SITE SPECIFIC

TRAFFIC CONTROL PLAN

FOR

FAIRFIELD BRF 0281 (25)

(State of Vermont, Agency of Transportation

Town Highway 1, South Road, Bridge 14, Fairfield, VT)

FOR

A.L. St. Onge Contractor, Inc.

PO BOX 65
MONTGOMERY, VT 05470

January, 2015

Revised 02/16/2015

Prepared by:

RUGGLES ENGINEERING SERVICES INC.

Ruggles Engineering Services, 4580 Memorial Drive, St. Johnsbury, VT 05819

www.rugglesengineeringservices.com

Construction Activities Before the BCP

- Construction Approach Signing Installation- Flaggers and Temporary Flagging Sign Package set up in advance of the Activities. Signs with Bridge Closed wording will be covered until the BCP begins. Single Lane traffic maintained. Construction Approach Signing guided by Standard T10 (modified by Plans sheet 18/69) and detailed on TCP5.
- The Town Of Fairfield will be notified a minimum of 2 weeks in the advance of the Bridge Closure Period. The Town is responsible for an off-site detour. **TRAFFIC CONTROL** note 7.
- Flaggers and their Temporary Sign Packages used as material deliveries/stock piling in the Staging Areas occur and stationed as detailed in TCP 5.
- Contractor Construction vehicles will be parked in the Staging areas.

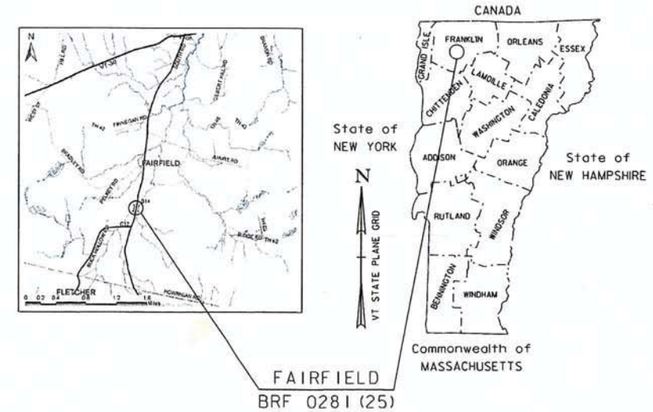
Construction Activities During the Bridge Closure Period

- The Bridge is closed and signs with Bridge Closed coverings will be removed. The Town Of Fairfield is responsible for the detour. **TRAFFIC CONTROL** note 7. The Road will closed and barricaded as detailed on TCP3. Flaggers and their Temporary Sign Packages utilized as material deliveries occur. Work is scheduled only for daylight periods, on the occurrence work continues into limited daylight , Portable Light Stations will be set up illuminating the Flaggers Positions as detailed in Report 476 NCHRP. Contractor Construction vehicles will be parked in the Staging areas.

Construction Activities After the BCP

- Normal Town Highway 1 traffic is restored and Bridge Closed wording signs will be covered until removed. TH1 traffic will be controlled with Flaggers and their Temporary Sign Packages for single lane traffic during daylight periods until Construction Activities Conclude.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

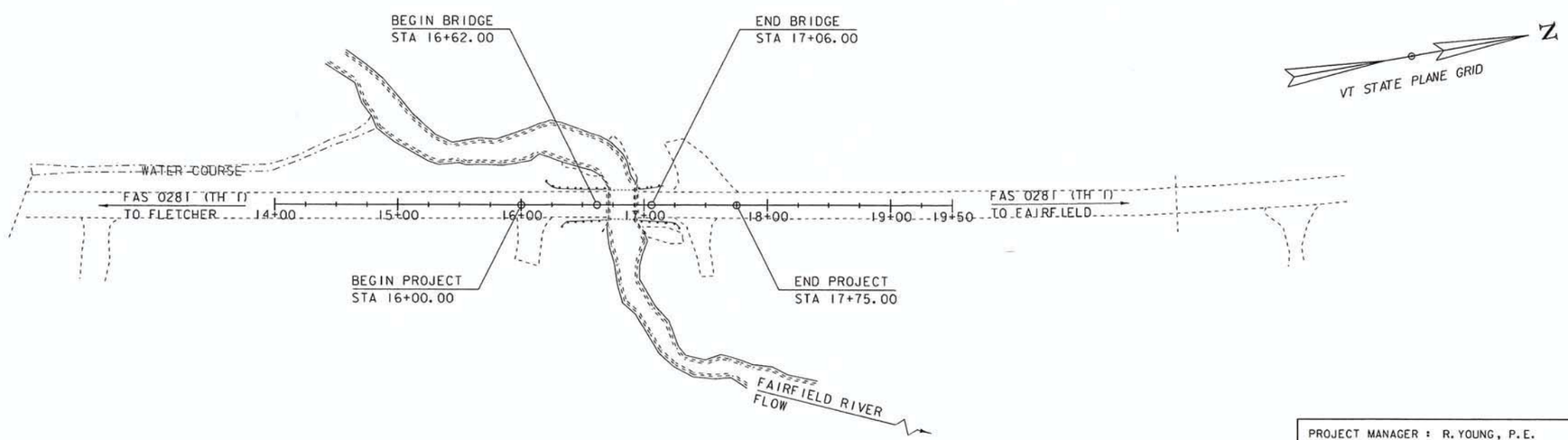
TOWN OF FAIRFIELD
COUNTY OF FRANKLIN

ROUTE NO : SOUTH ROAD, FAS 0281 (RURAL MAJOR COLLECTOR), CLASS 2 TOWN HIGHWAY BRIDGE NO : 14

PROJECT LOCATION: ON TH 1 (FAS 0281), APPROXIMATELY 2.5 MILES SOUTH OF ITS JUNCTION WITH VT 36.

PROJECT DESCRIPTION: REPLACEMENT OF EXISTING BRIDGE (BRIDGE NO. 14) WITH RELATED ROADWAY APPROACH AND CHANNEL WORK.

LENGTH OF STRUCTURE: 44.00 FEET
LENGTH OF ROADWAY: 131.00 FEET
LENGTH OF PROJECT: 175.00 FEET



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

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : L. ORVIS
SURVEYED DATE : 3/25/2012

DATUM
VERTICAL NAVD88
HORIZONTAL NAD (83) 2007

PROJECT MANAGER : R. YOUNG, P.E.

PROJECT NAME : FAIRFIELD
PROJECT NUMBER : BRF 0281 (25)

SHEET 6 OF 69 SHEETS

TCP1

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISIONS.

2. ALL PRECAST/PRESTRESSED CONCRETE ELEMENTS SHALL BE FABRICATED TO THE SPECIFIED DIMENSIONS AND ERECTED IN THE SPECIFIED LOCATIONS, ALL WITHIN TOLERANCES DEFINED ON THE PLANS AND IN THE PRECAST/PRESTRESSED CONCRETE INSTITUTE TOLERANCE MANUAL FOR PRECAST AND PRESTRESSED CONCRETE CONSTRUCTION, MNL 135-00, AND ITS LATEST REVISIONS.

3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

4. THE WEARING SURFACE SHALL BE SHIMMED TRANSVERSELY AS NECESSARY TO ACCOUNT FOR DIFFERENTIAL CAMBER OF THE ADJACENT PRESTRESSED SLABS.

TRAFFIC CONTROL

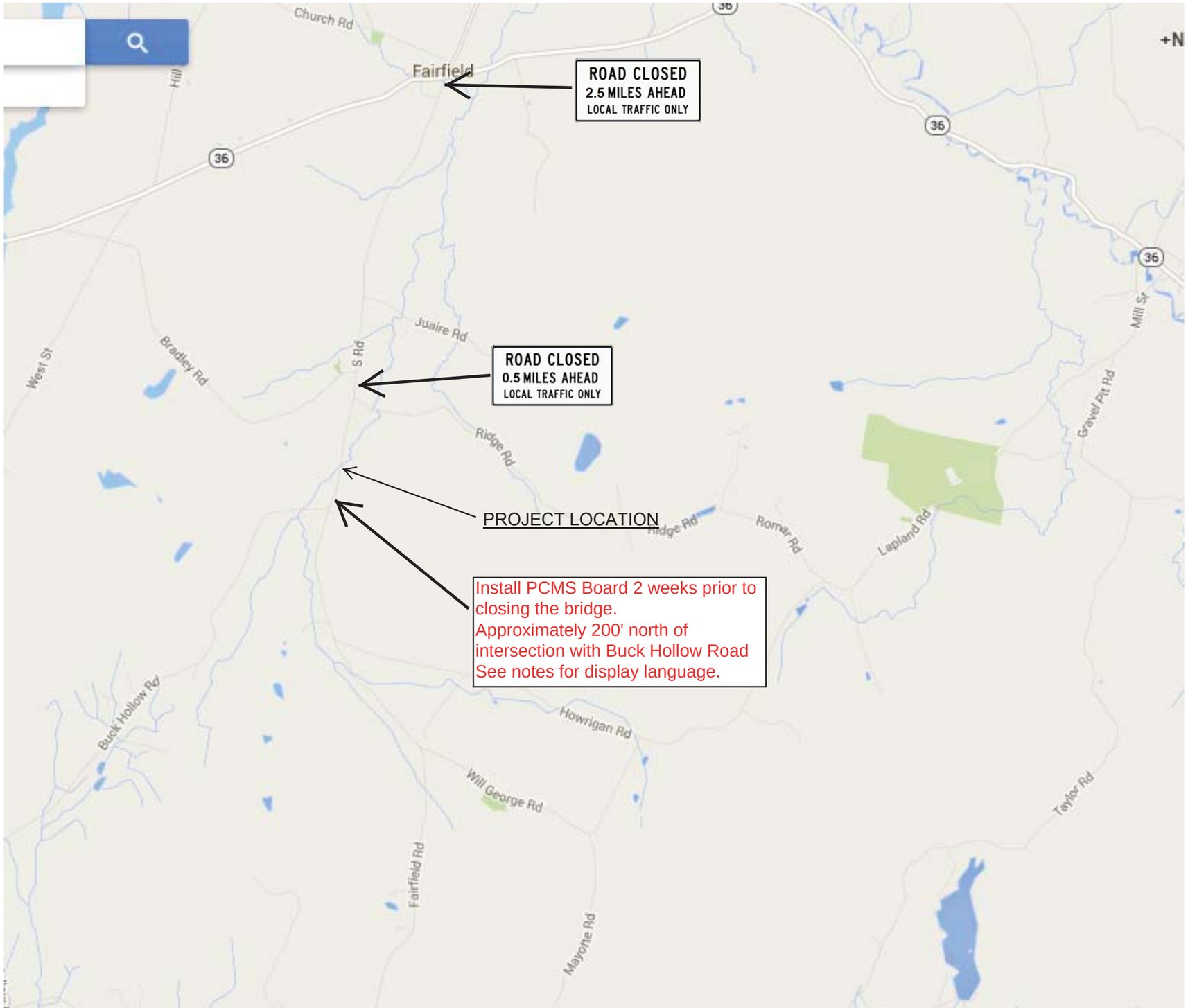
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A SITE SPECIFIC TRAFFIC CONTROL PACKAGE IDENTIFYING CONSTRUCTION ACTIVITIES BEFORE, DURING, AND AFTER THE BRIDGE CLOSURE PERIOD. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE PROJECT MANAGER FOR ALL STAGES OF CONSTRUCTION, FOR APPROVAL PER SUBSECTION 105.03. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE) (BRF 0281(25))". SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

6. ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCLUDED IN THE BID PRICE FOR ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)(BRF 0281(25))".

7. THE CONTRACTOR IS NOT RESPONSIBLE FOR THE OFF-SITE DETOUR. THE CONTRACTOR SHALL NOTIFY THE TOWN A MINIMUM OF TWO WEEKS IN ADVANCE OF THE BRIDGE CLOSURE PERIOD.

8. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. FOR ADDITIONAL SIGNING INSTRUCTIONS SEE THE T SERIES OF THE STANDARDS. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

TCP2



Notes:
1. Signs to be covered except during bridge closed period.
2. Detours and Detour signs are the responsibility of the Town per Note 7 on Contract Sheet 8.

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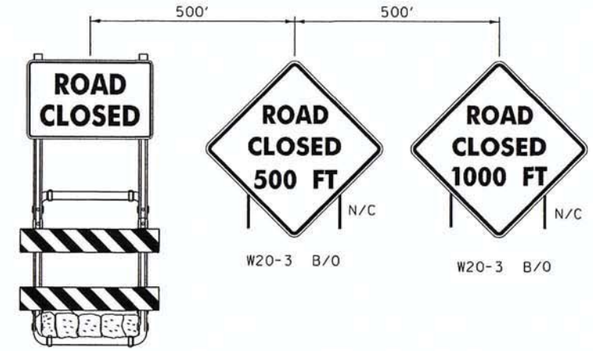
PCMS MESSAGE BOARD

PHASE 1	PHASE 2
BRIDGE	SEEK
CLOSED	ALTERNATE
(DATE)	ROUTE

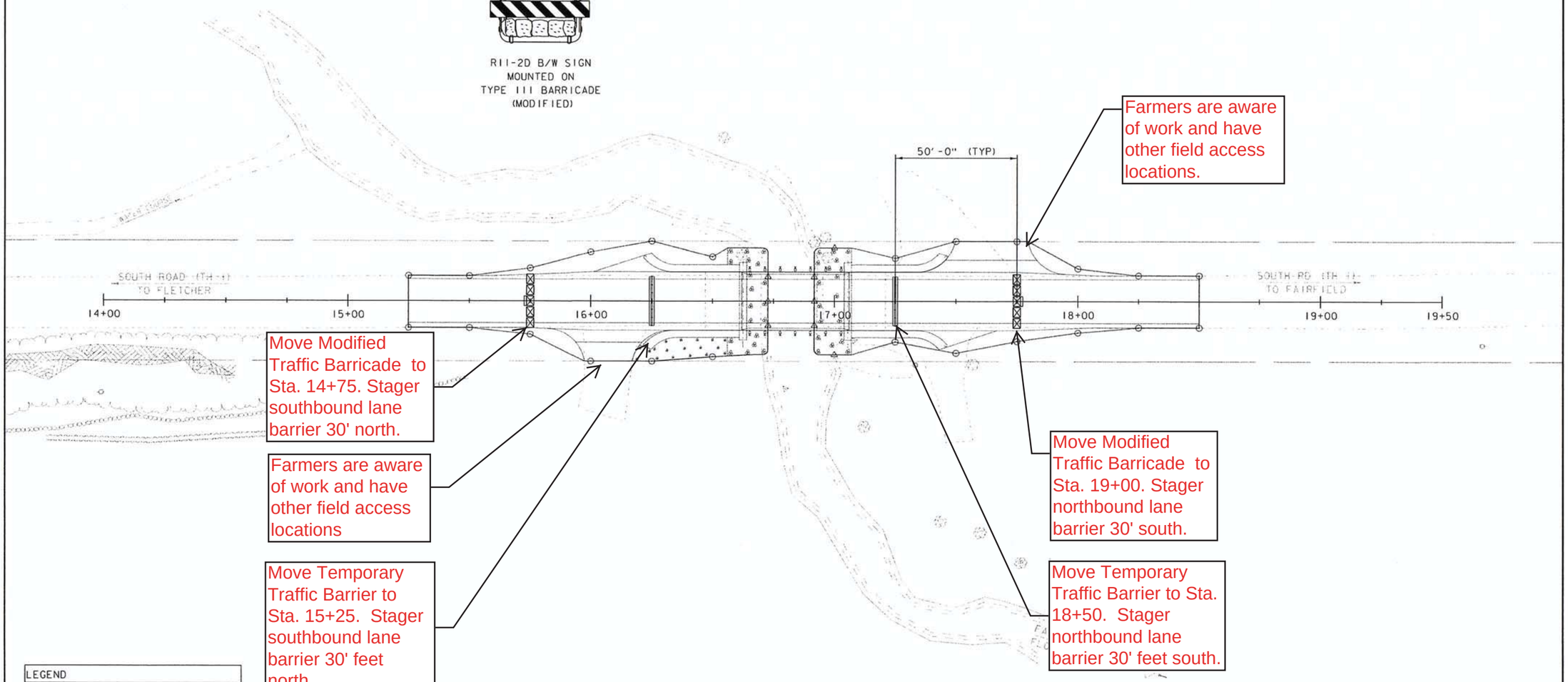
Prepared by Ruggles Engineering Services, Inc.
01/08/2015

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIGNS AND BARRICADES SHOWN ON THIS SHEET. THEY SHALL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
2. TEMPORARY TRAFFIC BARRIER AT EACH END OF THE PROJECT SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621 AND PAYMENT SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
3. SEE STANDARD T-10 FOR TYPICAL APPROACH SIGNING.



R11-2D B/W SIGN MOUNTED ON TYPE III BARRICADE (MODIFIED)



LEGEND

- N/C - NEW/CONSTRUCTION ONLY
- B/O - BLACK/ORANGE
- B/W - BLACK/WHITE
- ⊠ - TYPE III BARRICADE
- ⊠ - TYPE III BARRICADE (MOD.)
- ▭ TEMPORARY TRAFFIC BARRIER

TRAFFIC LAYOUT SHEET

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

PROJECT NAME: FAIRFIELD	
PROJECT NUMBER: BRF 028I(25)	
FILE NAME: s12J156traff.dgn	PLOT DATE: 10-SEP-2014
PROJECT LEADER: R. YOUNG	DRAWN BY: K. FRIEDLAND
DESIGNED BY: R. KLINEFELTER	CHECKED BY: J. SALVATORI
TRAFFIC LAYOUT SHEET	SHEET 18 OF 69

TCP3

PERMANENT APPROACH SIGNS

USE "ROAD WORK 500 FEET", REPLACE WITH "ROAD CLOSED 500 FT" DURING BRIDGE CLOSURE PERIOD, (TYP.)

These signs Modified by Plans sheet 18/69

LEGEND

(A) ROAD CLOSED 1000 FT

(B) ROAD CLOSED 500 FT

(C) ~~SIDE ROAD WORK AHEAD~~ VC-869

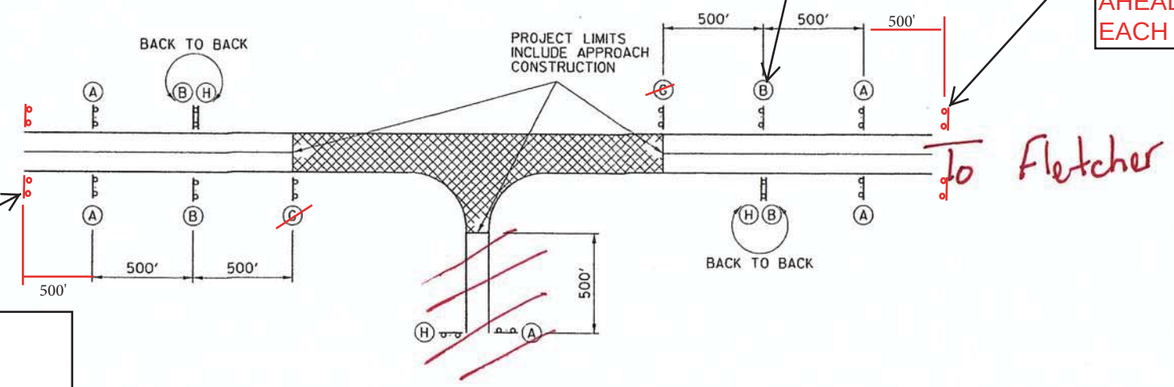
(D) ~~SIDE ROAD WORK 500 FT~~ VC-869

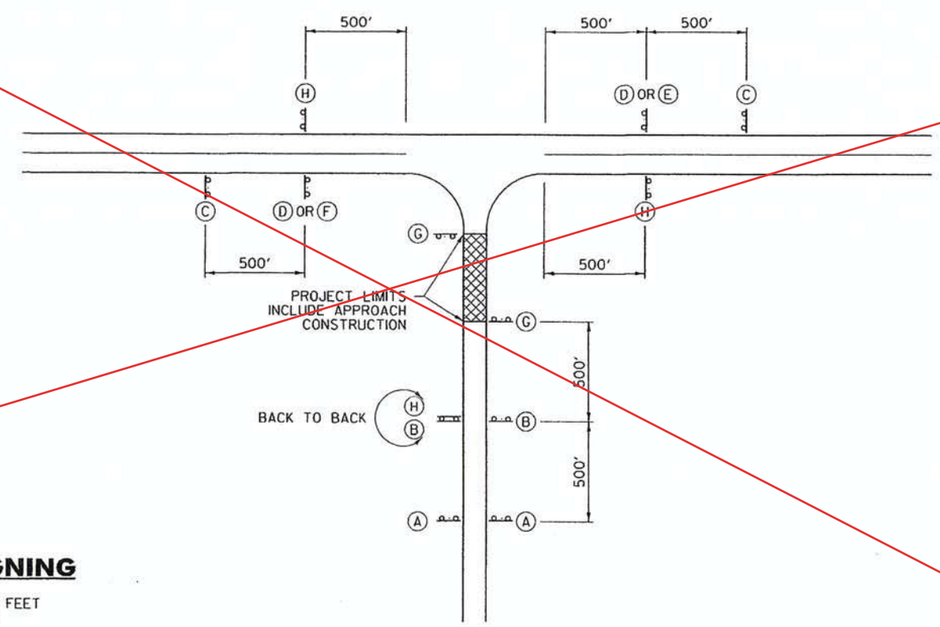
(E) ~~SIDE ROAD WORK LEFT~~ VC-869

(F) ~~SIDE ROAD WORK RIGHT~~ VC-869

(G) ~~ROAD WORK NEXT XX MILES~~ G20-1

(H) END ROAD WORK G20-2





SIDE ROAD APPROACH SIGNING

TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION. FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.

GENERAL NOTES:

1. SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.
2. THE "ROAD WORK NEXT XX MILES" SIGN (G20-1) SHALL BE INSTALLED IN ADVANCE OF TEMPORARY TRAFFIC CONTROL ZONES THAT ARE MORE THAN TWO MILES IN LENGTH OR AS DIRECTED BY THE ENGINEER. DISTANCES SHALL BE STATED TO THE NEAREST WHOLE MILE.
3. SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

OTHER STDS. REQUIRED: T-1, T-28

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

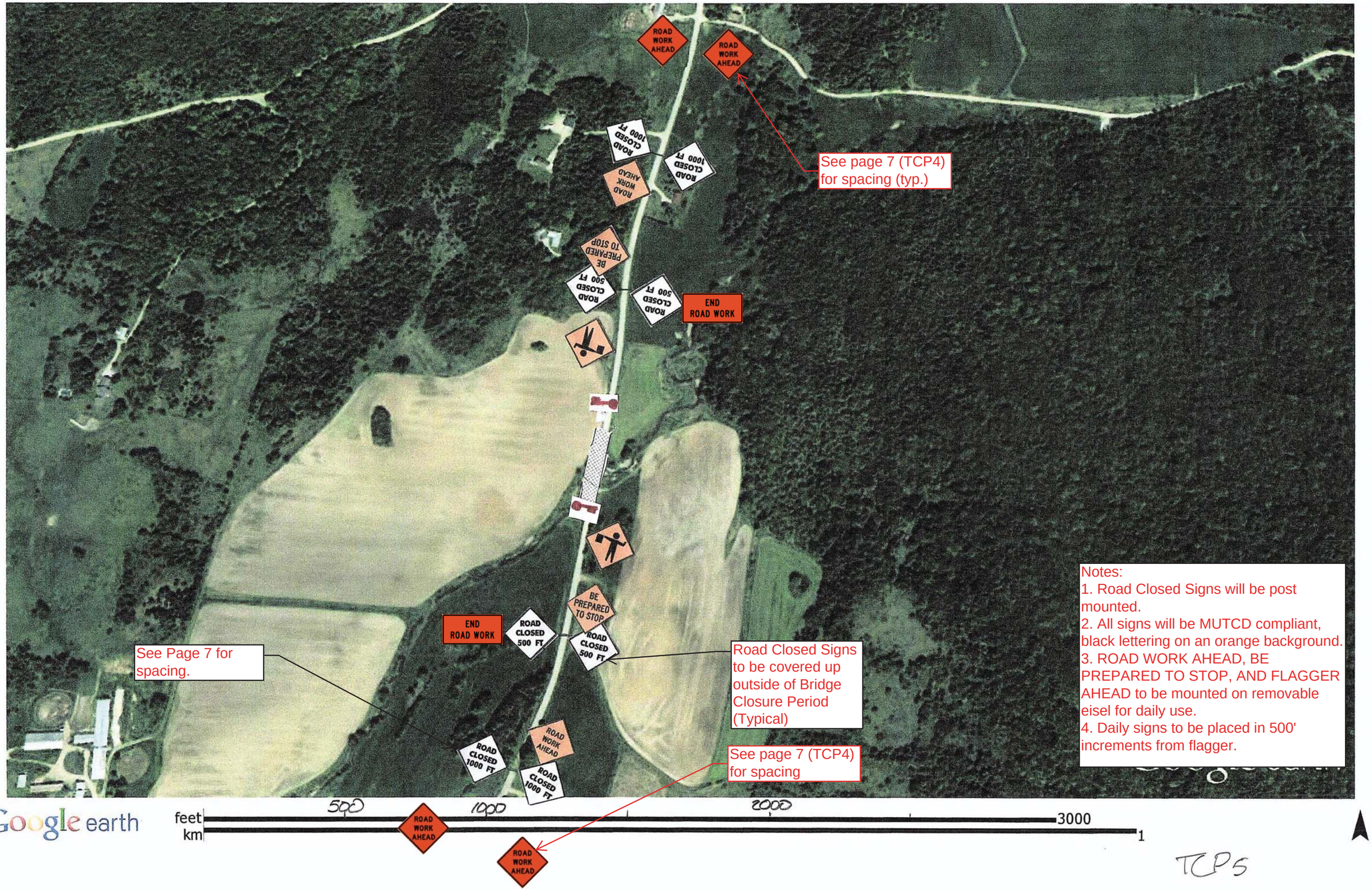
FEDERAL HIGHWAY ADMINISTRATION

CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING

VERMONT AGENCY OF TRANSPORTATION

STANDARD T-10

TCP4


ROAD WORK AHEAD
ROAD WORK AHEAD
See page 7 (TCP4) for spacing (typ.)
ROAD CLOSED 1000 FT
ROAD CLOSED 1000 FT
ROAD WORK AHEAD
BE PREPARED TO STOP
ROAD CLOSED 500 FT
ROAD CLOSED 500 FT
END ROAD WORK
END ROAD WORK
ROAD CLOSED 500 FT
BE PREPARED TO STOP
ROAD CLOSED 500 FT
See Page 7 for spacing.
Road Closed Signs to be covered up outside of Bridge Closure Period (Typical)
ROAD CLOSED 1000 FT
ROAD WORK AHEAD
ROAD CLOSED 1000 FT
See page 7 (TCP4) for spacing
Notes:
1. Road Closed Signs will be post mounted.
2. All signs will be MUTCD compliant, black lettering on an orange background.
3. ROAD WORK AHEAD, BE PREPARED TO STOP, AND FLAGGER AHEAD to be mounted on removable eisel for daily use.
4. Daily signs to be placed in 500' increments from flagger.
Google earth
feet
km
500
1000
2000
3000
1
ROAD WORK AHEAD
ROAD WORK AHEAD

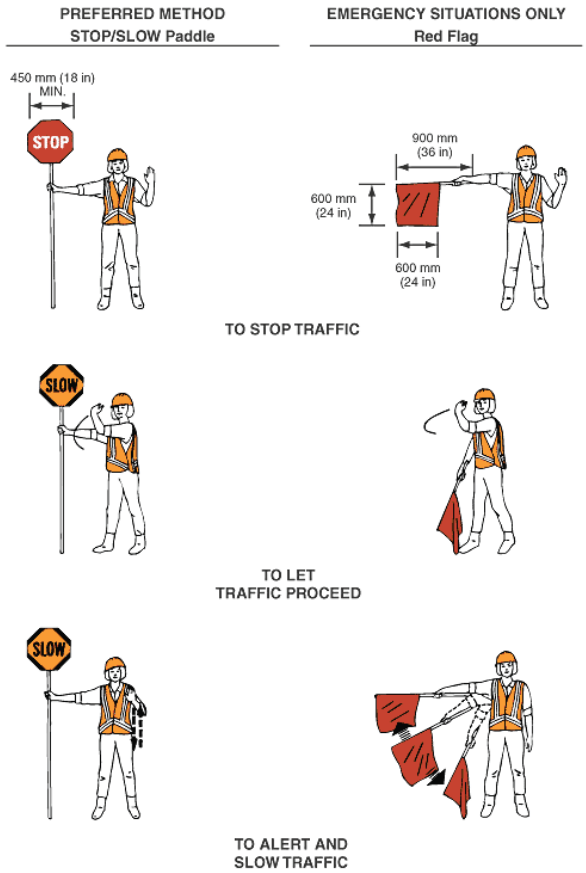
TCP5

Appendix A – Schedules and Supporting Information

Flagger Hand Signals

Sign Installation

Figure 6E-1. Use of Hand-Signaling Devices by Flaggers



Standard: The following methods of signaling with paddles shall be used:

A. To stop road users, the flagger shall face road users and aim the STOP paddle face toward road users in a stationary position with the arm extended horizontally away from the body. The free arm shall be held with the palm of the hand above shoulder level toward approaching traffic.

B. To direct stopped road users to proceed, the flagger shall face road users with the SLOW paddle face aimed toward road users in a stationary position with the arm extended horizontally away from the body. The flagger shall motion with the free hand for road users to proceed.

C. To alert or slow traffic, the flagger shall face road users with the SLOW paddle face aimed toward road users in a stationary position with the arm extended horizontally away from the body.

Option: To further alert or slow traffic, the flagger holding the SLOW paddle face toward road users may motion up and down with the free hand, palm down.

Standard: The following methods of signaling with a flag shall be used:

A. To stop road users, the flagger shall face road users and extend the flag staff horizontally across the road users' lane in a stationary position so that the full area of the flag is visibly hanging below the staff. The free arm shall be held with the palm of the hand above the shoulder level toward approaching traffic.

B. To direct stopped road users to proceed, the flagger shall stand parallel to the road user movement and with flag and arm lowered from the view of the road users, and shall motion with the free hand for road users to proceed. Flags shall not be used to signal road users to proceed.

C. To alert or slow traffic, the flagger shall face road users and slowly wave the flag in a sweeping motion of the extended arm from shoulder level to straight down without raising the arm above a horizontal position. The flagger shall keep the free hand down.

General Sign Installations

Figure 6F-1. Height and Lateral Location of Signs—Typical Installations

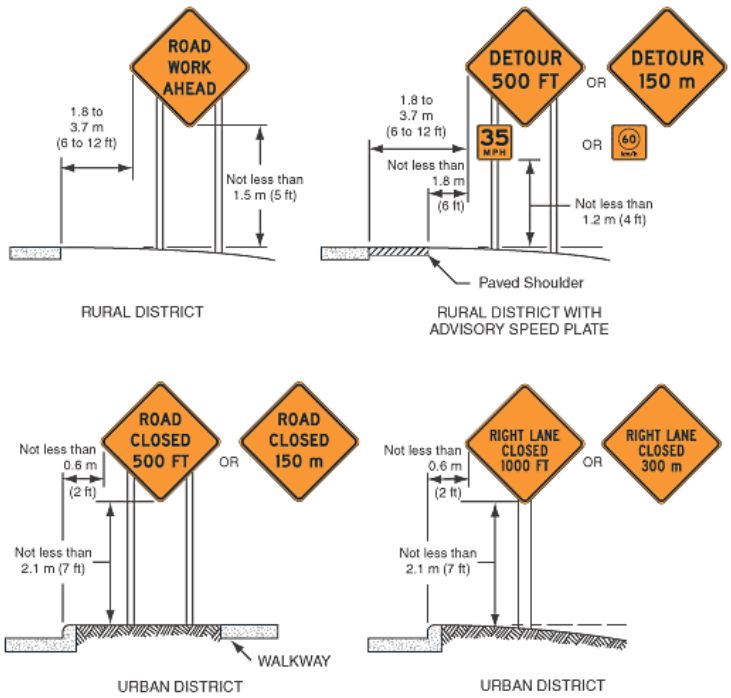


Figure 6F-1. Height and Lateral Location of Signs—Typical Installations

This figure shows four examples of the height and lateral location of signs for typical installations.

The first illustration is labeled "Rural District." The roadway is shown with no shoulder. The sign in this example is a diamond-shaped Road Work Ahead sign. The distance between the edge of the pavement and the near edge of the sign is shown as a dimension of 1.8 to 3.7 m (6 to 12 ft). The distance from the bottom edge of the sign to the level of the edge of the pavement is shown as a dimension not less than 1.5 m (5 ft).

The second illustration is labeled "Rural District with Advisory Speed Plate." The roadway is shown with a paved shoulder. The sign in this example is a diamond-shaped Detour sign with an advisory speed plaque mounted below it, with the metric alternate signs shown to the right. The distance between the outside edge of the roadway and the near edge of the sign is shown as a dimension of 1.8 to 3.7 m (6 to 12 ft). The distance between the outside edge of the paved shoulder and the near edge of the sign is shown as a dimension not less than 1.8 m (6 ft). The distance from the bottom edge of the advisory speed plaque to the level of the edge of the roadway at the inside edge of the shoulder is shown as a dimension not less than 1.2 m (4 ft).

The third illustration is labeled "Urban District." The roadway is shown with a curb along the outside edge of the pavement and a walkway to the right of the sign. The sign in this example is a diamond-shaped Road Closed sign with a metric alternate shown to the right. The distance from the edge of the roadway to the near edge of the sign is shown as a dimension no less than 0.6 m (2 ft). The distance from the bottom edge of the sign to the surface of the curbing is shown as a dimension no less than 2.1 m (7 ft).

The fourth illustration is labeled "Urban District." The roadway is shown with a curb along the outside edge of the pavement. The sign in this example is a diamond-shaped Right Lane Closed sign with a metric alternative shown to the right. The distance from the edge of the roadway to the near edge of the warning sign is shown as a dimension not less than 0.6 m (2 ft). The distance from the bottom edge of the sign to the level edge of the travel lane at the top of the curbing is shown as a dimension of not less than 2.1 m (7 ft).

Appendix B –Standard Sheets for Traffic Control

T-1 Traffic Control General Notes.

1. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) ''STANDARD DRAWINGS'' OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON TRAFFIC CONTROL DEVICES" (MUTCD) AND THE ''STANDARD HIGHWAY SIGNS AND MARKINGS'' BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).

2. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.

3. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.

4. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.

5. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED. CONSTRUCTION SIGNS SHALL BE PLACED ON TWO POSTS.

6. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.

7. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.

8. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.

9. ROLL UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI AND TYPE VII UNLESS OTHERWISE NOTED.

10. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VIII OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.

11. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.

12. ROADWAY AND SHOULDER WIDTHS DEPICTED ON THE STANDARD DRAWINGS MAY VARY.

13. THESE STANDARD DRAWINGS ARE INTENDED TO SERVE AS VTRANS STANDARD OPERATING PROCEDURE. IT IS NOTED THAT COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY BE MODIFIED DUE TO FIELD CONDITIONS, AT THE DISCRETION OF THE ENGINEER.

OTHER STDS. REQUIRED: **NONE**

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

FEDERAL HIGHWAY ADMINISTRATION

TRAFFIC CONTROL GENERAL NOTES

VERMONT AGENCY OF TRANSPORTATION

STANDARD

T-1