# SECTION C: TRAFFIC CONTROL PLANS

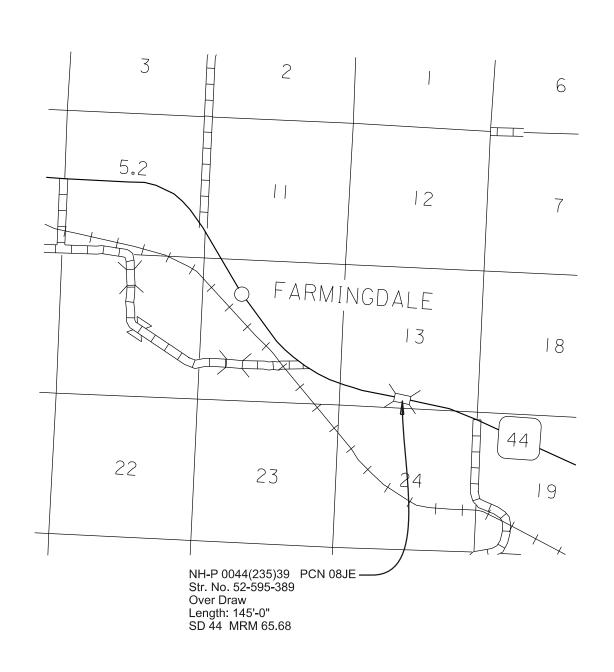
| PROJECT | SECTION SHEET | NH 0016(103)67 & | C | 1/10

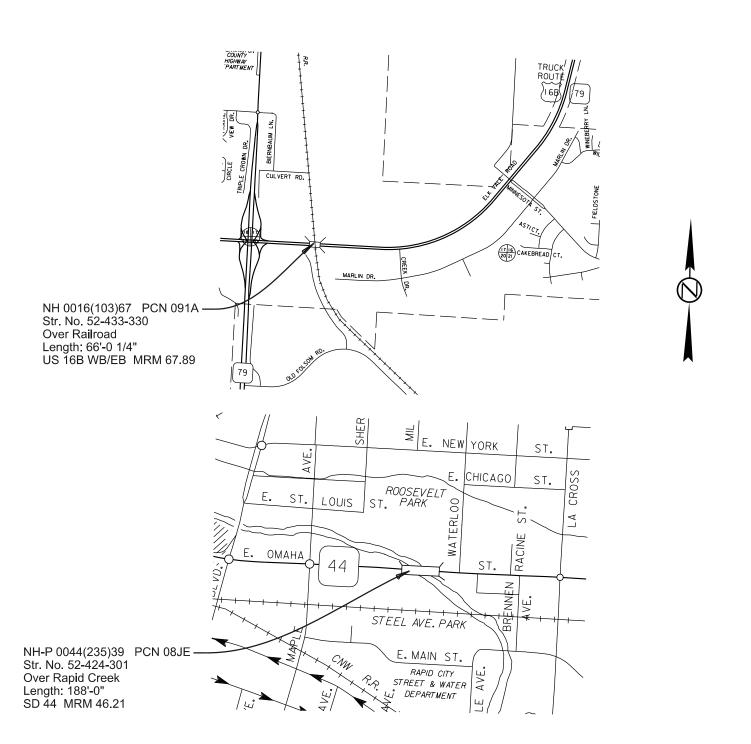
## **INDEX OF SHEETS**

Sheet C1 General Layout with Index

Sheet C2-C3 Estimate with General Notes & Table

Sheet C4-C5 Ramp Signing Details
Sheet C6 to C10 Standard Plates





## **SECTION C ESTIMATE OF QUANTITIES**

#### 091A

| BID ITEM<br>NUMBER | ITEM                               | QUANTITY | UNIT |
|--------------------|------------------------------------|----------|------|
| 009E0010           | Mobilization                       | Lump Sum | LS   |
| 009E4100           | Construction Schedule, Category I  | Lump Sum | LS   |
| 634E0010           | Flagging                           | 50.0     | Hour |
| 634E0110           | Traffic Control Signs              | 228.0    | SqFt |
| 634E0120           | Traffic Control, Miscellaneous     | Lump Sum | LS   |
| 634E0275           | Type 3 Barricade                   | 2        | Each |
| 634E0420           | Type C Advance Warning Arrow Board | 2        | Each |
| 634E0640           | Temporary Pavement Marking         | 2,880    | Ft   |

#### 08JE

| BID ITEM<br>NUMBER | ITEM                                      | QUANTITY | UNIT |
|--------------------|---|----------|------|
| 009E0010           | Mobilization                              | Lump Sum | LS   |
| 009E4100           | Construction Schedule, Category I         | Lump Sum | LS   |
| 634E0010           | Flagging                                  | 100.0    | Hour |
| 634E0110           | Traffic Control Signs                     | 249.0    | SqFt |
| 634E0120           | Traffic Control, Miscellaneous            | Lump Sum | LS   |
| 634E0275           | Type 3 Barricade                          | 7        | Each |
| 634E0420           | Type C Advance Warning Arrow Board        | 2        | Each |
| 634E0600           | 4" Temporary Pavement Marking Tape Type I | 288      | Ft   |
| 634E0640           | Temporary Pavement Marking                | 3,820    | Ft   |

## **SEQUENCE OF OPERATIONS**

Contractor requests to deviate from the sequence of operations will be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence will be submitted for review a minimum of one week prior to potential implementation.

## Str. No. 52-424-301 - SD44 MRM 46.21

- Use Standard Plates No. 634.57 and 634.60 to complete work at this structure
- Work on the inside 3 lanes (2 passing and 1 turning) will be completed first, followed by work in the outside driving lanes.

## Str. No. 52-595-389 - SD44 MRM 65.68

Use Standard Plate No. 634.25 to complete work at this structure.

## Str. No. 52-433-330 - US16B MRM 67.89

- Use Standard Plates No. 634.47, 634.48, and 634.63 to complete work at this structure. When working in the eastbound lanes, the lane closure setup will begin on the west side of the HWY 79 interchange.
- Use Typical Ramp Signing Detail when working in the eastbound lanes.
- Work in the passing lanes will be completed first, followed by work in the driving lanes.

## **GENERAL TRAFFIC CONTROL**

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

All temporary speed limit signs will have a minimum mounting height of 5 feet in rural locations, even when mounted on portable supports.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

At no time will a vertical drop-off of greater than 3 inches be left overnight adjacent to the traveled way. The Contractor will utilize embankment material to ensure a 3-inch vertical drop-off is not exceeded. The slope of the embankment material will not be steeper than a 4:1 within 30 feet of the traveled way.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

A 16' width restriction will be required at Str. No. 52-595-389 and Str. No. 52-433-330.

## TRAFFIC CONTROL SIGNS

Traffic control signs have been included in a table for each site. Payment will only be for those signs used on each site.

| PROJECT | SECTION SHEET | NH 0016(103)67 & | C | 2/10

Revised: 9-24-25

## **FLAGGING**

Operations will be conducted so that the traveling public will not have to wait longer than 15 minutes at the flagger station.

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours.

It is required that the flaggers be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

## **WORK ZONE SPEED REDUCTION**

The Department is required to obtain a speed reduction resolution prior to the installation of any SPEED LIMIT (R2-1) signs shown in the plans. To provide adequate time for the resolution to be enacted, the Contractor will inform the Engineer a minimum of 3 weeks prior to the scheduled installation of any work zone speed reduction signs on the project. The information provided by the Contractor will include the anticipated date of sign installation, the newly reduced speed limit, the location of the work zone, and the anticipated completion date of work requiring the speed reduction.

## **TEMPORARY PAVEMENT MARKING**

Temporary flexible vertical markers (tabs) may be used as detailed in the specifications.

Covers on the tabs will be sufficiently secured to prevent traffic from dislodging the cover and when removed, the covers will be properly disposed of. The Contractor will remove and properly dispose of the tabs after permanent pavement marking is applied. Method of removal will be nondestructive to the road surface and will be accomplished within one week of completion of the permanent pavement marking.

Full reflectivity of all temporary flexible vertical markers (tabs) is required at all times. The Contractor will be required to replace any missing or non-reflective tabs after each installation as detailed below at no additional cost to the State.

Str. No. 52-424-301 = 2440 ft

Str. No. 52-595-389 = 1380 ft

Str. No. 52-433-330 = 2880 ft

## **TEMPORARY PAVEMENT MARKING TAPE, TYPE I**

Temporary pavement marking for stop lines will consist of 4" Temporary Pavement Marking Tape Type I. Placement of each 24" white stop line will be accomplished by placing six pieces of 4" x 12' tape adjacent to one another. Each workspace requires two stop lines which is an equivalent of approximately 144' of 4" tape (1 workspace at 144' = 144'). Temporary pavement marking on centerline will consist of temporary flexible vertical markers (tabs) or temporary raised pavement markers and will be used as depicted on standard plate 634.25 when the stop condition must remain in place during nighttime hours, 9:00 pm to 6:00 am (Estimate 1 workspaces remaining during nighttime hours x 1,380 per workspace = 1,380'). Temporary tape will be removed upon completion of the project.

## **INCIDENTS**

An incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic such as a crash, hazardous materials spill, or other event.

The Contractor will set up a meeting prior to start of work to plan and coordinate responses to an incident. The Contractor will invite the Department of Transportation, the South Dakota Highway Patrol, the Pennington County Sheriff and local emergency response entities to the meeting.

The Contractor will assist to maintain traffic as required by these plan notes and as agreed to at that meeting.

Emergency vehicle access through the project will be considered and discussed at the meeting.

The Contractor may be required to modify messages on portable changeable message signs or relocate portable changeable message signs, and to provide flaggers to direct or detour traffic. The Contractor should be prepared to relocate advance warning signs if determined to be necessary for a major traffic incident lasting more than two hours. Fixed location ground mounted signs may be covered, and additional portable signs provided.

No additional payment will be made for the modification of portable changeable message sign messages or the relocation of portable changeable message signs. Cost for the relocation of an advance warning sign due to an incident will be 50% of the designated sign rate. Flaggers will be paid for at the contract unit price per hour for "Flagging".

## PRESS RELEASE ANNOUNCEMENTS

The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide the Engineer with pertinent information 7 days prior to any phase change or any other major change that affects traffic flow.

### ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

### Str. No. 52-424-301 - SD44 MRM 46.21

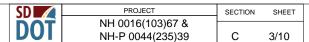
|              |                                  | CONVENTIONAL ROAD                            |           |                  |      |  |
|--------------|----------------------------------|--|-----------|------------------|------|--|
| SIGN<br>CODE | SIGN DESCRIPTION                 | NUM BER                                      | SIGN SIZE | SQFT<br>PER SIGN | SQFT |  |
| W4-2         | LEFT or RIGHT LANE ENDS (symbol) | 2  | 48" x 48" | 16.0             | 32.0 |  |
| W20-1        | ROAD WORK AHEAD                  | 2  | 48" x 48" | 16.0             | 32.0 |  |
| W20-5        | LEFT or RIGHT LANE CLOSED AHEAD  | 2  | 48" x 48" | 16.0             | 32.0 |  |
| G20-2        | END ROAD WORK                    | 2  | 36" x 18" | 4.5              | 9.0  |  |
|              |                                  | CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT |           | 105.0            |      |  |

#### Str. No. 52-595-389 - SD44 MRM 65.68

|              |                         | CONVENTIONAL ROAD                                  |           |                  |      |
|--------------|-------------------------|--|-----------|------------------|------|
| SIGN<br>CODE | SIGN DESCRIPTION        | NUMBER   | SIGN SIZE | SQFT<br>PER SIGN | SQFT |
| R1-1         | STOP                    | 2  | 30"       | 5.2              | 10.4 |
| W1-3         | REVERSE TURN (L or R)   | 1  | 48" x 48" | 16.0             | 16.0 |
| W3-1         | STOP AHEAD (symbol)     | 2  | 48" x 48" | 16.0             | 32.0 |
| W13-1P       | ADVISORY SPEED (plaque) | 2  | 30" x 30" | 6.3              | 12.6 |
| W20-1        | ROAD WORK AHEAD         | 2  | 48" x 48" | 16.0             | 32.0 |
| W20-4        | ONE LANE ROAD AHEAD     | 2  | 48" x 48" | 16.0             | 32.0 |
| G20-2        | END ROAD WORK           | 2  | 36" x 18" | 4.5              | 9.0  |
|              |                         | CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT 144.0 |           |                  |      |

## Str. No. 52-433-330 - US16B MRM 67.89

|              |  | EXPRESSWAY / INTERSTATE |           |                  | TE    |
|--------------|--|-------------------------|-----------|------------------|-------|
| SIGN<br>CODE | SIGN DESCRIPTION                                       | NUM BER                 | SIGN SIZE | SQFT<br>PER SIGN | SQFT  |
| R2-1         | SPEED LIMIT 45   | 3                       | 36" x 48" | 12.0             | 36.0  |
| W3-5         | SPEED REDUCTION AHEAD ( MPH)                           | 3                       | 48" x 48" | 16.0             | 48.0  |
| W4-2         | LEFT or RIGHT LANE ENDS (symbol)                       | 4                       | 48" x 48" | 16.0             | 64.0  |
| W20-1        | ROAD WORK AHEAD  | 2                       | 48" x 48" | 16.0             | 32.0  |
| W20-5        | LEFT or RIGHT LANE CLOSED AHEAD                        | 2                       | 48" x 48" | 16.0             | 32.0  |
| G20-2        | END ROAD WORK  | 2                       | 48" x 24" | 8.0              | 16.0  |
|              | EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT 228 |                         |           |                  | 228.0 |

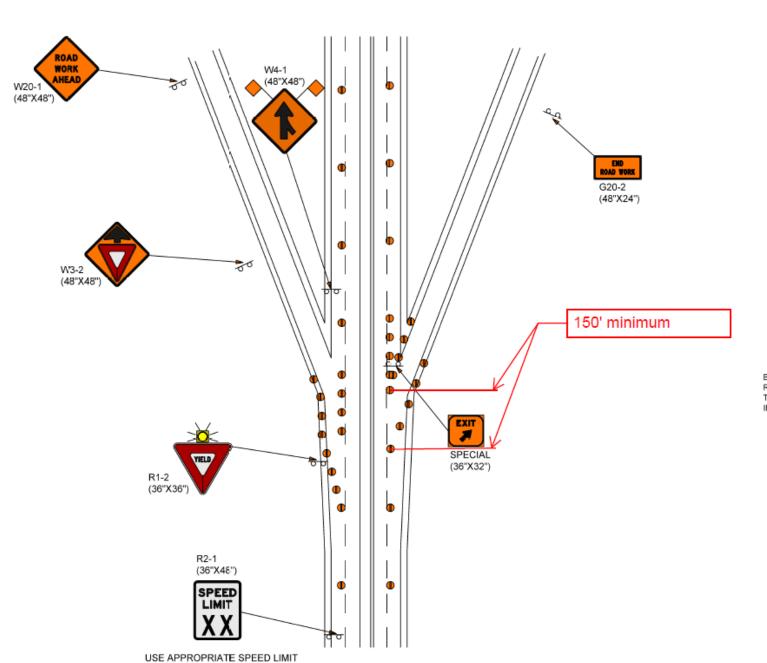


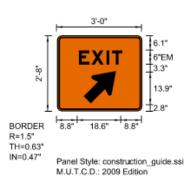
## TRAFFIC CONTROL

|                   | NH 0016(103)6     | 7 &              |                 |
|-------------------|-------------------|------------------|-----------------|
| STATE OF<br>SOUTH | PROJEH-P 0044(235 | ) <b>3</b> 9⊫∈ET | TOTAL<br>SHEETS |
|                   |                   |                  |                 |
| DAKOTA            |                   |                  |                 |

RAMP ENTRANCE AND EXIT SIGNING DETAILS #1

Plotting Date: 09/16/2022





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## TRAFFIC CONTROL

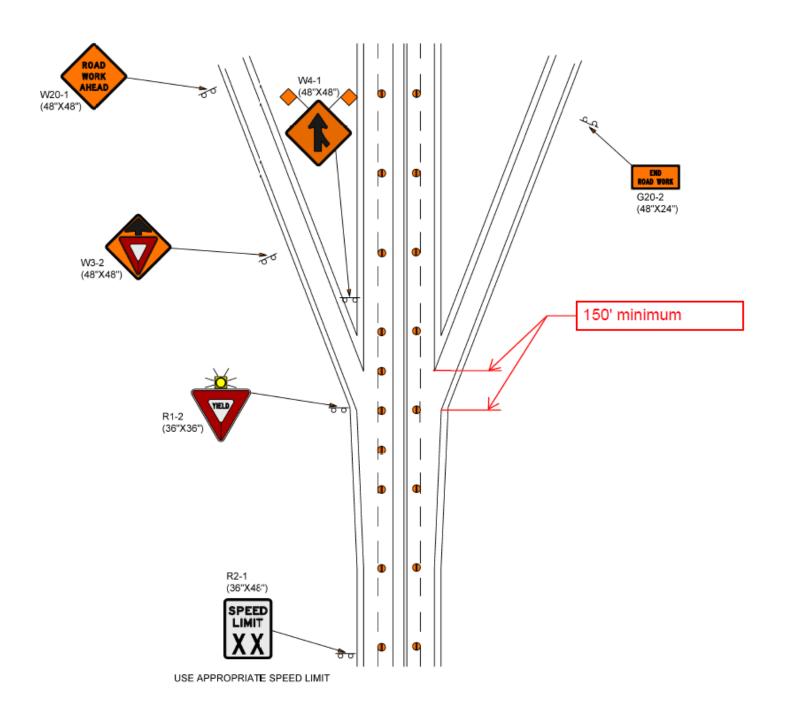
NH 0016(103)67 & PROMH-P 0044(235)39HEET STATE OF SOUTH DAKOTA

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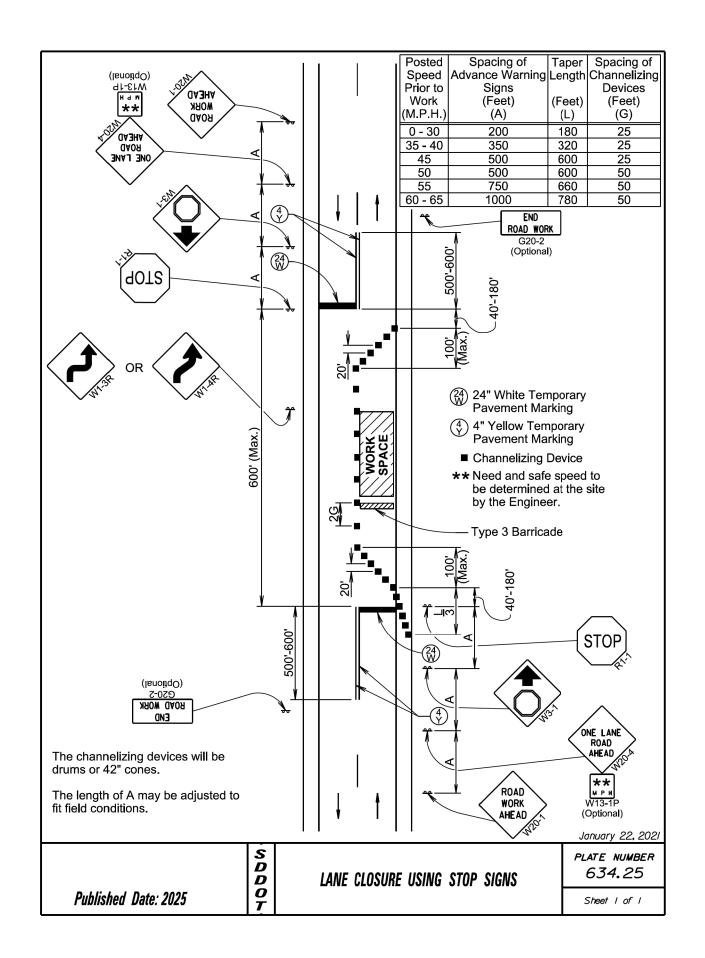
Plotting Date:

09/16/2022

RAMP ENTRANCE AND EXIT SIGNING DETAILS #2

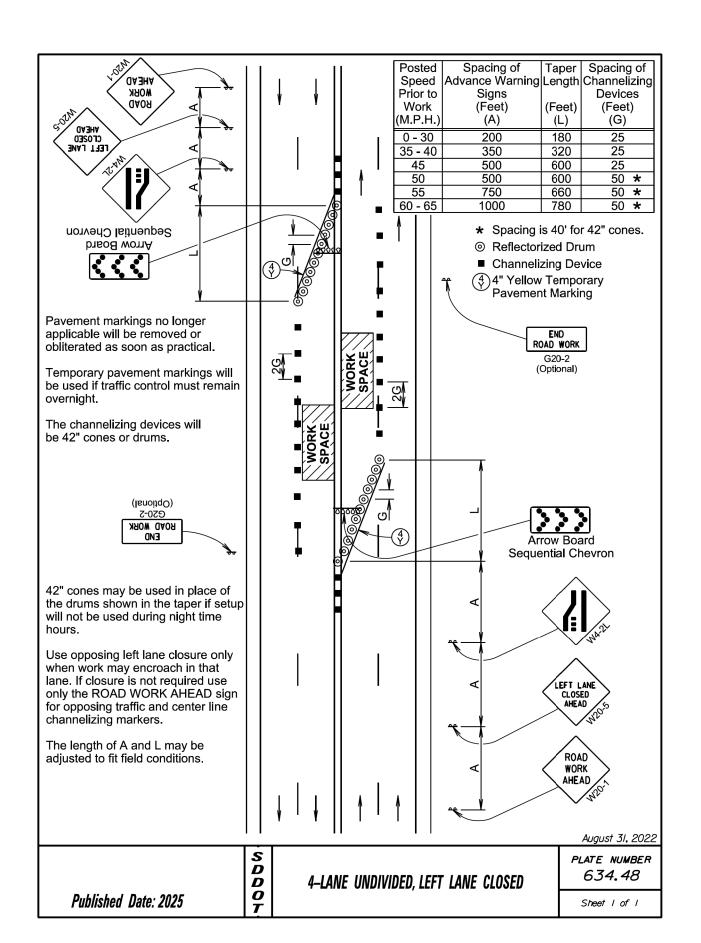


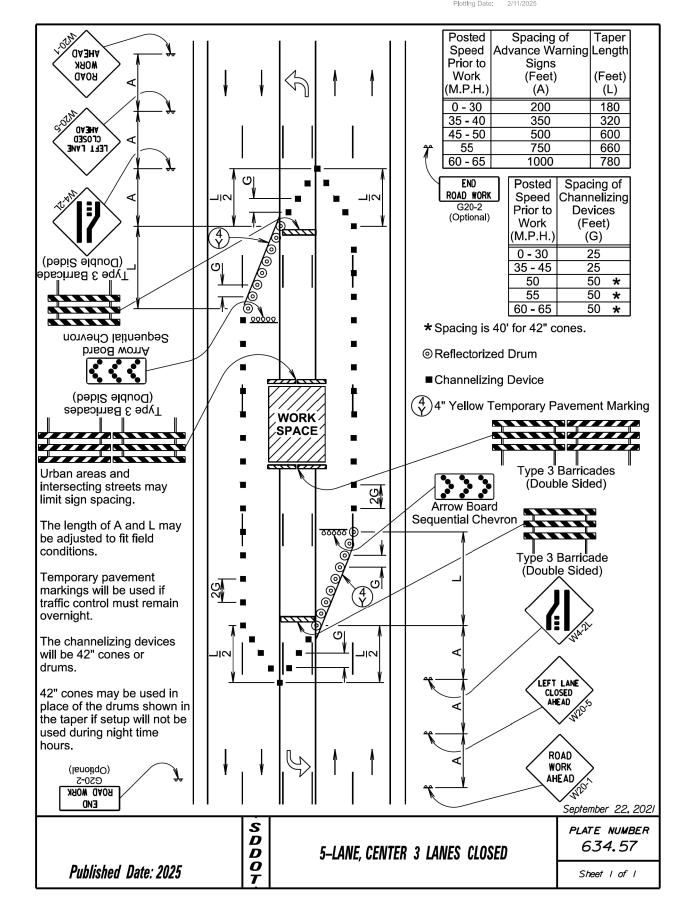


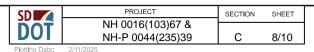


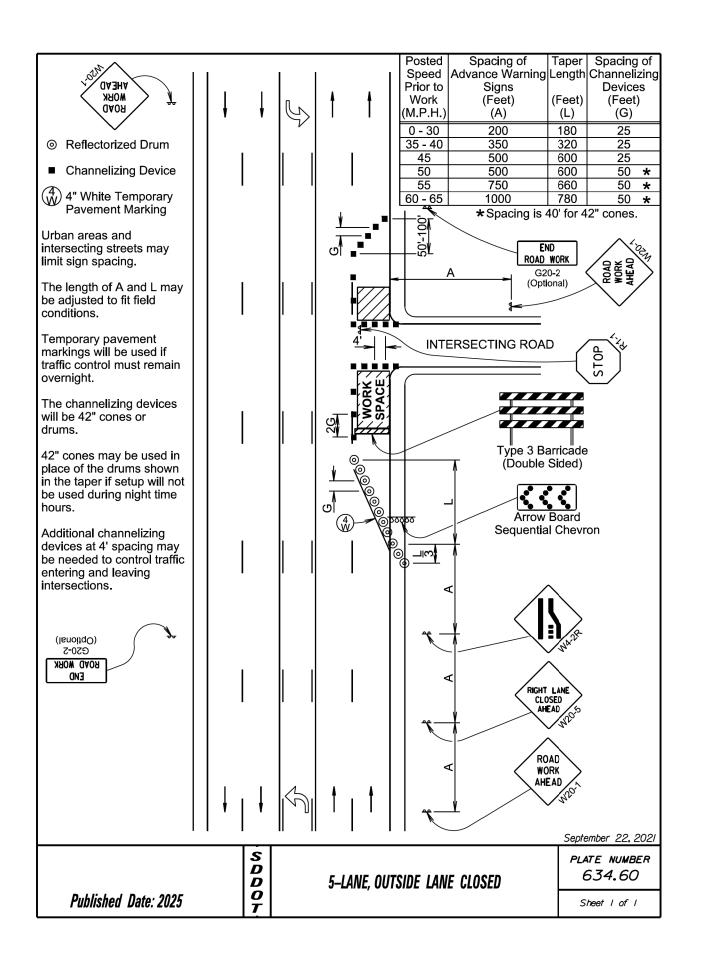
| Posted Spacing of Ta                          | per Spaci     | ng of    | 1                                   |     | ı   | ı       |  | I I   |  |
|---|---------------|----------|-------------------------------------|-----|-----|---------|--|---|--|
| Speed Advance Warning Le                      | ngth Chann    | elizing  | 1 1                                 | I   |     | 1 4     |  |   |  |
| Prior to Signs                                | Devi          |          |                                     |     |     |         | Î  | <del>~</del>                                      |  |
|   | eet) (Fe      |          | 1 .                                 |     |     | '       | •  |   |  |
|   | (L) (C        |          |                                     |     |     |         |  |   | _ <u></u>                              |
|   | 80 2          | 5        |                                     | 1   |     |         | ı  |   | END<br>ROAD WORK                       |
|   | 320 2         |          |                                     |     |     |         |  |   | G20-2                                  |
|   | 00 2          | 5        |                                     | 1   |     |         |  |   | (Optional)                             |
|   | 500 5         |          |                                     |     |     |         |  |   |  |
|   | 60 5          |          |                                     |     |     |         |  |   |  |
| 60 - 65 1000 7                                | 780 5         | <b>*</b> |                                     |     |     |         |  |   |  |
| * Spacing is 40' for 42" cone                 | s.            |          |                                     |     |     |         |  |   |  |
|   |               |          |                                     |     |     |         |  | 100'<br>Max                                       |  |
| Reflectorized Drum                            |               |          |                                     |     |     |         | <b>-</b>                                     | <u> </u>  |  |
|   |               |          |                                     | 1   |     |         | 1  |   |  |
| <ul><li>Channelizing Device</li></ul>         |               |          |                                     |     |     | 1       | T  |   |  |
| 4 White Temporary                             |               |          |                                     | -   |     |         |  | 1   |  |
| 4 4 White Temporary Pavement Marking          |               |          |                                     |     |     |         | <b>一关</b> 光                                  | ]   |  |
| <b>3</b>                                      |               |          |                                     |     |     |         | WORK<br>SPACE                                |   |  |
| The channelizing devices                      | ho 42"        |          |                                     |     |     |         | _ N S  | <b>i</b>  |  |
| The channelizing devices will cones or drums. | De 42         |          |                                     |     |     |         | <b>-</b> ///                                 |   |  |
| conce of dialitie.                            |               |          |                                     |     |     | 1       | <u>-                                    </u> | 1   |  |
| 42" cones may be used in pla                  | ce of the     |          |                                     |     |     |         | _  |   |  |
| drums shown in the taper if se                | etup          |          |                                     |     |     |         | 7  |   |  |
| will not be used during night ti              |               |          |                                     |     |     | ۱ ـ     | - 🖢  |   |  |
| hours.  |               |          |                                     | 1   |     | 2g<br>₩ |  |   |  |
|   |               |          |                                     |     |     | 1.7     | - ■  |   |  |
| Temporary pavement marking                    | js –          |          |                                     |     |     |         | െ—   |   |  |
| will be used if traffic control               |               |          |                                     |     |     |         | \ <u>\</u>                                   | <b>1</b>  |  |
| must remain overnight.                        |               |          |                                     |     |     |         | \ <u>©</u>                                   |   |  |
| The length of A and L may be                  |               |          |                                     |     |     |         | <b>1</b> 0                                   |   |  |
| adjusted to fit field conditions.             |               |          |                                     |     |     | (4)     |  |   | Arrow Board                            |
| adjusted to itt field conditions.             |               |          |                                     |     |     | _       |  | <del>οςοο</del> / ´                               | Sequential Chevron                     |
|   |               |          |                                     |     |     |         | <del>L</del> @                               |   | ocquentiai onevion                     |
|   |               |          |                                     |     |     |         | <del>     </del>                             |   | lm)                                    |
|   |               |          |                                     |     |     |         | ග් \   |   | (C)                                    |
|   |               |          |                                     |     |     |         |  |   | $\wedge$                               |
|   |               |          |                                     |     |     |         |  | ┫   |  |
|   |               |          |                                     |     |     |         |  |   |  |
|   |               |          |                                     |     |     |         |  |   | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \  |
|   |               |          |                                     |     |     |         |  | l   <u>.a.                                   </u> | NA.                                    |
|   |               |          |                                     |     |     |         |  |   |  |
|   |               |          |                                     |     |     |         |  |   |  |
|   |               |          |                                     |     |     |         |  |   | RIGHT LANE                             |
|   |               |          |                                     |     |     |         |  |   | S CLOSED >                             |
|   |               |          |                                     |     |     |         |  |   | AHEAD (5)                              |
|   |               |          |                                     |     |     |         |  | ــــــــــــــــــــــــــــــــــــــ            | \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
|   |               |          |                                     |     |     |         |  |   | /                                      |
|   |               |          |                                     |     |     |         |  |   | $\wedge$                               |
|   |               |          |                                     |     |     | 1       |  |   | ROAD                                   |
|   |               |          |                                     |     |     |         |  |   | < WORK >                               |
|   |               |          | .                                   | Ι.  |     | 1 .     | 1.   |   | AHEAD                                  |
|   |               |          |                                     |     | , [ | 1       | ↑  | موـــــــــــــــــــــــــــــــــــ             | / \/\n'\                               |
|   |               |          | 1                                   | . 1 | '   | 1 1     | . 1  |   |  |
|   |               | I        | 1                                   |     | I   | I       |  | I I   | September 22, 2021                     |
|   | S             |          |                                     |     |     |         |  |   | PLATE NUMBER                           |
|   | $\vec{D}$     |          |                                     |     |     |         |  |   |  |
|   | $ \tilde{D} $ | 4_       | 4-LANE UNDIVIDED, RIGHT LANE CLOSED |     |     |         |  | <i>634.4</i> 7                                    |  |
| Published Date: 2025                          | 0             | l ''     |                                     |     |     | , IIIC  |  | . 720025  | Chart 1 of 1                           |
| F UNIISII                                     | <b>T</b>      |          |                                     |     |     |         | Sheet I of I                                 |   |  |

ROJECT SECTION SHEET
16(103)67 &
0044(235)39 C 7/10



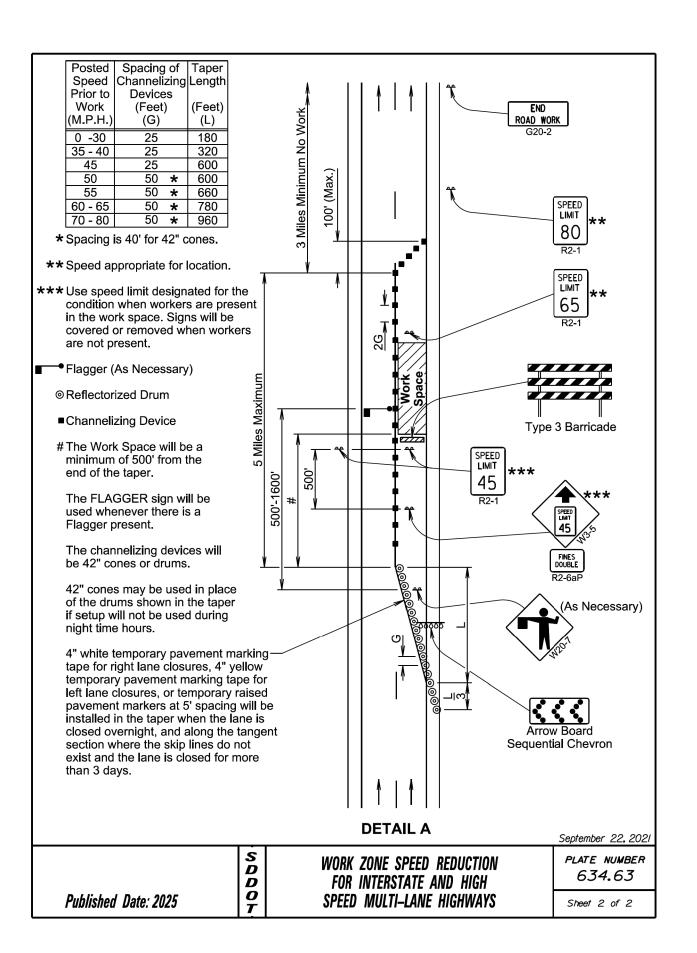


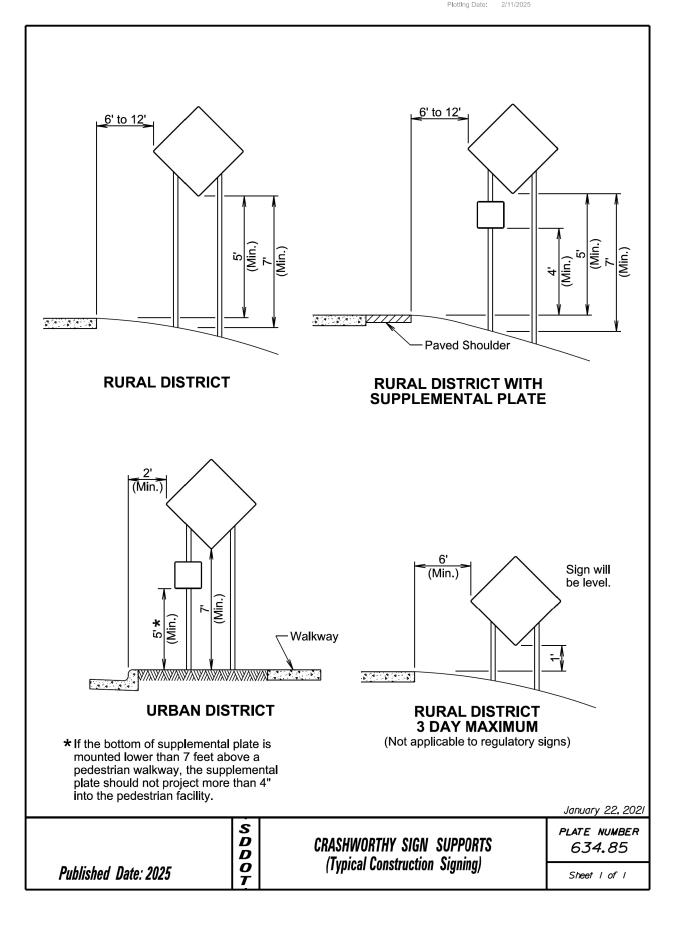


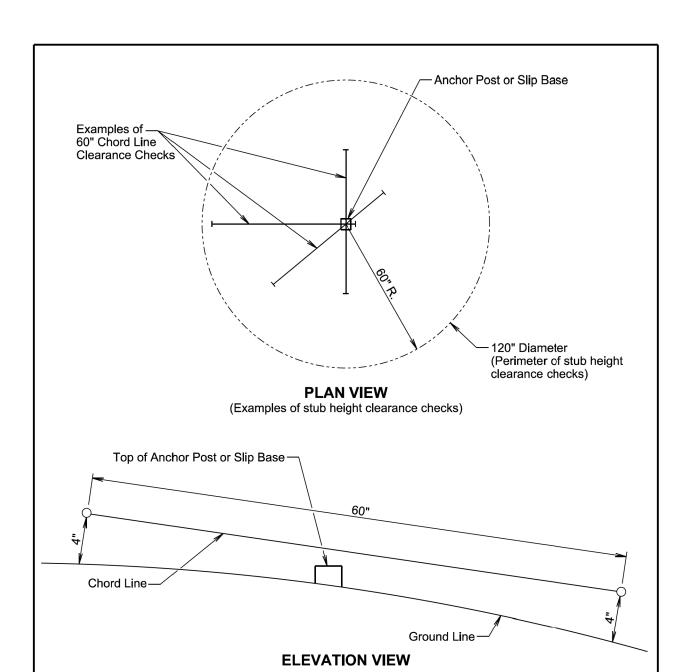


| Posted Spacing of Advance Warning Prior to Work (Feet) (M.P.H.) (A) (B) (C) 0 - 30 200 35 - 40 350 45 - 50 500 55 750 60 - 65 1000 (A) (B) (C) 70 - 80 1000 1500 2640   ★★ Speed appropriate for location.  Reflectorized Drum  Channelizing Device |       | SEE DE on Shee  |   |
|---|-------|---|---|
| ROAD WORK AHEAD sign is only required in advance of the first lane closure.  High speed is defined as having a posted speed limit greater than 45 mph.  |       | MICH RICH CL  | EED **  J LANE OSED SEED SEED SEED SEED SEED SEED SEE |
|   |       | O O O O O O O O O O O O O O O O O O O   | ** 5 5 September 22, 2021                             |
| Published Date: 2025  | SDDOT | WORK ZONE SPEED REDUCTION<br>FOR INTERSTATE AND HIGH<br>SPEED MULTI-LANE HIGHWAYS | PLATE NUMBER 634.63  Sheet   of 2                     |

| SD  | PROJECT                              | SECTION | SHEET |  |
|-----|--------------------------------------|---------|-------|--|
| DOT | NH 0016(103)67 &<br>NH-P 0044(235)39 | С       | 9/10  |  |
|     |                                      |         |       |  |







## **GENERAL NOTES:**

The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

SDDOT

January 22, 2021

Published Date: 2025

BREAKAWAY SUPPORT STUB CLEARANCE

PLATE NUMBER 634.99

Sheet I of I

PROJECT SECTION SHEET

NH 0016(103)67 & 
NH-P 0044(235)39 C 10/10