SD DOT	PROJECT	SECTION	SHEET
	PH 0040(365)	Non	1/12

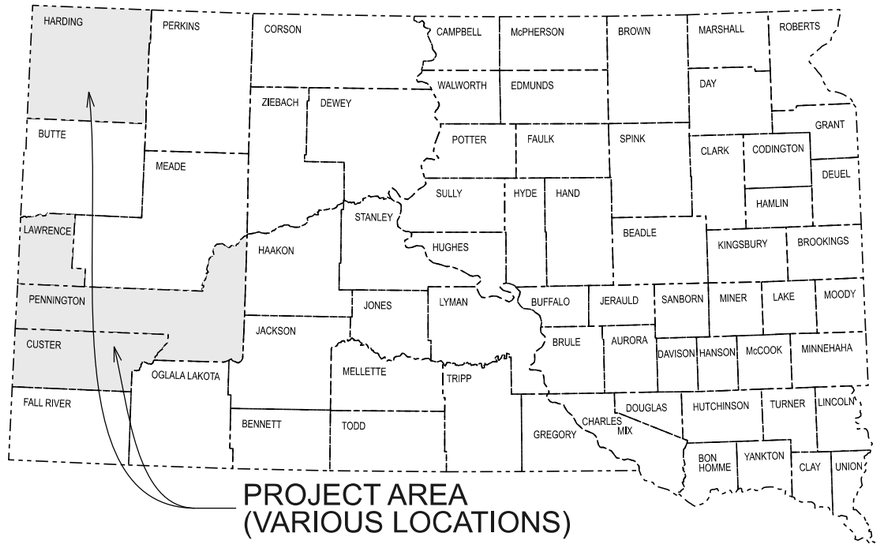
Plotting Date: 12/19/2025

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

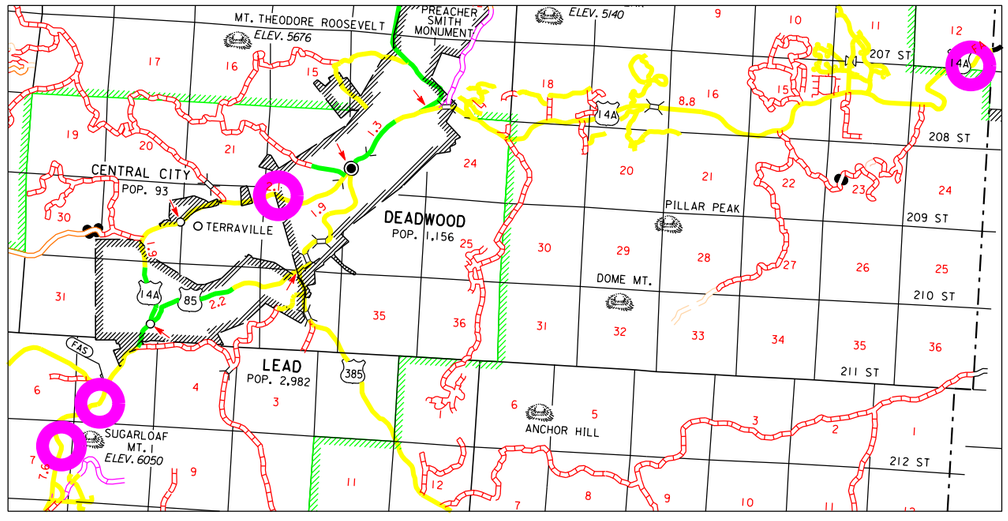
PLANS FOR PROPOSED

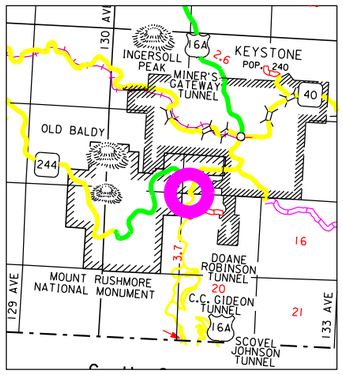
PROJECT PH 0040(365)
US HIGHWAYS 14A, 16A and 85 and Wildlife Loop Road
CUSTER, LAWRENCE, PENNINGTON AND HARDING COUNTIES

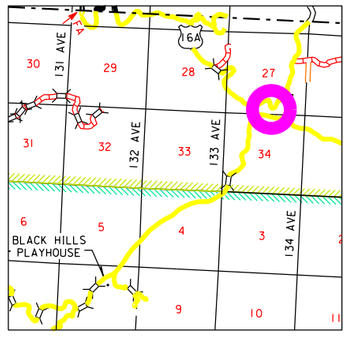
VEHICLE FEEDBACK SIGNS
PCN 0ACJ

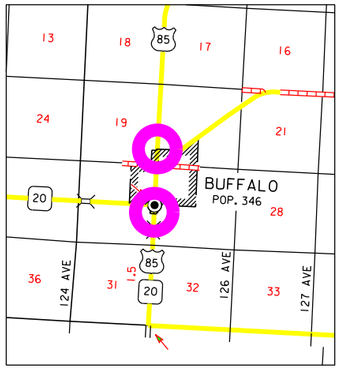


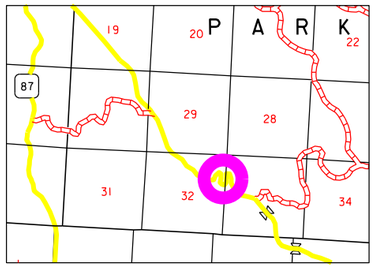
INDEX OF SHEETS











DESIGN DESIGNATION
(US14A, MRM 34 + 0.565)

ADT (2024)	1725
ADT (2044)	2500
DHV	410
D	51%
T DHV	1.4%
T ADT	3.0%
V	40 MPH

DESIGN DESIGNATION
(US14A, MRM 35 + 0.487)

ADT (2024)	1725
ADT (2044)	2500
DHV	410
D	51%
T DHV	1.4%
T ADT	3.0%
V	40 MPH

DESIGN DESIGNATION
(US14A, MRM 39 + 0.739)

ADT (2024)	8091
ADT (2044)	11724
DHV	1920
D	51%
T DHV	3.7%
T ADT	8.1%
V	45 MPH

DESIGN DESIGNATION
(US14A, MRM 50 + 0.169)

ADT (2024)	6870
ADT (2044)	9955
DHV	1631
D	51%
T DHV	1.6%
T ADT	3.6%
V	45 MPH

DESIGN DESIGNATION
(US16A, MRM 46.58 + 0.241)

ADT (2024)	625
ADT (2044)	1019
DHV	167
D	51%
T DHV	1.6%
T ADT	3.5%
V	35 MPH

DESIGN DESIGNATION
(US16A, MRM 55.56 + 0.083)

ADT (2024)	591
ADT (2044)	932
DHV	153
D	51%
T DHV	1.0%
T ADT	2.2%
V	25 MPH

DESIGN DESIGNATION
(US85, MRM 126.92 + 0.019)

ADT (2024)	1248
ADT (2044)	1636
DHV	215
D	50%
T DHV	11.8%
T ADT	26.0%
V	30 MPH

DESIGN DESIGNATION
(US85, MRM 126.03 + 0.085)

ADT (2024)	1484
ADT (2044)	1946
DHV	256
D	50%
T DHV	11.4%
T ADT	25.1%
V	30 MPH

DESIGN DESIGNATION
(Wildlife Loop Road, 43.661654, -103.421178 to 43.661735, -103.419410)

ADT (2024)	NA
ADT (2044)	NA
DHV	NA
D	NA
T DHV	NA
T ADT	NA
V	25 MPH

STORM WATER PERMIT
No Permit Required

March 18, 2026

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
110E0130	Remove Traffic Sign	22	Each
110E5020	Salvage Traffic Sign	3	Each
110E7150	Remove Sign for Reset	2	Each
632E1320	2.0"x2.0" Perforated Tube Post	115.5	Ft
632E1340	2.5"x2.5" Perforated Tube Post	366.2	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	20.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	88.0	SqFt
632E3500	Reset Sign	2	Each
632E3710	Radar Speed Sign, Solar Powered	13	Each
634E0010	Flagging	200.0	Hour
634E0110	Traffic Control Signs	81.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
635E6200	Miscellaneous, Electrical	Lump Sum	LS

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06. Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

COMMITMENT S: FIRE PREVENTION IN THE BLACK HILLS AREA

This project is located within the Black Hills Forest Fire Protection Boundary.

Action Taken/Required:

The Contractor will adhere to the “Special Provision for Fire Plan”.

SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the 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.

GENERAL TRAFFIC CONTROL

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

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.

Use standard plate 634.23 with a flagger in locations where the road has little or no shoulder and no adequately flat ditch to work in.

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.

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.

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	36"X36"	9	18
W20-4	ONE LANE ROAD AHEAD	2	36"X36"	9	18
W20-7	FLAGGER	2	36"X36"	9	18
W21-5	SHOULDER WORK	2	36"X36"	9	18
G20-2	END ROAD WORK	2	36"X18"	4.5	9
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT TOTAL:					81

FLAGGING

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

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”.

GENERAL PERMANENT SIGNING

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer.

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

When signs are mounted in an assembly, they will be 1-2 inches apart vertically and horizontally.

The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off.

Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2 inches in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation. Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets.

The Contractor will use 3/8-inch diameter rust proof machine sign bolts, flat metal washers, neoprene washers (against the sign sheeting), lock washers, and nuts to fasten the sign to the channel aluminum and posts. A minimum of two bolts will extend through each post.

Prior to ordering signs, the Contractor will verify dimensions, background, border, and legend of the signs.

Prior to use, the Contractor will provide documentation for the sign support devices showing they meet the applicable NCHRP 350 or MASH requirements.

REMOVE TRAFFIC SIGN

Existing signs that are shown as being removed in the Permanent Signing Table will become the property of the Contractor. Existing signposts and bases will be removed in their entirety. All existing signs, posts, and/or hardware removed will not be reused. Holes remaining from the removal of wood posts will be backfilled and compacted with material placed in layers not to exceed 6 inches in depth.

All costs associated with the removal of existing signs, posts, hardware, and backfilled holes will be incidental to the contract unit price per each for "Remove Traffic Sign". Quantities will be per assembly at the contract unit price per each.

SALVAGE TRAFFIC SIGN

All signs listed for salvage (existing radar speed signs) in the Permanent Signing Table will have the existing posts, utility poles, bases, and signs removed, disconnected, dismantled and delivered to the City of Buffalo. The Contractor will notify Harding County Sheriff Wyatt Sabo (605-395-3414) two days prior to time of delivery so correct placement for storage and inventory of materials can be made upon receipt. All bolts, nuts, and washers will be placed in individual 5-gallon pails. All signs listed for salvage will be handled with care so that the signs are not damaged during removal or transport. The Contractor will replace and pay for any salvaged signs damaged in their care. Utility poles will become the property of the Contractor if the City of Buffalo does not want them.

All costs for labor and equipment necessary to remove, dismantle, and deliver signs, posts and utility poles to the City of Buffalo will be incidental to the contract unit price per each for Salvage Traffic Sign. The quantity of signs to be salvaged is shown in the Permanent Signing Table. The plans quantity is shown as per assembly. Payment for salvaging signs will be paid per assembly at the contract unit price per each for "Salvage Traffic Sign".

MISCELLANEOUS ELECTRICAL

To remove and salvage existing radar speed signs, the Contractor will be disconnecting the electrical service and abandoning wire/conduit. All electrical work will be paid for as incidental to the contract lump sum price for "Miscellaneous, Electrical."

REMOVE SIGN FOR RESET AND RESET SIGN

Signs that are scheduled for reset will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The Contractor will remove and dispose of any existing posts for all reset signs that require use of new posts as shown in the Permanent Signing Table.

All costs for removing, dismantling, and disposing of any existing posts will be incidental to the contract unit price per each for "Remove Sign for Reset". All costs for resetting the existing signs will be incidental to the contract unit price per each for "Reset Sign". All quantities for Remove Sign for Reset and Reset Sign will be per assembly at the contract unit price per each.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films.

All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for "Flat Aluminum Sign, Nonremovable Copy High Intensity" or "Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity".

DIGITALLY PRINTED SIGNS

Digitally printed signs will be allowed on this project. If the Contractor elects to provide digitally printed signs, such signs will adhere to the following specifications.

PROTECTIVE OVERLAY FILM

Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate will comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1: Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
I	0	7
III	7	10
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

FABRICATION

Retroreflective sheeting will be applied to a properly cleaned and prepared aluminum sign blank in accordance with the retroreflective sheeting manufacturer's recommendations. Sign legend will be applied using digital print technologies and systems in accordance with the retroreflective sheeting manufacturer's recommendations and the requirements of these plans.

Finished signs will be free of ragged edges and must be supplied clean and free of scratches, grease, oil, lubricants or other contaminants. Minor blemishes (dirt speck, dust, etc.) may settle on the fresh ink surface or become entrapped between the sheeting surface and transparent overlay film due to static charge within the sign shop environment. Any blemish must be minor and not interfere with the communication of the sign message to the motorist. The blemish must not be visible to the naked eye when viewed from 30 feet or greater.

After application of the retroreflective sheeting, sign blanks will be stacked and packaged face to face, back to back, and protected in accordance with the sheeting manufacturer's recommendations. Finished signs will be securely packaged to prevent damage during transit or storage according to the sheeting manufacturer's recommendations.

TRAFFIC SIGN PERFORMANCE WARRANTY PROVISIONS

Based on the ASTM Type of sheeting specified, traffic control signs will be warranted for the duration shown in Table 1. Full product terms and conditions are as established by each sheeting manufacturer and may contain certain limitations based on sheeting and ink colors, and geographic exposure of the sign. A copy of the warranty document with complete details of terms and conditions will be supplied if requested by the Engineer.

CERTIFIED DIGITAL SIGN FABRICATOR

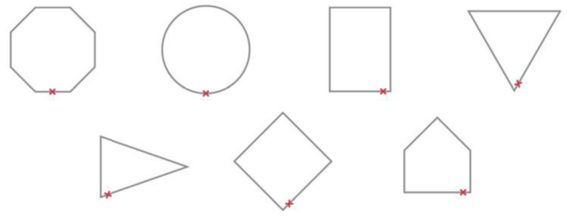
Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

DATE TAGGING SIGNS WITH PERTINENT INFORMATION

All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs
   Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.
   - Name of Sign Fabricator
   - Date the sign was fabricated (month and year)
   - Process that was used for sign fabrication (digitally printed)
   - Supplier of sheeting that was used for fabricating the sign.

2. Border date
The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8" sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.



RADAR SPEED SIGN, SOLAR POWERED

The solar powered radar speed signs must operate continually 24 hours per day, 7 days per week, all year. The system will be self-contained with all components except the solar panel within the housing.

The radar speed signs will be MUTCD compliant. When installed with a (R2-1) speed limit sign, the (W13-20) radar speed sign will be installed 2 inches below and flush with the speed limit sign.

The solar panel will be mounted above the sign assembly facing to the south and tilting skyward at a 45 degree angle.

The radar speed signs will be programmed so that the feedback display does not flash or strobe at any time. The radar speed signs will provide a solid display of the speed of the approaching vehicle if at or below the posted speed limit or advisory speed limit. A solid display of "SLOW DOWN" will be displayed when vehicles exceed the posted speed limit or advisory speed limit. The radar speed sign will be dark when no vehicles are approaching.

The W13-20 and W13-20aP radar speed feedback signs will be a SAFEPACE EVOLUTION 12FM or approved equivalent as determined by the Engineer.

Install the solar powered radar speed signs according to manufacturer's recommendations.

The Contractor will provide all labor and equipment necessary to install the solar powered radar speed signs. Payment for furnishing and installing the solar powered radar speed signs including the solar panel and faceplate will be paid for at the contract unit price per each for "Radar Speed Sign, Solar Powered."

SQUARE TUBE ANCHOR SLEEVE

The Contractor will furnish and install new 2.5" x 2.5" x 18", 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for 2.0" x 2.0" perforated tube posts. A 2.25" x 2.25" x 4', 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

SQUARE TUBE POST SLEEVE

All 2.5" x 2.5", 10 Gauge perforated tube post will be sleeved with a 2-3/16" x 2-3/16" x 4', 10 Gauge perforated tube post.

WINGED SLIP BASE ANCHOR

The Contractor will furnish and install new winged slip base anchors for 2.5" x 2.5" perforated tube posts as required in the Permanent Signing Table. Winged slip base anchors will be installed using the direct drive method. Winged slip base anchors will consist of a slip base (upper), a 48-inch long winged anchor (lower), and a hardware kit.

PERMANENT SIGNING TABLE

0ACJ - PERMANENT SIGNING AND SIGN REMOVALS

Highway (Road)	MRM	x coord	y coord	Side of Road	Location Description	SIGN								POST				Work to be Done	POST LENGTHS		FLAT ALUMINUM SIGN AREAS	
						Sign Code	Sign Description	Width	Height	Size (in)	Direction Facing	Square Footage	Sheeting Type	Post Height (feet)	Number of Posts	Post size	Telescoped and Shear Slip Base		LF of 2.0"	LF of 2.5"	SQFT IV	SQFT XI
14A	34 + 0.474			Right		W1-2L	LEFT CURVE ARROW	36	36	36 X 36	West	9						Remove Traffic Sign				
						W13-1P	35 MPH ADVISORY SPEED PLATE	18	18	18 X 18	West	2.25										
14A	34 + 0.531			Right	100 feet before point of curvature	W1-4L	LEFT REVERSE CURVE	30	30	30 X 30	South	6.25	XI	11.2	1	2.0	NO	New Permanent Signing	11.2			6.25
						W13-1P	35 MPH ADVISORY SPEED PLATE	18	18	18 X 18	South	2.25	XI					New Permanent Signing				2.25
14A	34 + 0.55			Right	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	South	5		12.2	2	2.5	YES	New Radar Speed Sign, Solar Powered		24.4		
14A	34 + 0.588			Right		W13-5	35 ADVISORY LEFT CURVE	30	24	30 X 24	South	5						Remove Traffic Sign				
14A	35 + 0.311			Right		W1-4R	RIGHT REVERSE CURVE	30	30	30 X 30	West	6.25						Remove Traffic Sign				
						W13-1PG	ADVISORY SPEED PLATE - 35 M.P.H.	18	18	18 X 18	West	2.25										
14A	35 + 0.33			Right	100 feet before point of curvature	W1-4R	RIGHT REVERSE CURVE	30	30	30 X 30	West	6.25	XI	11.2	1	2.0	NO	New Permanent Signing	11.2			6.25
						W13-1P	ADVISORY SPEED PLATE - 35 M.P.H.	18	18	18 X 18	West	2.25	XI					New Permanent Signing				2.25
14A	35 + 0.349			Right	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	West	5		11.7	2	2.5	YES	New Radar Speed Sign, Solar Powered		23.4		
14A	35 + 0.545			Left	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	North	5		12.1	2	2.5	YES	New Radar Speed Sign, Solar Powered		24.2		
14A	35 + 0.564			Left	100 feet before point of curvature	W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	North	2.25	XI	11.6	1	2.0	NO	New Permanent Signing	11.6			2.25
						W1-4R	RIGHT REVERSE CURVE ARROW	30	30	30 X 30	North	6.25	XI					New Permanent Signing				6.25
14A	35 + 0.64			Left		W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	North	2.25						Remove Traffic Sign				
						W1-4R	RIGHT REVERSE CURVE ARROW	30	30	30 X 30	North	6.25										
14A	39 + 0.473			Right		W1-5L	LEFT WINDING ROAD ARROW	30	30	30 X 30	West	6.25						Remove Traffic Sign				
						W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	West	2.25										
14A	39 + 0.493				100 feet before point of curvature	W1-5L	LEFT WINDING ROAD ARROW	30	30	30 X 30	West	6.25	XI	11.1	1	2.0	NO	New Permanent Signing	11.1			6.25
						W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	West	2.25	XI					New Permanent Signing				2.25
14A	39 + 0.512			Right		W1-8	CHEVRON	18	24	18 X 24	West	3						Remove Traffic Sign				
						W1-8	CHEVRON	18	24	18 X 24	East	3										
14A	39 + 0.512			Right	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	West	5		11.7	2	2.5	YES	New Radar Speed Sign, Solar Powered		23.4		
						W1-8	CHEVRON	18	24	18 X 24	East	3	XI					New Permanent Signing				3
14A	39.814 + 0			Left	At point of curvature	W1-1R	RIGHT TURN ARROW	30	30	30 X 30	East	6.25						Remove Traffic Sign				
14A	39.814 + 0			Left	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	East	5		12.1	2	2.5	YES	New Radar Speed Sign, Solar Powered		24.2		
14A	39.833 + 0			Left		W1-5R	RIGHT WINDING ROAD ARROW	30	30	30 X 30	East	6.25						Remove Traffic Sign				
						W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	East	2.25										
14A	39.833 + 0			Left	100 feet before point of curvature	W1-5R	RIGHT WINDING ROAD ARROW	30	30	30 X 30	East	6.25	XI	11.6	1	2.0	NO	New Permanent Signing	11.6			6.25
						W13-1P	35 M.P.H. ADVISORY SPEED PLATE	18	18	18 X 18	East	2.25	XI					New Permanent Signing				2.25
14A	50 + 0.144			Right		W1-2L	LEFT CURVE ARROW	30	30	30 X 30	West	6.25						Remove Traffic Sign				
						W13-1P	35 M.P.H. SPEED ADVISORY PLATE	18	18	18 X 18	West	2.25										
14A	50 + 0.153				100 feet from point of curvature	W1-2L	LEFT CURVE ARROW	30	30	30 X 30	West	6.25	XI	11.1	1	2.0	NO	New Permanent Signing	11.1			6.25
						W13-1P	35 M.P.H. SPEED ADVISORY PLATE	18	18	18 X 18	West	2.25	XI					New Permanent Signing				2.25
14A	50 + 0.182			Right		W1-2L	LEFT CURVE ARROW	48	48	48 X 48	West	16						Remove Traffic Sign				
14A	50 + 0.182			Right	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	West	5		11.6	2	2.5	YES	New Radar Speed Sign, Solar Powered		23.2		
14A	50 + 0.258			Right	Wrong MRM; existing sign on curve	W1-2R	RIGHT CURVE ARROW	48	48	48 X 48	Northeast	16						Remove Traffic Sign				
14A	50 + 0.218			Right	At point of curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	Northeast	5		11.7	2	2.5	YES	New Radar Speed Sign, Solar Powered		23.4		
14A	50 + 0.237			Left	100 feet from point of curvature	W1-2R	RIGHT CURVE ARROW	30	30	30 X 30	NorthEast	6.25	XI	11.1	1	2.0	NO	New Permanent Signing	11.1			6.25
						W13-1P	ADVISORY SPEED PLATE 35 M.P.H.	18	18	18 X 18	NorthEast	2.25	XI					New Permanent Signing				2.25
14A	50 + 0.256			Left		W1-2R	RIGHT CURVE ARROW	36	36	36 X 36	NorthEast	9						Remove Traffic Sign				
						W13-1PG	ADVISORY SPEED PLATE 35 M.P.H.	18	18	18 X 18	NorthEast	2.25										
16A	46.58 + 0.025			Right		R2-1X	Speed limit 35	24	30	24 X 30	East	5						Remove Traffic Sign				
16A	46.58 + 0.039			Right	200 feet from Playhouse intersection (100 before point of curvature)	R2-1	Speed limit 35	24	30	24 X 30	East	5	IV	14.5	2	2.5	YES	New Permanent Signing		29.0	5.0	
						W13-20aP	VEHICLE SPEED FEEDBACK (PLAQUE)	24	18	24 X 18	East	3						New Radar Speed Sign, Solar Powered				

0ACJ - PERMANENT SIGNING AND SIGN REMOVALS

Highway (Road)	MRM	x coord	y coord	Side of Road	Location Description	SIGN								POST				Work to be Done	POST LENGTHS		FLAT ALUMINUM SIGN AREAS	
						Sign Code	Sign Description	Width	Height	Size (in)	Direction Facing	Square Footage	Sheeting Type	Post Height (feet)	Number of Posts	Post size	Telescoped and Shear Slip Base		LF of 2.0"	LF of 2.5"	SQFT IV	SQFT XI
16A	55.571 + 0			Left	700 feet from existing location	ADO-2	BLACK HILLS BMW RIDERS CLUB	36	12	36 X 12	North	3	IV	15	1	2.5	YES	Reset Sign on New Posts		15.0		
						ADO-1	ADOPT A HIGHWAY	36	30	36 X 30	North	7.5	IV									
						AD-7	LITTER CREW AHEAD	30	30	30 X 30	North	6.25	IV									
16A	55.56 + 0.13			Left	At point of curvature	W1-5R	RIGHT WINDING ROAD	30	30	30 X 30	North	6.25	XI	11.6	1	2.0	NO	New Permanent Signing	11.6			6.25
						W13-1P	ADVISORY SPEED PLATE 20	18	18	18 X 18	North	2.25	XI					New Permanent Signing				2.25
16A	55.56 + 0.144			Right		R2-1E	Speed limit 35	24	30	24 X 30	South	5						Remove Traffic Sign				
16A	55.56 + 0.144			Left		ADO-2	BLACK HILLS BMW RIDERS CLUB	36	12	36 X 12	North	3						Remove Sign for Reset				
						ADO-1	ADOPT A HIGHWAY	36	30	36 X 30	North	7.5										
						AD-7	LITTER CREW AHEAD	30	30	30 X 30	North	6.25										
16A	55.56 + 0.149			Left	100 feet before point of curvature	R2-1	Speed limit 25	24	30	24 X 30	North	5	IV	14.7	2	2.5	YES	New Permanent Signing		29.4	5.0	
						W13-20aP	VEHICLE SPEED FEEDBACK (PLAQUE)	24	18	24 X 18	North	3						New Radar Speed Sign, Solar Powered				
16A	55.56 + 0.163			Left		W12-2F	TUNNEL CLEARANCES AHEAD , width 10 ft - 9 in, height 10 ft - 9 in	96	48	96 X 48	North	32						Remove Sign for Reset				
16A	55.56 + 0.18			Left		W1-5R	RIGHT WINDING ROAD	30	30	30 X 30	North	6.25						Remove Traffic Sign				
						W13-1P	ADVISORY SPEED PLATE 20	18	18	18 X 18	North	2.25						Remove Traffic Sign				
16A	55.56 + 0.18			Left		W12-2F	TUNNEL CLEARANCES AHEAD , width 10 ft - 9 in, height 10 ft - 9 in	96	48	96 X 48	North	32		11.1	2	2.5	YES	Reset Sign on New Posts		22.2		
US85	125 + 0.872			Right		R2-1X	SPEED LIMIT 30 M.P.H.	24	30	24 X 30	South	5						Remove Traffic Sign				
US85	125 + 0.872			Right		R2-1	SPEED LIMIT 30 M.P.H.	24	30	24 X 30	South	5	IV	13.1	2	2.5	YES	New Permanent Signing		26.2	5.0	
						W13-20aP	VEHICLE SPEED FEEDBACK (PLAQUE)	24	18	24 X 18	South	3						New Radar Speed Sign, Solar Powered				
US85	126.03 + 0.086			Right		R2-1X	SPEED LIMIT --30	24	30	24 X 30	South	5						Remove Traffic Sign				
						X-NS0	TRAFFIC SIGNAL SPEED	12	18	12 X 18	South	1.5						Salvage Traffic Sign				
US85	126.66 + 0.03			Left		X-NS0	your speed	18	12	18 X 12	North	1.5						Salvage Traffic Sign				
						X-NS0	lighted digital speed display	24	30	24 X 30	North	5										
						R2-1X	SPEED LIMIT 30	24	30	24 X 30	North	5						Remove Traffic Sign				
US85	126.92 + 0.019			Left		X-NS0	your speed	30	6	30 X 6	North	1.25						Salvage Traffic Sign				
						X-NS0	digital speed	30	18	30 X 18	North	3.75										
US85	126.92 + 0.041			Left		R2-1X	speed limit 30	24	30	24 X 30	North	5						Remove Traffic Sign				
US85	126.92 + 0.041			Left		R2-1	SPEED LIMIT 30 M.P.H.	24	30	24 X 30	South	5	IV	13.1	2	2.5	YES	New Permanent Signing		26.2	5.0	
						W13-20aP	VEHICLE SPEED FEEDBACK (PLAQUE)	24	18	24 X 18	South	3						New Radar Speed Sign, Solar Powered				
WLR		43.661559	-103.42118	East		W1-11R	Hairpin Curve Right	30	30	30 X 30	South							Remove Traffic Sign				
WLR		43.661559	-103.42118	East	150 feet before start of hairpin curve	W1-11R	Hairpin Curve Right	30	30	30 X 30	South	6.25	XI	12.5	1	2.0	NO	New Permanent Signing	12.5			6.25
						W13-1P	Advisory Speed Plate 10 MPH	18	18	18 X 18	South	2.25	XI					New Permanent Signing				2.25
WLR				East	At point of haripin curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	South	5		13	2	2.5	YES	New Radar Speed Sign, Solar Powered		26.0		
WLR		43.661692	-103.41935	East		W1-11L	Hairpin Curve Left	30	30	30 X 30	South							Remove Traffic Sign				
WLR		43.661692	-103.41935	East	150 feet before start of hairpin curve	W1-11L	Hairpin Curve Left	30	30	30 X 30	South	6.25	XI	12.5	1	2.0	NO	New Permanent Signing	12.5			6.25
						W13-1P	Advisory Speed Plate 10 MPH	18	18	18 X 18	South	2.25	XI					New Permanent Signing				2.25
WLR				East	At point of haripin curvature	W13-20	VEHICLE SPEED FEEDBACK SIGN	24	30	24 X 30	South	5		13	2	2.5	YES	New Radar Speed Sign, Solar Powered		26.0		

	2.0" POSTS	2.5" POSTS	TYPE IV SIGN	TYPE XI SIGN
TOTALS:	**115.5 feet**	**366.2 feet**	**20 sqft**	**88 sqft**

New Radar Speed Sign, Solar Powered TOTAL:	**13**
Remove Traffic Sign TOTAL:	**22**
Salvage Traffic Sign TOTAL:	**3**
Remove Sign for Reset TOTAL:	**2**
Reset Sign TOTAL:	**2**

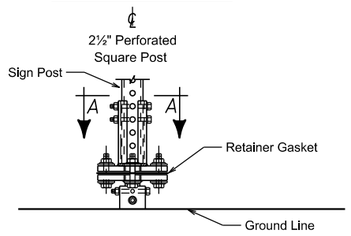
SIGN BASE DETAILS

SD DOT	PROJECT	SECTION	SHEET
	PH 0040(365)	Non	8/12

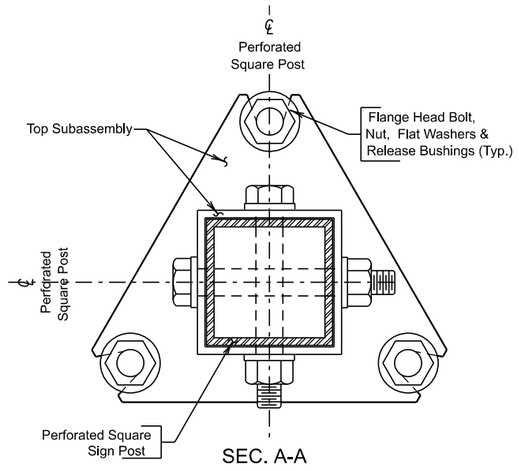
Plotting Date: 12/19/2025

BREAKAWAY SIGN SUPPORTS

SLIP BASE DESIGN

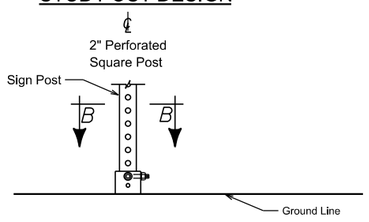


ELEVATION

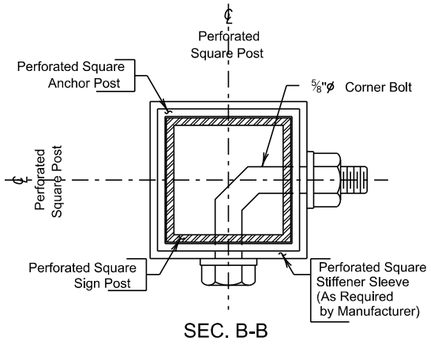


SEC. A-A

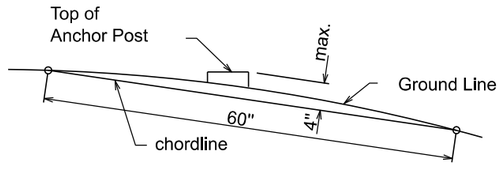
STUB POST DESIGN



ELEVATION



SEC. B-B



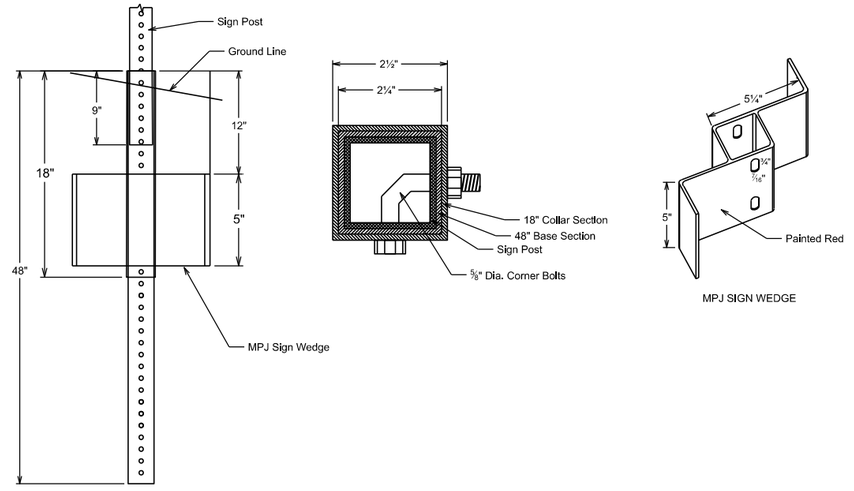
BREAKAWAY SUPPORT STUB CLEARANCE DIAGRAM

NOTE: The top of anchor post will NOT extend more than 4" max above the chordline within a 60" chord.

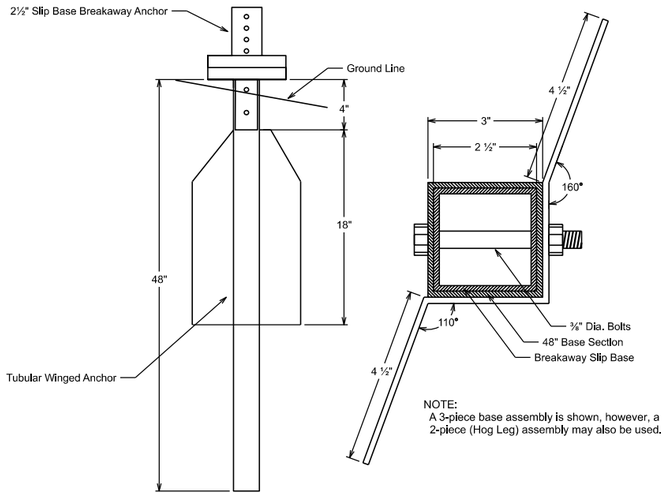
General Notes:

1. Design Specification: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, Latest Edition.
2. The manufacturer will provide certification that the posts and hardware furnished have essentially the same chemistry, mechanical porperties and geometry as that used in the FHWA tests, and that it will meet the FHWA change in velocity requirements.
3. The manufacturer will also provide certification that the breakaway system furnished will develop the full shear and bending yield strength of the sign post section being spliced.
4. All posts will be galvanized in accordance with ASTM A653, Des. G-90.
5. All hardware will be galvanized in accordance with ASTM A153.

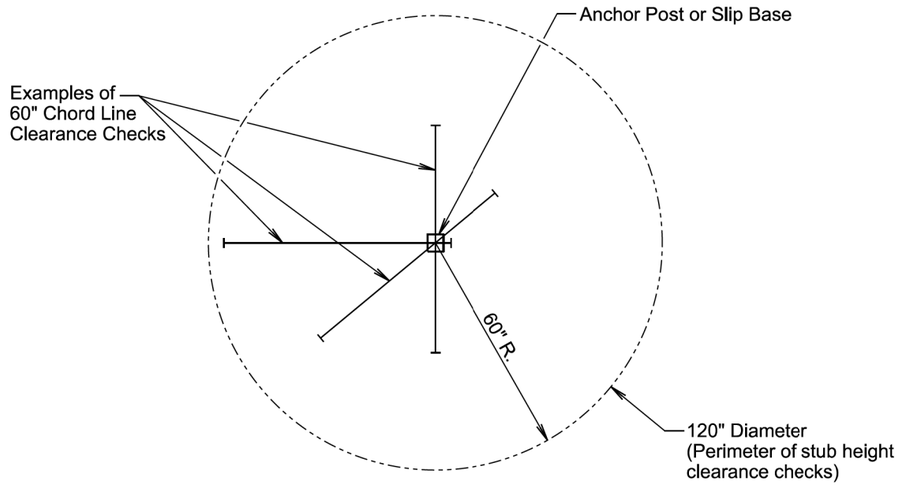
SIGN BASE DETAILS FOR A 2" SIGN POST



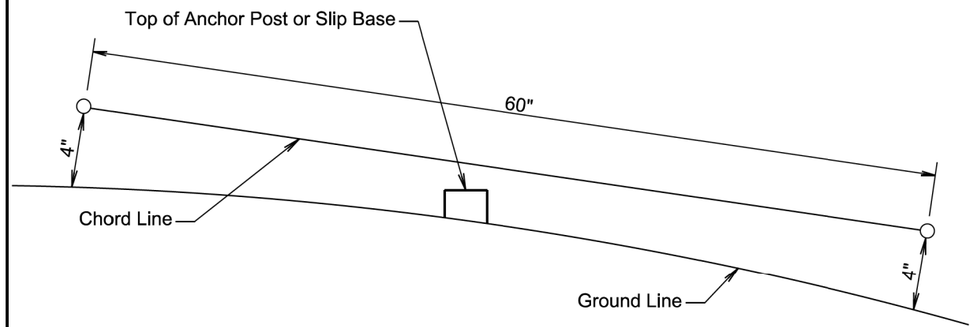
SIGN BASE DETAILS FOR A 2½" SIGN POST



NOTE:
A 3-piece base assembly is shown, however, a 2-piece (Hog Leg) assembly may also be used.



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

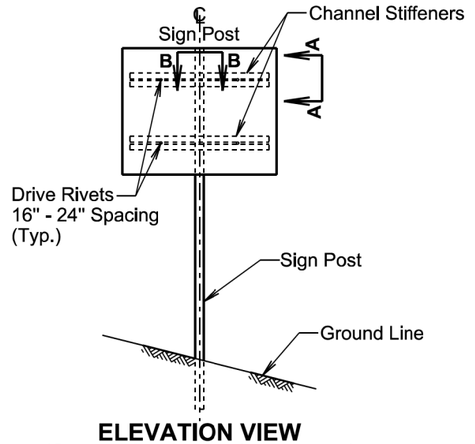
GENERAL NOTES:

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.

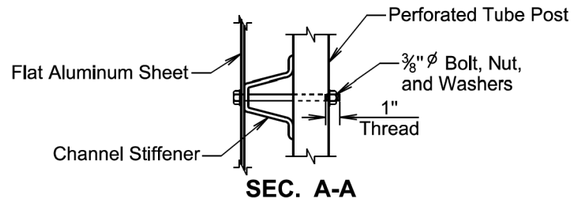
At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

January 22, 2021

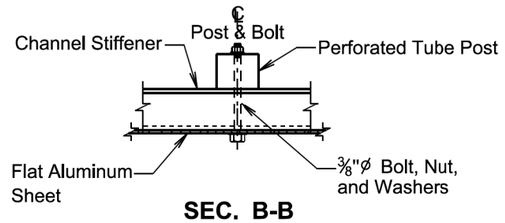
Published Date: 2026	SDDOT	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 632.18
			Sheet 1 of 1



ELEVATION VIEW
(One post breakaway sign supports.)



SEC. A-A

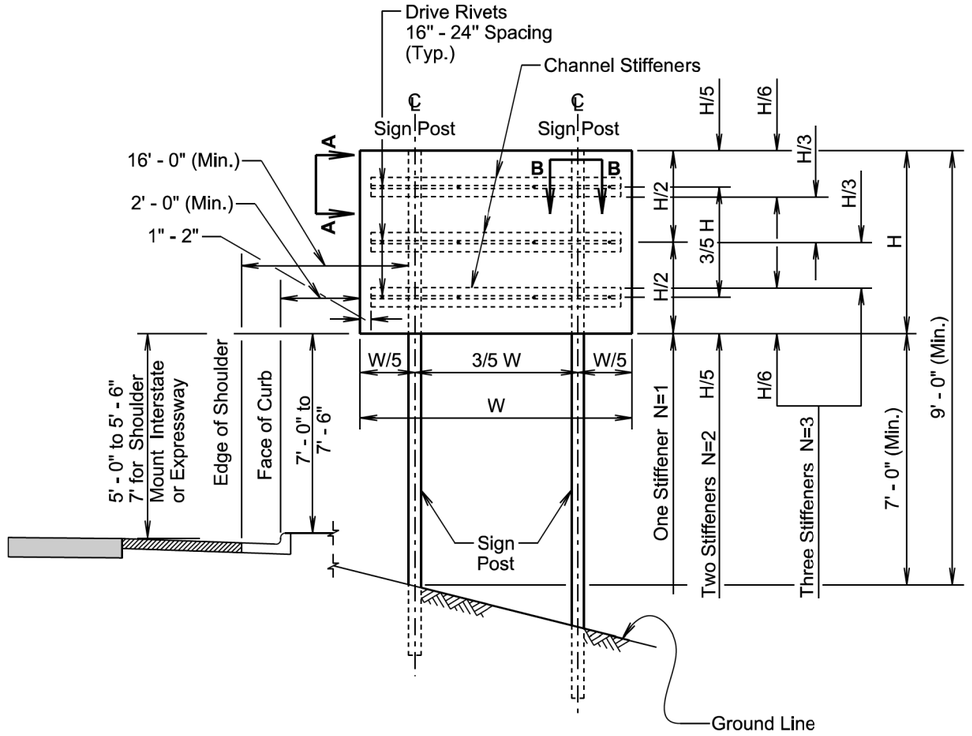


SEC. B-B
(Typical sign and stiffener details.)

ø A plastic washer, as recommended by the sheeting manufacturer, will be installed between the sign face and the metal washer shown.

November 19, 2020

Published Date: 2026	SDDOT	SIGN STIFFENER DETAILS	PLATE NUMBER 632.60
			Sheet 1 of 2



TWO POST BREAKAWAY SIGN SUPPORTS

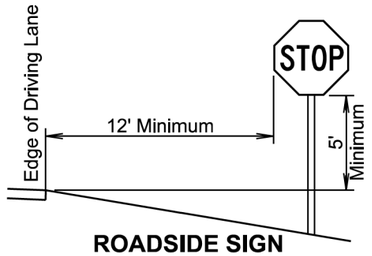
GENERAL NOTES:

The number of stiffeners used (N) will be as follows:
If H < = 2' - 0" then N = 1
if 2' - 0" < H < = 8' - 0" then N = 2
if 8' - 0" < H < = 15' - 0" then N = 3
where H is the vertical dimension of the sign.

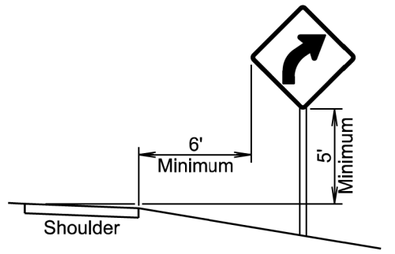
A minimum of two bolts will be required to fasten the sign to each post.

November 19, 2020

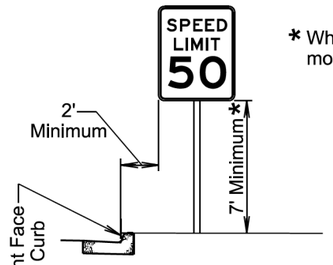
Published Date: 2026	SDDOT	SIGN STIFFENER DETAILS	PLATE NUMBER 632.60
			Sheet 2 of 2



ROADSIDE SIGN IN RURAL AREA

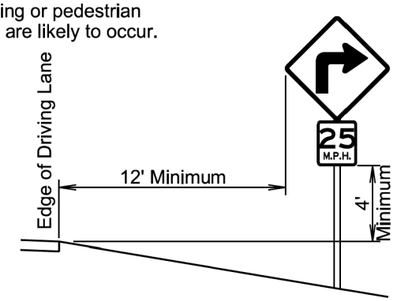


ROADSIDE SIGN IN RURAL AREA
(If shoulder width is greater than 6 foot)

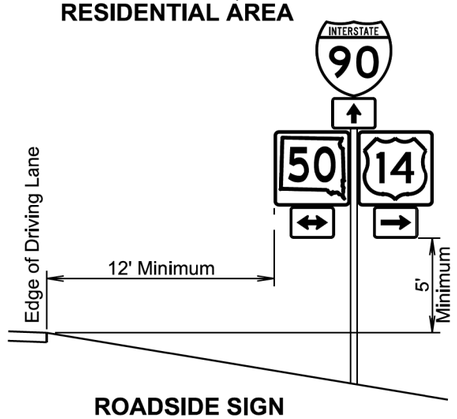


ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA

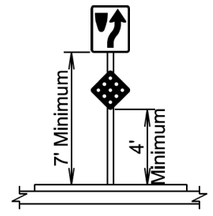
* Where parking or pedestrian movements are likely to occur.



WARNING SIGN ADVISORY SPEED PLAQUE IN RURAL AREA



ROADSIDE SIGN IN RURAL AREA



SIGN ON NOSE OF MEDIAN

April 8, 2025

Published Date: 2026	SDDOT	OFFSETS FOR SIGN INSTALLATION	PLATE NUMBER 632.90
			Sheet 1 of 1

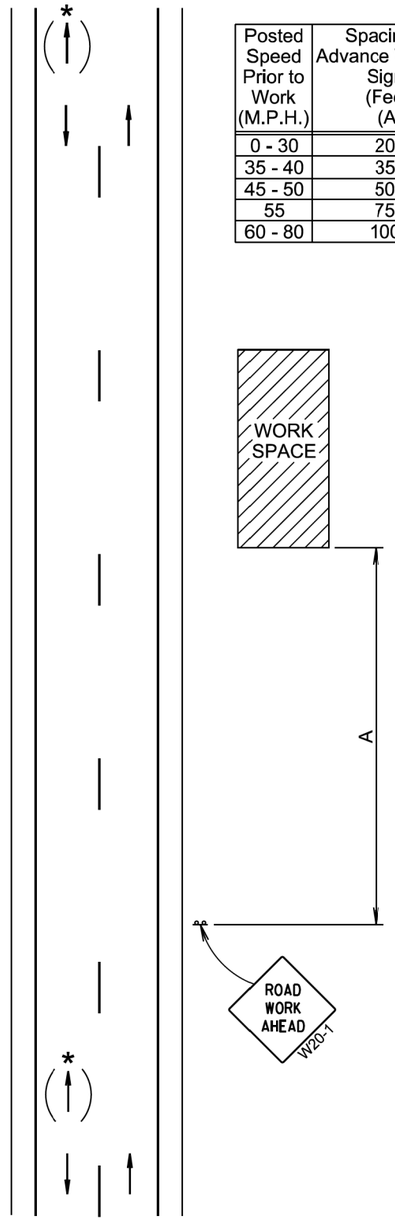
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated will 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.

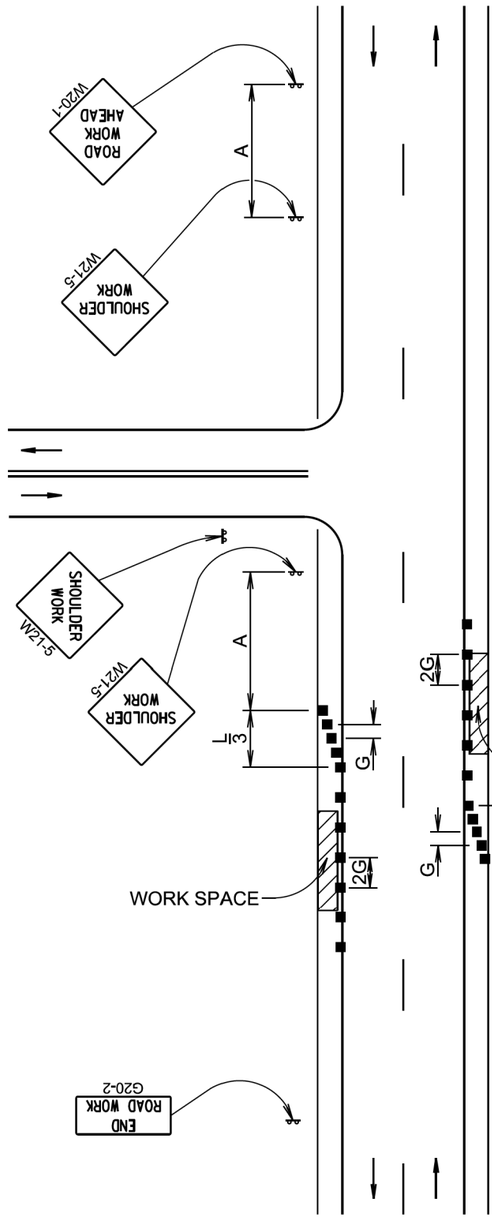
For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 80	1000

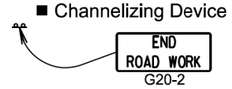
January 22, 2021

Published Date: 2026	SDDOT	WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01 Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device



The channelizing devices will 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.

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Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45	500	25
50	500	50
55	750	50
60 - 65	1000	50

Flagger

Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

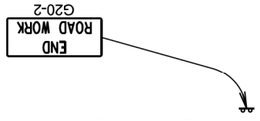
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) will be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices will be drums or 42" cones.

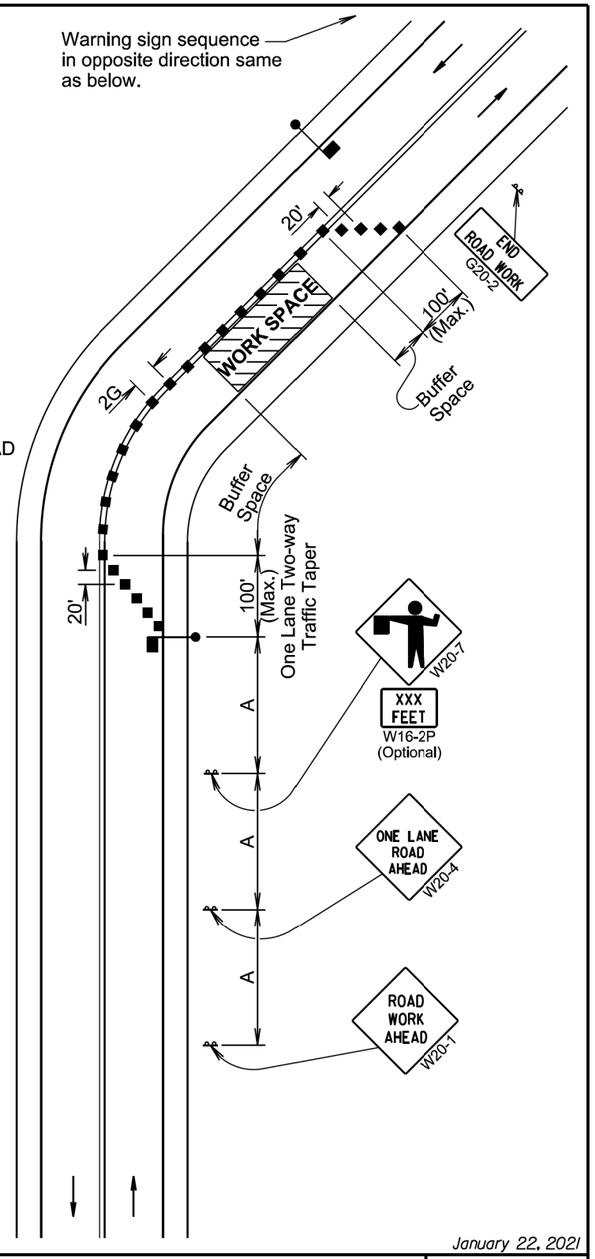
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.



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Published Date: 2026

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LANE CLOSURE WITH FLAGGER PROVIDED

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