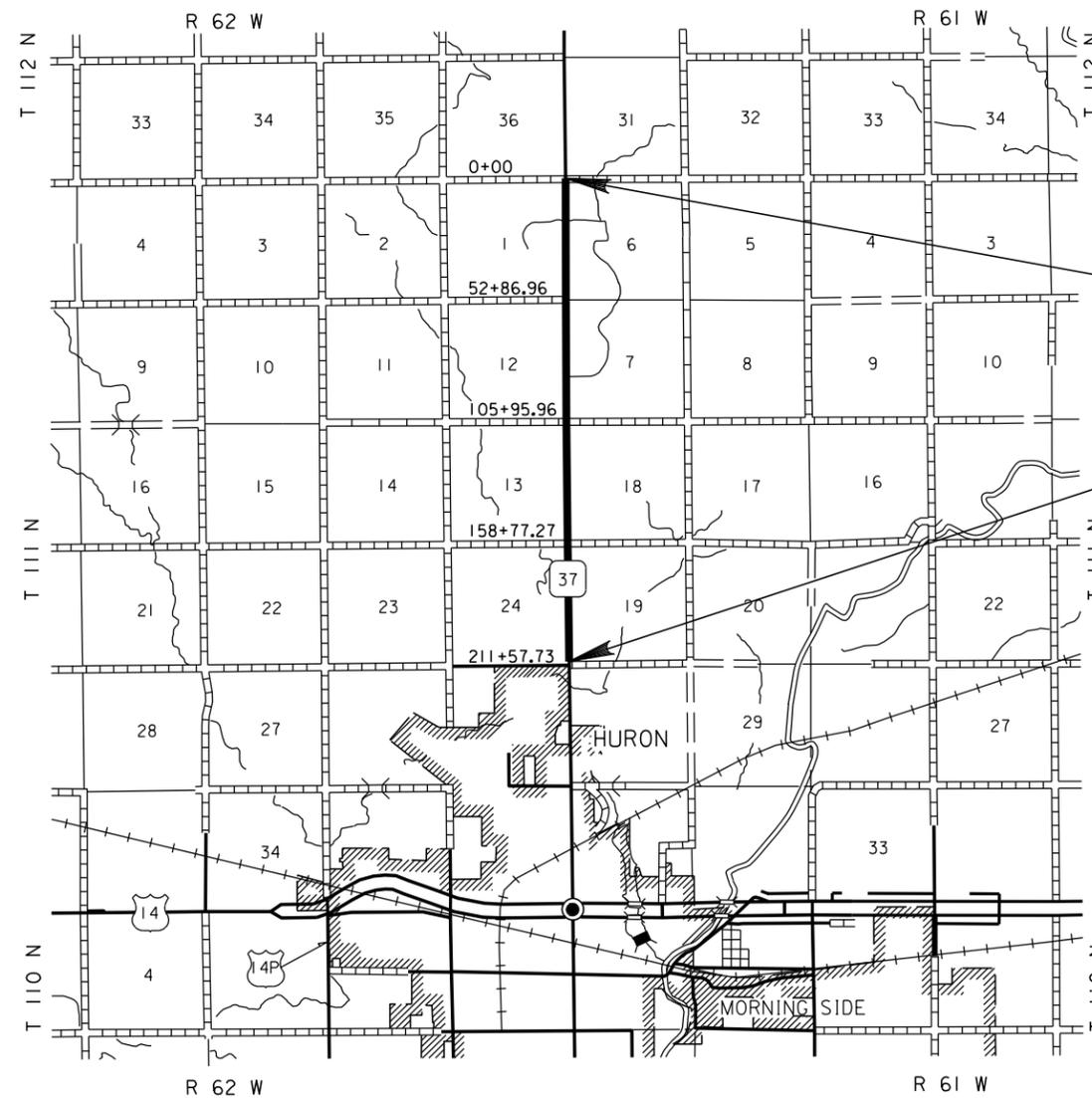


SECTION C: TRAFFIC CONTROL PLANS

INDEX OF SHEETS

- C1 General Layout W/Index
- C2 to C3 Estimate of Quantities and General Notes
- C4 Fixed Sign Locations
- C5 Traffic Control Details
- C6 Itemized List for Traffic Control and Special Sign Detail
- C7 to C9 Standard Plates



BEGIN P 0037(119)129
 STA. 0+00
 MRM 133.00 +0.721

END P 0037(119)129
 STA. 203+00.42
 MRM 129.70 +0.132



SECTION C: ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	2,500.0	Hour
634E0020	Pilot Car	1,250.0	Hour
634E0110	Traffic Control Signs	823	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	26	Each
634E0630	Temporary Pavement Marking	3.9	Mile

SEQUENCE OF OPERATIONS

The following sequence of operations will be followed unless an alternate sequence is submitted to and approved by the Engineer at least two weeks prior to the Preconstruction Meeting.

1. Install Construction Signing and Traffic Control
2. Perform Repair of Spalls on existing PCCP pavement throughout the project
3. Cold Mill Asphalt Concrete on one-half of the roadway
4. Install Erosion Control on the project
5. Strip Top Soil on the side of the roadway to be overlaid
6. Install Geotextile Bond Breaker Fabric on one-half of the roadway
7. Perform 5" PCC Pavement Overlay on the same half of the Geotextile Bond Breaker Fabric installed
8. Install Temporary Pavement Markings as concrete overlay progresses
9. Place Base Course Material on the same shoulder as the newly installed 5" PCC Pavement Overlay as per the typical section
10. Replace Top Soil on the same inslope as the newly install overlay
11. Perform all Auxiliary Paving, Transition Work, and any Other Miscellaneous Work on the same half as the newly installed 5" PCC Pavement Overlay
12. Switch traffic to the newly Installed 5" PCC Pavement Overlay
13. Cold Mill Asphalt Concrete on the same half of the roadway
14. Strip Top Soil on the second half of the roadway to be overlaid
15. Install Geotextile Bond Breaker Fabric on the second half of the roadway
16. Perform 5" PCC Pavement Overlay on the second half of roadway
17. Place Base Course Material on the same shoulder as the newly installed 5" PCC Pavement Overlay as per the typical section
18. Replace Top Soil on the same inslope as the newly install overlay
19. Perform all remaining Auxiliary Paving, Transition Work, and any other Miscellaneous Work
20. Install Permanent Signing and Delineation Work
21. Apply Permanent Striping
22. Remove Construction Signing and Traffic Control

Once work begins (not including permanent signing) on the project it shall be worked on a continuous basis until completion. If significant progress is not made towards the completion of the project, as determined by the Engineer, for 3 continuous working days the Contractor shall be responsible for all costs associated with the FLAGGING and PILOT CAR bid items and hours will not be accepted for payment thereafter until work is resumed.

TRAFFIC CONTROL

Work limits for the project shall be allowed from project beginning to project end.

A minimum of 1 lane of traffic shall be maintained during all phases of construction. When traffic is limited to 1 lane of traffic due to construction or drop-offs 24-hour flaggers and pilot car shall be required as directed by the Engineer.

Warning lights shall be placed on top of flagging station signing as per Section 634.3 E.3 and shall be yellow in color. This shall be incidental to the contract lump sum price for TRAFFIC CONTROL, MISCELLANEOUS.

Quantities for TYPE 3 BARRICADES, ROAD CLOSED, ROAD CLOSED AHEAD, ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY, and ROAD CLOSED TO THRU TRAFFIC have been included in the Estimate of Quantities for use on Intersecting Roads as per details. Additional Type 3 Barricades have also been included the Estimate of Quantities for use in the patching and repair work. Drums shall be placed, spaced at 5 feet apart, at centerline where intersecting roads are closed.

Channelizing devices will be required along centerline when pilot cars are utilized for escorting traffic through the work area due to drop-offs.

UNEVEN LANES signs shall be placed at the project limits and after intersecting roads as directed by the Engineer.

The Contractor shall notify businesses\home owners a minimum of two weeks prior to construction to inform them of up coming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

It is required that the flaggers and pilot car operators all have radio or telephone contact with one another. This equipment is to be used to assist with traffic movement and in the event that an emergency vehicle needs to pass through the project in an expedient manner. All costs associated with this shall be incidental to the contract lump sum price for TRAFFIC CONTROL, MISCELLANEOUS.

Signing for two flagging stations and additional flagger hours has been included in the Estimate of Quantities for use on intersecting roads. These flagger stations will be used as directed by the Engineer and will be used primarily during daytime hours. Also included in the Estimate of Quantities are TURNING VEHICLES WAIT FOR PILOT CAR signs for use on intersecting roads.

All traffic control devices shall be in "like new" condition.

Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including delineation, shall be the responsibility of the Contractor. Cost of this work shall be incidental to the various contract items unless otherwise specified in the plans. Delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

TRAFFIC CONTROL (Continued)

Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

Work activities (not including flagging and pilot car) during non-daylight hours are subject to prior approval.

A minimum roadway width of 16 feet shall be maintained throughout the project at all times.

The bottom of signs on portable or temporary supports shall not be less than seven feet above the pavement in urban areas and one foot above the pavement in rural areas. Portable sign supports may be used as long as the duration is less than 3 days. If the duration is more than 3 days the signs shall be on fixed location, ground mounted, breakaway supports.

Traffic Control signs, as shown in the Itemized List for Traffic Control Signs, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used.

TEMPORARY PAVEMENT MARKINGS

The total length of no passing zone on this project is estimated to be **0.0** miles.

Quantities of Temporary Pavement Markings consist of:
One pass on top of the Concrete Overlay

Temporary Flexible Vertical Markers (tabs) shall be used at centerline as detailed in the Specifications. In addition to the specifications, the outside white edge line shall be marked with tabs every 200'. Costs for these tabs shall be included in the contract unit price per mile for TEMPORARY PAVEMENT MARKING. The Contractor shall remove and properly dispose of the tabs after Permanent Pavement Marking is applied. Method of removal shall be nondestructive to the road surface and shall be accomplished within one week of completion of the Permanent Pavement Marking. Cost for furnishing, applying, removing and disposing of the Temporary Flexible Vertical Markers shall be included in the contract unit price per mile for TEMPORARY PAVEMENT MARKING.

STATE OF SOUTH DAKOTA	PROJECT P 0037(119)129	SHEET C3	TOTAL SHEETS C9
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Plotting Date: 09/23/2015

TRAFFIC CONTROL FOR STATE FAIR CONTRACT TIME SPECIAL PROVISION

As stated in the Special Provision for Contract Time no work will be allowed on the project during the South Dakota State Fair and all lanes shall be open to traffic. If the project is at a phase where hazardous drop-offs exist on centerline, the shoulder, or other potential hazards exist for the traveling public, additional traffic control and measures shall be provided.

If head-to-head traffic is opened on the project while a 5" drop-off at centerline exists the following traffic control measures shall be applied to the project:

- Channelizing devices shall be reduced from a spacing of 50 feet to 25 feet.
- All intersecting roads shall be closed off as per plan details.
- BUMP signs (W8-1, 48"x48") shall be placed at all locations as directed by the Engineer with Advisory Speed Plates displaying 30 M.P.H. attached.
- Asphalt concrete ramps shall be provided for traffic coming onto or off of the new PCCP overlay if a transition is not already provided. The asphalt concrete ramps shall be a minimum of 40 feet in length.

The Contractor will also be required to provide any unforeseen additional traffic control beyond what is listed as determined by the Engineer. All costs associated for installing the additional traffic control measures including additional signing, materials, labor, and equipment costs shall be the responsibility of the Contractor at no cost to the State.

PLOT SCALE - 1:7920

PLOT NAME - 6

FILE - ... \DESIGN\0232 TITLE.DGN

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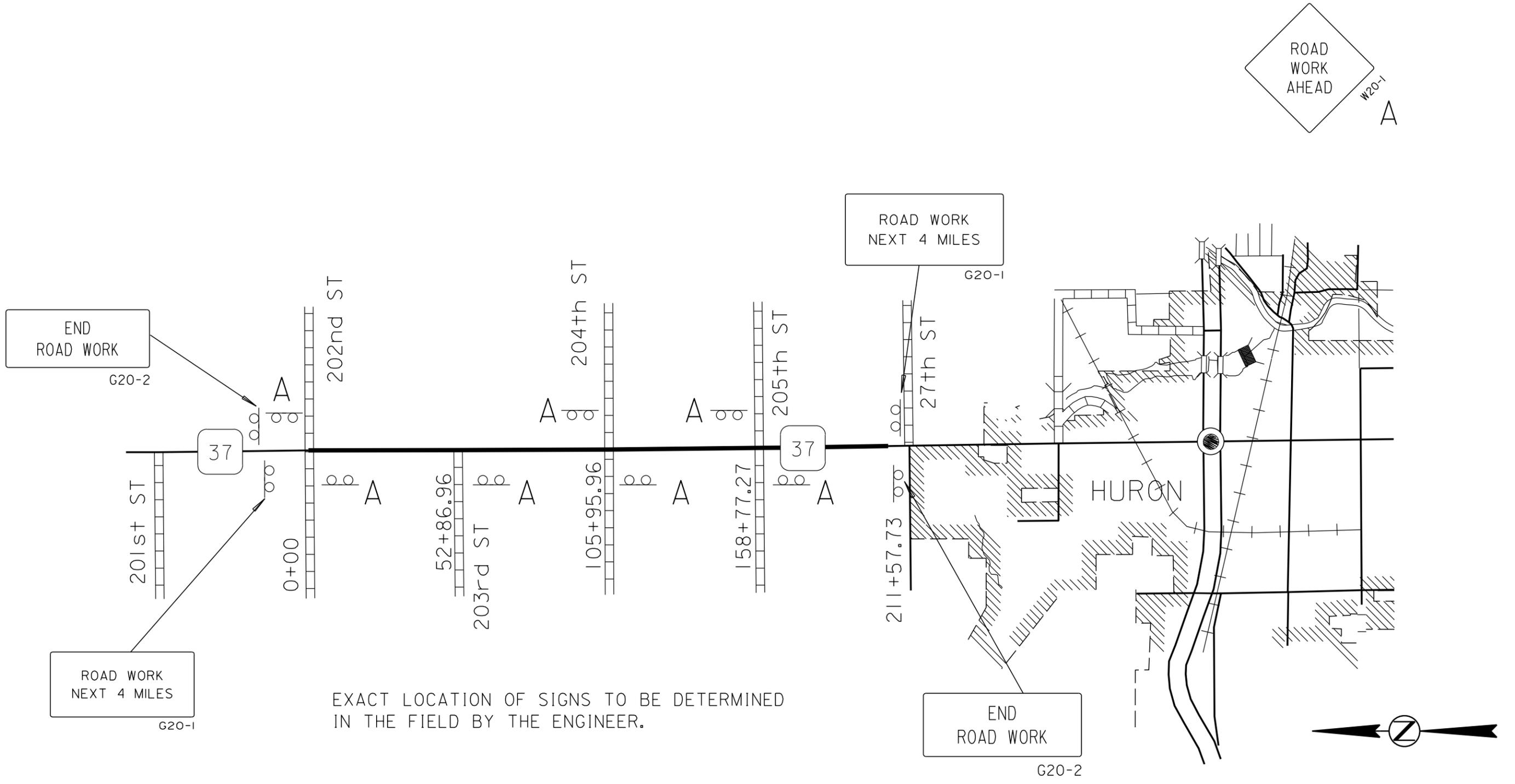
STATE OF SOUTH DAKOTA	PROJECT P 0037(119)129	SHEET C4	TOTAL SHEETS C9
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Plotting Date: 09/12/2015

FIXED LOCATION SIGNS GROUND MOUNTED, BREAKAWAY SUPPORTS

PLOT SCALE - 1:7920

PLOT NAME - 2



EXACT LOCATION OF SIGNS TO BE DETERMINED
IN THE FIELD BY THE ENGINEER.

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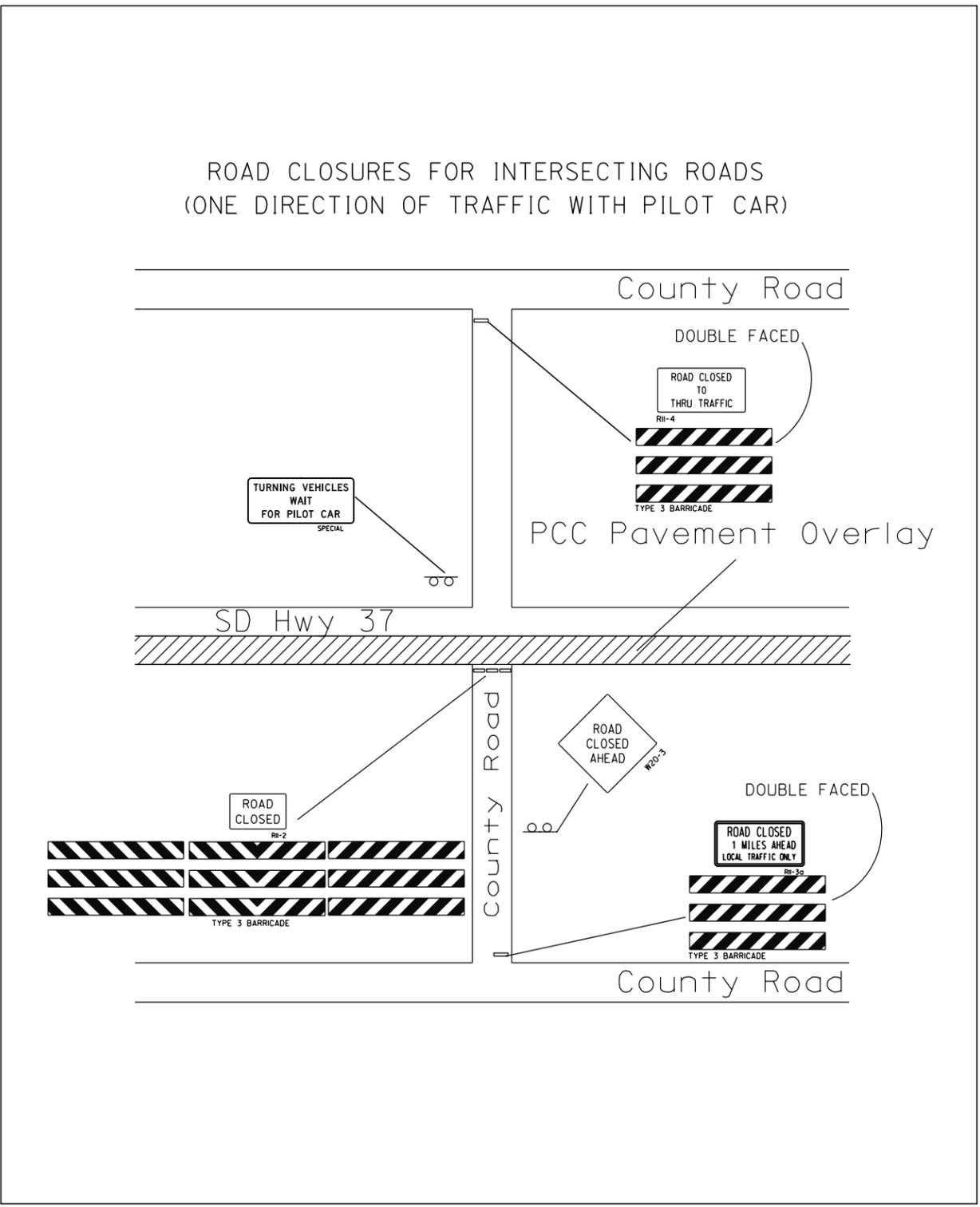
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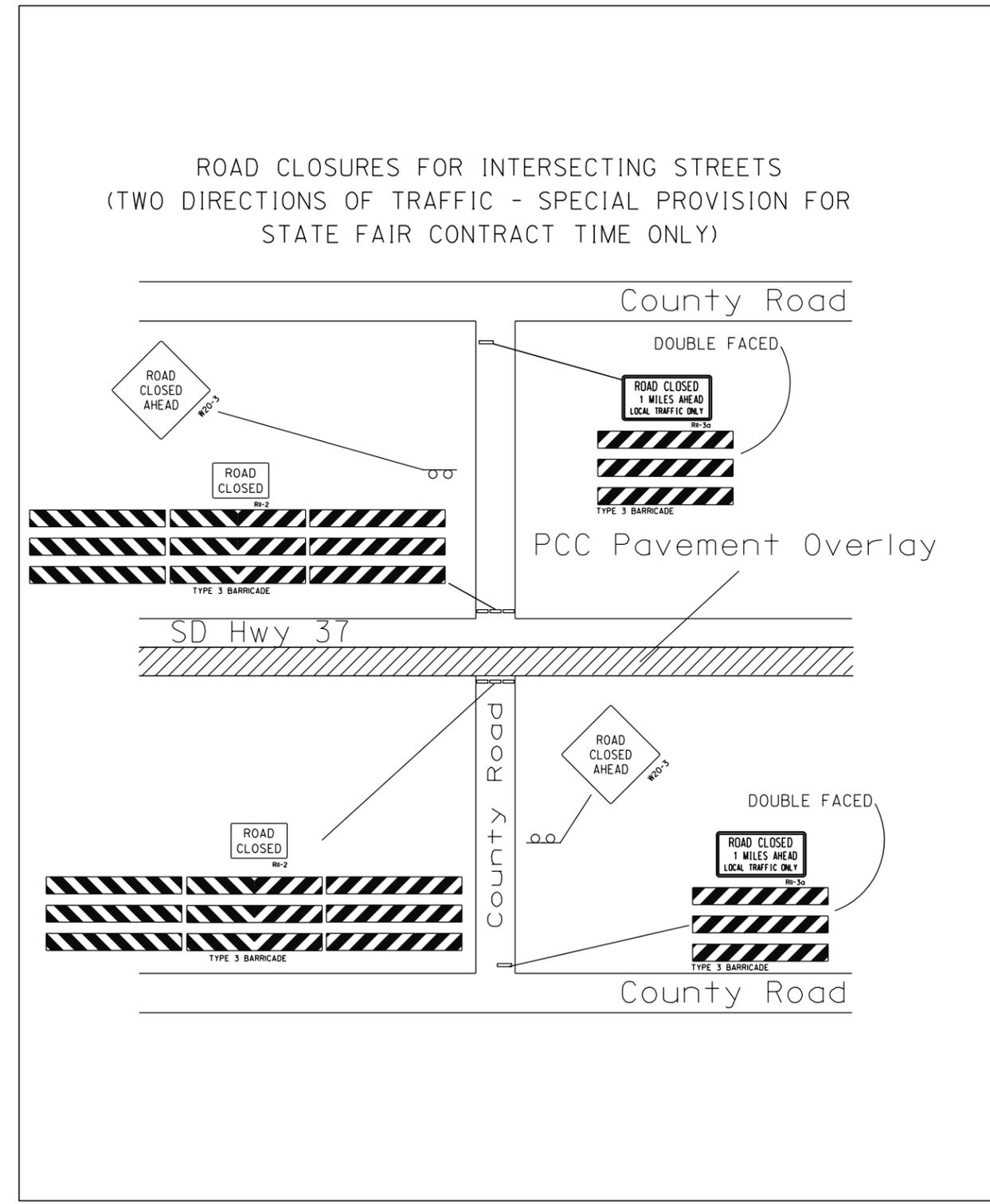
PLOT NAME - 3

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ROAD CLOSURES FOR INTERSECTING ROADS
(ONE DIRECTION OF TRAFFIC WITH PILOT CAR)



ROAD CLOSURES FOR INTERSECTING STREETS
(TWO DIRECTIONS OF TRAFFIC - SPECIAL PROVISION FOR STATE FAIR CONTRACT TIME ONLY)



PLOTTED FROM - TRHJINT06

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

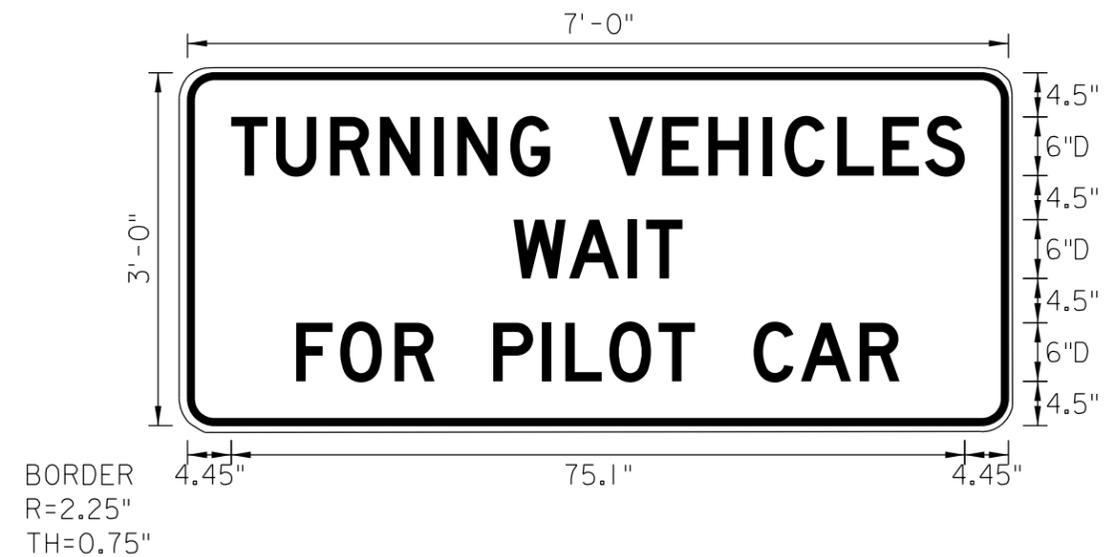
SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R11-2	ROAD CLOSED	3	48" x 30"	10	30
R11-3a	ROAD CLOSED ___ MILES AHEAD LOCAL TRAFFIC ONLY	3	60" x 30"	13	39
R11-4	ROAD CLOSED TO THRU TRAFFIC	3	60" x 30"	13	39
W8-1	BUMP	4	48" x 48"	16	64
W8-6	TRUCK CROSSING	4	48" x 48"	16	64
W8-11	UNEVEN LANES	4	48" x 48"	16	64
W13-1P	ADVISORY SPEED (plaque)	4	30" x 30"	6	24
W20-1	ROAD WORK AHEAD	11	48" x 48"	16	176
W20-3	ROAD CLOSED AHEAD	5	48" x 48"	16	80
W20-4	ONE LANE ROAD AHEAD	4	48" x 48"	16	64
W20-7	FLAGGER (symbol)	4	48" x 48"	16	64
W21-5	SHOULDER WORK	2	48" x 48"	16	32
G20-1	ROAD WORK NEXT ___ MILES	2	36" x 18"	5	10
G20-2	END ROAD WORK	2	36" x 18"	5	10
SPECIAL	TURNING VEHICLES WAIT FOR PIOLT CAR	3	84" x 36"	21	63
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			823

TYPE 3 BARRICADES

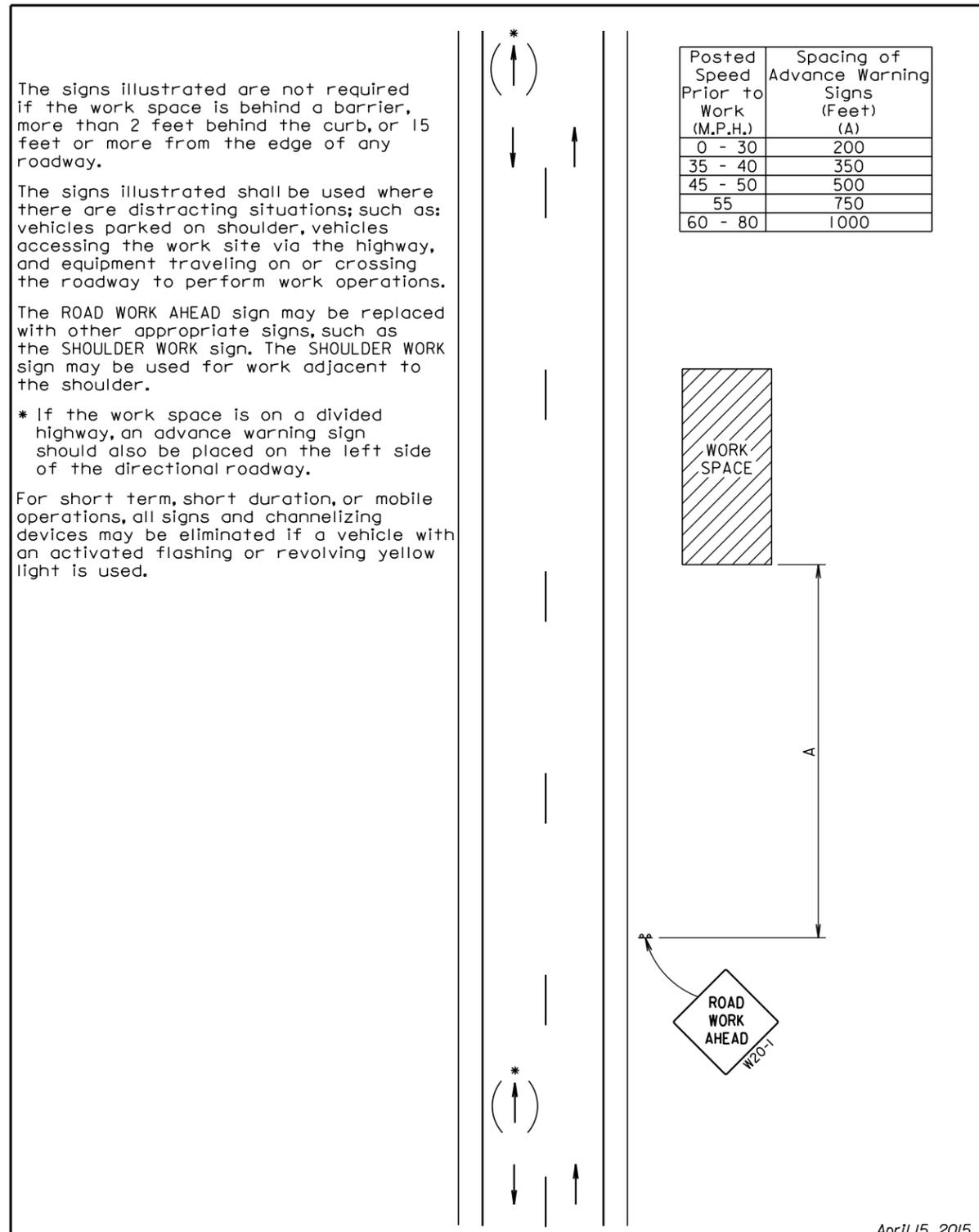
ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	26 Each

SPECIAL SIGNING DETAIL

Black on Orange



Plotting Date: 09/12/2015



The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

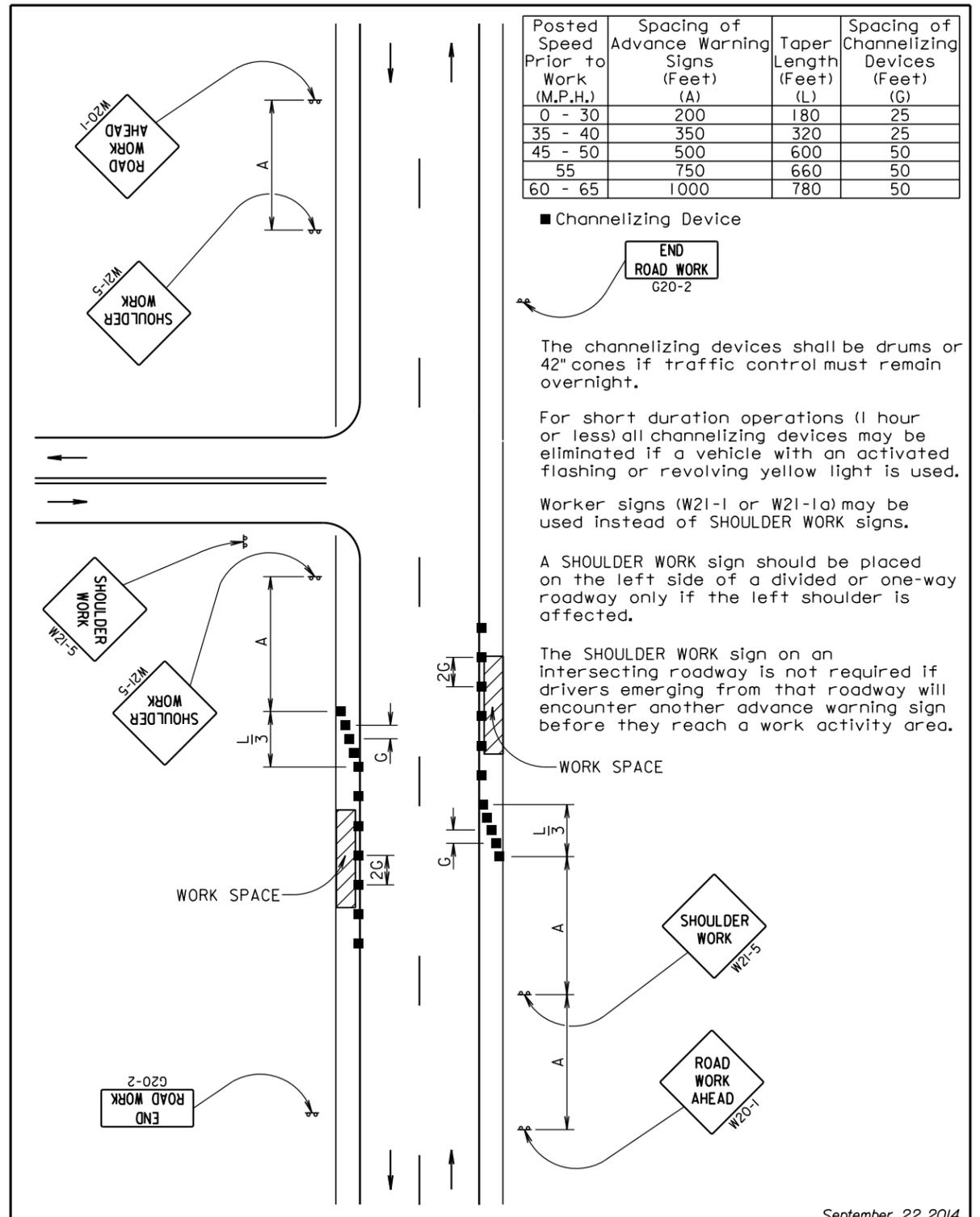
The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

April 15, 2015

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
			Sheet 1 Of 1



■ Channelizing Device

END ROAD WORK G20-2

The channelizing devices shall be drums or 42" cones if traffic control must remain overnight.

For short duration operations (1 hour or less) all channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.

September 22, 2014

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK ON SHOULDERS	PLATE NUMBER 634.03
			Sheet 1 of 1

PLOT SCALE - 1:7920

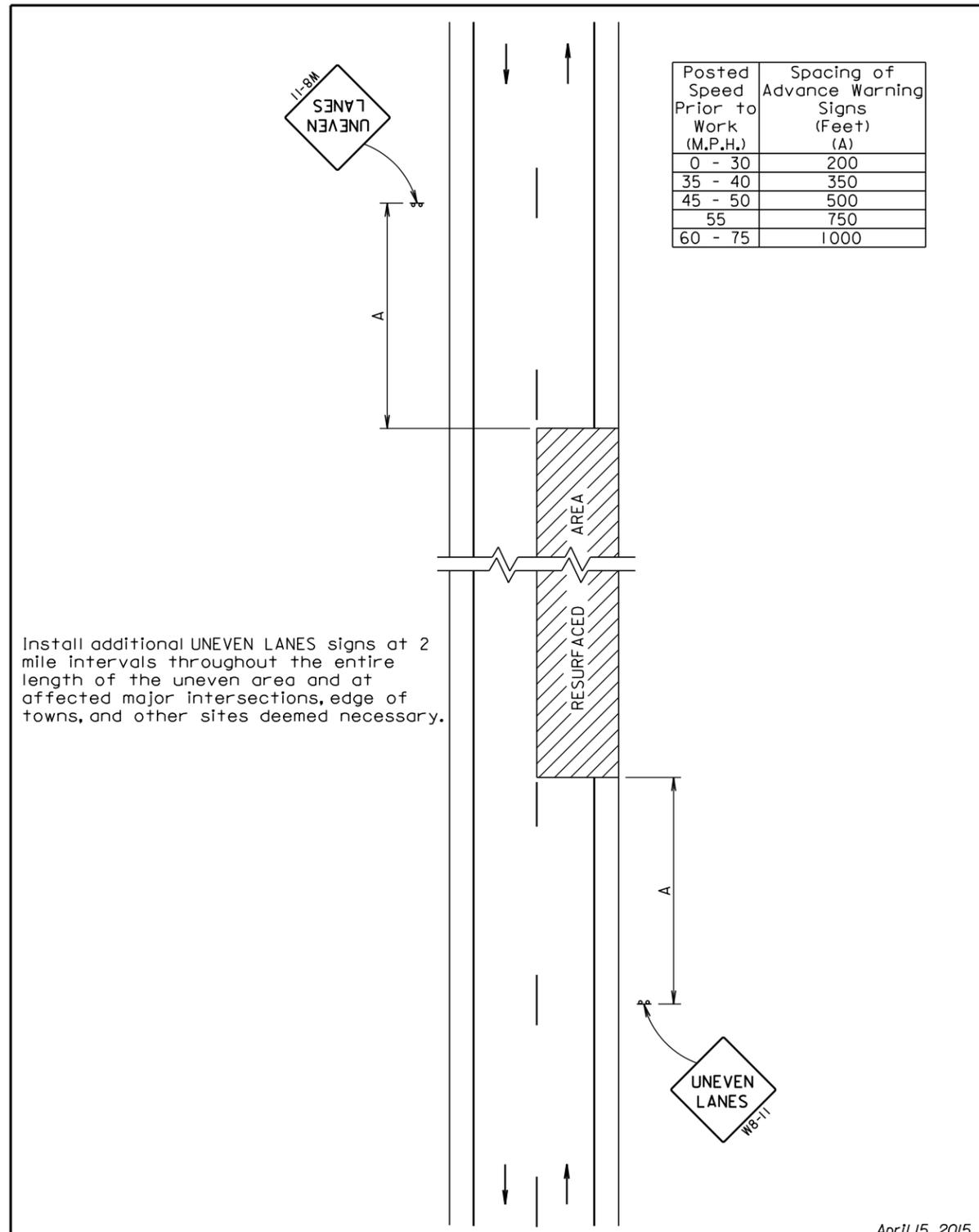
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PLOT NAME - 7

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Plotting Date: 09/12/2015

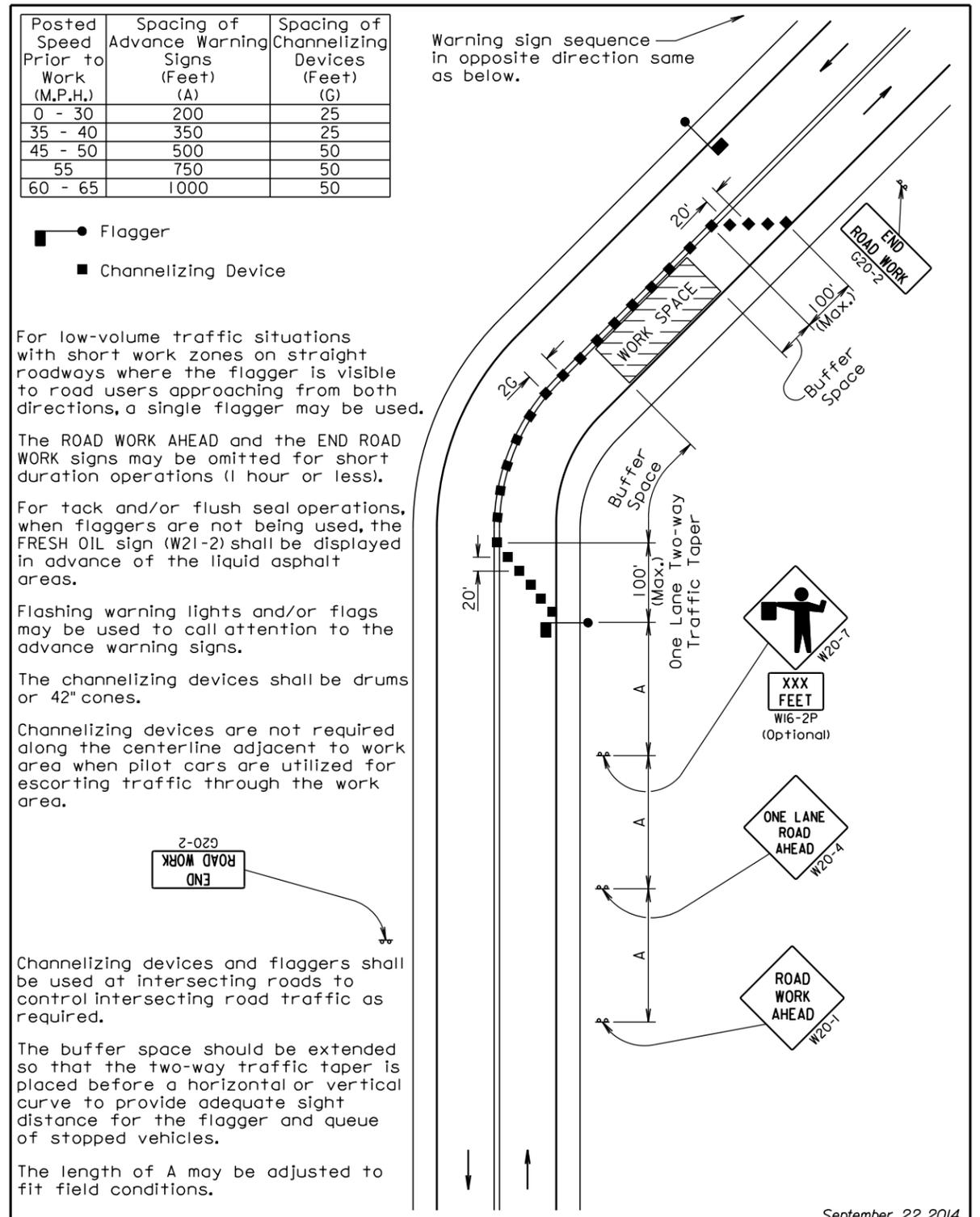
PLOT SCALE - 1:7920



April 15, 2015

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES UNEVEN ROAD SURFACE	PLATE NUMBER 634.22
			Sheet 1 of 1

PLOTTED FROM - TRHJINT06



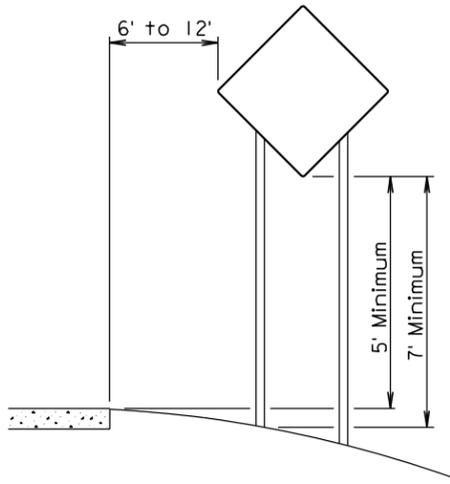
September 22, 2014

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1

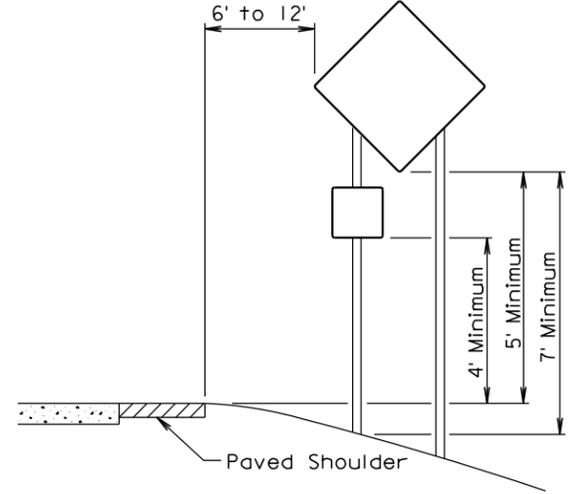
PLOT NAME - 8

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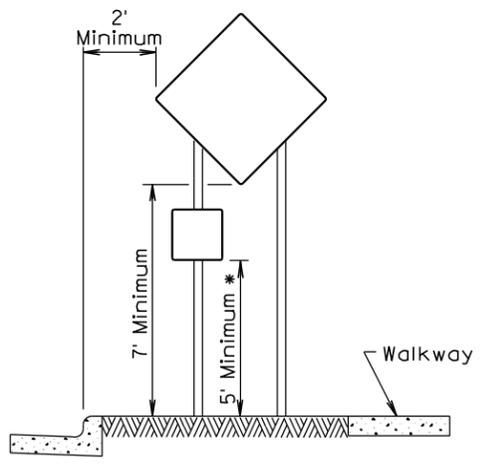
PLOT SCALE - 1:7920



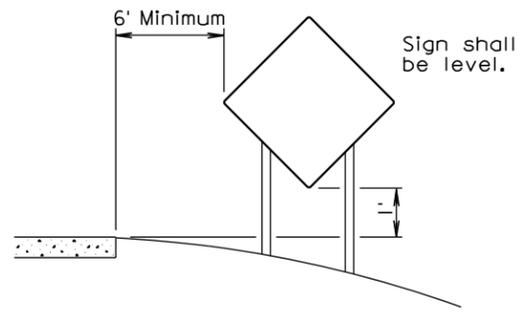
RURAL DISTRICT



RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



URBAN DISTRICT

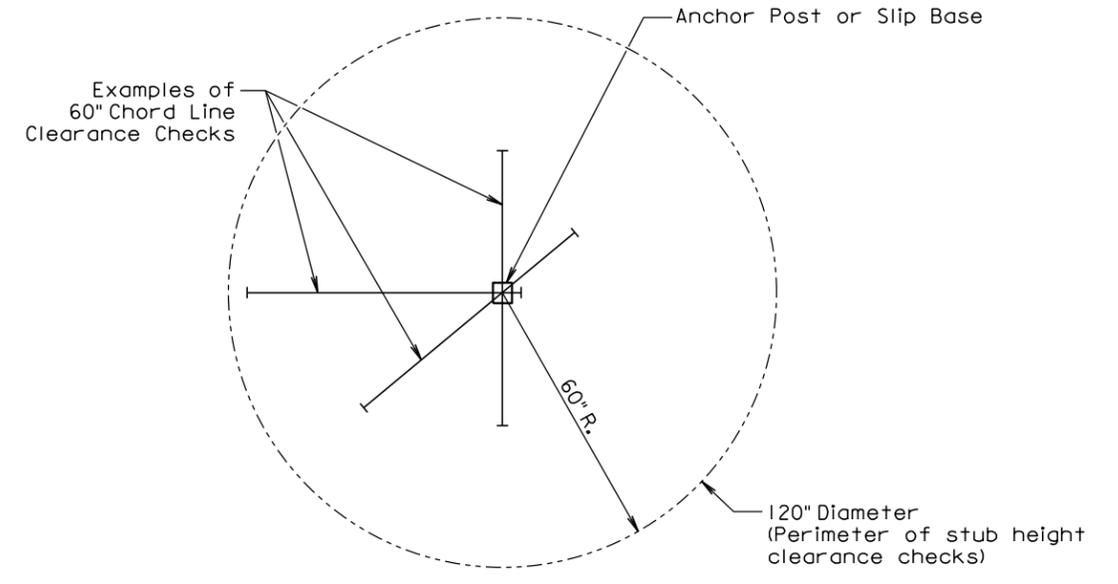


RURAL DISTRICT
3 DAY MAXIMUM
(Not applicable to regulatory signs)

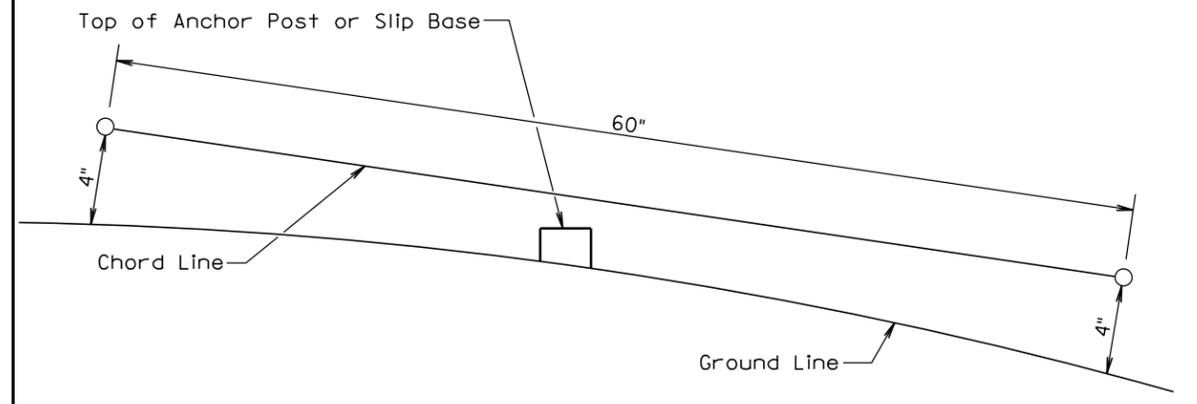
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

September 22, 2014

Published Date: 3rd Qtr. 2015	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

The top of anchor posts and slip bases SHALL 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 shall 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.

July 1, 2005

Published Date: 3rd Qtr. 2015	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

PLOTTED FROM - TRHWINT06

PLOT NAME - 9

FILE - ... \DESIGN\0232 TITLE.DGN