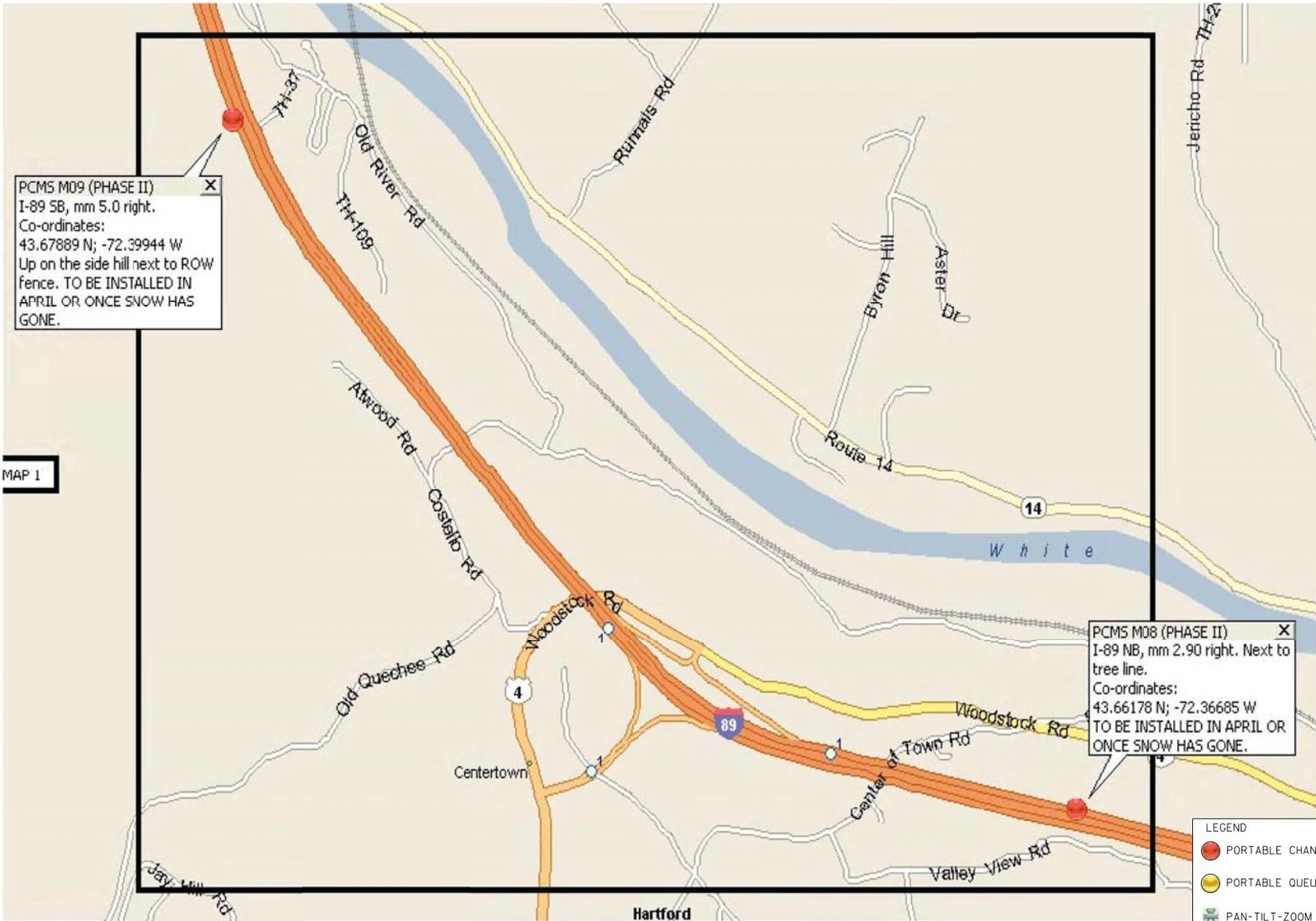


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SMART WORK ZONE OVERALL PLAN 2



PROJECT NAME:	HARTFORD	PLOT DATE:	03/02/15
PROJECT NUMBER:	IM 091-2(79)	DRAWN BY:	B. LYON
FILE NAME:	si2a026_SWZ_TCP.dgn	CHECKED BY:	S. SAWYER
PROJECT LEADER:	K. HIGGINS	SMART WORK ZONE TCP	SHEET 5 OF ??
DESIGNED BY:	S. DESCHAMPS		



PCMS M09 (PHASE II)
 I-89 SB, mm 5.0 right.
 Co-ordinates:
 43.67889 N; -72.39944 W
 Up on the side hill next to ROW
 fence. TO BE INSTALLED IN
 APRIL OR ONCE SNOW HAS
 GONE.

PCMS M08 (PHASE II)
 I-89 NB, mm 2.90 right. Next to
 tree line.
 Co-ordinates:
 43.66178 N; -72.36685 W
 TO BE INSTALLED IN APRIL OR
 ONCE SNOW HAS GONE.

- LEGEND
- PORTABLE CHANGEABLE MESSAGE SIGN
 - PORTABLE QUEUE TRAILER
 - PAN-TILT-ZOOM CAMERA

MAP 1



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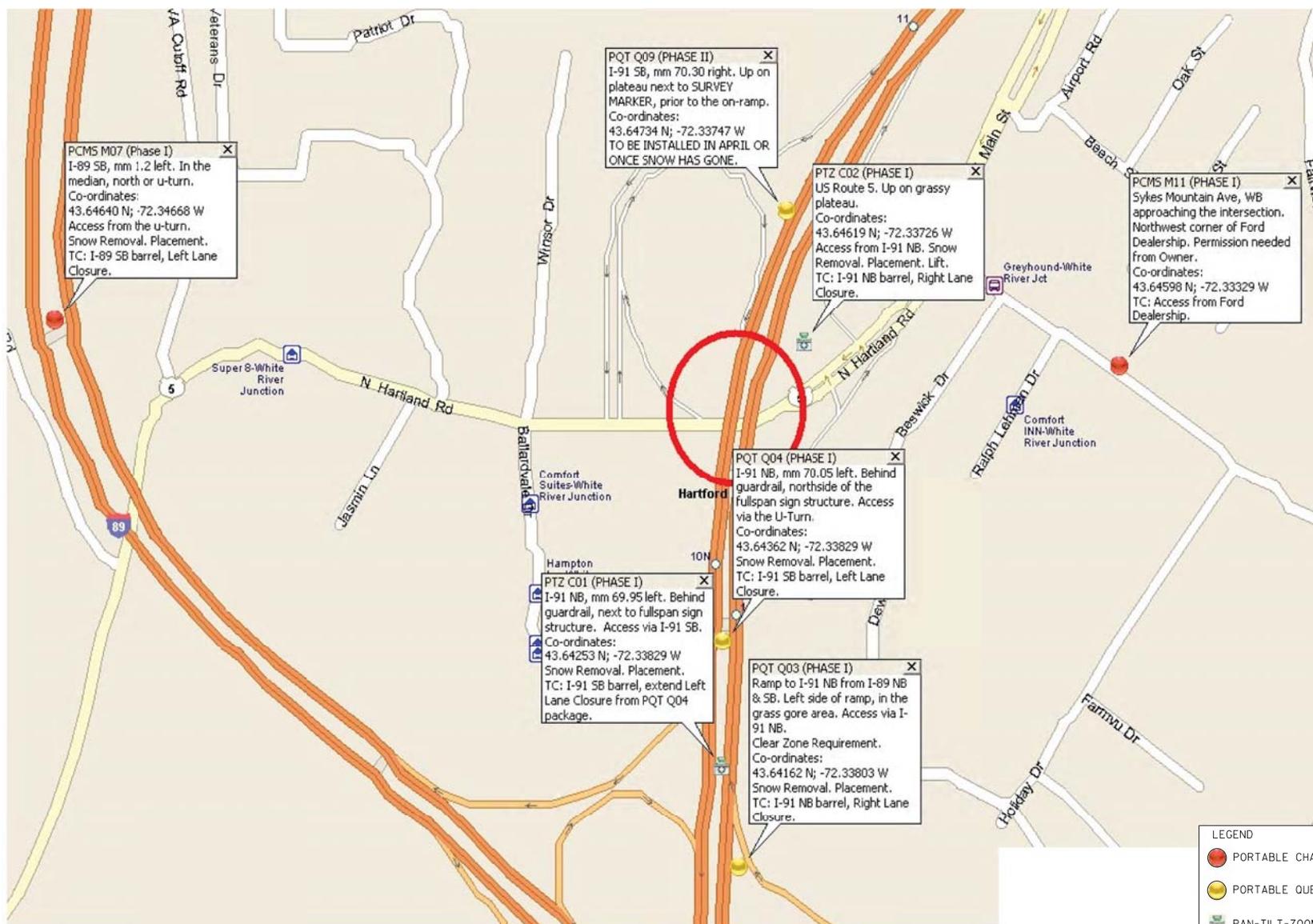
SMART WORK ZONE MAP 1



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 09I-2(79)

FILE NAME: s12a026_SW2_TCP.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: S. DESCHAMPS
 SMART WORK ZONE TCP

PLOT DATE: 03/02/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 6 OF ??

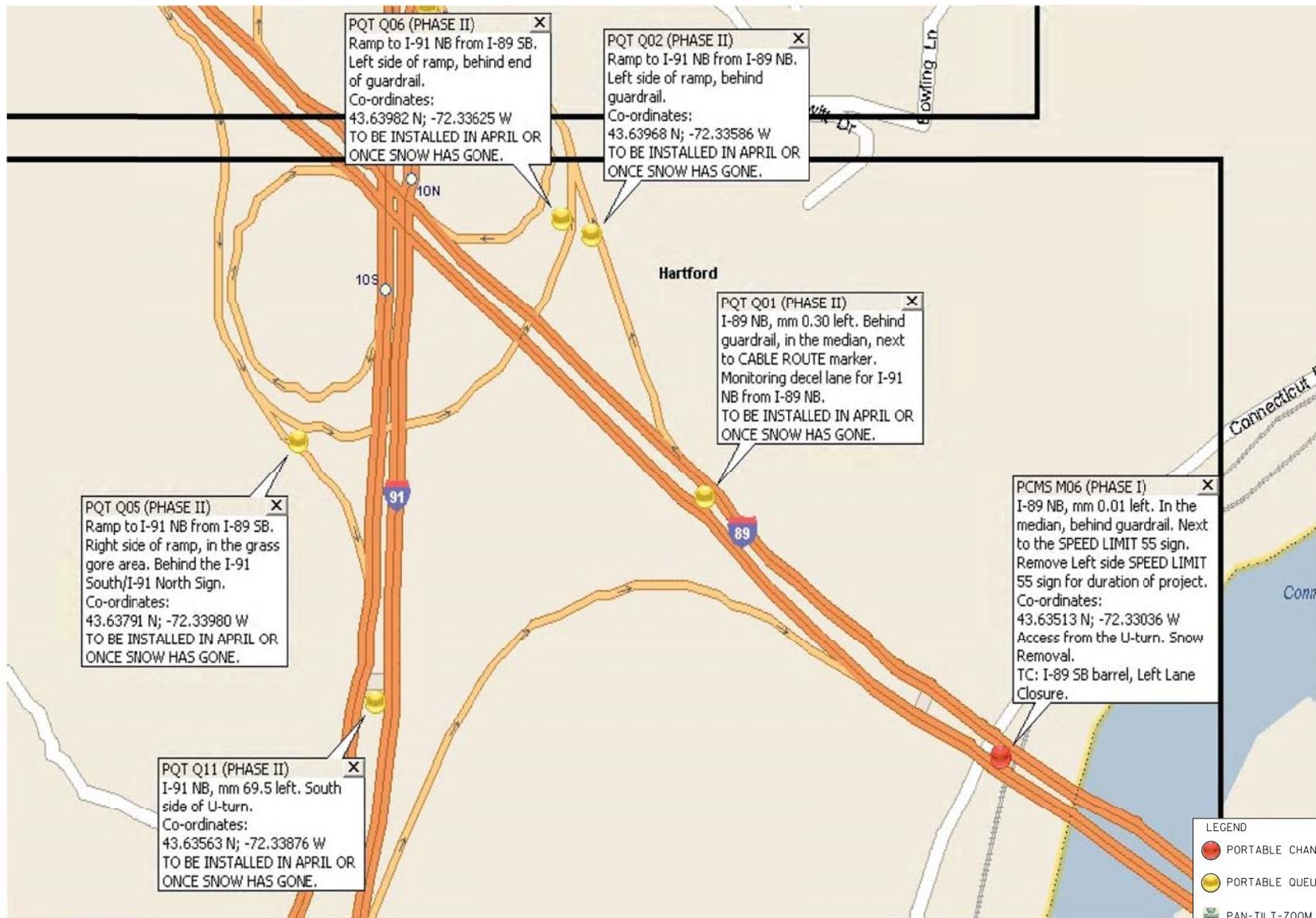


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SMART WORK ZONE MAP 2



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: si2a026_SWZ_TCP.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: S. DESCHAMPS
 SMART WORK ZONE TCP
 PLOT DATE: 03/02/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 7 OF ??

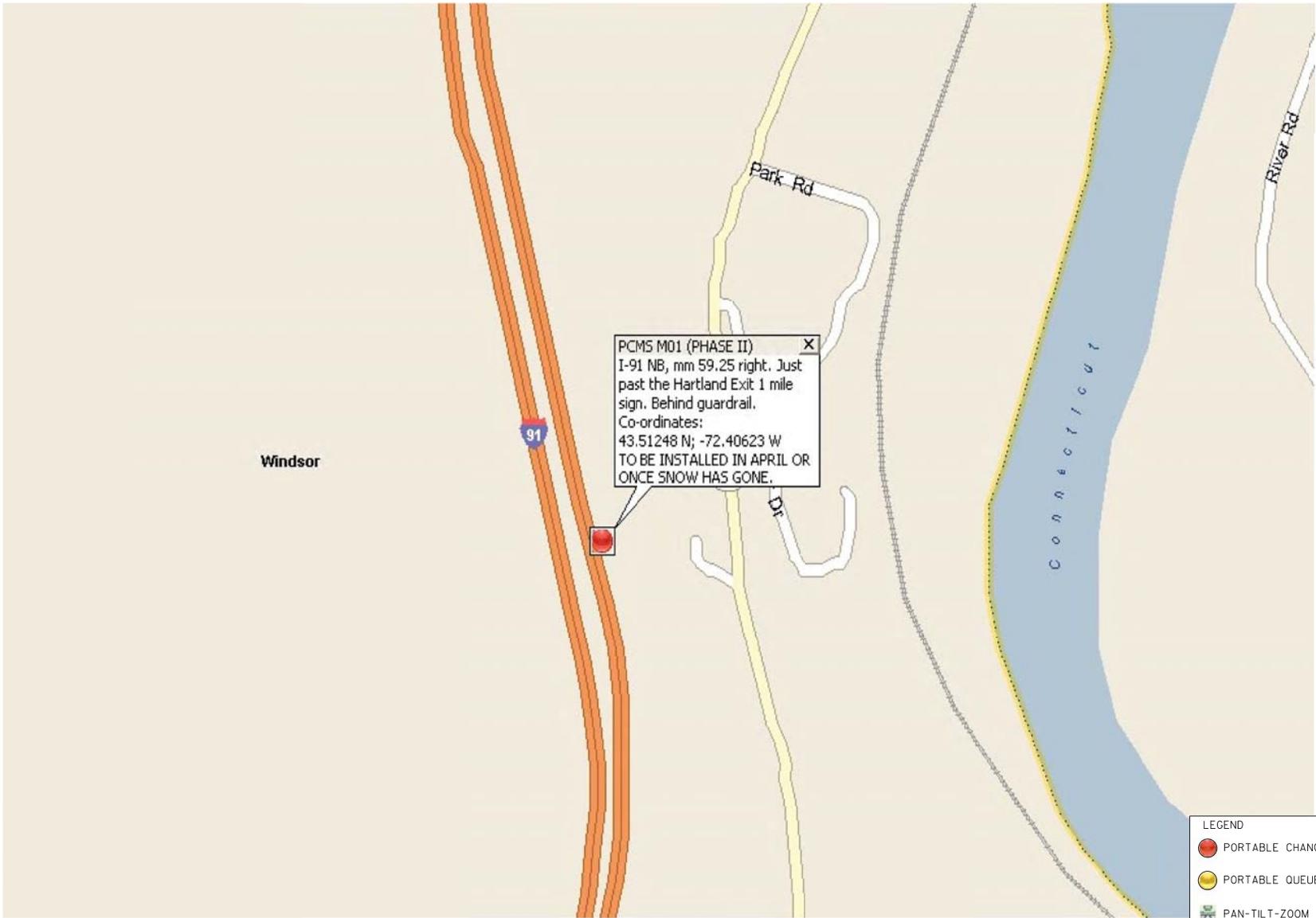


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SMART WORK ZONE MAP 3



PROJECT NAME:	HARTFORD	FILE NAME:	sl2a026_SW2_TCP.dgn	PLOT DATE:	03/02/15
PROJECT NUMBER:	IM 091-2(79)	PROJECT LEADER:	K. HIGGINS	DRAWN BY:	B. LYON
		DESIGNED BY:	S. DESCHAMPS	CHECKED BY:	S. SAWYER
			SMART WORK ZONE TCP	SHEET	8 OF ??



PCMS M01 (PHASE II) X
 I-91 NB, mm 59.25 right. Just past the Hartland Exit 1 mile sign. Behind guardrail.
 Co-ordinates:
 43.51248 N; -72.40623 W
 TO BE INSTALLED IN APRIL OR ONCE SNOW HAS GONE.

- LEGEND
- PORTABLE CHANGEABLE MESSAGE SIGN
 - PORTABLE QUEUE TRAILER
 - PAN-TILT-ZOOM CAMERA



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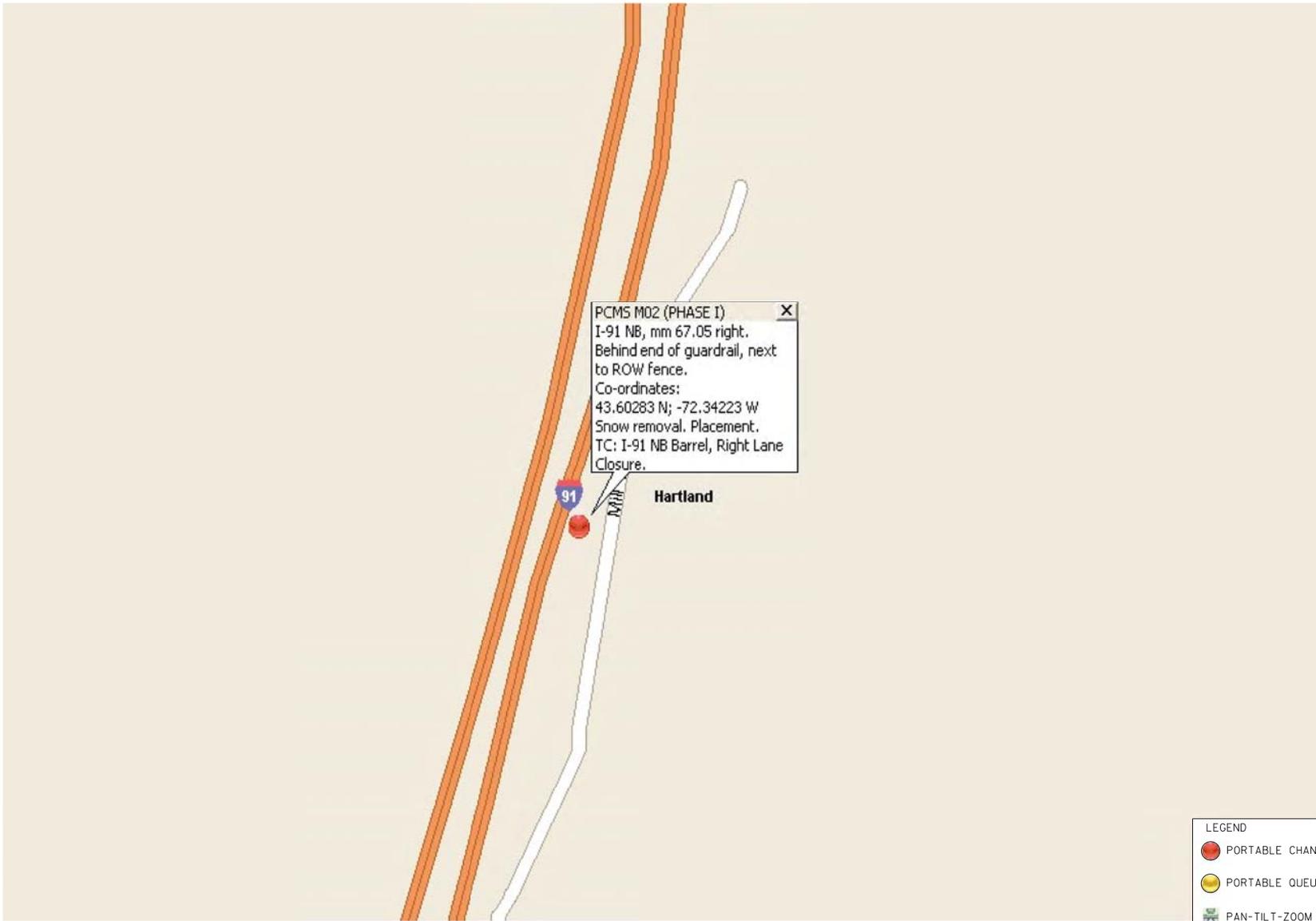
SMART WORK ZONE MAP 4



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)

FILE NAME: s12a026_SWZ_TCP.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: S. DESCHAMPS
 SMART WORK ZONE TCP

PLOT DATE: 03/02/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 9 OF ??



LEGEND	
	PORTABLE CHANGEABLE MESSAGE SIGN
	PORTABLE QUEUE TRAILER
	PAN-TILT-ZOOM CAMERA

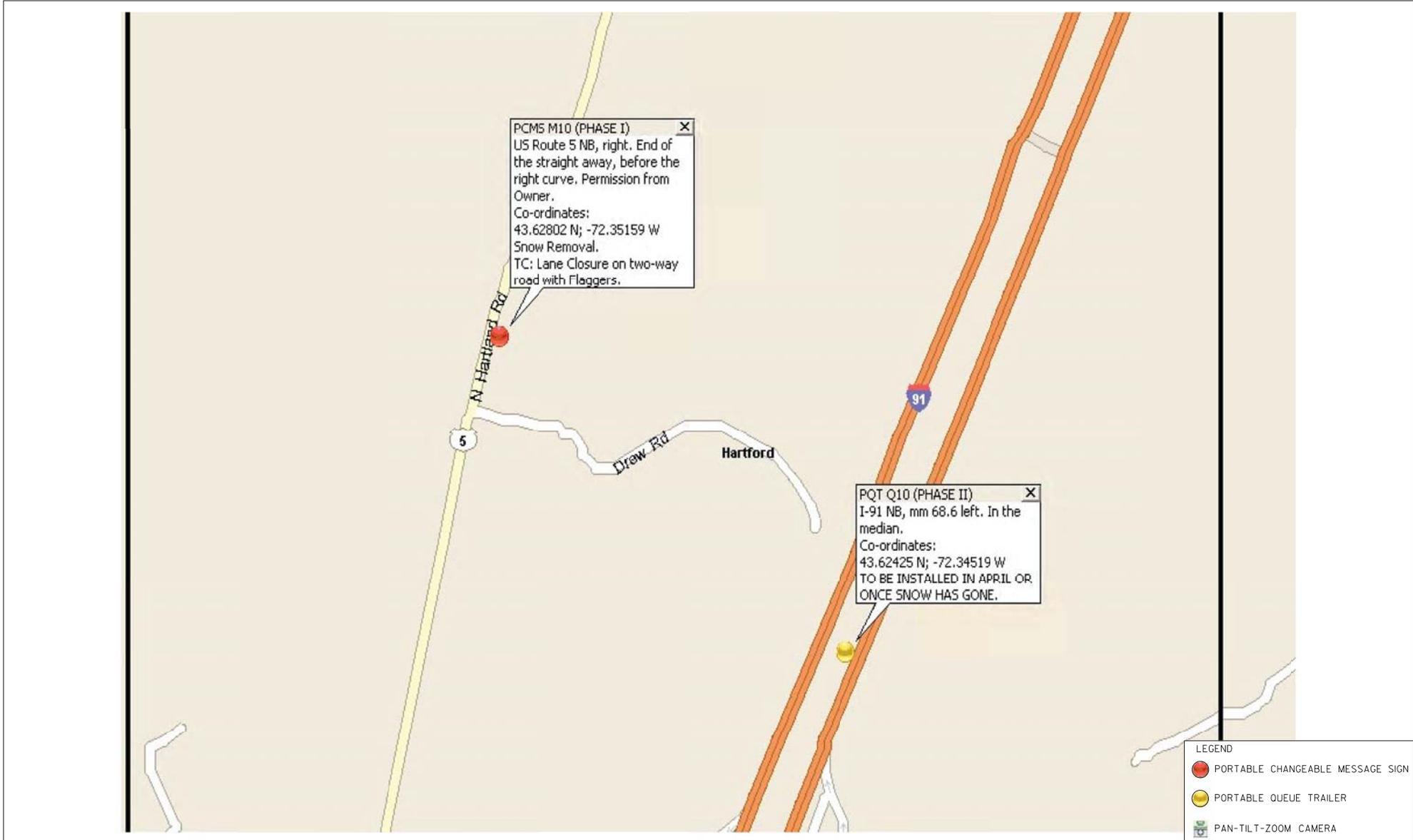


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 BY: KSI DATE: 3-4-2015

SMART WORK ZONE MAP 5



PROJECT NAME: HARTFORD	PLOT DATE: 03/02/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: si2a026_SWZ_TCP.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 10 OF ??
DESIGNED BY: S. DESCHAMPS	
SMART WORK ZONE TCP	



LEGEND

- PORTABLE CHANGEABLE MESSAGE SIGN
- PORTABLE QUEUE TRAILER
- PAN-TILT-ZOOM CAMERA

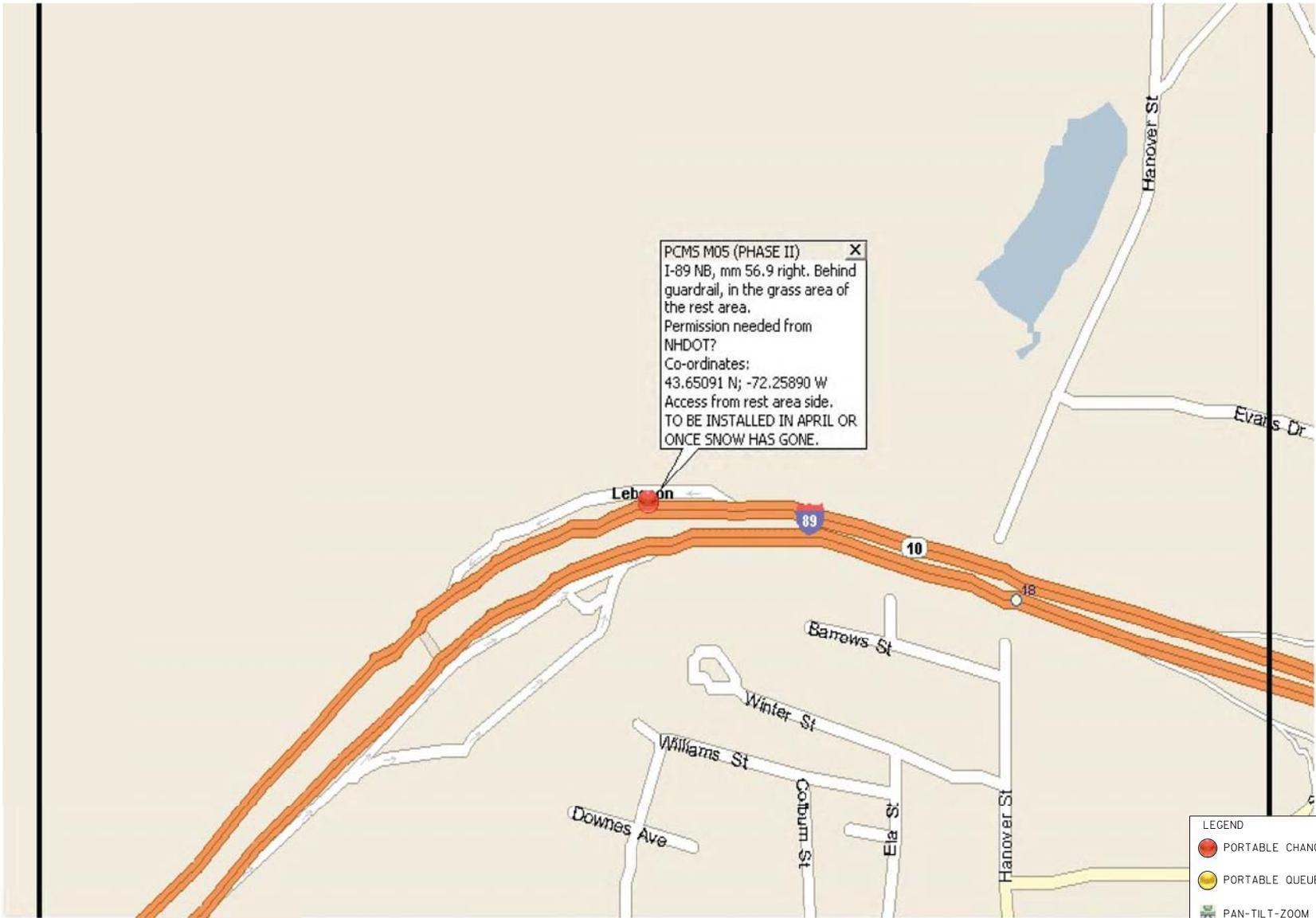


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 BY: NH DATE 3-4-2015

SMART WORK ZONE MAP 6



PROJECT NAME: HARTFORD	PLOT DATE: 03/02/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: si2o026_SWZ_TCP.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET II OF ??
DESIGNED BY: S. DESCHAMPS	
SMART WORK ZONE TCP	



PCMS M05 (PHASE II) X
 I-89 NB, mm 56.9 right. Behind guardrail, in the grass area of the rest area.
 Permission needed from NHDOT?
 Co-ordinates:
 43.65091 N; -72.25890 W
 Access from rest area side.
 TO BE INSTALLED IN APRIL OR ONCE SNOW HAS GONE.

- LEGEND
- PORTABLE CHANGEABLE MESSAGE SIGN
 - PORTABLE QUEUE TRAILER
 - PAN-TILT-ZOOM CAMERA

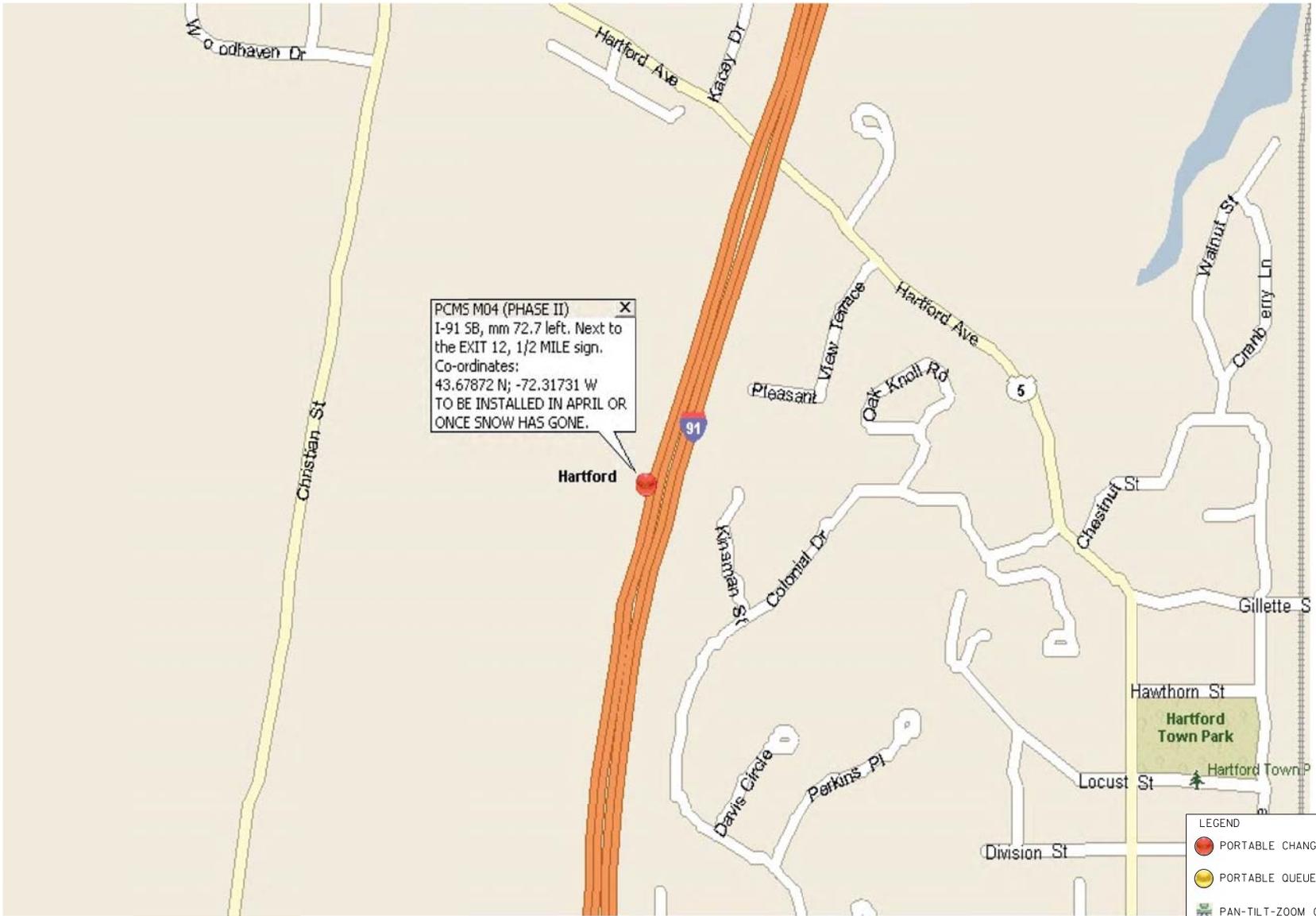


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SMART WORK ZONE MAP 7

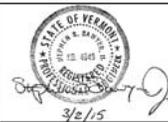


PROJECT NAME: HARTFORD	PLOT DATE: 03/02/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: si2a026_SWZ_TCP.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 12 OF ??
DESIGNED BY: S. DESCHAMPS	
SMART WORK ZONE TCP	



PCMS M04 (PHASE II) X
 I-91 SB, mm 72.7 left. Next to
 the EXIT 12, 1/2 MILE sign.
 Co-ordinates:
 43.67872 N; -72.31731 W
 TO BE INSTALLED IN APRIL OR
 ONCE SNOW HAS GONE.

- LEGEND
- PORTABLE CHANGEABLE MESSAGE SIGN
 - PORTABLE QUEUE TRAILER
 - PAN-TILT-ZOOM CAMERA



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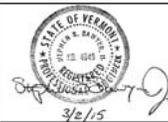
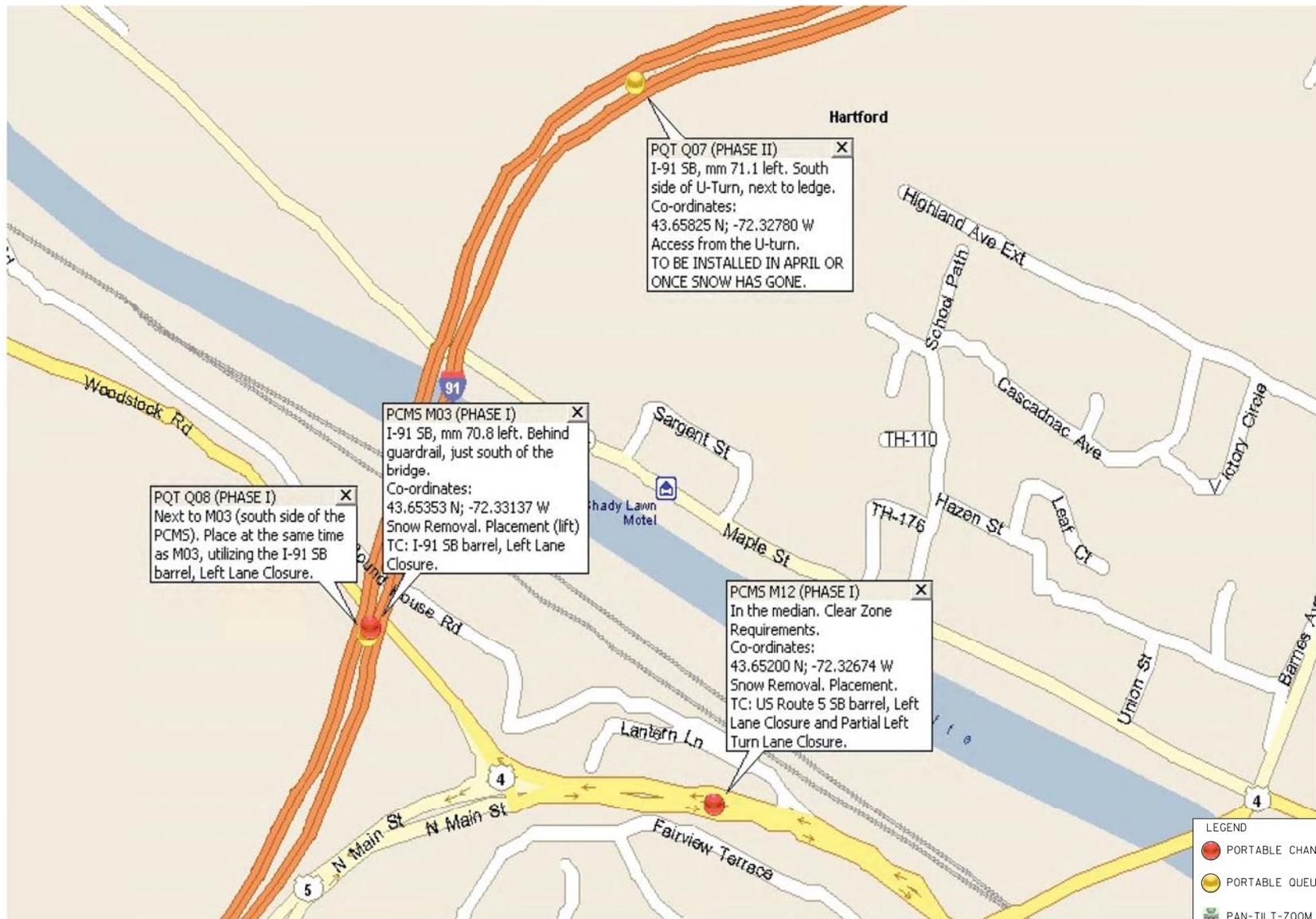
SMART WORK ZONE MAP 8



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)

FILE NAME: s12a026_SW2_TCP.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: S. DESCHAMPS
 SMART WORK ZONE TCP

PLOT DATE: 03/02/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 13 OF ??



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 BY: KH DATE: 3-4-2015

SMART WORK ZONE MAP 9



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: si2a026_SW2_TCP.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: S. DESCHAMPS
 SMART WORK ZONE TCP
 PLOT DATE: 03/02/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 14 OF ??

LEGEND

- (A) ROAD WORK AHEAD
W20-1
36"X36"
- (B) ROAD WORK 500 FT
W20-1
36"X36"
- (C) END ROAD WORK
G20-2
48"X24"
- (D)
W3-3
36"X36"
(SIGN TO BE COVERED UNTIL SIGNAL BECOMES OPERATIONAL)
- (E) SIDE ROAD WORK AHEAD
VC-869
48"X48"
- (F) WATCH FOR TURNING VEHICLES
VC-883
36"X36"
48"X48" (RAMP C AND B ONLY)



UTO TO BE LOCATED AT VETERAN'S DRIVE ON WEEKDAYS FROM 4:00 PM TO 5:00 PM FOR THE DURATION OF THE PROJECT

PROPOSED CONSTRUCTION ACCESS (TYP.)

LIMITS OF CONSTRUCTION

A UTO SHALL BE STATIONED AT THE INTERSECTION OF RAMP C AND ROUTE 5 DURING DAYLIGHT HOURS FOR THE DURATION OF THE PROJECT OR AS DIRECTED BY THE RESIDENT ENGINEER

NOTES:
 1. SIGNS SHALL BE POST MOUNTED PER VTRANS STANDARD DRAWING T-45, "SQUARE TUBE SIGN POST AND ANCHOR".
 2. FIELD ADJUSTMENTS TO THE LOCATIONS OF THE PROPOSED SIGNAGE SHALL BE MADE AS NECESSARY SO AS TO NOT INTERFERE WITH ANY EXISTING SIGNAGE.
 3. CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY.



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CONSTRUCTION APPROACH SIGNING PLAN I

SCALE 1" = 100' -0"
 100 0 100



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
SEBAGO
 TECHNICS
 FILE NAME: sl2a026_Const_Approach.dgn PLOT DATE: 03/04/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 OVERALL CONSTRUCTION APPROACH SIGNING SHEET 3 OF ??

LEGEND



W20-7
36"x36"

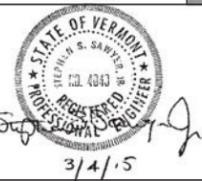


W21-5
36"x36"

NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 2, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE IS LIMITED TO WORK INVOLVING THE INSTALLATION OF THE SIGNAL CABINET, SIGNAL POLES AND ELECTRICAL SERVICE TO OCCUR OUTSIDE OF THE EXISTING ROADWAY. THIS SIGN PACKAGE SHALL ALSO COVER REMOVAL OF THIS EQUIPMENT AT THE END OF THE PROJECT.
3. A FLAGGER MAY BE NECESSARY FOR EACH ACTIVE SHOULDER CLOSURE BASED ON THE DISCRETION OF THE CONTRACTOR AND RESIDENT ENGINEER.
4. CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY.

5. STRAIN POLES SHALL BE INSTALLED OUTSIDE CLEAR ZONE
6. TRAFFIC SHIFTS SHALL BE DURING DAY LIGHT HOURS ONLY, AND SHALL BE IN ACCORDANCE WITH ALLOWABLE TRAFFIC DELAYS AS SPECIFIED IN THE SPECIAL PROVISIONS. ROADWAY WILL BE RETURNED TO ITS NORMAL CONFIGURATION AT THE END OF THE WORK DAY.
7. SHOULDER CLOSURES SHALL INCLUDE END TAPERS OF 100 FT AS GEOMETRY PERMITS.



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TRAFFIC SIGNAL INSTALLATION @ ROUTE 5 AND RAMP F PLAN I

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 09I-2(79)

FILE NAME: sl2a026_Shoulder Closure l.dgn PLOT DATE: 03/04/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 SIGNAL CONSTRUCTION SIGNING SHEET 15 OF ??

LEGEND



W20-7
36"X36"



W21-5
36"X36"



NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 2, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE IS LIMITED TO WORK INVOLVING THE INSTALLATION OF THE SIGNAL CABINET, SIGNAL POLES AND ELECTRICAL SERVICE TO OCCUR OUTSIDE OF THE EXISTING ROADWAY. THIS SIGN PACKAGE SHALL ALSO COVER REMOVAL OF THIS EQUIPMENT AT THE END OF THE PROJECT.
3. A FLAGGER MAY BE NECESSARY FOR EACH ACTIVE SHOULDER CLOSURE BASED ON THE DISCRETION OF THE CONTRACTOR AND RESIDENT ENGINEER.
4. CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY.

5. STRAIN POLES SHALL BE INSTALLED OUTSIDE CLEAR ZONE
6. TRAFFIC SHIFTS SHALL BE DURING DAY LIGHT HOURS ONLY, AND SHALL BE IN ACCORDANCE WITH ALLOWABLE TRAFFIC DELAYS AS SPECIFIED IN THE SPECIAL PROVISIONS. ROADWAY WILL BE RETURNED TO ITS NORMAL CONFIGURATION AT THE END OF THE WORK DAY.
7. SHOULDER CLOSURES SHALL INCLUDE END TAPERS OF 100 FT AS GEOMETRY PERMITS.



TRAFFIC SIGNAL INSTALLATION @ ROUTE 5 AND RAMP C PLAN I

SCALE 1" = 30'-0"
30 0 30

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PROJECT NAME: HARTFORD
PROJECT NUMBER: IM 091-2(79)

FILE NAME: sl2a026.Shoulder Closure 2.dgn PLOT DATE: 03/04/15
PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
SIGNAL CONSTRUCTION SIGNING SHEET 17 OF ??

LEGEND



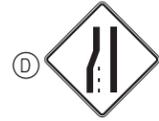
W20-7
36"X36"



W1-4R
36"X36"



W1-4L
36"X36"



W4-2L
36"X36"



W4-2R
36"X36"



W9-3L
36"X36"



W9-3R
36"X36"

NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 2, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE IS LIMITED TO AERIAL WORK PERTAINING TO THE SIGNAL INSTALLATION ON ROUTE 5. THIS SIGN PACKAGE SHALL ALSO COVER REMOVAL OF THIS SIGNAL EQUIPMENT AT THE END OF THE PROJECT.
3. THE TAPER AND SIGNAGE SHALL BE REVERSED FOR THE EASTBOUND AND WESTBOUND APPROACHES WHEN NECESSARY.
4. A UNIFORMED TRAFFIC OFFICER SHALL BE PRESENT FOR EACH ACTIVE LANE CLOSURE.
5. CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY.

6. STRAIN POLES SHALL BE INSTALLED OUTSIDE CLEAR ZONE
7. TRAFFIC SHIFTS SHALL BE DURING DAY LIGHT HOURS ONLY, AND SHALL BE IN ACCORDANCE WITH ALLOWABLE TRAFFIC DELAYS AS SPECIFIED IN THE SPECIAL PROVISIONS. ROADWAY WILL BE RETURNED TO ITS NORMAL CONFIGURATION AT THE END OF THE WORK DAY.
8. SHOULDER CLOSURES SHALL INCLUDE END TAPERS OF 100 FT AS GEOMETRY PERMITS.



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TRAFFIC SIGNAL INSTALLATION @ ROUTE 5 AND RAMP F PLAN 2

SCALE 1" = 50'-0"
 50 0 50

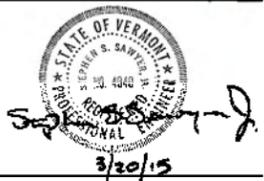


PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
 FILE NAME: sl2a026_Lane Closure 2.dgn PLOT DATE: 03/04/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 SIGNAL CONSTRUCTION SIGNING SHEET 18 OF ??



NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE (SHEET 19) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.7: TEMPORARY STRIPING, US 5, EAST OF RAMP D, RIGHT LANE.
 - ITEM 2.8: TEMPORARY STRIPING, US 5, EAST OF RAMP D, LEFT LANE.
 - ITEM 2.9: OVERHEAD SIGN REMOVAL / SIGN REINSTALLATION, US 5, EAST OF RAMP D
3. TRAFFIC CONTROL FOR THIS PHASE SHALL FOLLOW THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, FIGURE 6H-17, MOBILE OPERATIONS ON A TWO-LANE ROAD (TA-17). A UTO MAY BE USED IN PLACE OF A SHADOW VEHICLE WITH A TRUCK MOUNTED ATTENUATOR.



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ROUTE 5 STRIPING EAST OF RAMP "D"

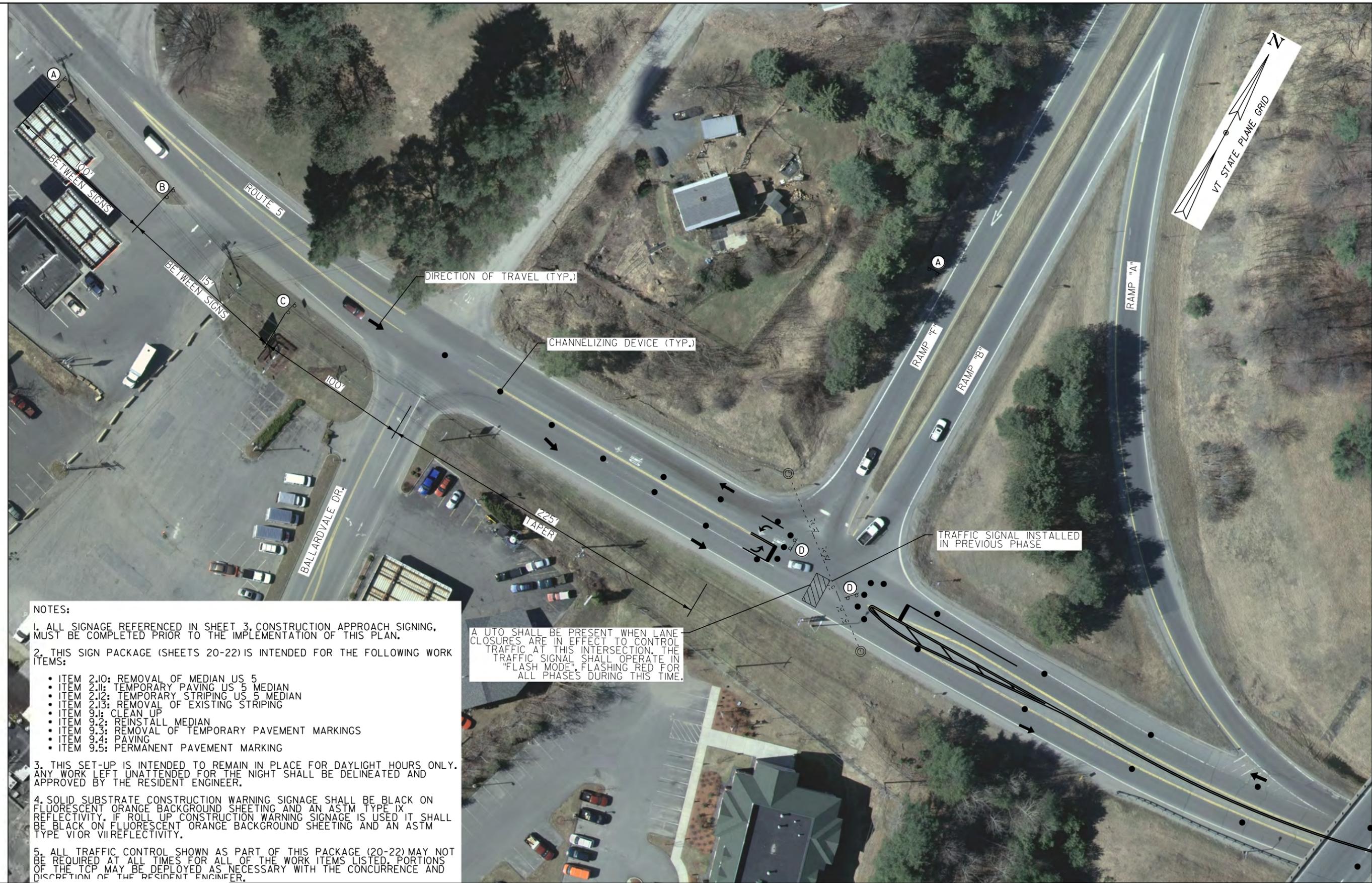
SCALE 1" = 30'-0"
 30 0 30



PROJECT NAME: HARTFORD	PLOT DATE: 03/20/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026.Striping E of D.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 19 OF ??
DESIGNED BY: B. LYON	
ROUTE 5 STRIPING EAST OF RAMP "D"	

LEGEND

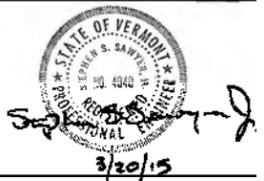
- (A)  W20-7
36"X36"
- (B)  LEFT LANE
CLOSED
AHEAD
W9-3L
36"X36"
- (C)  W1-4R
36"X36"
- (D)  R4-7
36"X48"



NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE (SHEETS 20-22) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.10: REMOVAL OF MEDIAN US 5
 - ITEM 2.11: TEMPORARY PAVING US 5 MEDIAN
 - ITEM 2.12: TEMPORARY STRIPING US 5 MEDIAN
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 9.1: CLEAN UP
 - ITEM 9.2: REINSTALL MEDIAN
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
3. THIS SET-UP IS INTENDED TO REMAIN IN PLACE FOR DAYLIGHT HOURS ONLY. ANY WORK LEFT UNATTENDED FOR THE NIGHT SHALL BE DELINEATED AND APPROVED BY THE RESIDENT ENGINEER.
4. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.
5. ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (20-22) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.

A UTO SHALL BE PRESENT WHEN LANE CLOSURES ARE IN EFFECT TO CONTROL TRAFFIC AT THIS INTERSECTION. THE TRAFFIC SIGNAL SHALL OPERATE IN "FLASH MODE", FLASHING RED FOR ALL PHASES DURING THIS TIME.



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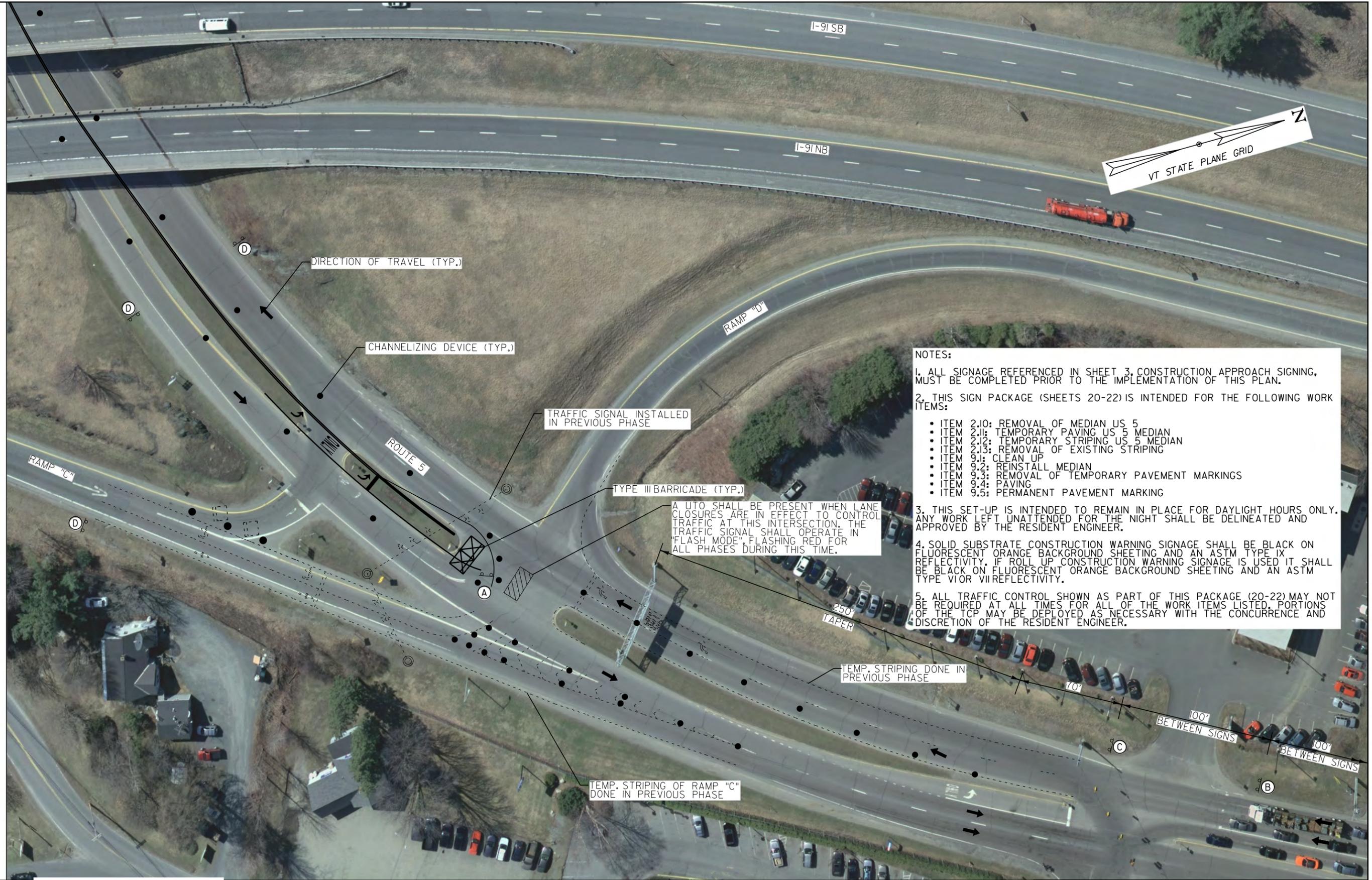
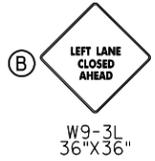
ROUTE 5 MEDIAN CLOSURE

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: sl2a026_Median / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 MEDIAN CLOSURE SHEET 20 OF ??

LEGEND



NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE (SHEETS 20-22) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.10: REMOVAL OF MEDIAN US 5
 - ITEM 2.11: TEMPORARY PAVING US 5 MEDIAN
 - ITEM 2.12: TEMPORARY STRIPING US 5 MEDIAN
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 9.1: CLEAN UP
 - ITEM 9.2: REINSTALL MEDIAN
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
3. THIS SET-UP IS INTENDED TO REMAIN IN PLACE FOR DAYLIGHT HOURS ONLY. ANY WORK LEFT UNATTENDED FOR THE NIGHT SHALL BE DELINEATED AND APPROVED BY THE RESIDENT ENGINEER.
4. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.
5. ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (20-22) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.



Vermont Agency of Transportation
RECEIVED
 CK'D BY NA/CB/JS OK'D BY AG
 March 20, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

ROUTE 5 MEDIAN CLOSURE

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
 FILE NAME: sl2a026_Median / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 MEDIAN CLOSURE SHEET 21 OF ??

LEGEND

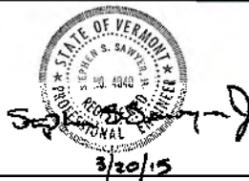


W20-7
36"X36"



NOTES:

1. ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
2. THIS SIGN PACKAGE (SHEETS 20-22) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.10: REMOVAL OF MEDIAN US 5
 - ITEM 2.11: TEMPORARY PAVING US 5 MEDIAN
 - ITEM 2.12: TEMPORARY STRIPING US 5 MEDIAN
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 9.1: CLEAN UP
 - ITEM 9.2: REINSTALL MEDIAN
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
3. THIS SET-UP IS INTENDED TO REMAIN IN PLACE FOR DAYLIGHT HOURS ONLY. ANY WORK LEFT UNATTENDED FOR THE NIGHT SHALL BE DELINEATED AND APPROVED BY THE RESIDENT ENGINEER.
4. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.
5. ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (20-22) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.



Vermont Agency of Transportation
RECEIVED
 CK'D BY NACB/JS OK'D BY AG
 March 20, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

ROUTE 5 MEDIAN CLOSURE

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_Median / Striping.dgn	PLOT DATE: 03/20/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	ROUTE 5 MEDIAN CLOSURE	SHEET 22 OF ??

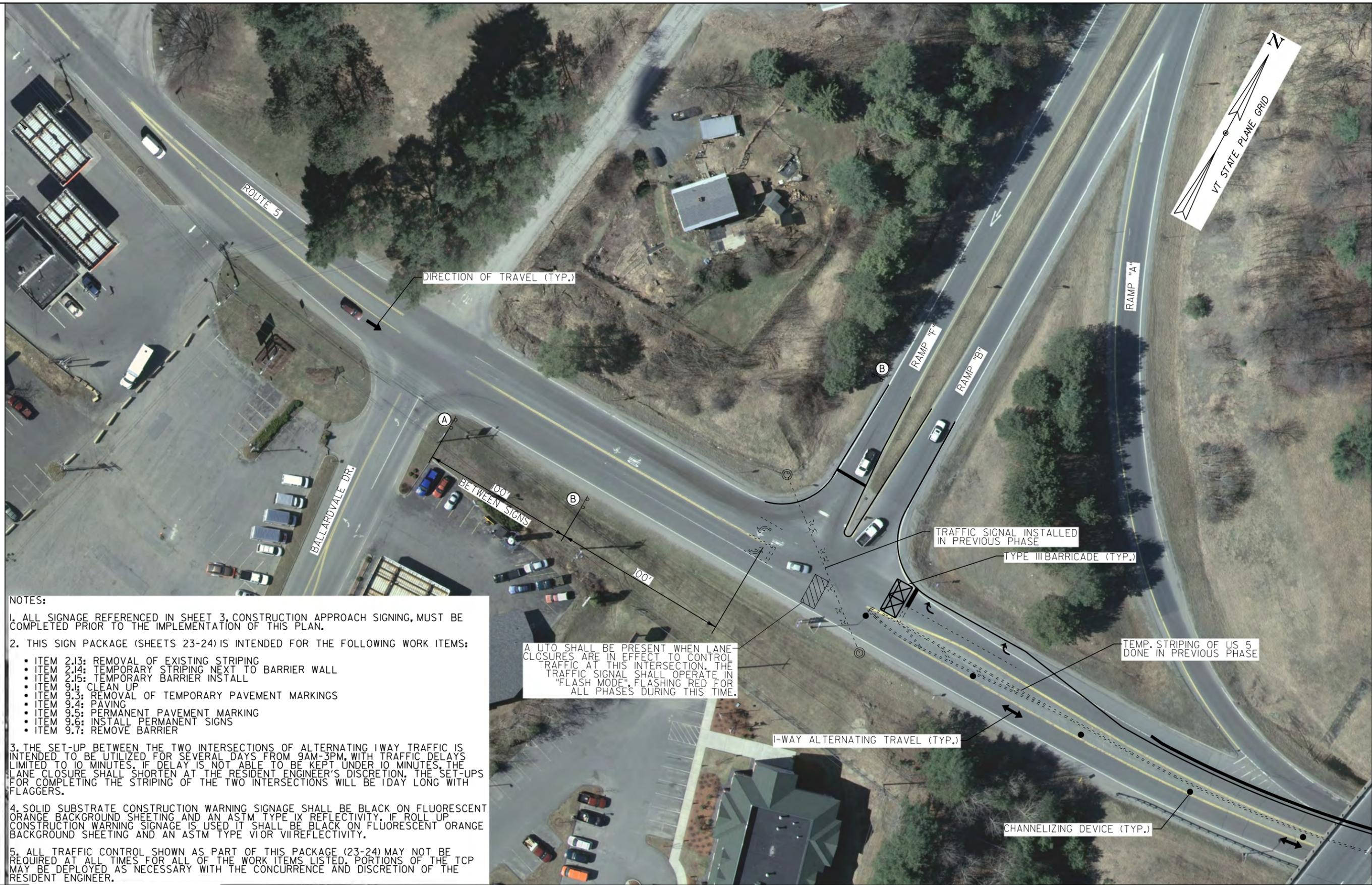
LEGEND



W20-4
36"X36"



W20-7
36"X36"



NOTES:

- ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
- THIS SIGN PACKAGE (SHEETS 23-24) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 2.14: TEMPORARY STRIPING NEXT TO BARRIER WALL
 - ITEM 2.15: TEMPORARY BARRIER INSTALL
 - ITEM 9.1: CLEAN UP
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
 - ITEM 9.6: INSTALL PERMANENT SIGNS
 - ITEM 9.7: REMOVE BARRIER
- THE SET-UP BETWEEN THE TWO INTERSECTIONS OF ALTERNATING I-WAY TRAFFIC IS INTENDED TO BE UTILIZED FOR SEVERAL DAYS FROM 9AM-3PM, WITH TRAFFIC DELAYS LIMITED TO 10 MINUTES. IF DELAY IS NOT ABLE TO BE KEPT UNDER 10 MINUTES, THE LANE CLOSURE SHALL SHORTEN AT THE RESIDENT ENGINEER'S DISCRETION. THE SET-UPS FOR COMPLETING THE STRIPING OF THE TWO INTERSECTIONS WILL BE 1 DAY LONG WITH FLAGGERS.
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.
- ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (23-24) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.



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 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

ROUTE 5 WESTBOUND LANE CLOSURE (ALTERNATING I WAY)

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
SEBAGO
 TECHNICS
 FILE NAME: sl2a026_Barrier / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 WB LANE CLOSURE SHEET 23 OF ??

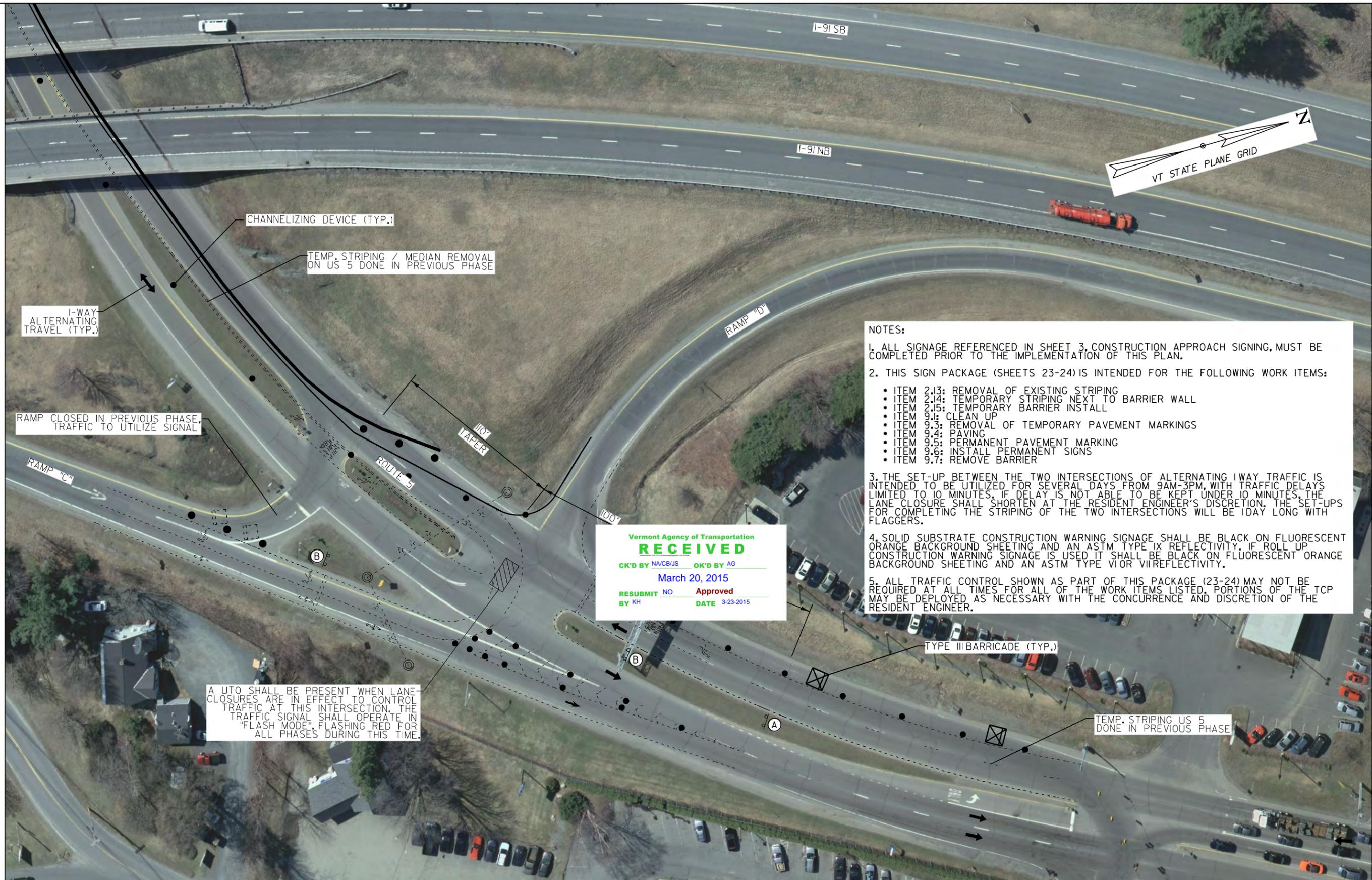
LEGEND



W20-4
36"X36"



W20-7
36"X36"



NOTES:

- ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
- THIS SIGN PACKAGE (SHEETS 23-24) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 2.14: TEMPORARY STRIPING NEXT TO BARRIER WALL
 - ITEM 2.15: TEMPORARY BARRIER INSTALL
 - ITEM 9.1: CLEAN UP
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
 - ITEM 9.6: INSTALL PERMANENT SIGNS
 - ITEM 9.7: REMOVE BARRIER
- THE SET-UP BETWEEN THE TWO INTERSECTIONS OF ALTERNATING IWAY TRAFFIC IS INTENDED TO BE UTILIZED FOR SEVERAL DAYS FROM 9AM-3PM, WITH TRAFFIC DELAYS LIMITED TO 10 MINUTES. IF DELAY IS NOT ABLE TO BE KEPT UNDER 10 MINUTES, THE LANE CLOSURE SHALL SHORTEN AT THE RESIDENT ENGINEER'S DISCRETION. THE SET-UPS FOR COMPLETING THE STRIPING OF THE TWO INTERSECTIONS WILL BE 1 DAY LONG WITH FLAGGERS.
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VIREFLECTIVITY.
- ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (23-24) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.

Vermont Agency of Transportation
RECEIVED
 CK'D BY NAVCBJS OK'D BY AG
 March 20, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

A UTO SHALL BE PRESENT WHEN LANE CLOSURES ARE IN EFFECT TO CONTROL TRAFFIC AT THIS INTERSECTION. THE TRAFFIC SIGNAL SHALL OPERATE IN "FLASH MODE", FLASHING RED FOR ALL PHASES DURING THIS TIME.

3/20/15

ROUTE 5 WESTBOUND LANE CLOSURE (ALTERNATING I WAY)

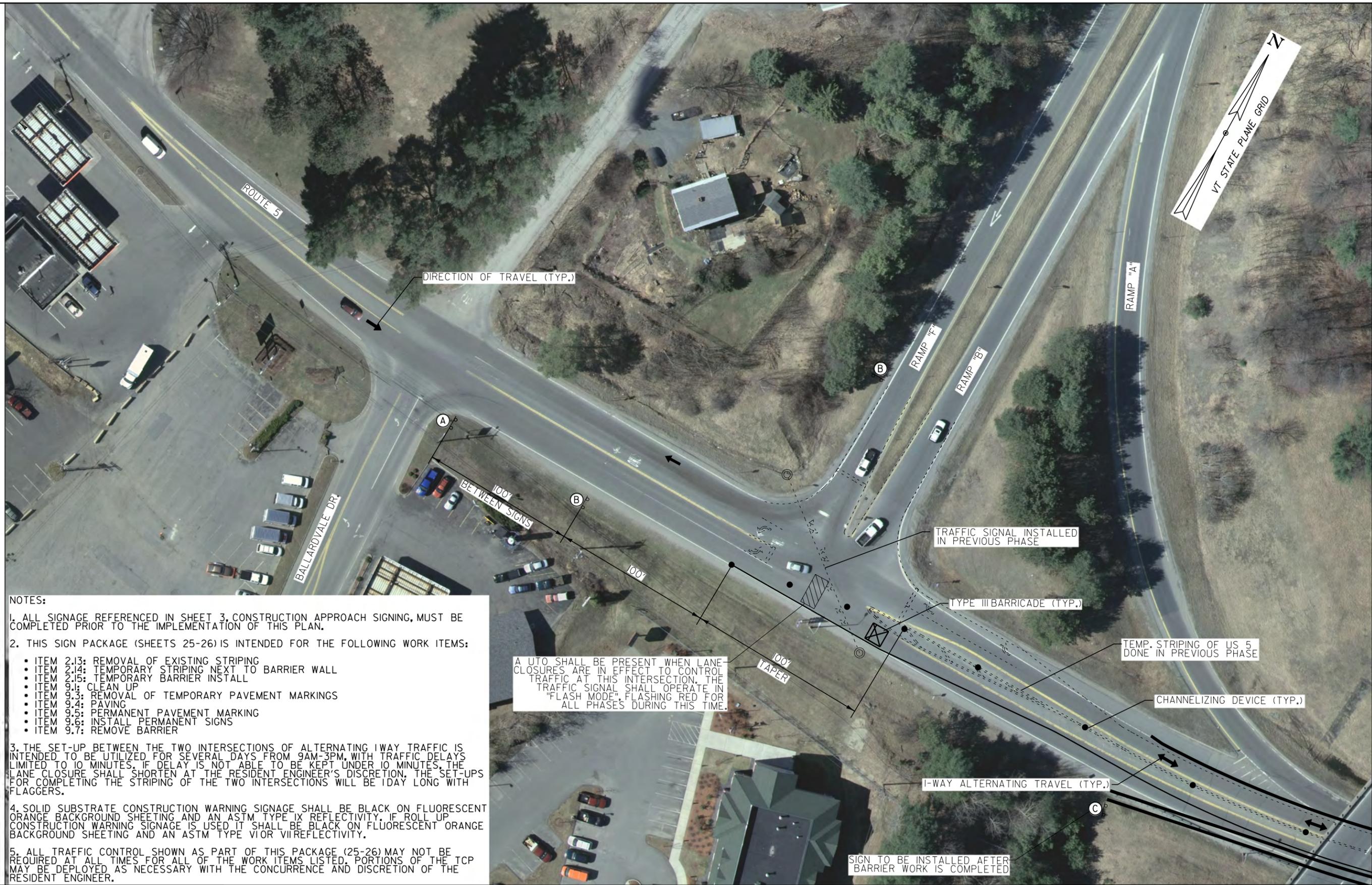
SCALE 1" = 30' - 0"
 30 0 30

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: sl2a026_Barrier / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 WB LANE CLOSURE SHEET 24 OF ??

LEGEND

- (A)  ONE LANE ROAD AHEAD
W20-4
36"X36"
- (B)  W20-7
36"X36"
- (C)  **DETOUR**
M4-9B
30"X24"



NOTES:

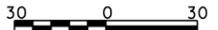
- ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
- THIS SIGN PACKAGE (SHEETS 25-26) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 2.14: TEMPORARY STRIPING NEXT TO BARRIER WALL
 - ITEM 2.15: TEMPORARY BARRIER INSTALL
 - ITEM 9.1: CLEAN UP
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
 - ITEM 9.6: INSTALL PERMANENT SIGNS
 - ITEM 9.7: REMOVE BARRIER
- THE SET-UP BETWEEN THE TWO INTERSECTIONS OF ALTERNATING IWAY TRAFFIC IS INTENDED TO BE UTILIZED FOR SEVERAL DAYS FROM 9AM-3PM, WITH TRAFFIC DELAYS LIMITED TO 10 MINUTES. IF DELAY IS NOT ABLE TO BE KEPT UNDER 10 MINUTES, THE LANE CLOSURE SHALL SHORTEN AT THE RESIDENT ENGINEER'S DISCRETION. THE SET-UPS FOR COMPLETING THE STRIPING OF THE TWO INTERSECTIONS WILL BE 1 DAY LONG WITH FLAGGERS.
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VIOR REFLECTIVITY.
- ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (25-26) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.

A UTO SHALL BE PRESENT WHEN LANE CLOSURES ARE IN EFFECT TO CONTROL TRAFFIC AT THIS INTERSECTION. THE TRAFFIC SIGNAL SHALL OPERATE IN "FLASH MODE", FLASHING RED FOR ALL PHASES DURING THIS TIME.



Vermont Agency of Transportation
RECEIVED
 CK'D BY NA/CB/JS OK'D BY AG
 March 20, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

ROUTE 5 EASTBOUND LANE CLOSURE (ALTERNATING I WAY)

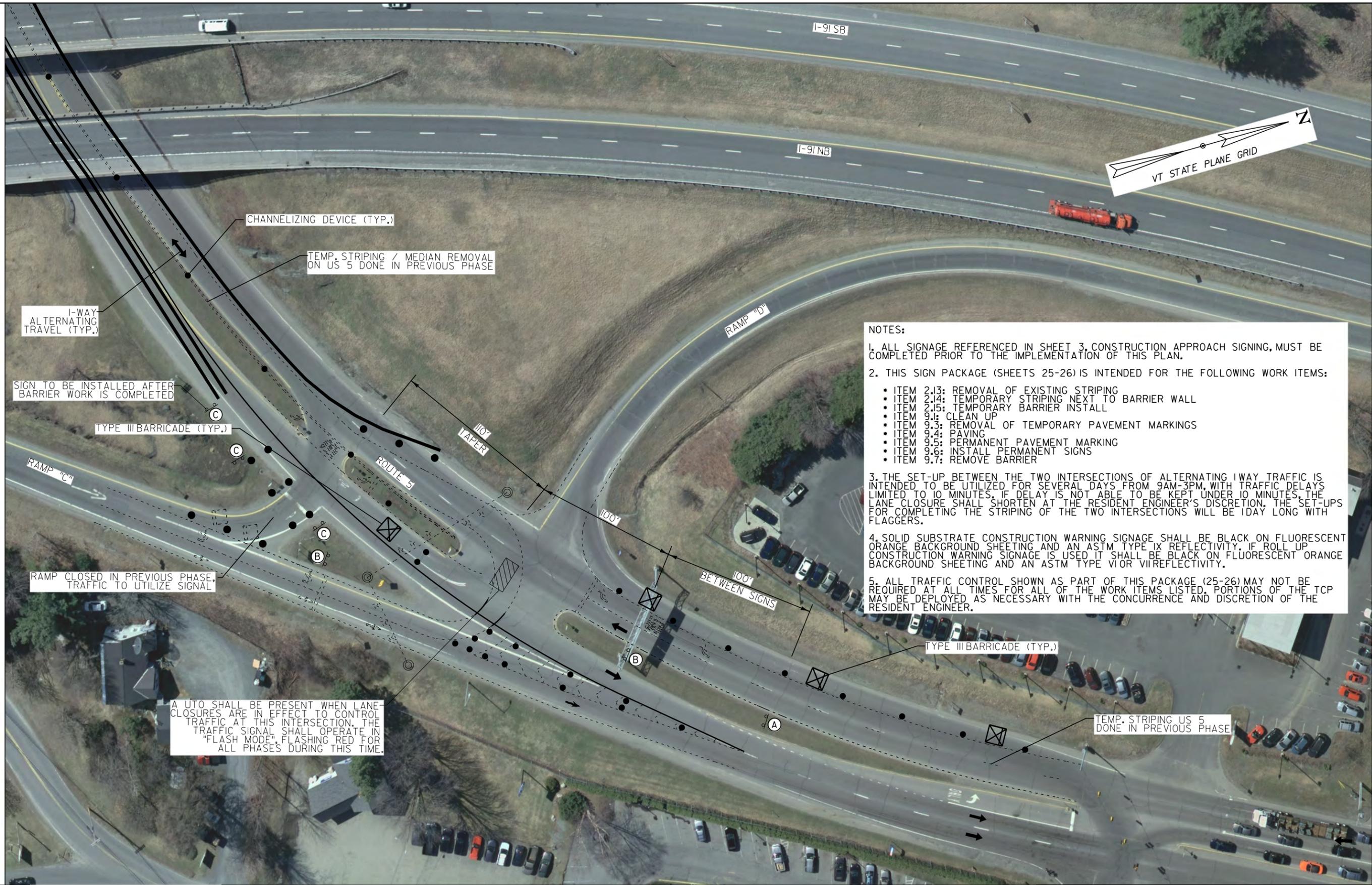
SCALE 1" = 30' - 0"




PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
SEBAGO
 TECHNICS
 FILE NAME: sl2a026.Barrier / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 EB LANE CLOSURE SHEET 25 OF ??

LEGEND

- (A)  ONE LANE ROAD AHEAD
W20-4
36"X36"
- (B)  W20-7
36"X36"
- (C)  **DETOUR**
M4-9B
30"X24"



NOTES:

- ALL SIGNAGE REFERENCED IN SHEET 3, CONSTRUCTION APPROACH SIGNING, MUST BE COMPLETED PRIOR TO THE IMPLEMENTATION OF THIS PLAN.
- THIS SIGN PACKAGE (SHEETS 25-26) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 2.13: REMOVAL OF EXISTING STRIPING
 - ITEM 2.14: TEMPORARY STRIPING NEXT TO BARRIER WALL
 - ITEM 2.15: TEMPORARY BARRIER INSTALL
 - ITEM 9.1: CLEAN UP
 - ITEM 9.3: REMOVAL OF TEMPORARY PAVEMENT MARKINGS
 - ITEM 9.4: PAVING
 - ITEM 9.5: PERMANENT PAVEMENT MARKING
 - ITEM 9.6: INSTALL PERMANENT SIGNS
 - ITEM 9.7: REMOVE BARRIER
- THE SET-UP BETWEEN THE TWO INTERSECTIONS OF ALTERNATING IWAY TRAFFIC IS INTENDED TO BE UTILIZED FOR SEVERAL DAYS FROM 9AM-3PM, WITH TRAFFIC DELAYS LIMITED TO 10 MINUTES. IF DELAY IS NOT ABLE TO BE KEPT UNDER 10 MINUTES, THE LANE CLOSURE SHALL SHORTEN AT THE RESIDENT ENGINEER'S DISCRETION. THE SET-UPS FOR COMPLETING THE STRIPING OF THE TWO INTERSECTIONS WILL BE 1 DAY LONG WITH FLAGGERS.
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VIREFLECTIVITY.
- ALL TRAFFIC CONTROL SHOWN AS PART OF THIS PACKAGE (25-26) MAY NOT BE REQUIRED AT ALL TIMES FOR ALL OF THE WORK ITEMS LISTED. PORTIONS OF THE TCP MAY BE DEPLOYED AS NECESSARY WITH THE CONCURRENCE AND DISCRETION OF THE RESIDENT ENGINEER.

SIGN TO BE INSTALLED AFTER BARRIER WORK IS COMPLETED

RAMP CLOSED IN PREVIOUS PHASE, TRAFFIC TO UTILIZE SIGNAL

A UTO SHALL BE PRESENT WHEN LANE CLOSURES ARE IN EFFECT TO CONTROL TRAFFIC AT THIS INTERSECTION. THE TRAFFIC SIGNAL SHALL OPERATE IN "FLASH MODE", FLASHING RED FOR ALL PHASES DURING THIS TIME.



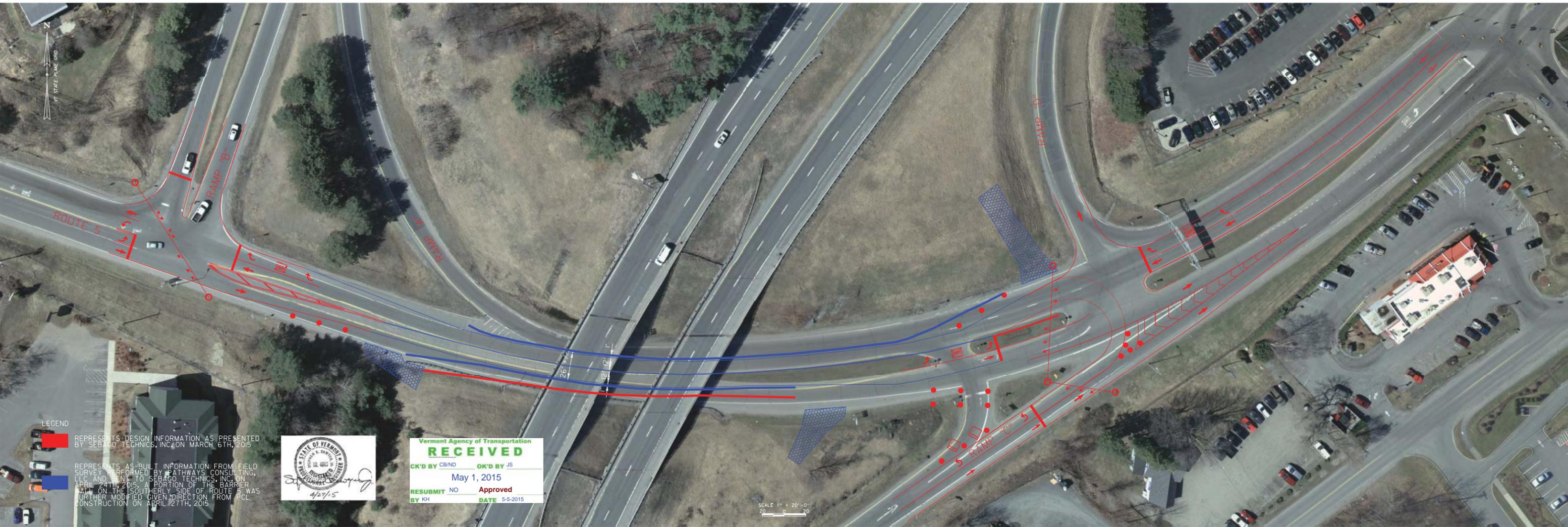
Vermont Agency of Transportation
RECEIVED
 CK'D BY NAVCBJS OK'D BY AG
 March 20, 2015
 RESUBMIT NO Approved
 BY KH DATE 3-23-2015

ROUTE 5 EASTBOUND LANE CLOSURE (ALTERNATING I WAY)

SCALE 1" = 30' - 0"
 30 0 30



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
SEBAGO
 TECHNICS
 FILE NAME: sl2a026_Barrier / Striping.dgn PLOT DATE: 03/20/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 ROUTE 5 EB LANE CLOSURE SHEET 26 OF ??



LEGEND

REPRESENTS DESIGN INFORMATION AS PRESENTED BY SEBAGO TECHNICS, INC. ON MARCH 6TH, 2015

REPRESENTS AS-BUILT INFORMATION FROM FIELD SURVEY PERFORMED BY PATHWAYS CONSULTING, LLC AND SENT TO SEBAGO TECHNICS, INC. ON APRIL 24TH, 2015. A PORTION OF THE BARRIER WALL ON THE SOUTHERLY SIDE OF ROUTE 5 WAS FURTHER MODIFIED GIVEN DIRECTION FROM PCL CONSTRUCTION ON APRIL 27TH, 2015.

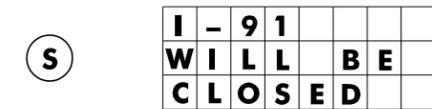
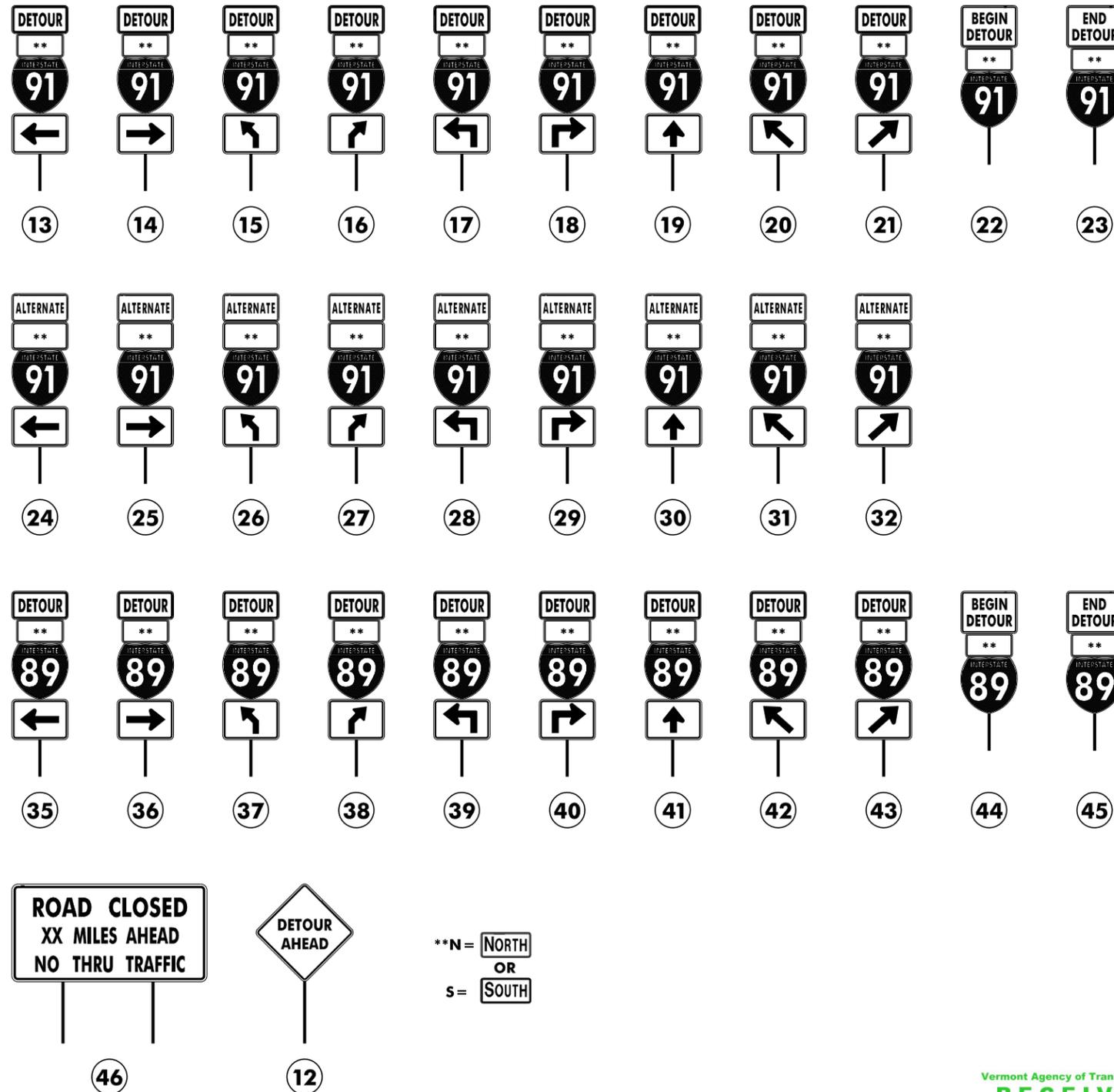


Vermont Agency of Transportation
RECEIVED
 CK'D BY CB/ND OK'D BY JS
 May 1, 2015
 RESUBMIT NO Approved
 BY KH DATE 5-5-2015

SCALE 1" = 20'-0"
 20 0 20

NOTES:

1. THE PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE FULLY OPERATIONAL A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSURE OF I-91 OR US-5 AS APPLICABLE.
2. DURING ACTUAL CLOSURE, ELIMINATE PHASE 3 AND REMOVE "WILL BE" FROM PHASE 1.
3. DETOUR SIGNS SHALL BE LOCATED ADJACENT TO EXISTING INTERSECTION ROUTE MARKER ASSEMBLIES WHERE APPLICABLE.
4. CONFIRMATION ROUTE MARKERS SHALL BE INSTALLED IMMEDIATELY FOLLOWING EACH TURN AND AT ALL LOCATIONS ALONG DETOUR WHERE ROUTE MARKERS EXIST FOR THE PARENT ROUTE.
5. DETOUR SIGNING IS THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT FOR ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR IMPLEMENTING THE DETOUR, INCLUDING BUT NOT LIMITED TO SIGNS, BARRICADES AND MESSAGE BOARDS, WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645 SPECIAL PROVISION TRAFFIC CONTROL, ALL - INCLUSIVE.



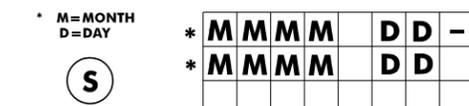
PORTABLE CHANGEABLE SIGN - PHASE 1



PORTABLE CHANGEABLE SIGN - PHASE 2 SB



PORTABLE CHANGEABLE SIGN - PHASE 2 NB



PORTABLE CHANGEABLE SIGN - PHASE 3

Vermont Agency of Transportation
RECEIVED
CK'D BY NA/AG/CB OK'D BY JS
April 1, 2015
RESUBMIT NO Approved
BY KH DATE 4-2-2015



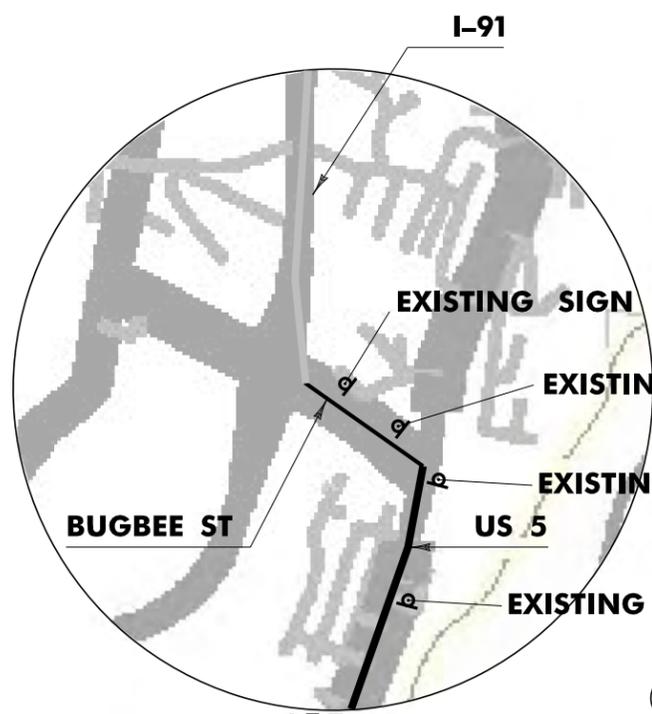
PROJECT NAME: HARTFORD
PROJECT NUMBER: IM 091-2(79)

PREPARED BY:
SEBAGO
TECHNICS

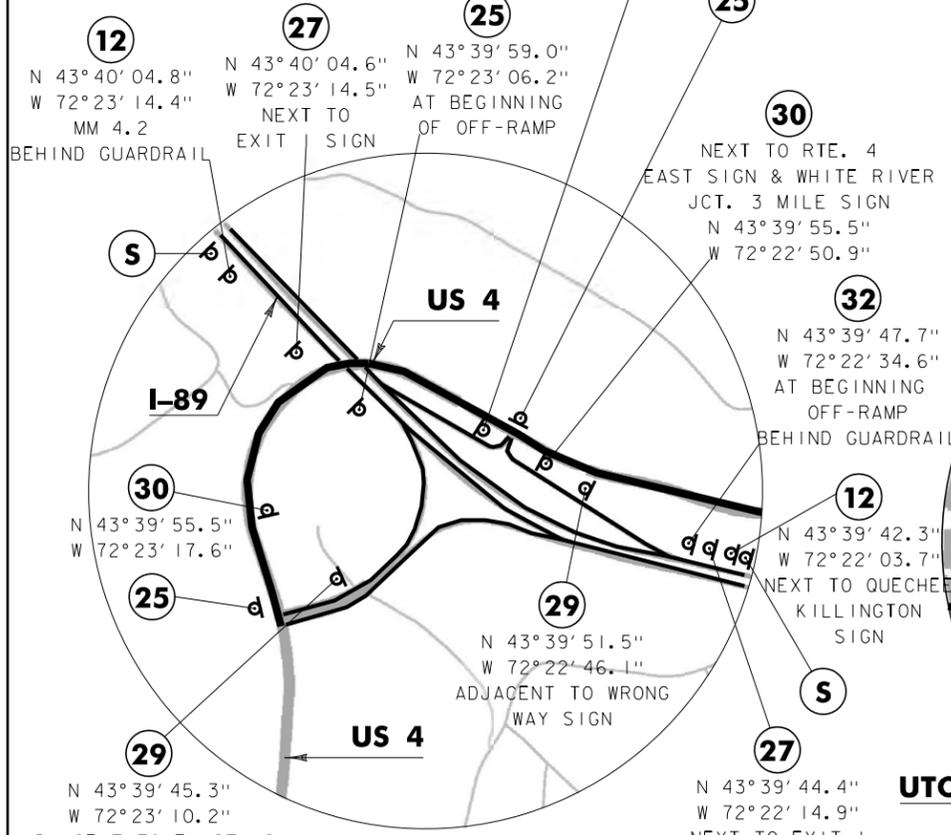
FILE NAME: sl2a026detour.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: B. LYON
DETOUR SIGN LEGEND

PLOT DATE: 03/31/15
DRAWN BY: B. LYON
CHECKED BY: S. SAWYER
SHEET 27 OF ??

DETOUR SIGN LEGEND
NOT TO SCALE



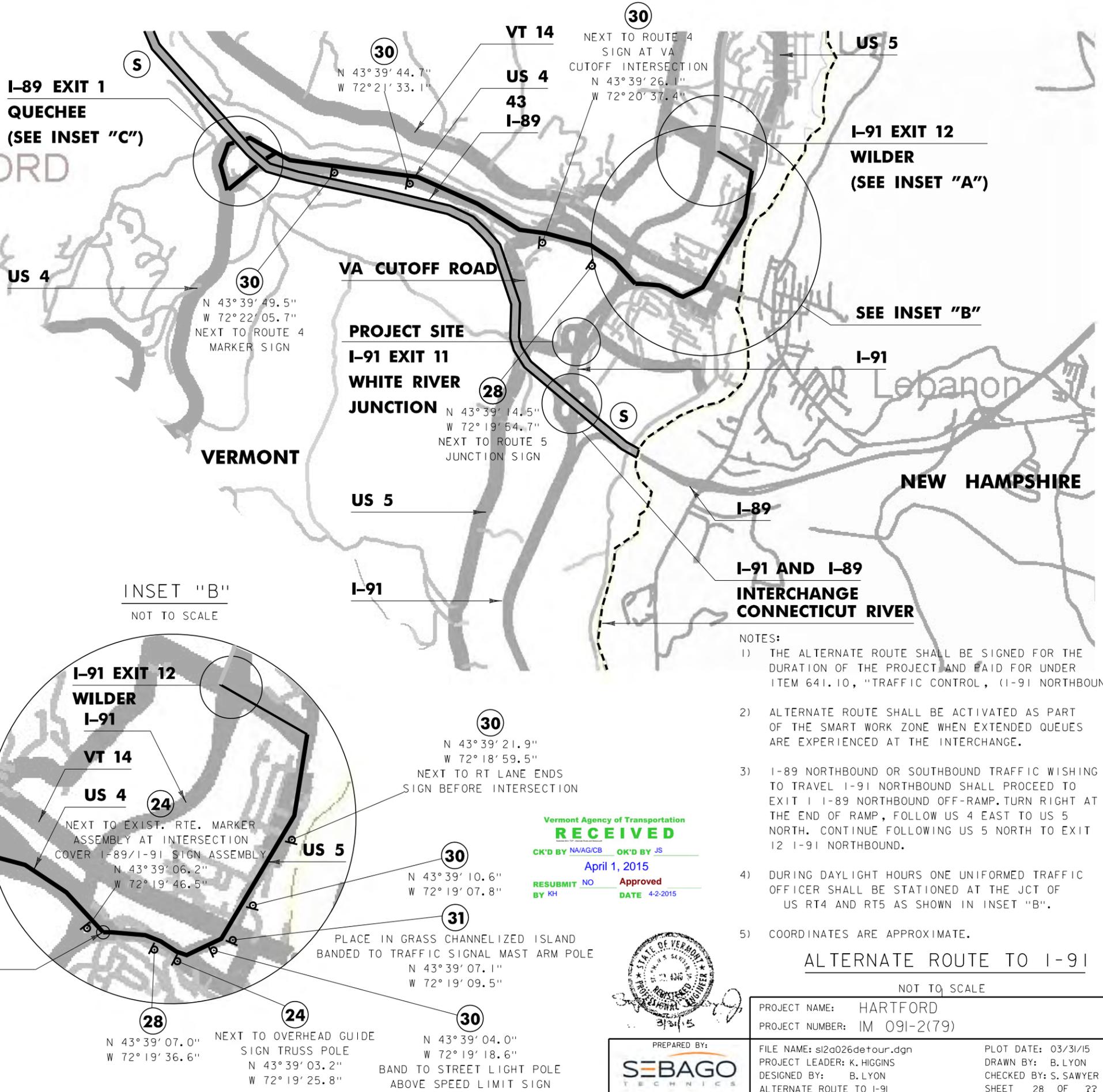
INSET "A"
I-91 EXIT 12
WILDER
NOT TO SCALE



INSET "B"
NOT TO SCALE



INSET "C"
I-89 EXIT 1
QUECHEE
NOT TO SCALE



- NOTES:**
- 1) THE ALTERNATE ROUTE SHALL BE SIGNED FOR THE DURATION OF THE PROJECT AND PAID FOR UNDER ITEM 641.10, "TRAFFIC CONTROL, (I-91 NORTHBOUND).
 - 2) ALTERNATE ROUTE SHALL BE ACTIVATED AS PART OF THE SMART WORK ZONE WHEN EXTENDED QUEUES ARE EXPERIENCED AT THE INTERCHANGE.
 - 3) I-89 NORTHBOUND OR SOUTHBOUND TRAFFIC WISHING TO TRAVEL I-91 NORTHBOUND SHALL PROCEED TO EXIT 1 I-89 NORTHBOUND OFF-RAMP. TURN RIGHT AT THE END OF RAMP, FOLLOW US 4 EAST TO US 5 NORTH. CONTINUE FOLLOWING US 5 NORTH TO EXIT 12 I-91 NORTHBOUND.
 - 4) DURING DAYLIGHT HOURS ONE UNIFORMED TRAFFIC OFFICER SHALL BE STATIONED AT THE JCT OF US RT4 AND RT5 AS SHOWN IN INSET "B".
 - 5) COORDINATES ARE APPROXIMATE.

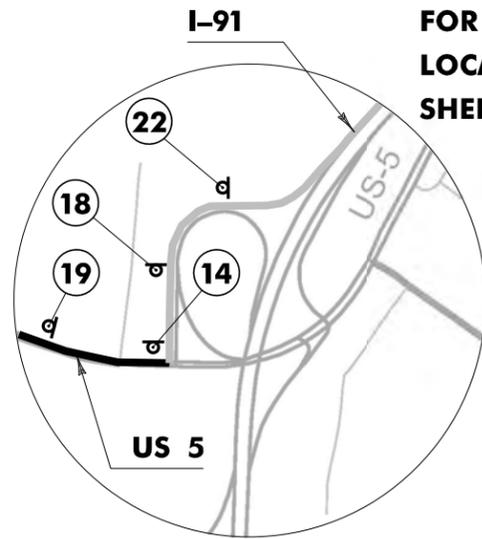
Vermont Agency of Transportation
RECEIVED
CK'D BY NAV/ICB OK'D BY JS
April 1, 2015
RESUBMIT NO Approved
BY KH DATE 4-2-2015



PREPARED BY:
SEBAGO
TECHNICS

ALTERNATE ROUTE TO I-91
NOT TO SCALE

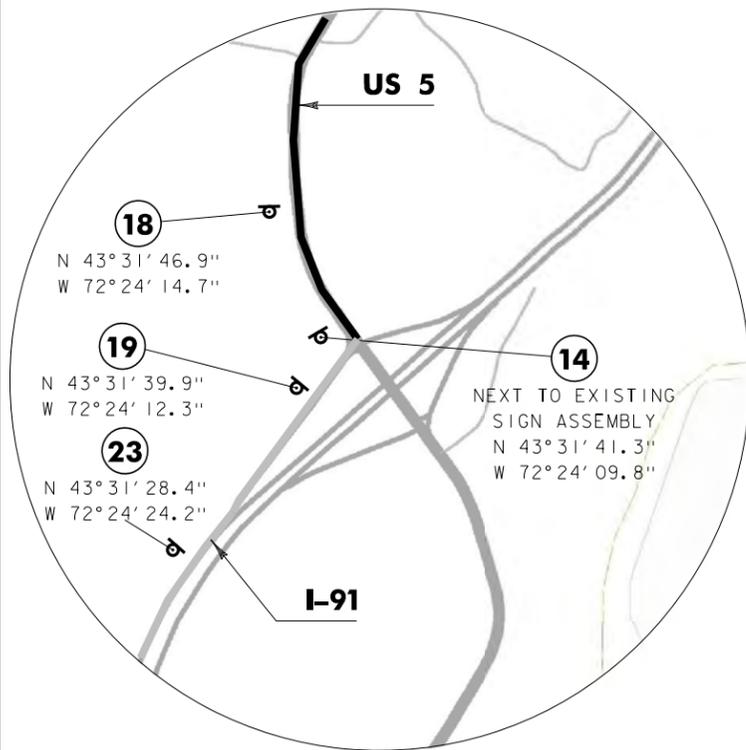
PROJECT NAME: HARTFORD	FILE NAME: sl2a026de+our.dgn	PLOT DATE: 03/31/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	ALTERNATE ROUTE TO I-91	SHEET 28 OF ??



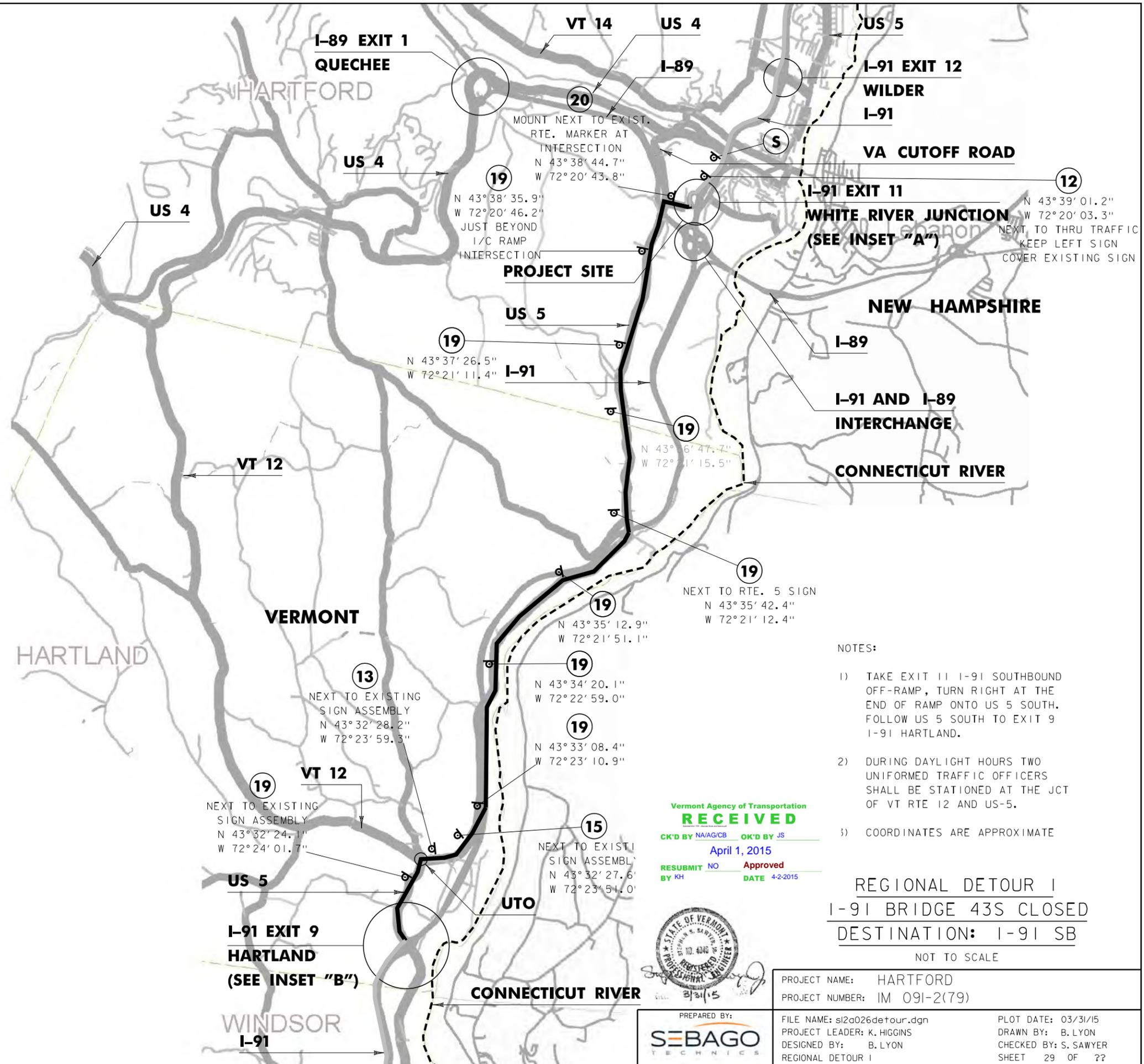
FOR SPECIFIC SIGN LOCATIONS SEE SHEET 30

I-91 EXIT 11
WHITE RIVER
JUNCTION

INSET "A"
I-91 EXIT 11
WHITE RIVER JUNCTION
NOT TO SCALE



INSET "B"
I-91 EXIT 9
HARTLAND
NOT TO SCALE



- NOTES:
- 1) TAKE EXIT 11 I-91 SOUTHBOUND OFF-RAMP, TURN RIGHT AT THE END OF RAMP ONTO US 5 SOUTH. FOLLOW US 5 SOUTH TO EXIT 9 I-91 HARTLAND.
 - 2) DURING DAYLIGHT HOURS TWO UNIFORMED TRAFFIC OFFICERS SHALL BE STATIONED AT THE JCT OF VT RTE 12 AND US-5.
 - 3) COORDINATES ARE APPROXIMATE

Vermont Agency of Transportation
RECEIVED
CK'D BY NAAG/CB OK'D BY JS
April 1, 2015
RESUBMIT NO Approved
BY KH DATE 4-2-2015

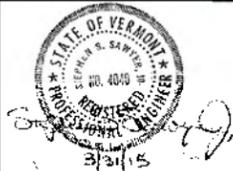


PREPARED BY:
SEBAGO
TECHNICS

REGIONAL DETOUR I I-91 BRIDGE 43S CLOSED DESTINATION: I-91 SB NOT TO SCALE	
PROJECT NAME: HARTFORD	PROJECT NUMBER: IM 091-2(79)
FILE NAME: sl2a026detour.dgn	PLOT DATE: 03/31/15
PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
REGIONAL DETOUR I	SHEET 29 OF ??

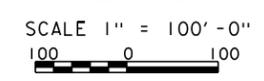
LEGEND

- (A) ROAD WORK AHEAD
W20-1
36"X36"
- (B) ROAD WORK 500 FT
W20-1
36"X36"
- (C) END ROAD WORK
G20-2
48"X24"
- (D) (SIGN TO BE COVERED UNTIL SIGNAL BECOMES OPERATIONAL)
W3-3
36"X36"
- NEXT TWO INTERSECTIONS
36"X24"
- (E) SIDE ROAD WORK AHEAD
VC-869
48"X48"
- (F) WATCH FOR TURNING VEHICLES
VC-883
36"X36"
48"X48" (RAMP C AND B ONLY)

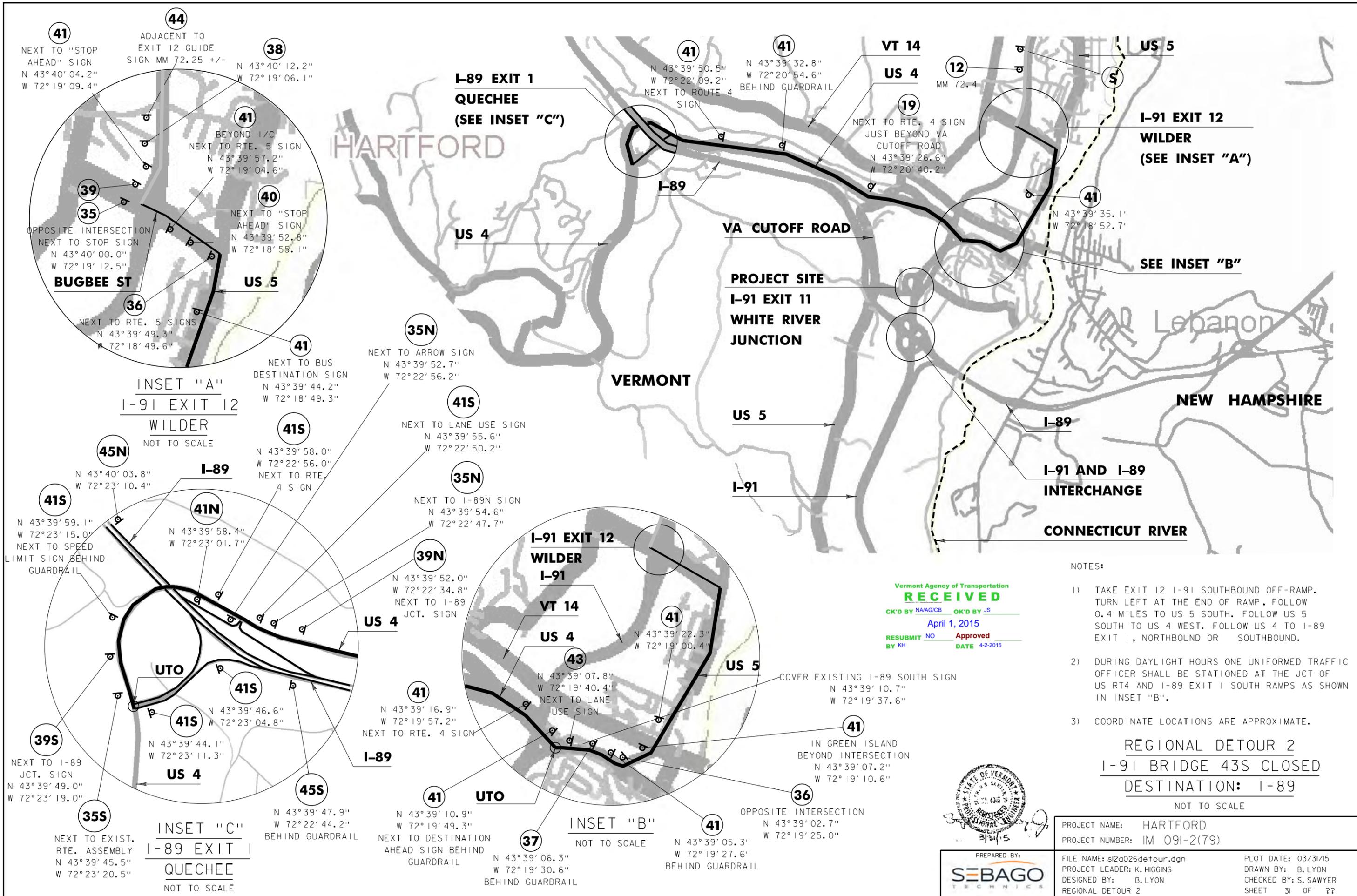


Vermont Agency of Transportation
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 April 1, 2015
 RESUBMIT NO Approved
 BY KH DATE 4-2-2015

BEGIN DETOUR SIGNING
 REGIONAL DETOUR I
 I-91 BRIDGE 43S CLOSED
 DESTINATION: I-91 SB



PROJECT NAME: HARTFORD	PLOT DATE: 03/23/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_Const_Approach.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 30 OF ??
DESIGNED BY: B. LYON	
BEGIN REGIONAL DETOUR I	



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 RESUBMIT NO Approved
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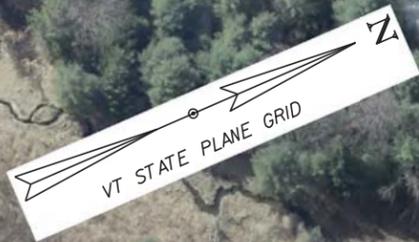
- NOTES:
- 1) TAKE EXIT 12 I-91 SOUTHBOUND OFF-RAMP. TURN LEFT AT THE END OF RAMP, FOLLOW 0.4 MILES TO US 5 SOUTH. FOLLOW US 5 SOUTH TO US 4 WEST. FOLLOW US 4 TO I-89 EXIT 1, NORTHBOUND OR SOUTHBOUND.
 - 2) DURING DAYLIGHT HOURS ONE UNIFORMED TRAFFIC OFFICER SHALL BE STATIONED AT THE JCT OF US RT4 AND I-89 EXIT 1 SOUTH RAMP AS SHOWN IN INSET "B".
 - 3) COORDINATE LOCATIONS ARE APPROXIMATE.

REGIONAL DETOUR 2
I-91 BRIDGE 43S CLOSED
DESTINATION: I-89
 NOT TO SCALE

PROJECT NAME: HARTFORD	FILE NAME: sl2a026detour.dgn	PLOT DATE: 03/31/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	REGIONAL DETOUR 2	SHEET 31 OF ??



PREPARED BY:
SEBAGO
 TECHNICS



1,000'
BETWEEN SIGNS

NOTES:

1. THIS SIGN PACKAGE (SHEETS 32-36) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.3: MILLING I-91NB EXISTING BRIDGE LEFT LANE
- ITEM 7.2: SINGLE LANE CLOSURE I-91NB LEFT LANE (LATERAL SLIDE I-91SB)
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

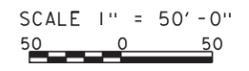
2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE

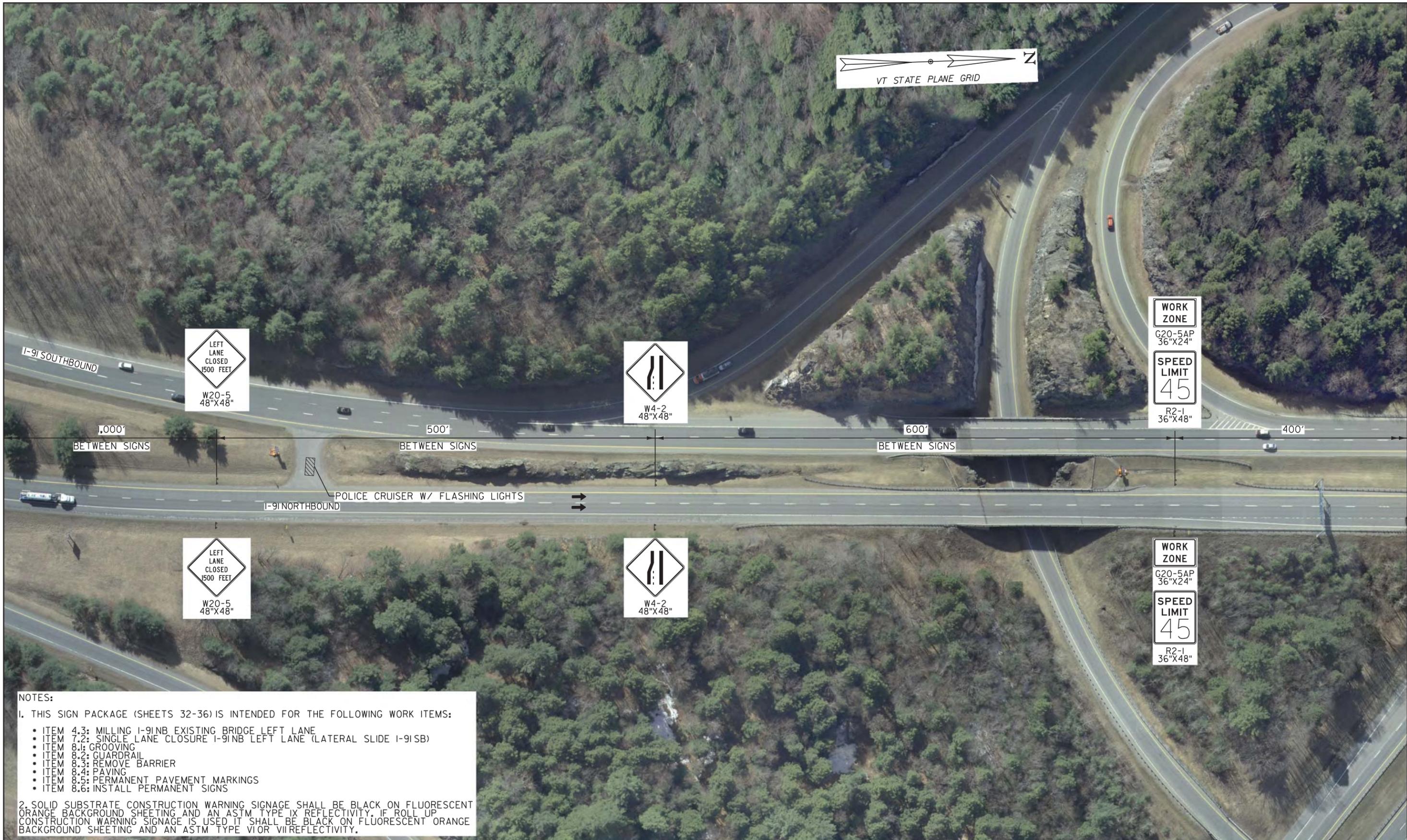


Vermont Agency of Transportation
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I-91 NB LEFT LANE CLOSURE (BARRELS)



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_NB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 32 OF ??
DESIGNED BY: B. LYON	
I-91NB LEFT LANE CLOSURE (BARRELS)	



NOTES:

1. THIS SIGN PACKAGE (SHEETS 32-36) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.3: MILLING I-91NB EXISTING BRIDGE LEFT LANE
- ITEM 7.2: SINGLE LANE CLOSURE I-91NB LEFT LANE (LATERAL SLIDE I-91SB)
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ☒ TYPE III BARRICADE



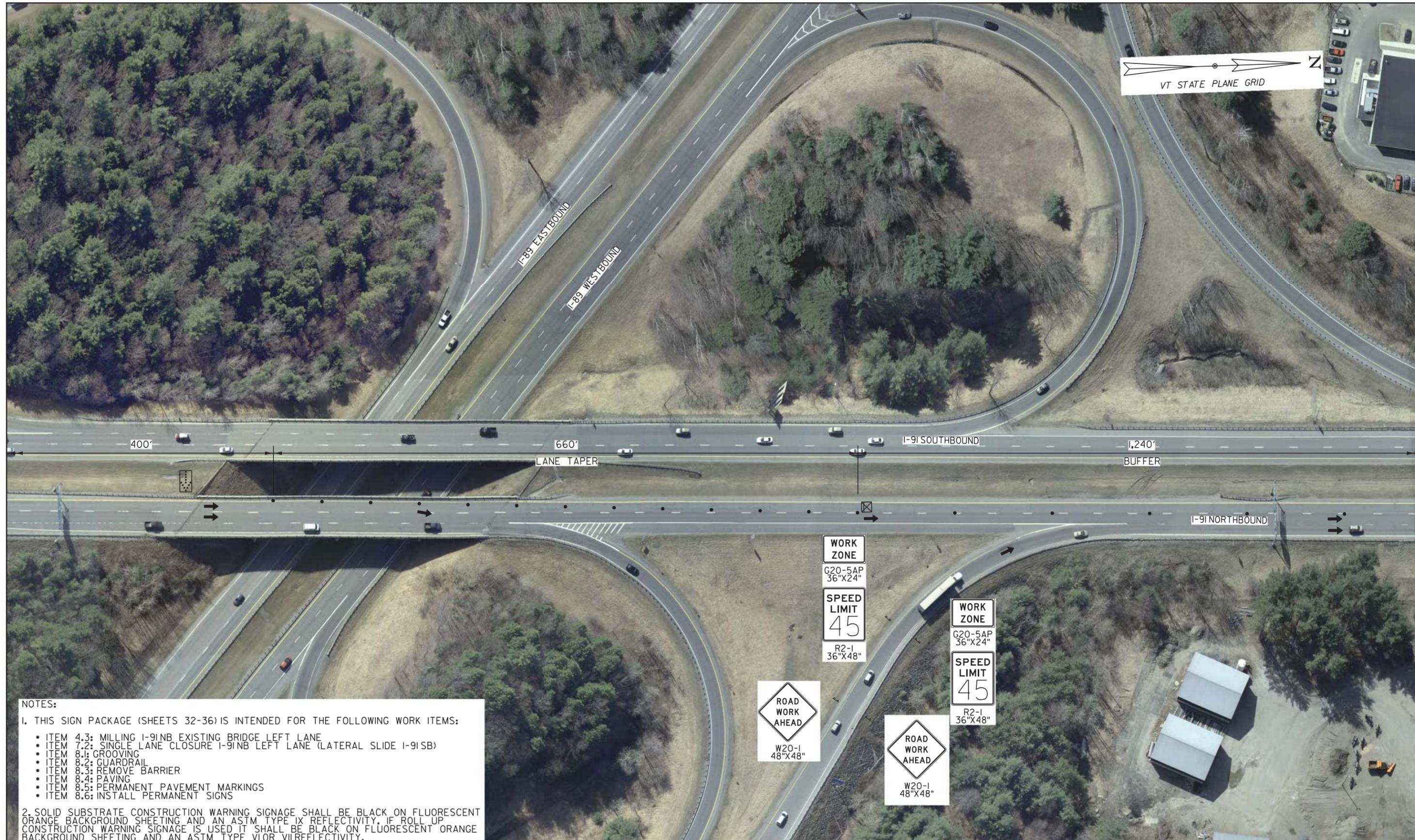
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 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 NB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50'-0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB LEFT LANE CLOSURE (BARRELS)	SHEET 33 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 32-36) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.3: MILLING I-91NB EXISTING BRIDGE LEFT LANE
- ITEM 7.2: SINGLE LANE CLOSURE I-91NB LEFT LANE (LATERAL SLIDE I-91SB)
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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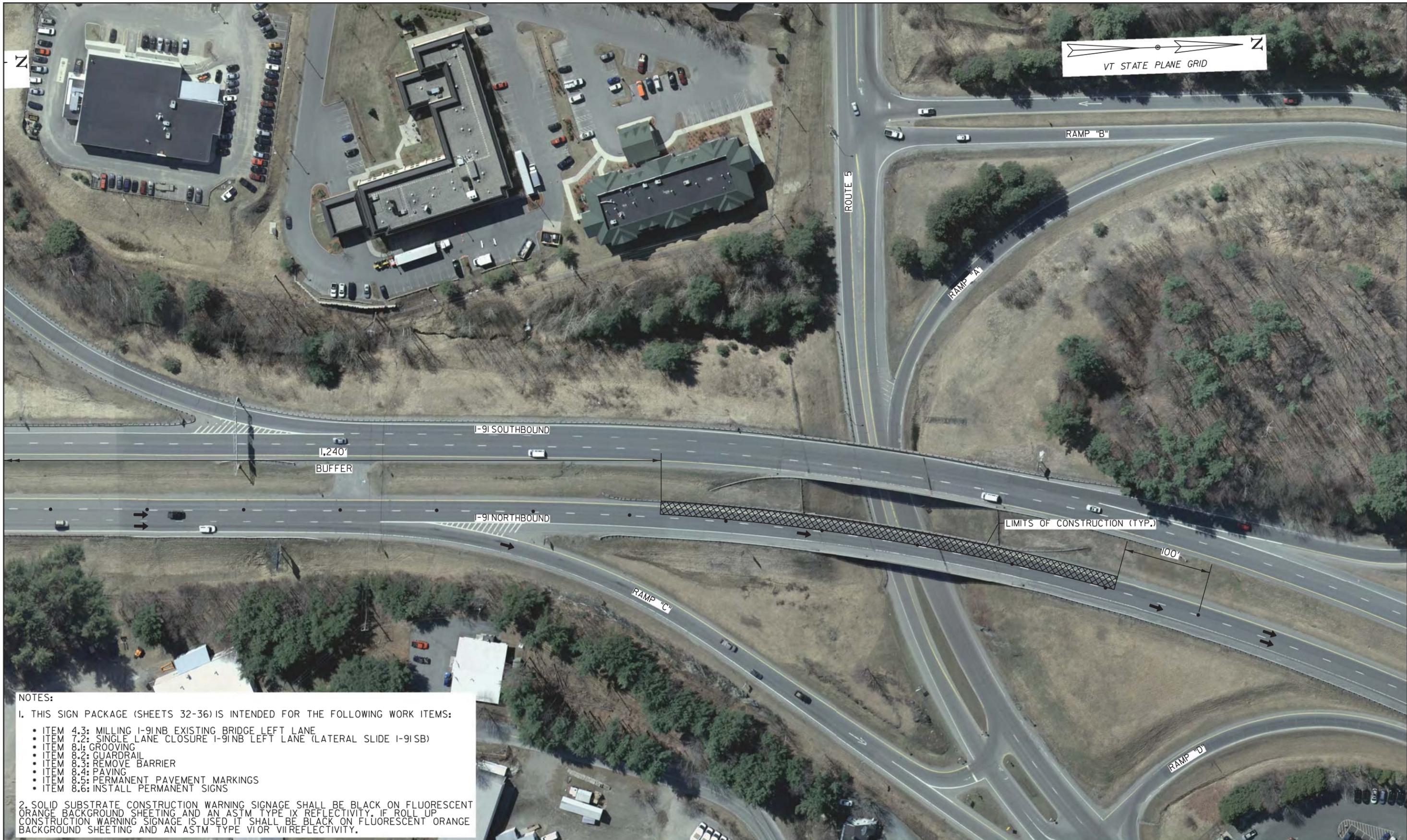
I-91 NB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)

FILE NAME: sl2a026_NB Left Closure.dgn PLOT DATE: 04/07/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 I-91NB LEFT LANE CLOSURE (BARRELS) SHEET 34 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 32-36) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.3: MILLING I-91NB EXISTING BRIDGE LEFT LANE
- ITEM 7.2: SINGLE LANE CLOSURE I-91NB LEFT LANE (LATERAL SLIDE I-91 SB)
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- ▣ TYPE III BARRICADE



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I-91 NB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_NB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 35 OF ??
DESIGNED BY: B. LYON	
I-91NB LEFT LANE CLOSURE (BARRELS)	



NOTES:

1. THIS SIGN PACKAGE (SHEETS 32-36) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.3: MILLING I-91NB EXISTING BRIDGE LEFT LANE
- ITEM 7.2: SINGLE LANE CLOSURE I-91NB LEFT LANE (LATERAL SLIDE I-91 SB)
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



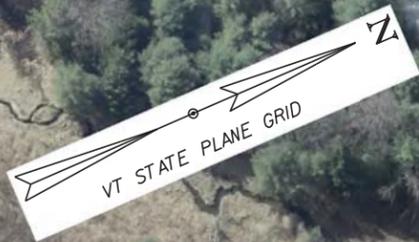
Vermont Agency of Transportation
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I-91 NB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_NB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 36 OF ??
DESIGNED BY: B. LYON	
I-91NB LEFT LANE CLOSURE (BARRELS)	



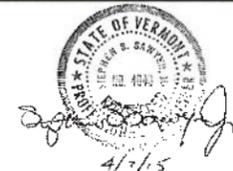
NOTES:

1. THIS SIGN PACKAGE (SHEETS 37-41) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.4: MILLING I-91NB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

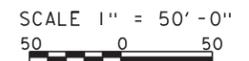
2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE

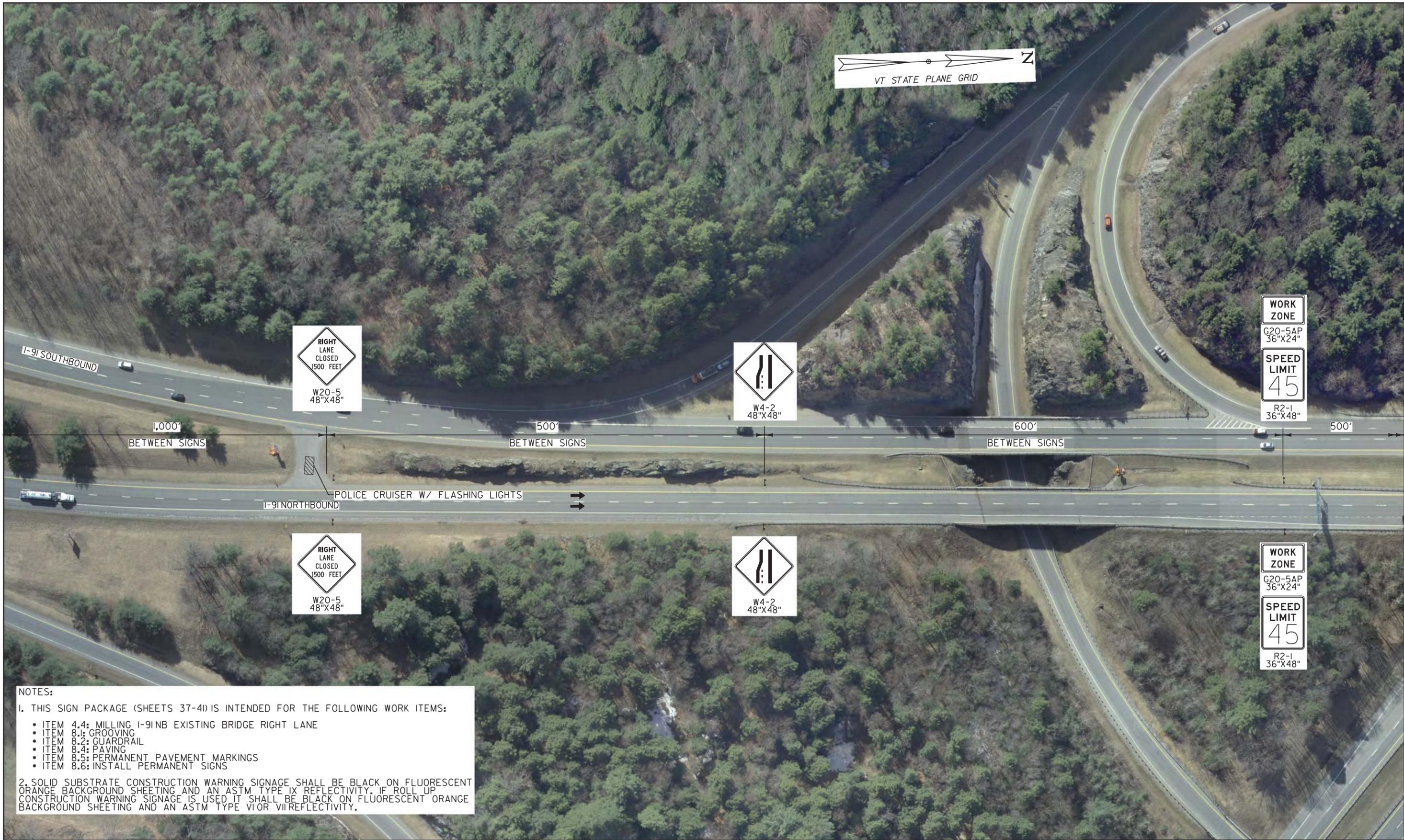


Vermont Agency of Transportation
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 BY KH DATE 4-9-2015

I-91 NB RIGHT LANE CLOSURE (BARRELS)



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Right Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB RIGHT LANE CLOSURE (BARRELS)	SHEET 37 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 37-41) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.4: MILLING I-91NB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ☒ TYPE III BARRICADE



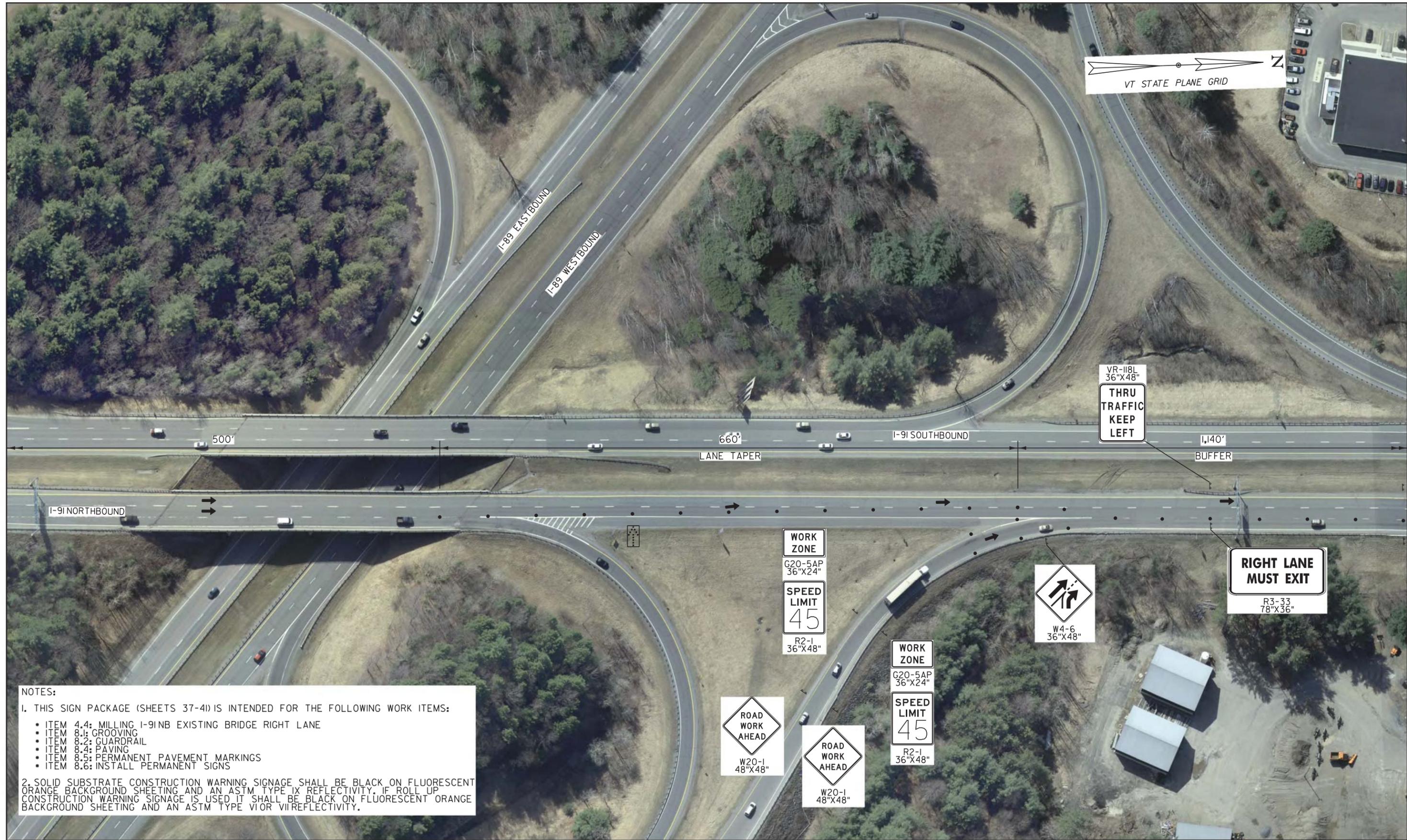
Vermont Agency of Transportation
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 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 NB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Right Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB RIGHT LANE CLOSURE (BARRELS)	SHEET 38 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 37-41) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.4: MILLING I-91NB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⚡ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 NB RIGHT LANE CLOSURE (BARRELS)

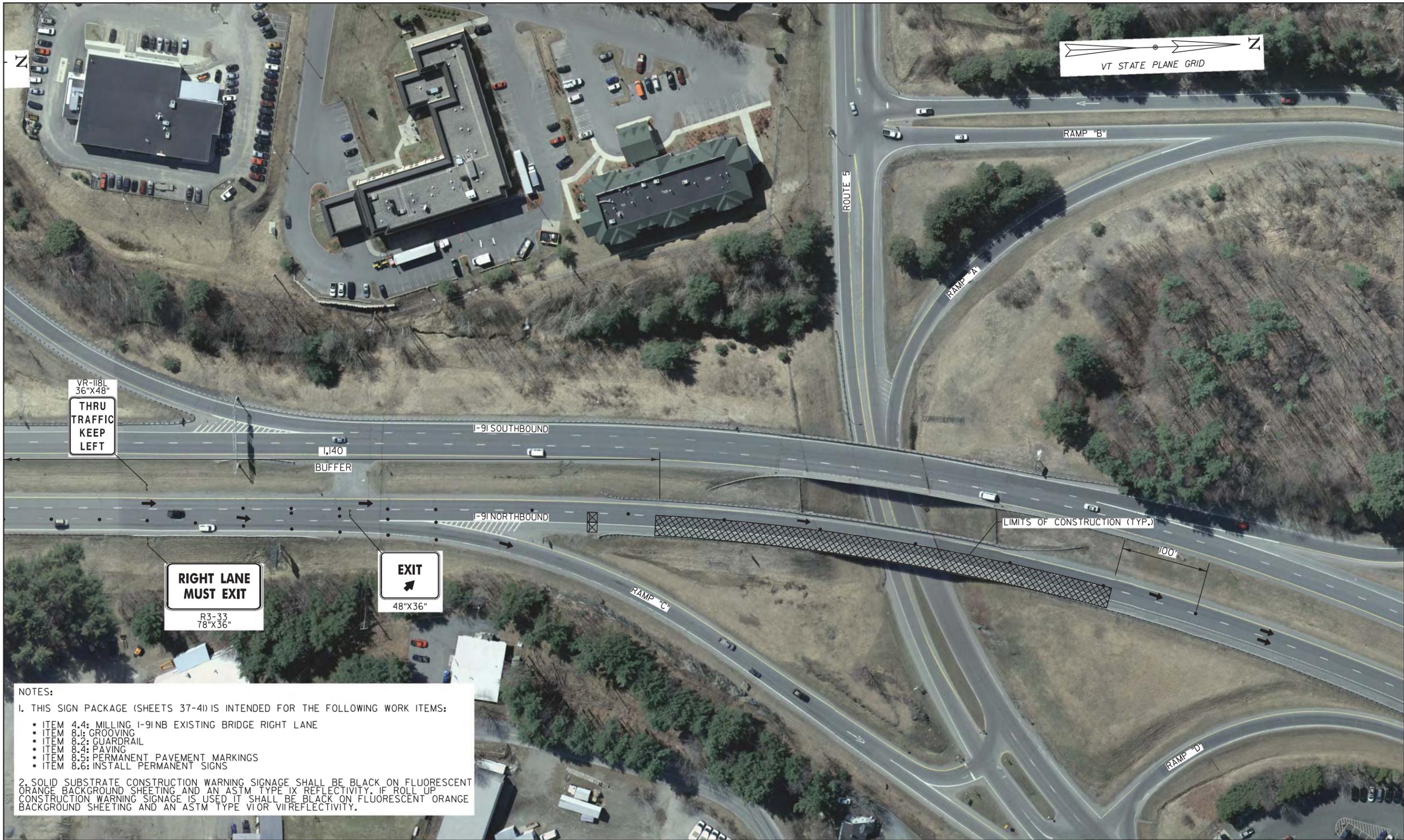
SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)

PREPARED BY:
SEBAGO
 TECHNICS

FILE NAME: sl2a026.NB Right Closure.dgn PLOT DATE: 04/07/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 I-91NB RIGHT LANE CLOSURE (BARRELS) SHEET 39 OF ??



VR-118L
36"x48"
**THRU TRAFFIC
KEEP LEFT**

**RIGHT LANE
MUST EXIT**
R3-33
78"x36"

EXIT
48"x36"

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 37-41) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 4.4: MILLING I-91NB EXISTING BRIDGE RIGHT LANE
 • ITEM 8.1: GROOVING
 • ITEM 8.2: GUARDRAIL
 • ITEM 8.4: PAVING
 • ITEM 8.5: PERMANENT PAVEMENT MARKINGS
 • ITEM 8.6: INSTALL PERMANENT SIGNS
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- ▣ TYPE III BARRICADE



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I-91 NB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026.NB Right Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 40 OF ??
DESIGNED BY: B. LYON	
I-91NB RIGHT LANE CLOSURE (BARRELS)	



NOTES:

1. THIS SIGN PACKAGE (SHEETS 37-41) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.4: MILLING I-91NB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 NB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Right Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB RIGHT LANE CLOSURE (BARRELS)	SHEET 41 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 47-51) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 5.1: SINGLE LANE CLOSURE I-91 SB LEFT LANE (LATERAL SLIDE I-91NB)
- ITEM 6.2: MILLING I-91 SB EXISTING BRIDGE LEFT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



Vermont Agency of Transportation
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I-91 SB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026.SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91 SB LEFT LANE CLOSURE (BARRELS)	SHEET 47 OF ??



2,250'
BETWEEN SIGNS

500'
BETWEEN SIGNS

I-91 NORTHBOUND

I-91 SOUTHBOUND

LEFT
LANE
CLOSED
1500 FEET
W20-5
48"X48"

LEFT
LANE
CLOSED
1500 FEET
W20-5
48"X48"

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 47-51) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 5.1: SINGLE LANE CLOSURE I-91SB LEFT LANE (LATERAL SLIDE I-91NB)
 • ITEM 6.2: MILLING I-91SB EXISTING BRIDGE LEFT LANE
 • ITEM 8.1: GROOVING
 • ITEM 8.2: GUARDRAIL
 • ITEM 8.3: REMOVE BARRIER
 • ITEM 8.4: PAVING
 • ITEM 8.5: PERMANENT PAVEMENT MARKINGS
 • ITEM 8.6: INSTALL PERMANENT SIGNS
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ☒ TYPE III BARRICADE



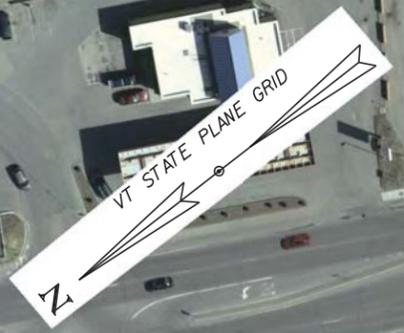
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I-91 SB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_SB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 48 OF ??
DESIGNED BY: B. LYON	
I-91SB LEFT LANE CLOSURE (BARRELS)	



500'
BETWEEN SIGNS

890'

I-91 NORTHBOUND

110'

SHLD. TAPER

660'

LANE TAPER

POLICE CRUISER W/ FLASHING LIGHTS

I-91 SOUTHBOUND

NOTES:

1. THIS SIGN PACKAGE (SHEETS 47-51) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 5.1: SINGLE LANE CLOSURE I-91SB LEFT LANE (LATERAL SLIDE I-91NB)
- ITEM 6.2: MILLING I-91SB EXISTING BRIDGE LEFT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91SB LEFT LANE CLOSURE (BARRELS)	SHEET 49 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 47-51) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 5.1: SINGLE LANE CLOSURE I-91 SB LEFT LANE (LATERAL SLIDE I-91 NB)
- ITEM 6.2: MILLING I-91 SB EXISTING BRIDGE LEFT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VIOR VII REFLECTIVITY.



- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



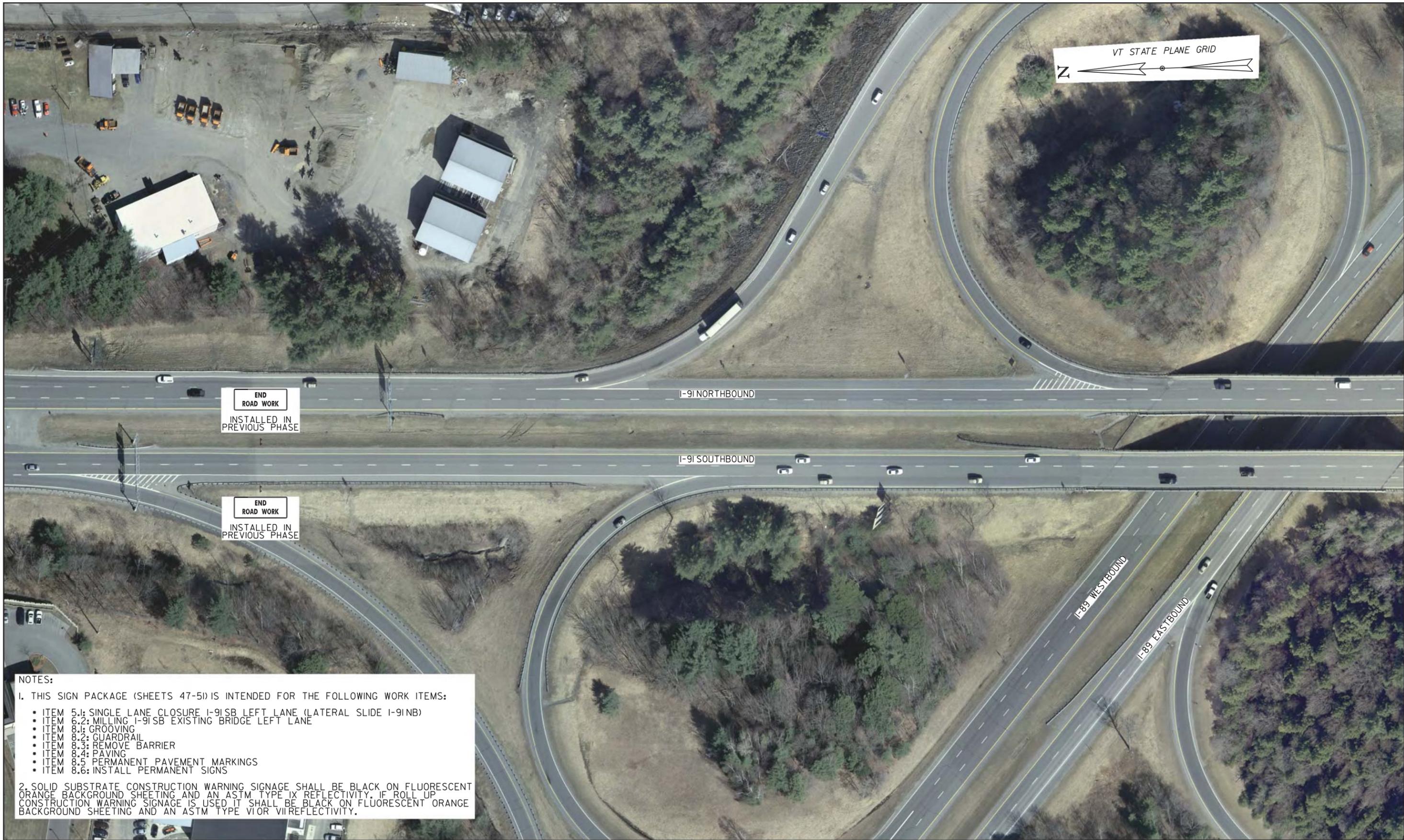
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 BY KH DATE 4-9-2015

I-91 SB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50'-0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_SB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 50 OF ??
DESIGNED BY: B. LYON	



END ROAD WORK
INSTALLED IN PREVIOUS PHASE

END ROAD WORK
INSTALLED IN PREVIOUS PHASE

NOTES:

1. THIS SIGN PACKAGE (SHEETS 47-51) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 5.1: SINGLE LANE CLOSURE I-91SB LEFT LANE (LATERAL SLIDE I-91NB)
- ITEM 6.2: MILLING I-91SB EXISTING BRIDGE LEFT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.3: REMOVE BARRIER
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB LEFT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
50 0 50



PROJECT NAME: HARTFORD
PROJECT NUMBER: IM 091-2(79)

PREPARED BY:
FILE NAME: sl2a026_SB Left Closure.dgn PLOT DATE: 04/07/15
PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
I-91SB LEFT LANE CLOSURE (BARRELS) SHEET 51 OF ??



NOTES:

1. THIS SIGN PACKAGE (SHEETS 52-56) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 6.3: MILLING I-91 SB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026.SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91 SB RIGHT LANE CLOSURE (BARRELS)	SHEET 52 OF ??



2,250'
BETWEEN SIGNS

500'
BETWEEN SIGNS

I-91 NORTHBOUND

I-91 SOUTHBOUND

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 52-56) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 6.3: MILLING I-91 SB EXISTING BRIDGE RIGHT LANE
 • ITEM 8.1: GROOVING
 • ITEM 8.2: GUARDRAIL
 • ITEM 8.4: PAVING
 • ITEM 8.5: PERMANENT PAVEMENT MARKINGS
 • ITEM 8.6: INSTALL PERMANENT SIGNS
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_SB Right Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 53 OF ??
DESIGNED BY: B. LYON	
I-91 SB RIGHT LANE CLOSURE (BARRELS)	



NOTES:

1. THIS SIGN PACKAGE (SHEETS 52-56) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 6.3: MILLING I-91 SB EXISTING BRIDGE RIGHT LANE
- ITEM 8.1: GROOVING
- ITEM 8.2: GUARDRAIL
- ITEM 8.4: PAVING
- ITEM 8.5: PERMANENT PAVEMENT MARKINGS
- ITEM 8.6: INSTALL PERMANENT SIGNS

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_SB Right Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 54 OF ??
DESIGNED BY: B. LYON	
I-91 SB RIGHT LANE CLOSURE (BARRELS)	



NOTES:

- THIS SIGN PACKAGE (SHEETS 52-56) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 6.3: MILLING I-91 SB EXISTING BRIDGE RIGHT LANE
 - ITEM 8.1: GROOVING
 - ITEM 8.2: GUARDRAIL
 - ITEM 8.4: PAVING
 - ITEM 8.5: PERMANENT PAVEMENT MARKINGS
 - ITEM 8.6: INSTALL PERMANENT SIGNS
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



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I-91 SB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_SB Right Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 55 OF ??
DESIGNED BY: B. LYON	
I-91 SB RIGHT LANE CLOSURE (BARRELS)	



NOTES:

- THIS SIGN PACKAGE (SHEETS 52-56) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 6.3: MILLING I-91 SB EXISTING BRIDGE RIGHT LANE
 - ITEM 8.1: GROOVING
 - ITEM 8.2: GUARDRAIL
 - ITEM 8.4: PAVING
 - ITEM 8.5: PERMANENT PAVEMENT MARKINGS
 - ITEM 8.6: INSTALL PERMANENT SIGNS
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



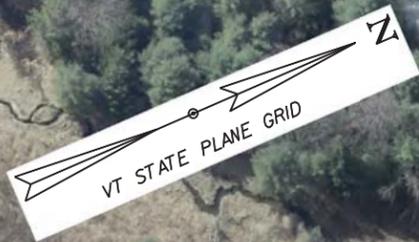
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I-91 SB RIGHT LANE CLOSURE (BARRELS)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_SB Right Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
DESIGNED BY: B. LYON	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
I-91 SB RIGHT LANE CLOSURE (BARRELS)		SHEET 56 OF ??



1,000'
BETWEEN SIGNS



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 42-46) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 4.5: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91NB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.



- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ ENERGY ABSORPTION ATTENUATOR
- //// PAVEMENT MARKING REMOVAL
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



I-91 NB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB LEFT LANE CLOSURE (BARRIER)	SHEET 42 OF ??



VT STATE PLANE GRID

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 42-46) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 4.5: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91NB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VIOR VIREFLECTIVITY.

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- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- #### PAVEMENT MARKING REMOVAL
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE

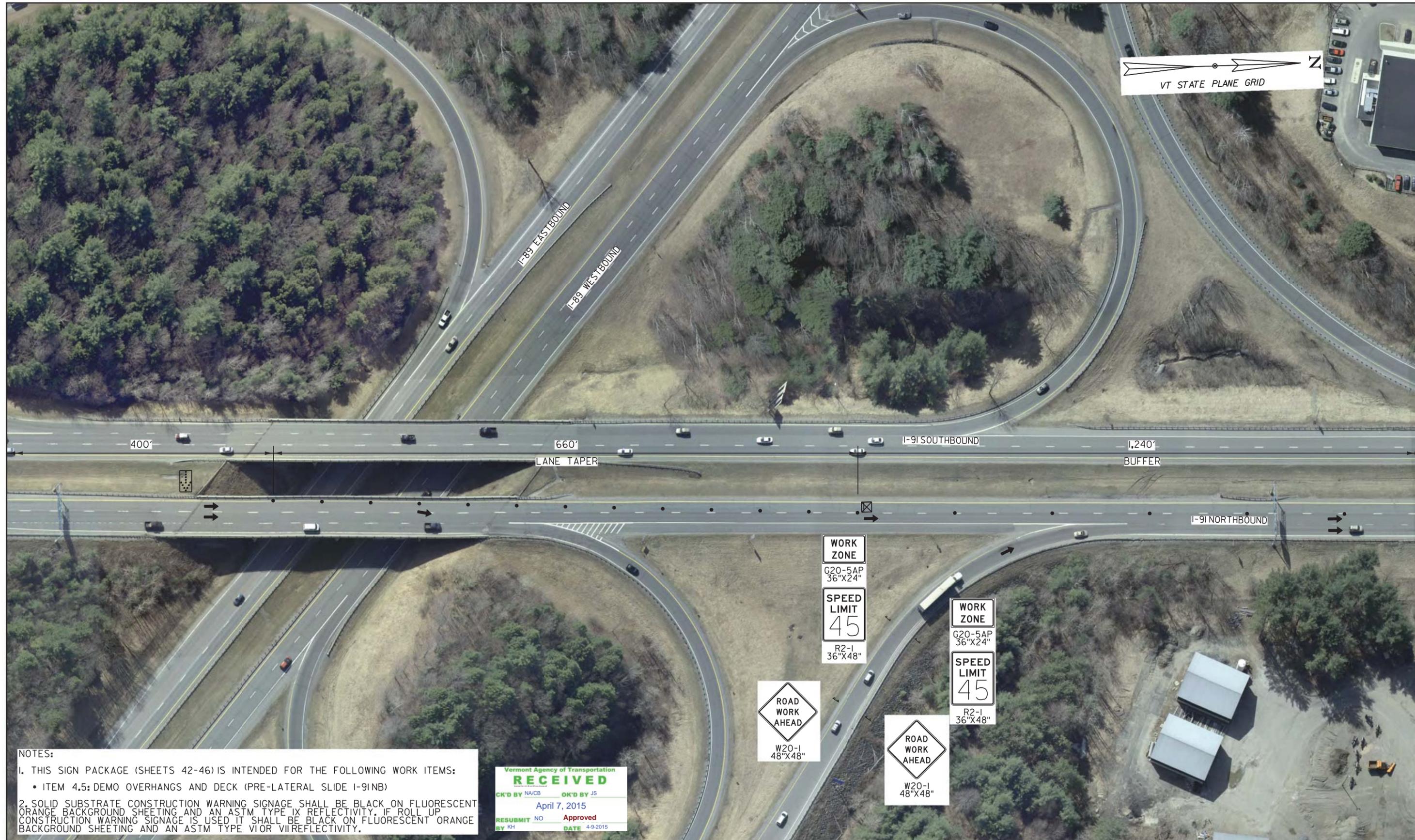
STATE OF VERMONT
 4/7/15

I-91 NB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50'-0"
 50 0 50

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: sl2a026_NB Left Closure.dgn PLOT DATE: 04/07/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 I-91NB LEFT LANE CLOSURE (BARRIER) SHEET 43 OF ??



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 42-46) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 4.5: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91NB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VIOR VIREFLECTIVITY.



- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- //// PAVEMENT MARKING REMOVAL
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



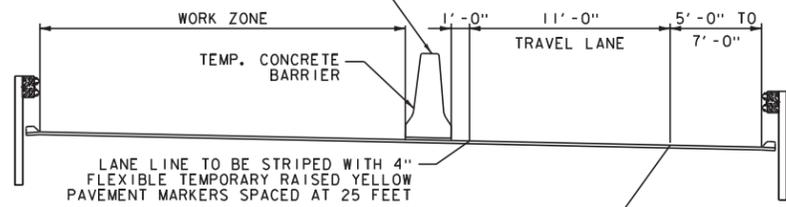
I-91 NB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_NB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91NB LEFT LANE CLOSURE (BARRIER)	SHEET 44 OF ??

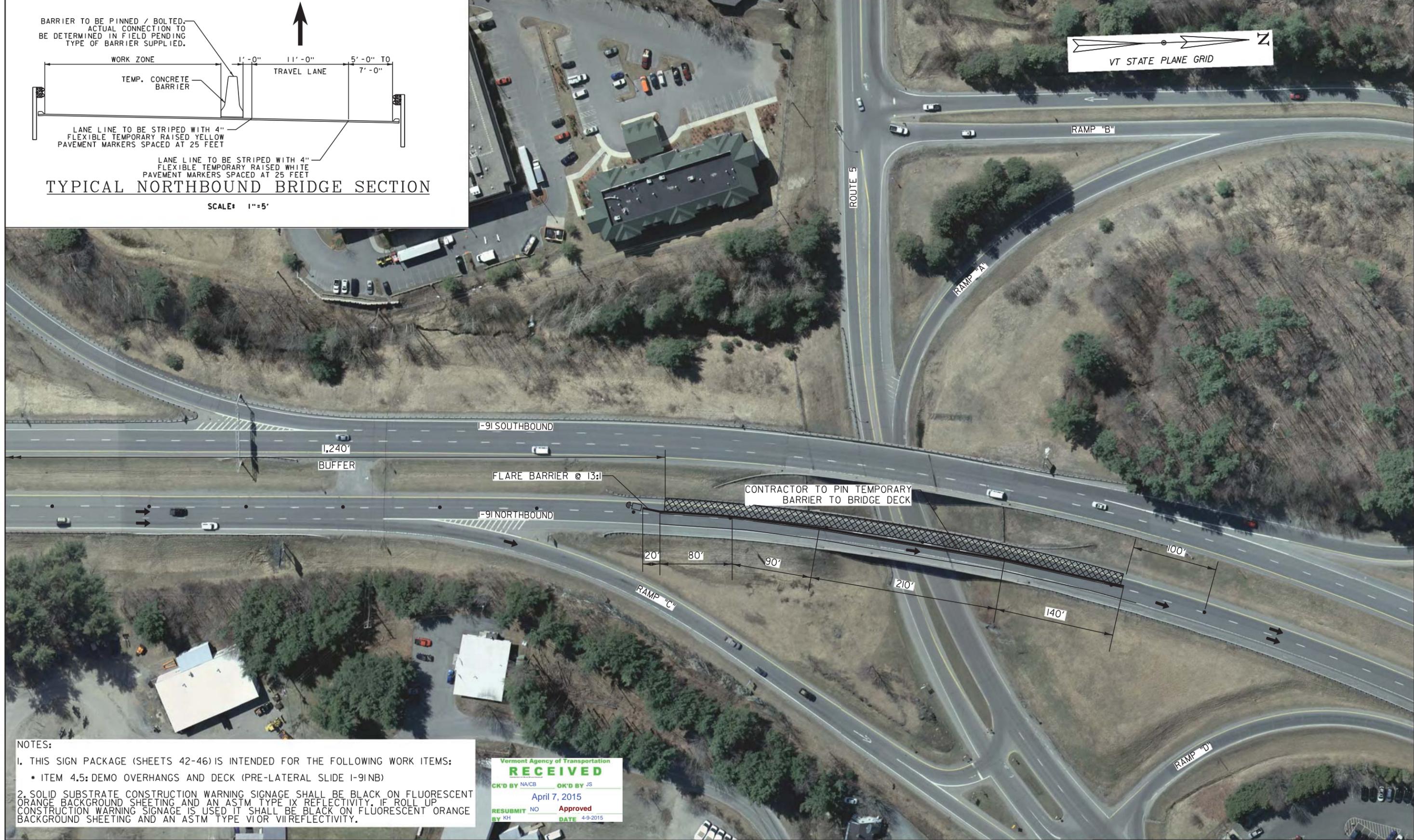
BARRIER TO BE PINNED / BOLTED. ACTUAL CONNECTION TO BE DETERMINED IN FIELD PENDING TYPE OF BARRIER SUPPLIED.



LANE LINE TO BE STRIPED WITH 4\"/>

TYPICAL NORTHBOUND BRIDGE SECTION

SCALE: 1"=5'



CONTRACTOR TO PIN TEMPORARY BARRIER TO BRIDGE DECK

NOTES:

1. THIS SIGN PACKAGE (SHEETS 42-46) IS INTENDED FOR THE FOLLOWING WORK ITEMS:

- ITEM 4.5: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91NB)

2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VIOR REFLECTIVITY.



- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ ENERGY ABSORPTION ATTENUATOR
- //// PAVEMENT MARKING REMOVAL
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



I-91 NB LEFT LANE CLOSURE (BARRIER)

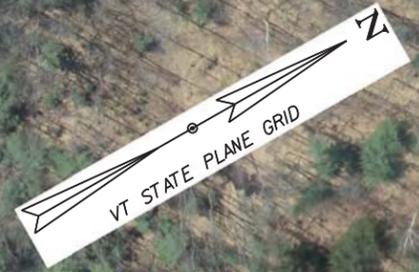
SCALE 1" = 50'-0"
50 0 50



PROJECT NAME: HARTFORD
PROJECT NUMBER: IM 091-2(79)

FILE NAME: sl2a026_NB Left Closure.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: B. LYON
I-91NB LEFT LANE CLOSURE (BARRIER)

PLOT DATE: 04/07/15
DRAWN BY: B. LYON
CHECKED BY: S. SAWYER
SHEET 45 OF ??



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 42-46) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 4.5: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91NB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

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SPEED
 LIMIT
 55
 EXISTING

- ➔ FLOW OF TRAFFIC
- ☐ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- #### PAVEMENT MARKING REMOVAL
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE



I-91 NB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_NB Left Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 46 OF ??
DESIGNED BY: B. LYON	
I-91NB LEFT LANE CLOSURE (BARRIER)	



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 57-61) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 6.4: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91 SB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

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- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- ◻ FLASHING ARROW PANEL
- ◻ TYPE III BARRICADE

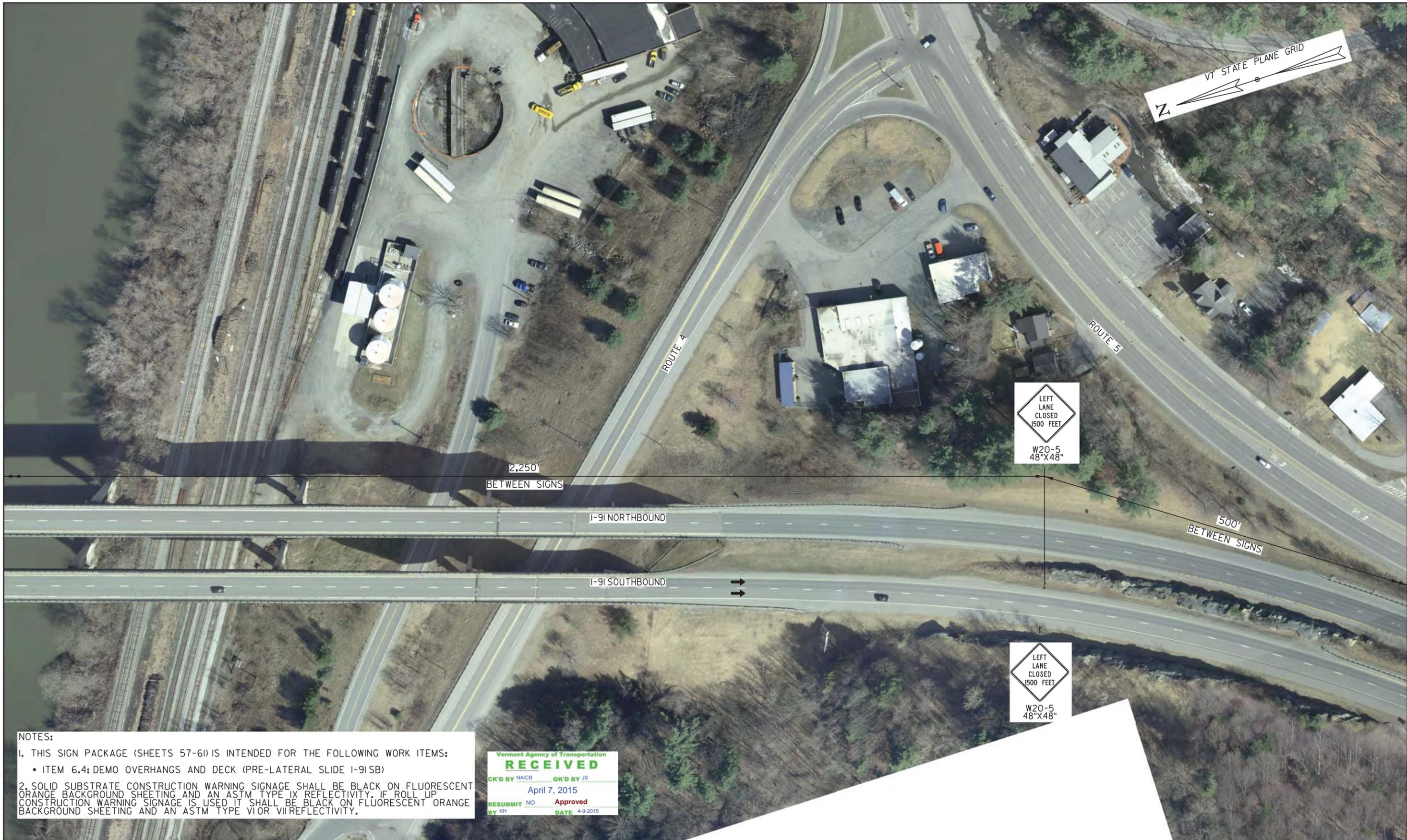


I-91 SB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	FILE NAME: sl2a026.SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91 SB LEFT LANE CLOSURE (BARRIER)	SHEET 57 OF ??



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 57-61) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 6.4: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91 SB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

Vermont Agency of Transportation
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- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- ◻ FLASHING ARROW PANEL
- ◻ TYPE III BARRICADE

STATE OF VERMONT
 4/7/15

I-91 SB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 FILE NAME: sl2a026_SB Left Closure.dgn PLOT DATE: 04/07/15
 PROJECT LEADER: K. HIGGINS DRAWN BY: B. LYON
 DESIGNED BY: B. LYON CHECKED BY: S. SAWYER
 I-91 SB LEFT LANE CLOSURE (BARRIER) SHEET 58 OF ??



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 57-61) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 6.4: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91 SB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

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- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- ◻ FLASHING ARROW PANEL
- ◻ TYPE III BARRICADE

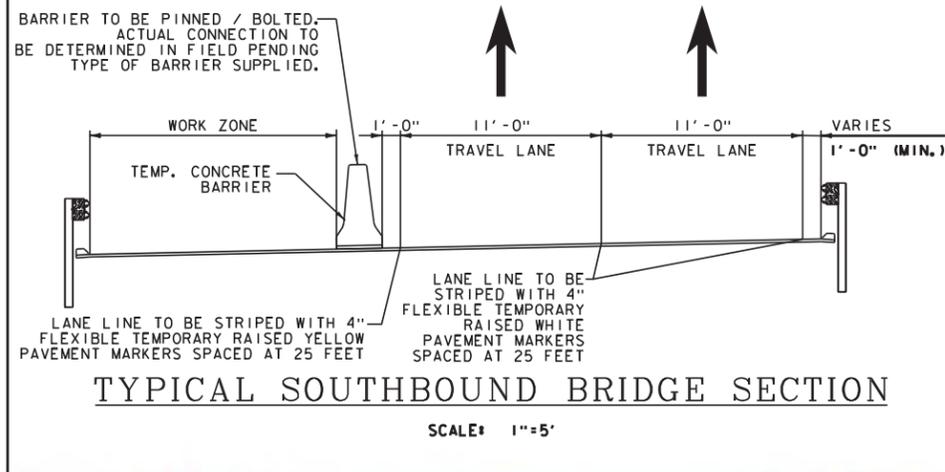
STATE OF VERMONT
 4/7/15

I-91 SB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD	FILE NAME: sl2a026_SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91 SB LEFT LANE CLOSURE (BARRIER)	SHEET 59 OF ??

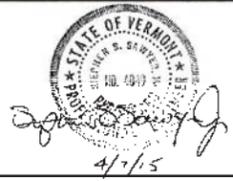


NOTES:

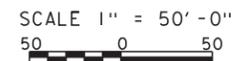
- THIS SIGN PACKAGE (SHEETS 57-61) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 6.4: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91SB)
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.



- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ⊠ FLASHING ARROW PANEL
- ⊠ TYPE III BARRICADE
- ⊠ ENERGY ABSORPTION ATTENUATOR



I-91 SB LEFT LANE CLOSURE (BARRIER)



PROJECT NAME: HARTFORD	FILE NAME: sl2a026_SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91SB LEFT LANE CLOSURE (BARRIER)	SHEET 60 OF ??



VT STATE PLANE GRID
N

END ROAD WORK
INSTALLED IN PREVIOUS PHASE

I-91 NORTHBOUND

I-91 SOUTHBOUND

END ROAD WORK
INSTALLED IN PREVIOUS PHASE

I-89 WESTBOUND

I-89 EASTBOUND

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 57-61) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 6.4: DEMO OVERHANGS AND DECK (PRE-LATERAL SLIDE I-91 SB)
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

Vermont Agency of Transportation
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 CK'D BY NACB OK'D BY JS
 April 7, 2015
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 BY KH DATE 4-9-2015

- ➔ FLOW OF TRAFFIC
- ◻ ENERGY ABSORPTION ATTENUATOR
- RETROREFLECTIVE PLASTIC DRUM
- ◻ FLASHING ARROW PANEL
- ◻ TYPE III BARRICADE

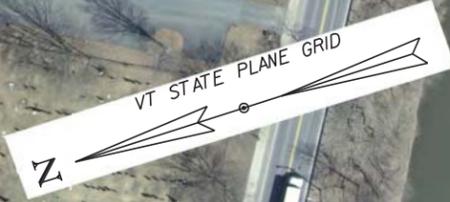
STATE OF VERMONT
 4/7/15

I-91 SB LEFT LANE CLOSURE (BARRIER)

SCALE 1" = 50' - 0"
 50 0 50

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD	FILE NAME: sl2a026_SB Left Closure.dgn	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: B. LYON
	DESIGNED BY: B. LYON	CHECKED BY: S. SAWYER
	I-91 SB LEFT LANE CLOSURE (BARRIER)	SHEET 61 OF ??



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 62-64) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 7.3: I-91SB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- TYPE III BARRICADE



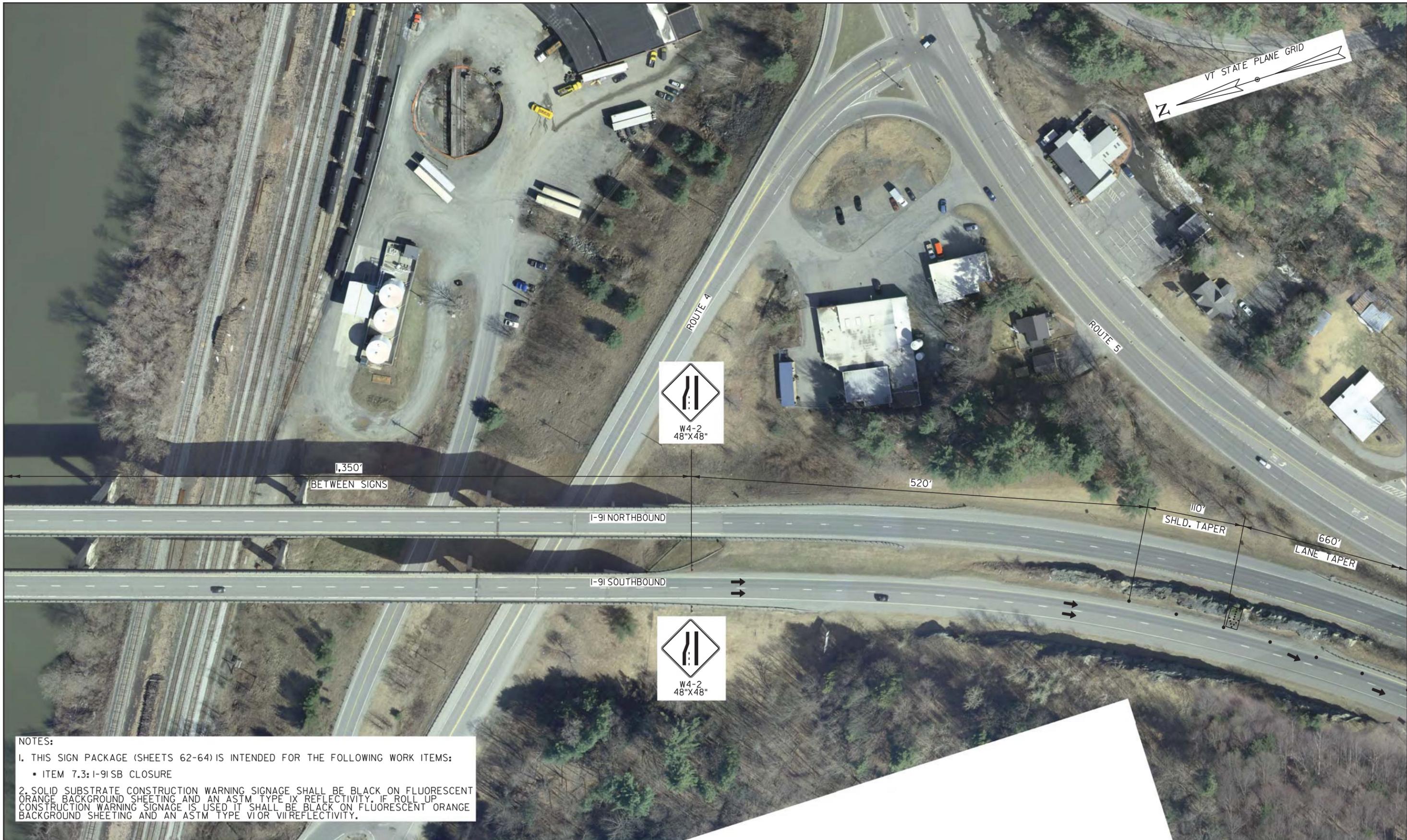
Vermont Agency of Transportation
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 April 7, 2015
 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 SB CLOSURE

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91SB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 62 OF ??
DESIGNED BY: B. LYON	
I-91SB CLOSURE	



1,350'
BETWEEN SIGNS

520'

110'
SHLD. TAPER

660'
LANE TAPER

I-91 NORTHBOUND

I-91 SOUTHBOUND

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 62-64) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 7.3: I-91SB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ▣ TYPE III BARRICADE



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I-91 SB CLOSURE

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91 SB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 63 OF ??
DESIGNED BY: B. LYON	
I-91 SB CLOSURE	



NOTES:

- THIS SIGN PACKAGE (SHEETS 62-64) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 7.3: I-91SB CLOSURE
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- TYPE III BARRICADE

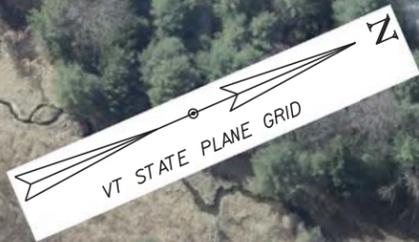


Vermont Agency of Transportation
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 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 SB CLOSURE
 SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91SB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 64 OF ??
DESIGNED BY: B. LYON	
I-91SB CLOSURE	



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 65-69) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 5.2: I-91NB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ▣ TYPE III BARRICADE



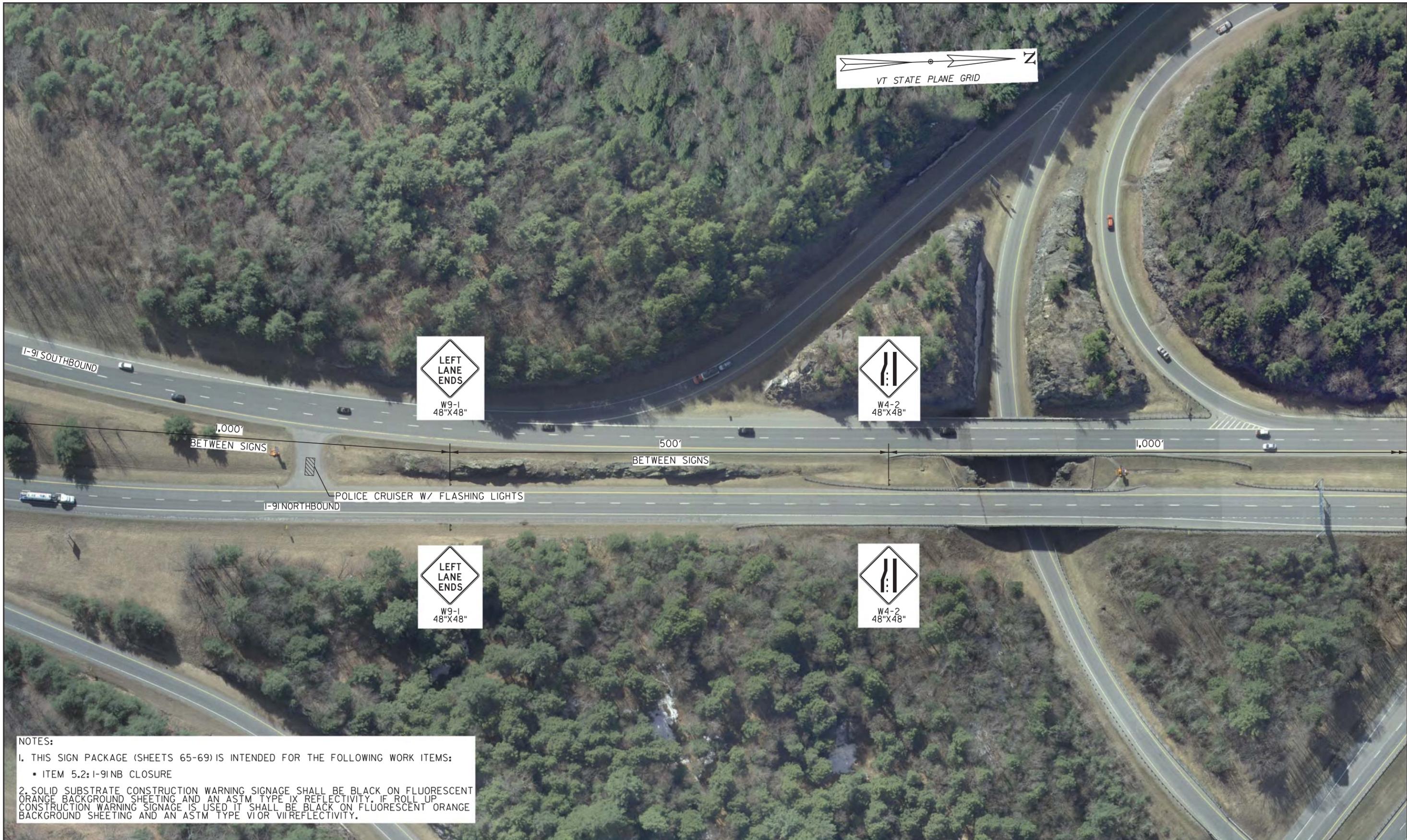
Vermont Agency of Transportation
RECEIVED
 CK'D BY NA/CB OK'D BY JS
 April 7, 2015
 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 NB CLOSURE

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91NB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 65 OF ??
DESIGNED BY: B. LYON	
I-91NB CLOSURE	



NOTES:

- THIS SIGN PACKAGE (SHEETS 65-69) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 - ITEM 5.2: I-91NB CLOSURE
- SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▨ FLASHING ARROW PANEL
- TYPE III BARRICADE



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 BY KH DATE 4-9-2015

I-91 NB CLOSURE
 SCALE 1" = 50'-0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91NB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 66 OF ??
DESIGNED BY: B. LYON	
I-91NB CLOSURE	



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 65-69) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 5.2: I-91NB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▣ FLASHING ARROW PANEL
- ▣ TYPE III BARRICADE



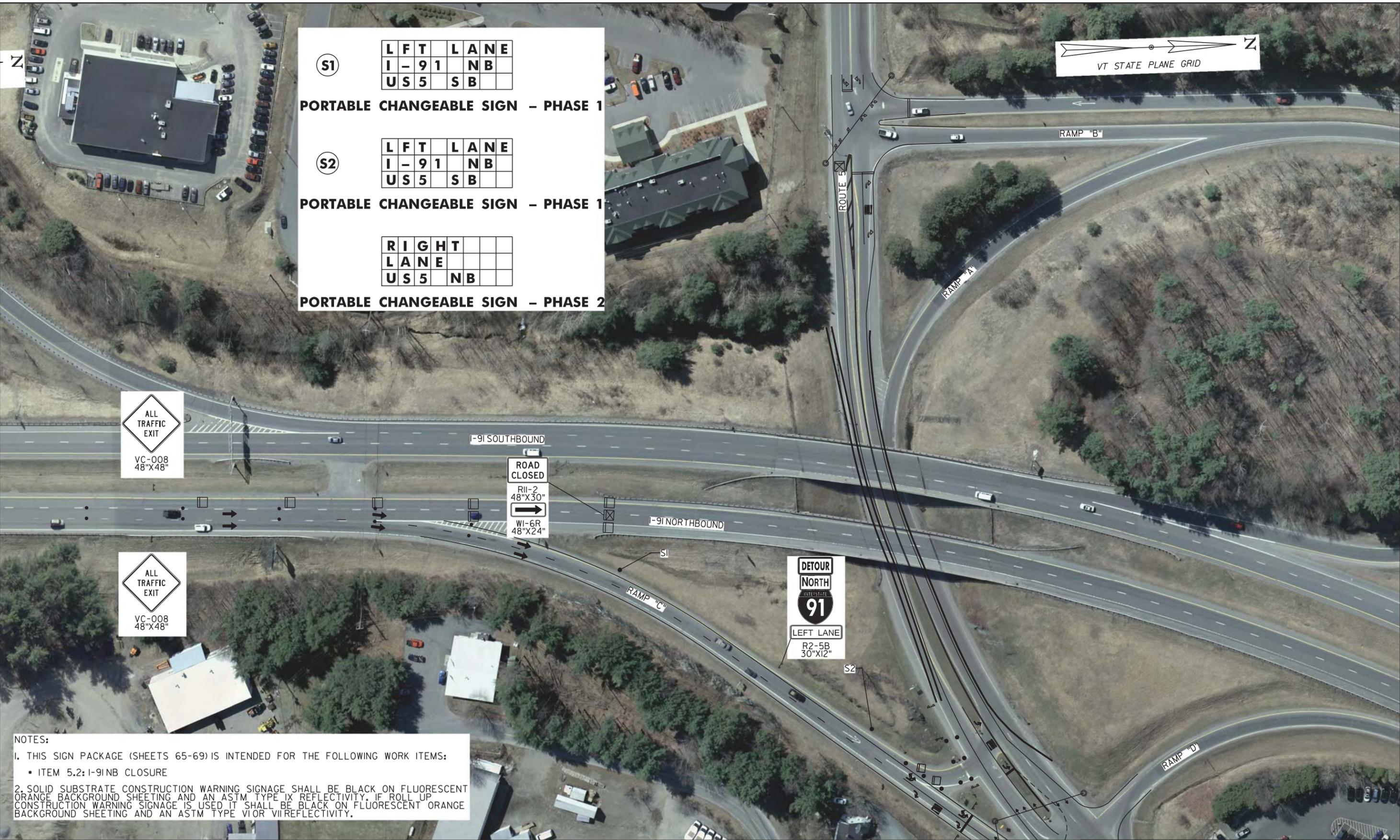
Vermont Agency of Transportation
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 CK'D BY NACB OK'D BY JS
 April 7, 2015
 RESUBMIT NO. Approved
 BY KH DATE 4-9-2015

I-91 NB CLOSURE

SCALE 1" = 50' - 0"
 50 0 50



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: sl2a026_I-91NB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 67 OF ??
DESIGNED BY: B. LYON	
I-91NB CLOSURE	



(S1)

L	F	T	L	A	N	E
I	-	9	1	N	B	
U	S	5	S	B		

PORTABLE CHANGEABLE SIGN - PHASE 1

(S2)

L	F	T	L	A	N	E
I	-	9	1	N	B	
U	S	5	S	B		

PORTABLE CHANGEABLE SIGN - PHASE 1

R	I	G	H	T		
L	A	N	E			
U	S	5	N	B		

PORTABLE CHANGEABLE SIGN - PHASE 2

ALL TRAFFIC EXIT
 VC-008
 48"X48"

ROAD CLOSED
 R11-2
 48"X30"

 W1-6R
 48"X24"

DETOUR
NORTH

91
LEFT LANE
 R2-5B
 30"X12"

NOTES:
 1. THIS SIGN PACKAGE (SHEETS 65-69) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 5.2: I-91NB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VII REFLECTIVITY.

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- FLASHING ARROW PANEL
- TYPE III BARRICADE

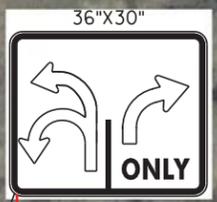


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 RESUBMIT NO Approved
 BY KH DATE 4-9-2015

I-91 NB CLOSURE
 SCALE 1" = 50'-0"



PROJECT NAME: HARTFORD	PLOT DATE: 04/07/15
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: B. LYON
FILE NAME: si2a026_I-91NB Closure.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 68 OF ??
DESIGNED BY: B. LYON	
I-91NB CLOSURE	



GATE POST FOR BETTER VISIBILITY



NOTES:
 1. THIS SIGN PACKAGE (SHEETS 65-69) IS INTENDED FOR THE FOLLOWING WORK ITEMS:
 • ITEM 5.2: I-91 NB CLOSURE
 2. SOLID SUBSTRATE CONSTRUCTION WARNING SIGNAGE SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE IX REFLECTIVITY. IF ROLL UP CONSTRUCTION WARNING SIGNAGE IS USED IT SHALL BE BLACK ON FLUORESCENT ORANGE BACKGROUND SHEETING AND AN ASTM TYPE VI OR VIIR REFLECTIVITY.

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ◻ FLASHING ARROW PANEL
- ◻ TYPE III BARRICADE



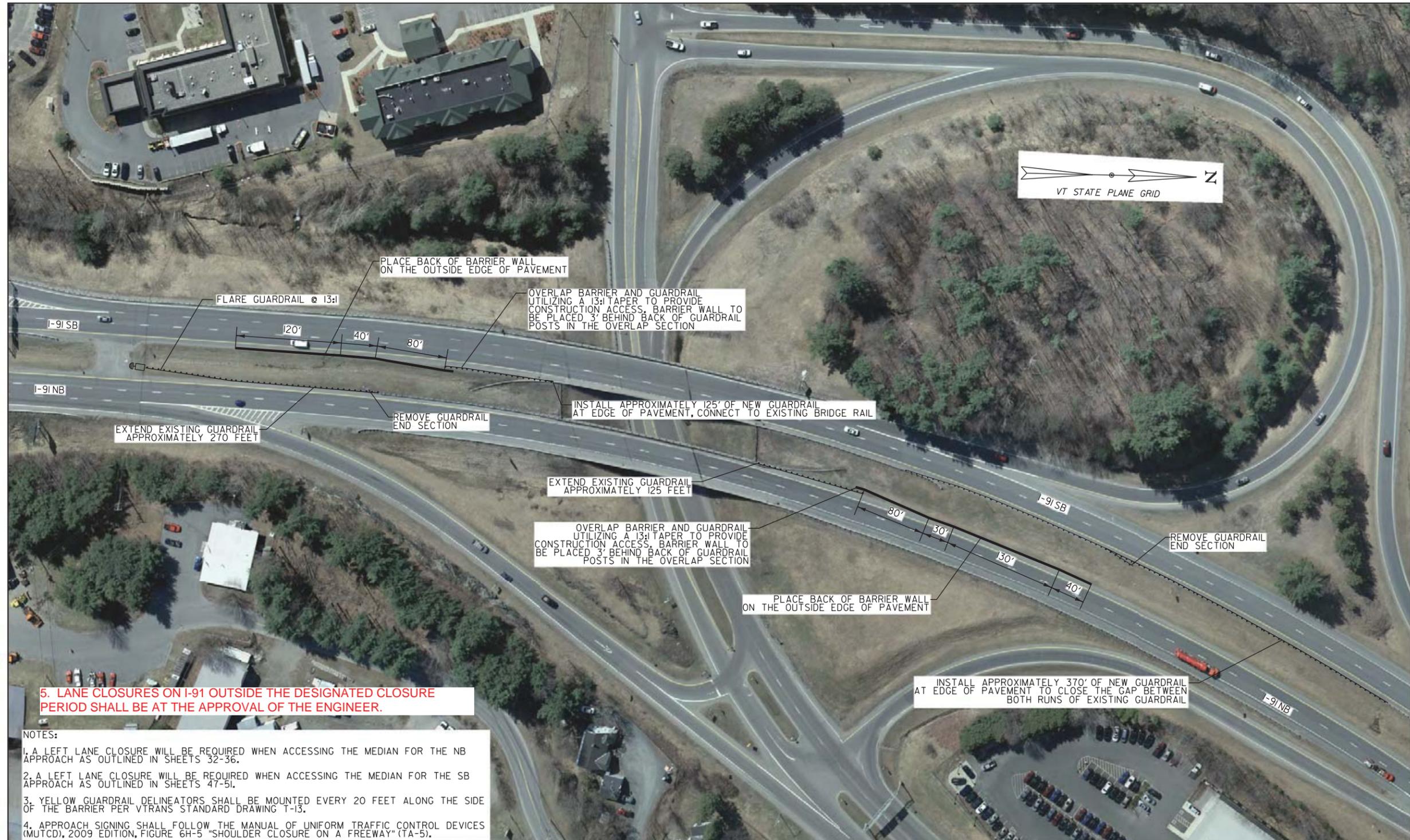
Vermont Agency of Transportation
RECEIVED
 CK'D BY CB/NA OK'D BY JS
 April 7, 2015
 RESUBMIT NO Approved AsNoted
 BY KH DATE 4-9-2015

I-91 NB CLOSURE

SCALE 1" = 20'-0"
 20 0 20



PROJECT NAME: HARTFORD
 PROJECT NUMBER: IM 091-2(79)
 PREPARED BY:
 FILE NAME: sl2a026_I-91NB Closure.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: B. LYON
 I-91 NB CLOSURE
 PLOT DATE: 04/07/15
 DRAWN BY: B. LYON
 CHECKED BY: S. SAWYER
 SHEET 69 OF ??



5. LANE CLOSURES ON I-91 OUTSIDE THE DESIGNATED CLOSURE PERIOD SHALL BE AT THE APPROVAL OF THE ENGINEER.

- NOTES:
1. A LEFT LANE CLOSURE WILL BE REQUIRED WHEN ACCESSING THE MEDIAN FOR THE NB APPROACH AS OUTLINED IN SHEETS 32-36.
 2. A LEFT LANE CLOSURE WILL BE REQUIRED WHEN ACCESSING THE MEDIAN FOR THE SB APPROACH AS OUTLINED IN SHEETS 47-51.
 3. YELLOW GUARDRAIL DELINEATORS SHALL BE MOUNTED EVERY 20 FEET ALONG THE SIDE OF THE BARRIER PER VTRANS STANDARD DRAWING T-13.
 4. APPROACH SIGNING SHALL FOLLOW THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, FIGURE 6H-5 "SHOULDER CLOSURE ON A FREEWAY" (TA-5).

Signature
4/23/15

Vermont Agency of Transportation
RECEIVED
CK'D BY CB/NA OK'D BY JS
April 23, 2015
RESUBMIT NO Approved AsNoted
BY KH DATE 4-24-2015

I-91 MEDIAN WORK

SCALE 1" = 50' -0"
50 0 50

PREPARED BY:
SEBAGO
TECHNICS

PROJECT NAME: HARTFORD
PROJECT NUMBER: IM 091-2(79)

FILE NAME: sl2a026_Median Closure.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: B. LYON
I-91 MEDIAN WORK

PLOT DATE: 04/23/15
DRAWN BY: B. LYON
CHECKED BY: S. SAWYER
SHEET 70 OF ??



CONSTRUCTION LEADERS

**SUBMITTAL NO. : 29.2
Lighting Plan**

Item No.	Specification	Description
1	Spec. Prov. #12	Lighting Plan

PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

Vermont Agency of Transportation

RECEIVED

Submittal 029.2 Lighting Plan.pdf

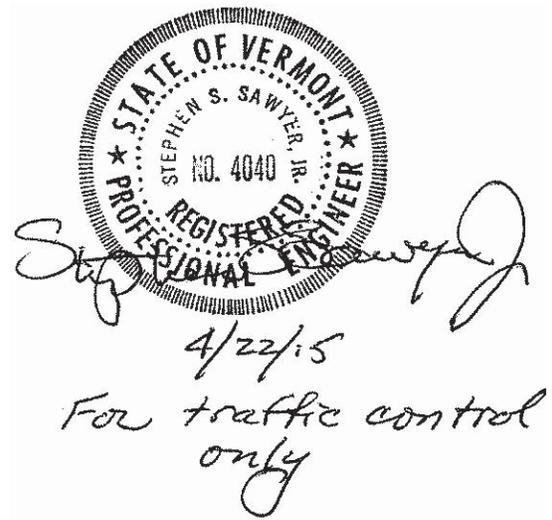
CK'D BY _____ OK'D BY _____

April 22, 2015

APRIL 21, 2015

RESUBMIT NO Approved _____

BY CB DATE 5-5-2015



SITE SPECIFIC LIGHTING PLAN

**PCL Civil Constructors, Inc.
Transportation Infrastructure Group - Tampa**

PCL Job # 5515002

**Hartford Lateral Slide Project
I-91 over US-5
Project No.: IM 091-2(79)**

Hartford, VT

Site Specific Light Plan

A. Introduction

As stated in the Special Provisions for Hartford IM 091-2 (79), and in accordance with the National Cooperative Highway Research Program (NCHRP) Report 476 – “Guidelines for Design and Operation of Nighttime Traffic Control for Highway Maintenance and Construction”, this document serves to present a lighting plan to be implemented during nighttime work. The nighttime work associated with this project consists of beam erection, concrete deck pour, concrete barrier wall, and bridge closure periods. Girder erection is scheduled for June 8th. The concrete deck pour and barrier wall are scheduled between July 24th and August 7th. The closure periods are scheduled for August 21st – 24th and August 28th – 31st of 2015. The lighting plan PCL had provided has been categorized into four different phases. The phases are broken down in further detail in the following section

B. Phases and Location

The lighting plan has been divided into four specific phases. Each phase describes the scope of work and the desired location of each light plant. Light plants are to be installed according to the lighting plan attached at the end of this document. Light plants are to be placed where illumination is maximized and glare is minimized. Glare control is discussed in greater detail in Section E. Additional lighting will be provided from the Bidwell during the concrete deck pour.

Sufficient lighting, provided by a light plant or equivalent source, is required for each phase when nighttime work is required. Each phase is described in further detail below:

Phase I:

- Phase I consists of staging and erecting six girders approximately 133 feet in length on the east side of I-91N. The beams will be set onto the steel false work for the slide system adjacent to I-91N. Two light plants are to be placed on the east side of I-91N for Phase I. One light plant is to be set on the south side of US 5 and one light plant is to be set on the north side of

US 5 to provide sufficient lighting in the work zone. Phase I will be repeated for the deck pour for the I-91N Bridge on July 24th. Once the bridge deck has reached the three day cure time, per specifications, concrete barrier wall will be installed. Dismantling and transporting the light plants will be required.

Phase II:

- Phase II consists of staging and erecting six girders approximately 133 feet in length on the west side of I-91 S. The beams will be set onto the steel false work for the slide system adjacent to I-91 S. Light Plants must be dismantled, then transported to the appropriate area per the Phase II Lighting Plans. Two light plants are to be placed on the west side of I-91S for Phase II. One light plant is to be set on the south side of US 5 and one light plant is to be set on the north side of US 5 to provide sufficient lighting in the work zone. Phase II will be repeated for the deck pour for the I-91N Bridge on July 31st. Once the bridge deck has reached the three day cure time, per specifications, concrete barrier wall will be installed. Dismantling and transporting the light plants will be required.

Phase III:

- Phase III will consist of the closure period August 21st-24th for I-91N. Work will consist of demolition of the existing bridge and sliding the new bridge, via lateral slide system, into place per spec. There will be four light plants for this phase. Two light plants will be placed on the south side of US 5, and two light plants will be placed on the north side of US 5. View attached plans for details.

Phase IV:

- Phase IV will consist of the closure period August 28th -31st for I-91S. Work will consist of demolition of the existing bridge and sliding the new bridge, via lateral slide system, into place per spec. There will be four light plants for this phase. Two light plants will be placed on the south side of US 5, and two light plants will be placed on the north side of US 5. View attached Plans for details.

C. Traffic Control

Nighttime work contains traffic control for setting beams. Lane closures will be set up in accordance with the work performed for each particular phase and as per the approved traffic control drawings for Route 5. Lane closures will be required during setting beams, concrete barrier wall, and during the slide. When necessary, traffic will be stopped in both directions for a maximum of 10 minutes in length between the hours of 6:00 pm – 9:00 pm, and 20 minutes in length between the hours of 9:00 pm - 6:00 am. Live traffic on US 5 is not permitted when the crane is picking and placing any item on the bridge or when the slide is in motion. Flaggers will have additional lighting provided to illuminate their position for personal safety and driver recognition. Flaggers for nighttime work will wear full body High Visibility Safety Apparel Class 3 in accordance with Section 6E of the MUTCD. In addition, hand signaling devices shall be retroreflectorized. General flagger station locations are shown on the attached lighting plans at the end of this document, but their actual positions shall provide approaching drivers with sufficient stopping sight distance in accordance with Section 6E.08 of the MUTCD.

D. Configuration

The lights will be positioned and angled so that recommended minimum illuminance levels are reached. See table below from NCHRP Report 476 for reference.

TECH NOTE TABLE 3 Recommended minimum illuminance levels and categories for nighttime highway maintenance and construction

Level of Illuminance	Illuminance in Footcandles (lux)	Area of Illumination	Type of Activity	Example of Areas and Activities to be Illuminated
I	5(54)	general illumination throughout spaces	performance of visual task of large sizes; or medium contrast; or low desired accuracy; or for general safety requirements	a) Excavation b) Sweeping and cleanup c) Movement area in the workzone d) Movement between two
II	10 (108)	general illumination of tasks and around equipment	performance of visual task of medium sizes; or low to medium contrast; or medium desired accuracy; or for safety on and around equipment	a) Paving b) Milling c) Concrete work d) Around paver, miller and other construction equipment
III	20 (216)	illumination of task	performance of visual task of small sizes; or low contrast; or desired high accuracy and fine finish	a) Crack filling b) Pothole filling c) Signalization or similar work requiring extreme caution and attention

E. Glare Control

To minimize glare, PCL will adhere to the following NCHRP Report 476 guidelines:

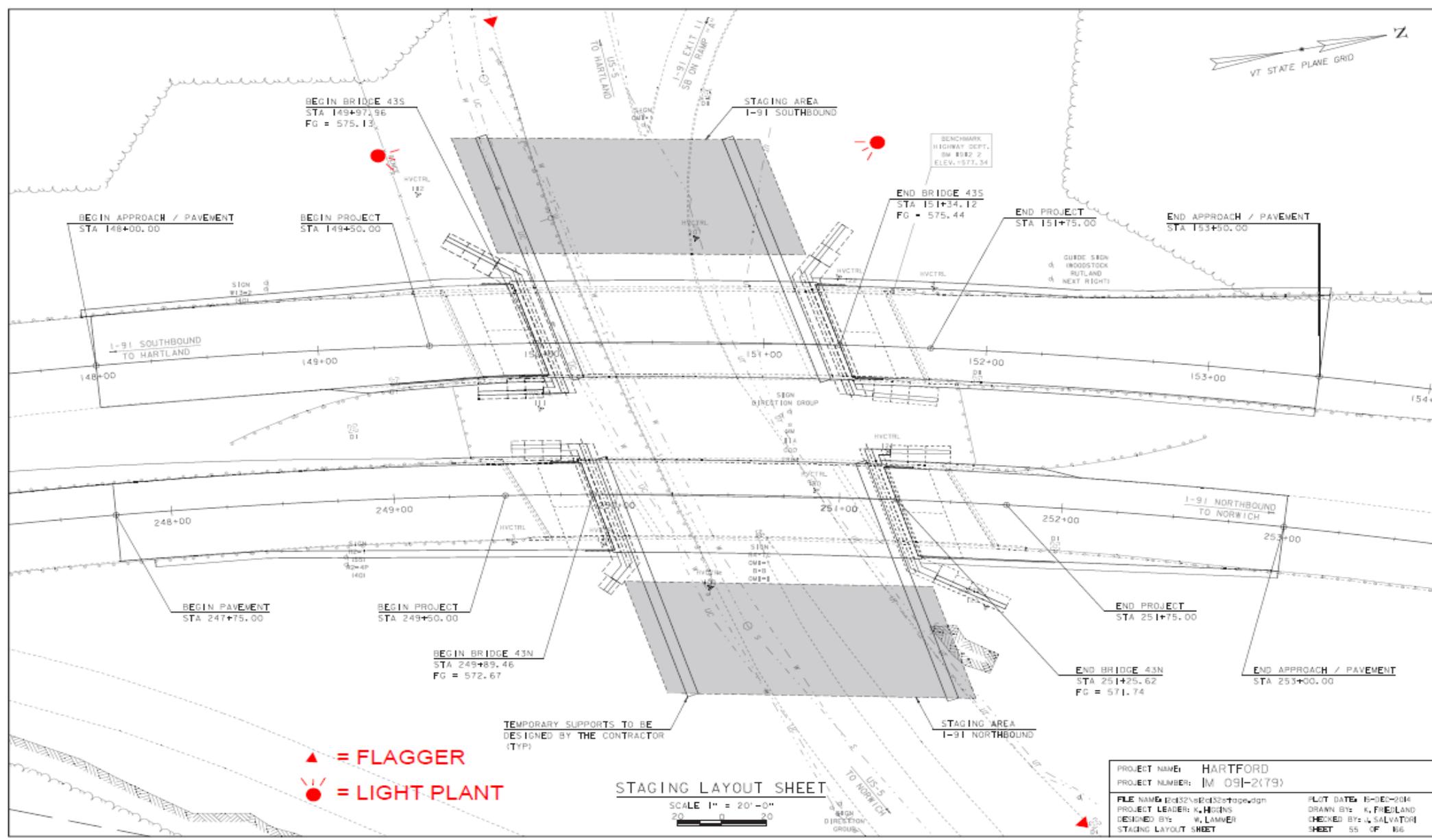
- Tower-mounted luminaires should generally be aimed either parallel or perpendicular to the roadway.
- All luminaires should be aimed such that the center of the beam axis is no greater than 60 degrees above the vertical (straight down).
- None of the luminaires should provide a luminous intensity greater than 20,000 candela at an angle of 72 degrees above the vertical (straight down).

F. Light Plant Specifications

All light plants will follow the NCHRP Report 476 specifications. The light plants will have equivalent characteristics as follows:

- 4,000 Watts of Light (1,000 Watts/EA)
- Individual Floodlight Circuits
- 360° Mast and Light Fixture Rotation with Locking System
- 120 V and 240 V Outlets for Additional Power Supply
- Start trip breaker assures no load condition exists before starting
- Full tubular steel frame trailer for lifetime durability
- 4-point outrigger stance to withstand up to 65 mph winds

LIGHTING PLAN FOR NIGHT WORK (PHASE II)

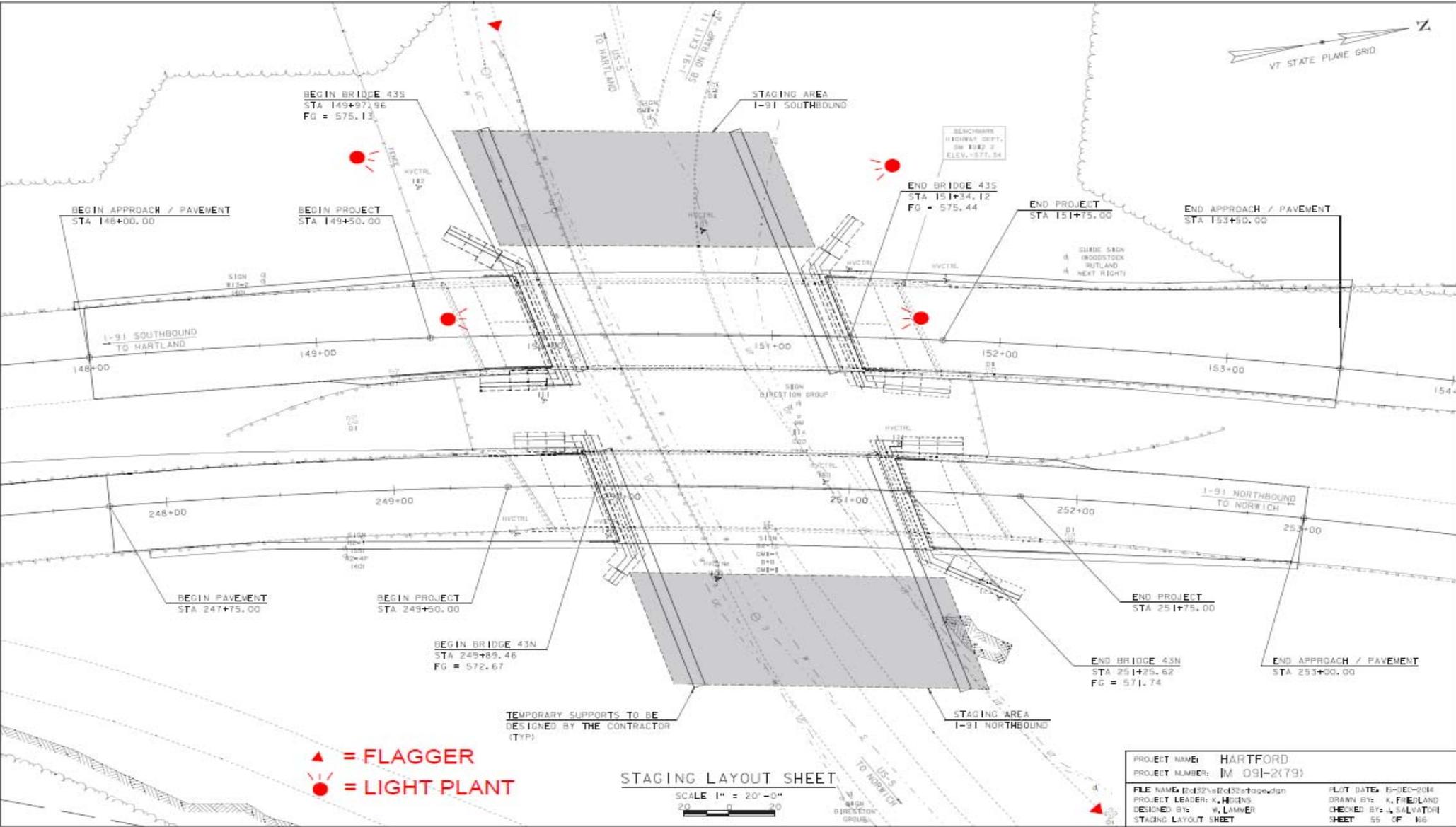


▲ = FLAGGER
 ☀ = LIGHT PLANT

STAGING LAYOUT SHEET
 SCALE 1" = 20'-0"
 20 0 20

PROJECT NAME: HARTFORD	PLOT DATE: 15-DEC-2004
PROJECT NUMBER: IM 09-2(79)	DRAWN BY: K. FRIEDLAND
FILE NAME: I2032\sr032stage\dwg	CHECKED BY: A. SALVATORE
PROJECT LEADER: K. HIGGINS	SHEET 55 OF 66
DESIGNED BY: W. LAMVER	
STAGING LAYOUT SHEET	

LIGHTING PLAN FOR NIGHT WORK (PHASE IV)



PROJECT NAME:	HARTFORD	PLAT DATE:	6-DEC-2004
PROJECT NUMBER:	IM 09I-2(79)	DRAWN BY:	K. FINELAND
FILE NAME:	041219e0432stoppedit	DESIGNED BY:	W. LAMMER
PROJECT LEADER:	K. HINDS	CHECKED BY:	L. SALVATORI
STAGING LAYOUT SHEET		SHEET	55 OF 66