

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED  
Project 014-192  
US HWY 14

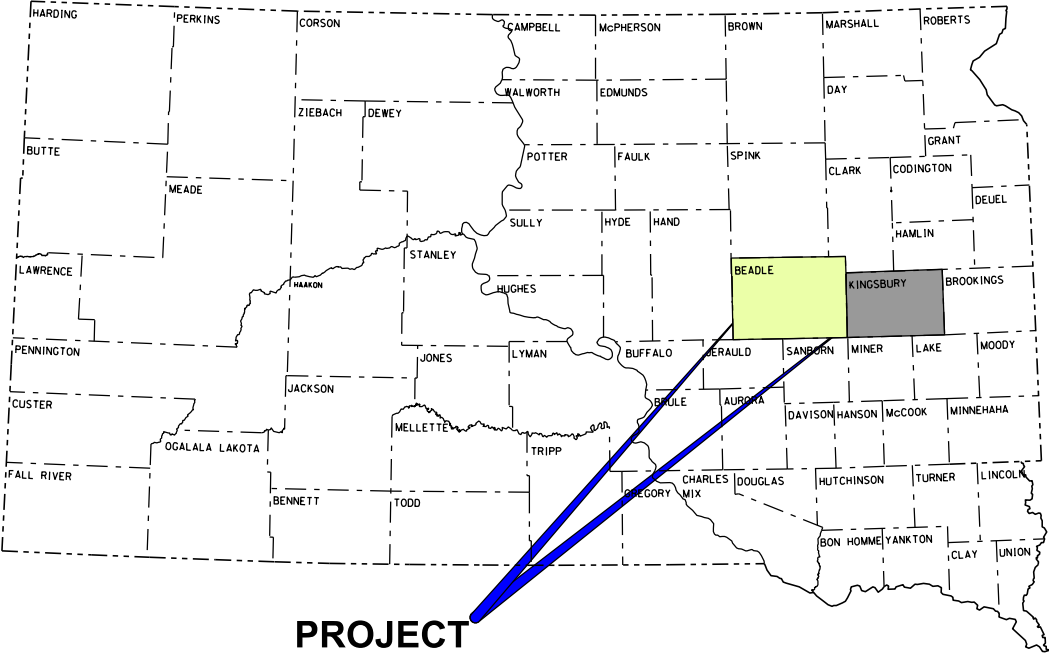
BEADLE AND KINGSBURY COUNTIES

ASPHALT CONCRETE PLACEMENT ON SHOULDER  
PCN i4ck & i4cL

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	014-191	1	11
Plotting Date: 05/18/2016			

INDEX OF SHEETS

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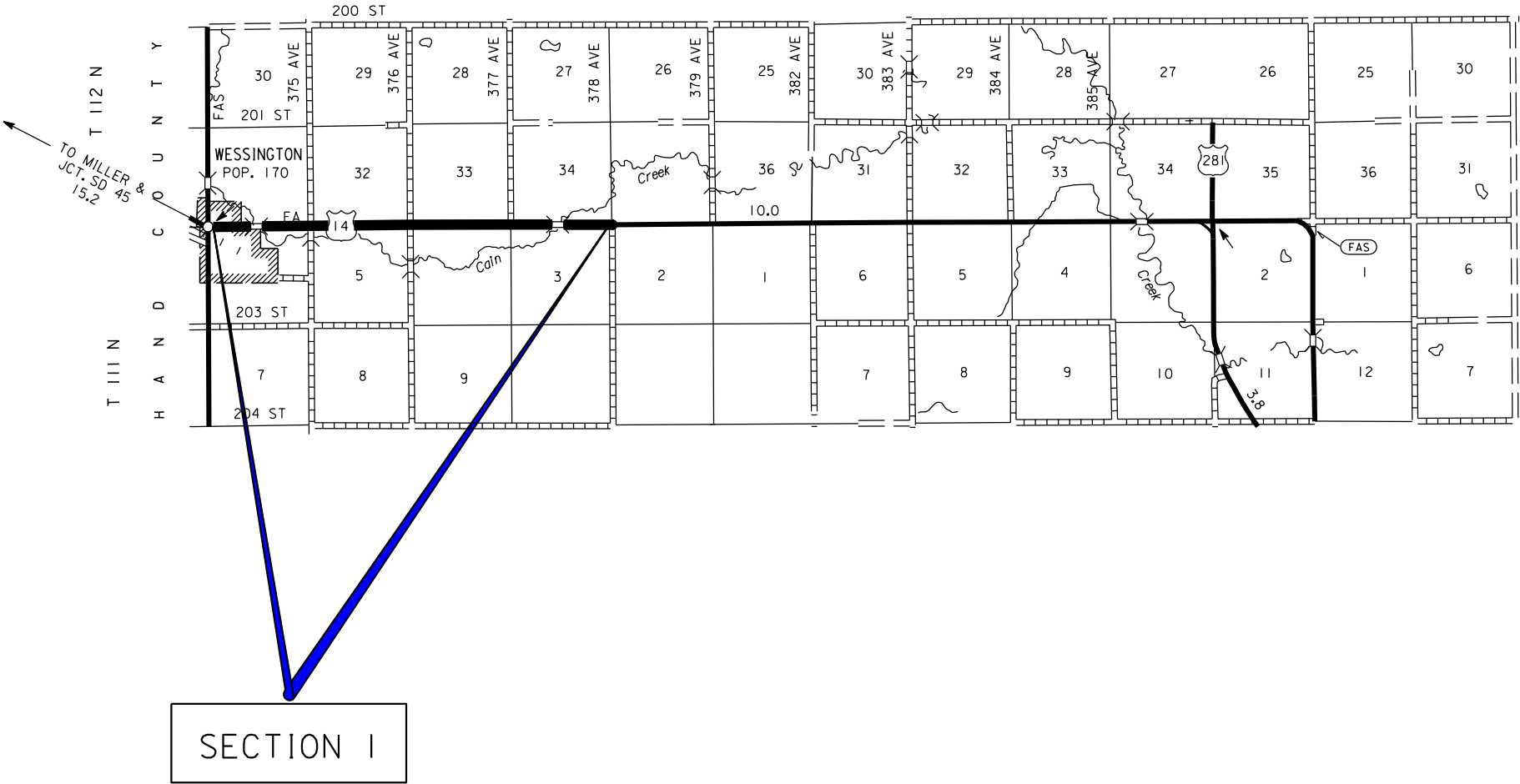


PROJECT

PCN i4ck  
SECTION #1, US 14  
BEADLE COUNTY  
BEGIN MRM: 316.76+0.000  
END MRM: 320.00+0.500

R 65 W

R 64 W



SECTION 1

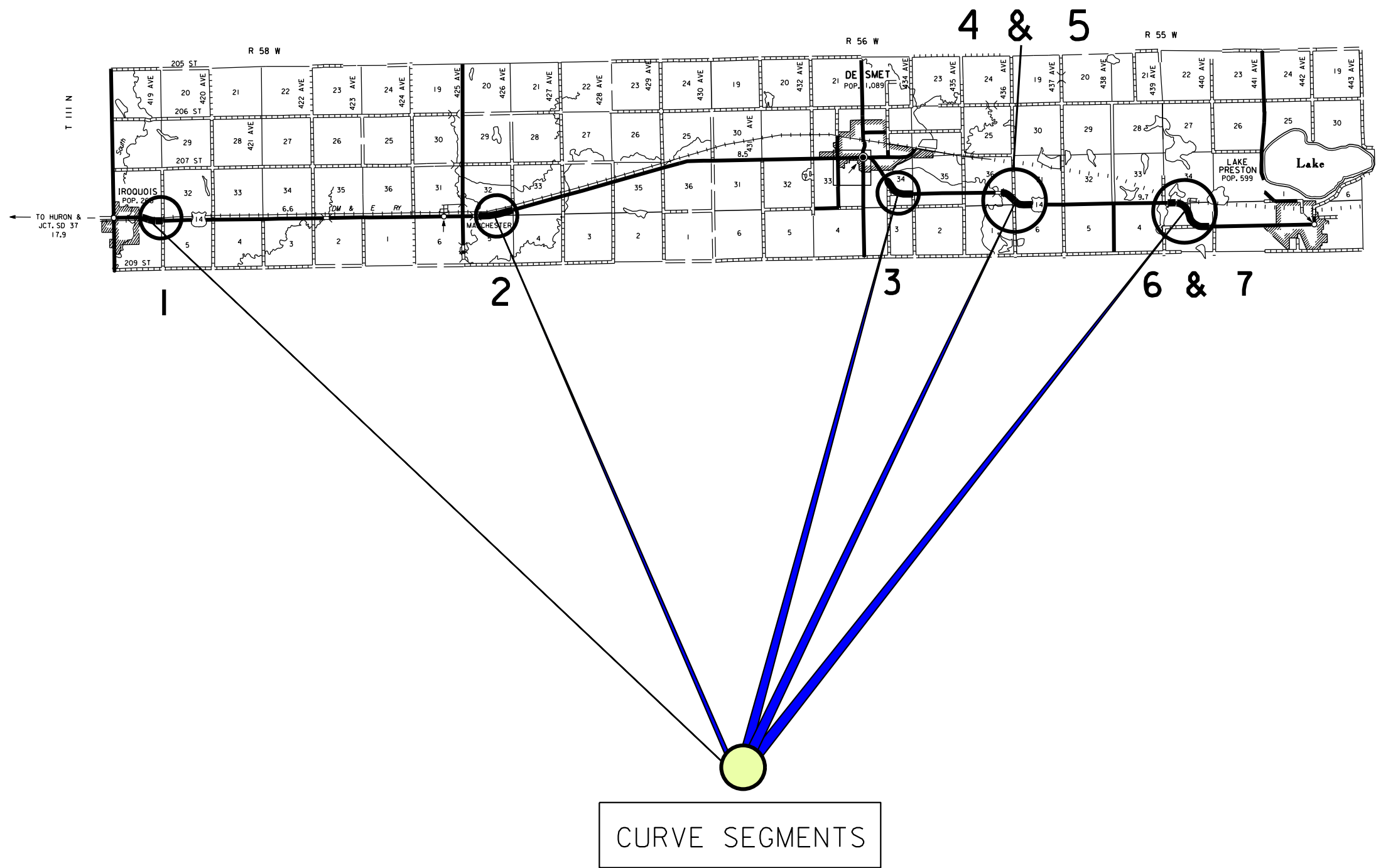
STORM WATER PERMIT  
(NONE REQUIRED)

DESIGN DESIGNATION

ADT (2015)	1195
ADT (2035)	1585
DHV	151
D	50%
T DHV	3.1%
T•ADT	22.6%
V	65 M.P.H.



PCN i4cL  
SECTION #2, US 14  
KINGSBURY COUNTY



PCN I4CK

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 009E0010	Mobilization	Lump Sum	LS
* 110E1010	Remove Asphalt Concrete Pavement	1,432.8	SqYd
* 210E2000	Shoulder Shaping	7.600	Mile
* 320E1200	Asphalt Concrete Composite	5,931.0	Ton
* 330E0010	MC-70 Asphalt for Prime	47.6	Ton
* 634E0010	Flagging	96.0	Hour
* 634E0020	Pilot Car	48.0	Hour
* 634E0110	Traffic Control Signs	316.0	SqFt
* 634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

\* - Denotes Non-Participating

PCN I4CL

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
* 009E0010	Mobilization	Lump Sum	LS
* 110E1010	Remove Asphalt Concrete Pavement	9,331.4	SqYd
* 210E2000	Shoulder Shaping	5.200	Mile
* 320E1200	Asphalt Concrete Composite	3,527.9	Ton
* 330E0010	MC-70 Asphalt for Prime	28.7	Ton
* 634E0010	Flagging	120.0	Hour
* 634E0020	Pilot Car	60.0	Hour
* 634E0110	Traffic Control Signs	316.0	SqFt
* 634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

\* - Denotes Non-Participating

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

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) shall be incidental to the various contract items.

**COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES**

The SDDOT has obtained concurrence with the State Historical 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 review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

**ENVIRONMENTAL COMMITMENTS**

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

**COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES**

**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 pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

**COMMITMENT C: WATER SOURCE**

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

The Contractor shall not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

**Action Taken/Required:**

The Contractor shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

**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 shall 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 State ROW.

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

The waste disposal site(s) shall 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 Project Engineer.

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

- Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating “No Dumping Allowed”.
- Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall 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.

RATES OF MATERIALS

SECTION 1

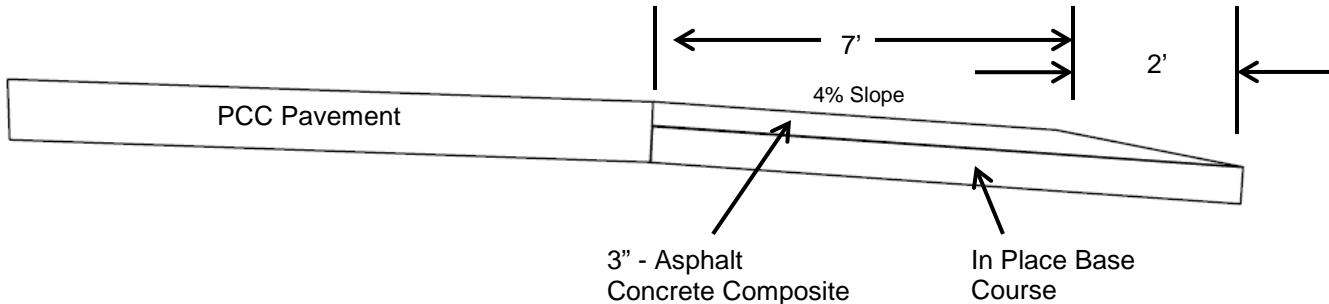
The Estimate of Quantities is based on the following quantities of material per mile for one shoulder.

3” Asphalt Concrete Composite Lift - (Estimated at 7’ Wide, with a 2’ sluff)

780 Tons

MC-70 Asphalt for Prime at the rate of 6.3tons applied 9 feet wide.  
(8 feet wide each shoulder) (Rate = 0.30 Gal./Sq.Yd.)

Final Typical Section for Shoulder Surfacing:



SUMMARY OF ASPHALT CONCRETE

LOCATIONS:	Asphalt Concrete Composite TONS
Section 1 - Eastbound Shoulder	2964
Section 1 - Westbound Shoulder	2967
Section 2 - Eastbound Shoulder	1794.7
Section 2 - Westbound Shoulder	1733.2
Total Asphalt Concrete Composite:	9,458.9 Tons

SECTION 2

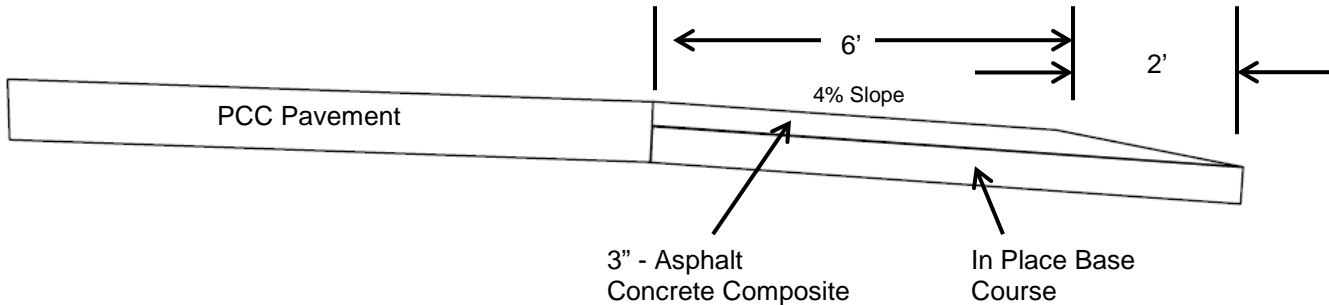
The Estimate of Quantities is based on the following quantities of material per mile for one shoulder.

3” Asphalt Concrete Composite Lift - (Estimated at 6’ Wide, with a 2’ sluff)

782 Tons

MC-70 Asphalt for Prime at the rate of 5.6 tons applied 8 feet wide.  
(8 feet wide each shoulder) (Rate = 0.30 Gal./Sq.Yd.)

Final Typical Section for Shoulder Surfacing:



ESTIMATE OF QUANTITIES TABLES FOR INFORMATION ONLY

TABLE OF MATERIAL QUANTITIES, PCN I4CK

	BEGINNING MRM	ENDING MRM	REMOVE ASPHALT CONCRETE PAVEMENT	SHOULDER SHAPING	MC-70 ASPHALT FOR PRIME	AC COMPOSITE
Section	Mile	Mile	SqYd	(Lane) Mile	Ton	Ton
1	316.76+0.000	320.00+0.000	1,432.8	7.6	47.6	5,931.0
Totals	0	0.0	1,432.8	7.6	47.6	5,931.0

TABLE OF MATERIAL QUANTITIES, PCN I4CL

	CURVE LENGTH	REMOVE ASPHALT CONCRETE PAVEMENT	SHOULDER SHAPING	MC-70 ASPHALT FOR PRIME	AC COMPOSITE
Section	FEET	SqYd	(Lane) Mile	Ton	Ton
2 - CURVE 1 - WBL	1,073	-	0.2	1.1	139.1
2 - CURVE 1 - EBL	985	-	0.2	1.0	127.7
2 - CURVE 2 - WBL	2,032	-	0.4	2.1	263.4
2 - CURVE 2 - EBL	2,085	-	0.4	2.2	270.3
2 - CURVE 3 - WBL	2,140	-	0.4	2.3	277.4
2 - CURVE 3 - EBL	2,235	1,986.7	0.4	2.4	289.7
2 - CURVE 4 - WBL	1,365	-	0.3	1.4	176.9
2 - CURVE 4 - EBL	1,483	-	0.3	1.6	192.2
2 - CURVE 5 - WBL	1,892	1,681.8	0.4	2.0	245.3
2 - CURVE 5 - EBL	1,846	-	0.3	1.9	239.3
2 - CURVE 6 - WBL	2,366	-	0.4	2.5	306.7
2 - CURVE 6 - EBL	2,324	2,065.8	0.4	2.4	301.3
2 - CURVE 7 - WBL	2,502	-	0.5	2.6	324.3
2 - CURVE 7 - EBL	2,887	2,566.2	0.5	3.0	374.2
Additional Quantities	-	1,031	-	-	-
Totals	27,215	9,331.4	5.2	28.7	3,527.9

**SURFACING THICKNESS DIMENSIONS**

Plans tonnage will be applied even though the thickness may vary from that shown on the plans.

**SEQUENCE OF OPERATIONS**

1. Install Traffic Control
2. Complete Asphalt Concrete Pavement Removal.
3. Complete shoulder shaping
4. Complete MC-70 Asphalt for Prime application
5. Complete paving Asphalt Concrete Composite
6. Complete cleanup work.

**GENERAL NOTES**

Once work that inconveniences traffic, it shall be pursued in a near continuous, expeditious manner to its completion. Any work that restricts the motorist from driving the posted speed limit, reduces existing roadway width, or causes a potentially unsafe condition due to Contractor operations such as frequent movement of equipment or materials on or through the project, is considered to be an inconvenience to traffic.

**PROJECT WORK HOURS**

The Contractor may perform work on the roadway during daylight hours only, unless additional hours are approved by the Engineer. Daylight hours are considered to be sunrise until sunset. Traffic shall be returned to normal driving lanes during non-working hours.

**TRAFFIC CONTROL**

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

Certified flaggers properly attired and preceded by FLAGGER symbol signs, will be required where work activity and/or equipment present a hazard to the workers, a hazard to through traffic, or encroaches into a driving lane.

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.

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 zones for the various construction operations that utilize a pilot car shall not exceed 3 miles in length.

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.

Erect only those signs that are applicable to the work in progress. When the Contractor is working at specific work spaces within the project, only those traffic control devices applicable to that operation should be displayed. Non-applicable signs and/or devise shall be removed from the view by the Contractor and stored a minimum of 30 feet from the driving lanes during periods of in-activity. All costs to do this work shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

A shadow vehicle, equipped with flashing amber light and a ROAD MACHINERY AHEAD sign prominently displayed, shall be used in advance of landscaping, clean up, and other mobile work activities. Highway equipment working within traffic or adjacent to traffic shall, at all times, display a flashing or revolving amber light to warn the traveling public. The Contractor shall maintain the driving surface on the project to eliminate hazards to the traveling public. The driving surface is defined as both driving lanes along with both shoulders on the project.

The cost for additional signs shall be paid for at the contract unit price per square foot for Traffic Control Signs. Additional Flagger hours shall be paid for at the contract unit price per hour for Flagging. The cost of additional channeling devices shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

Traffic Control Signs, as shown in the Estimate of Quantities, 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.

**UTILITIES**

Utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the Contractor shall contact the Project Engineer to determine modifications that will be necessary to avoid utility impacts.

**ASPHALT CONCRETE PAVEMENT REMOVAL**

In order to construct the new asphalt surfacing flush with the adjacent Pavement, Remove Asphalt Concrete Pavement shall be completed, where Asphalt Concrete has previously been placed on the shoulders. All in place asphalt concrete shall be removed from intersecting roads, entrances, approaches, and mailbox turnouts, within the limits of the newly placed Asphalt Concrete Composite.

Shoulder segments, where Asphalt Concrete Pavement Removal is designated, shall be shaped according to Shoulder Shaping specifications prior to Asphalt Concrete Composite.

Exact limits and locations of Asphalt Concrete Pavement Removal shall be determined and marked by the Engineer prior to removal.

The basis of payment for Remove Asphalt Concrete Pavement will be plans quantity. No separate measurements will be taken. The below table is for bidding purposes only.

Asphalt Concrete removal at intersecting roads shall be saw cut or cold milled adjacent to the in place existing asphalt concrete, to allow a vertical edge to tie into the existing pavement. All costs associated with saw cutting or cold milling shall be incidental to the unit price of Remove Asphalt Concrete Pavement. Additional removal shall be required. No additional payment shall be made for additional removal. Additional quantities have been accounted for approaches, entrances, intersecting roads, mailbox turnouts, and any other asphalt concrete pads throughout the project corridor.

Detail A: Asphalt Concrete Removal at Intersecting Roads & Approaches

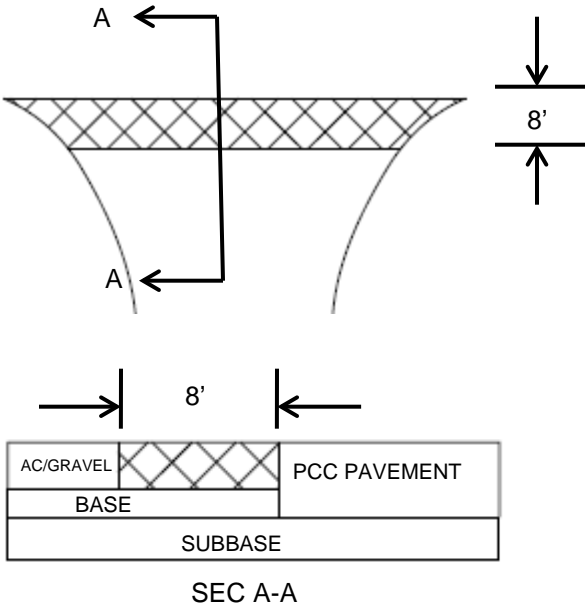


TABLE OF REMOVE ASPHALT CONCRETE PAVEMENT

SEGMENT	LOCATION	APPROXIMATE SIZE			AREA
		FEET	x	FEET	SQYD
Segment 1, Intersecting Roads	North & South Shoulders	-			548.4
Segment 1, Approaches/Mailbox Turnouts	North & South Shoulders	-			884.4
Segment 2, Curve 3	South Shoulder	2235	x	8	1986.7
Segment 2, Curve 5	North Shoulder	1892	x	8	1681.8
Segment 2, Curve 6	South Shoulder	2324	x	8	2065.8
Segment 2, Curve7	North Shoulder	2180	x	8	2566.2
Segment 2, Additional Quantities for residential approaches and intersecting roads	North & South Shoulders	-			1031.0
TOTAL=					10764.3

SHOULDER SHAPING

Prior to placing the asphalt concrete composite, the upper 3 inches of shoulders shall be scarified, reworked and shaped to allow for 3” of Asphalt Concrete Composite to be placed flush with the existing PCC Pavement. Compaction of the reworked shoulders shall be to the satisfaction of the engineer. All other specifications in section 260.3 C shall apply to shoulder shaping material.

It is estimated that Water for Granular Material, for shaping and compaction, to be applied at the locations and rate as follows:

Section 1:  
Water for Granular Material at the rate of 9.4 M gallons per mile.

Section 2:  
Water for Granular Material at the rate of 9.4 M gallons per mile.

Included in the Estimate of Quantities are 12.8 miles of Shoulder Shaping.

Section	Length (Miles)
Section 1 (Approximately 9' Wide)	7.6
Section 2 (Approximately 9' Wide)	5.2

No additional payment or change in contract unit price for any areas in which the field conditions are different than the plans quantities and typical sections.

WATER FOR COMPACTION OF GRANULAR MATERIALS

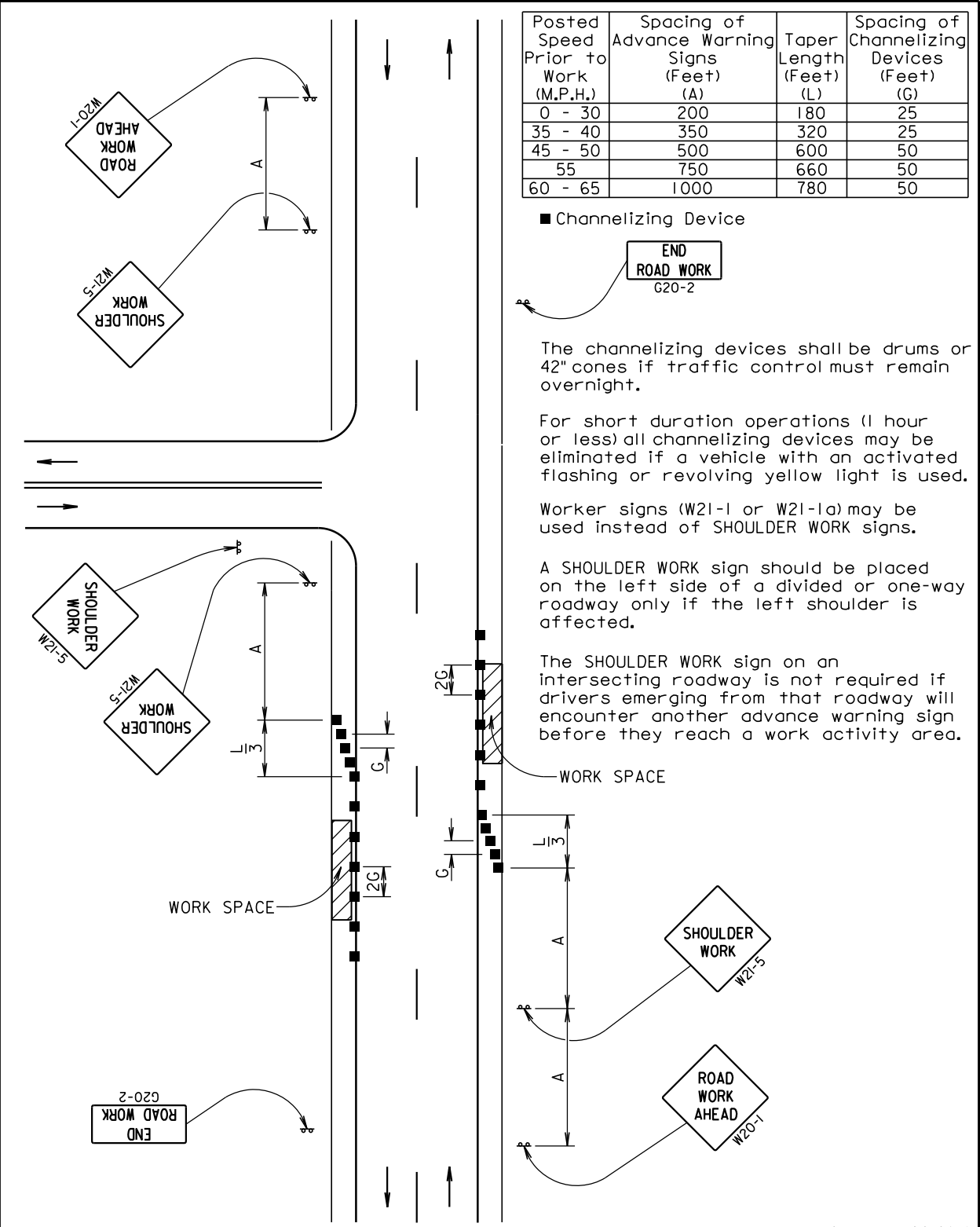
Cost of water for compaction of the granular material shall be incidental to the contract unit price for the various contract items. Six percent, plus or minus, moisture will be required at the time of compaction unless otherwise directed by the Engineer.

ASPHALT CONCRETE COMPOSITE

The 3” Asphalt Concrete Composite Wearing Course Lift shall be paver laid.

All other requirements in the specifications for Asphalt Concrete Composite shall apply.





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 - 50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device



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.

WORK SPACE

2G

G

2G

A

A

A

A

A

A

A

A

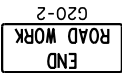
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September 22, 2014

Published Date: 2nd Qtr. 2016

S  
D  
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T

GUIDES FOR TRAFFIC CONTROL DEVICES  
WORK ON SHOULDERS

PLATE NUMBER  
634.03

Sheet 1 of 1

PCN I4CK & I4CL

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W13-1P	ADVISORY SPEED (plaque)	4	30" x 30"	6	24
W20-1	ROAD WORK AHEAD	4	48" x 48"	16	64
W20-4	ONE LANE ROAD AHEAD	4	48" x 48"	16	64
W20-7	FLAGGER (symbol)	4	48" x 48"	16	64
W21-3	ROAD MACHINERY AHEAD	1	48" x 48"	16	16
W21-5	SHOULDER WORK	4	48" x 48"	16	64
G20-2	END ROAD WORK	4	36" x 18"	5	20
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			
		316			

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 - 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) shall 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 shall 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.

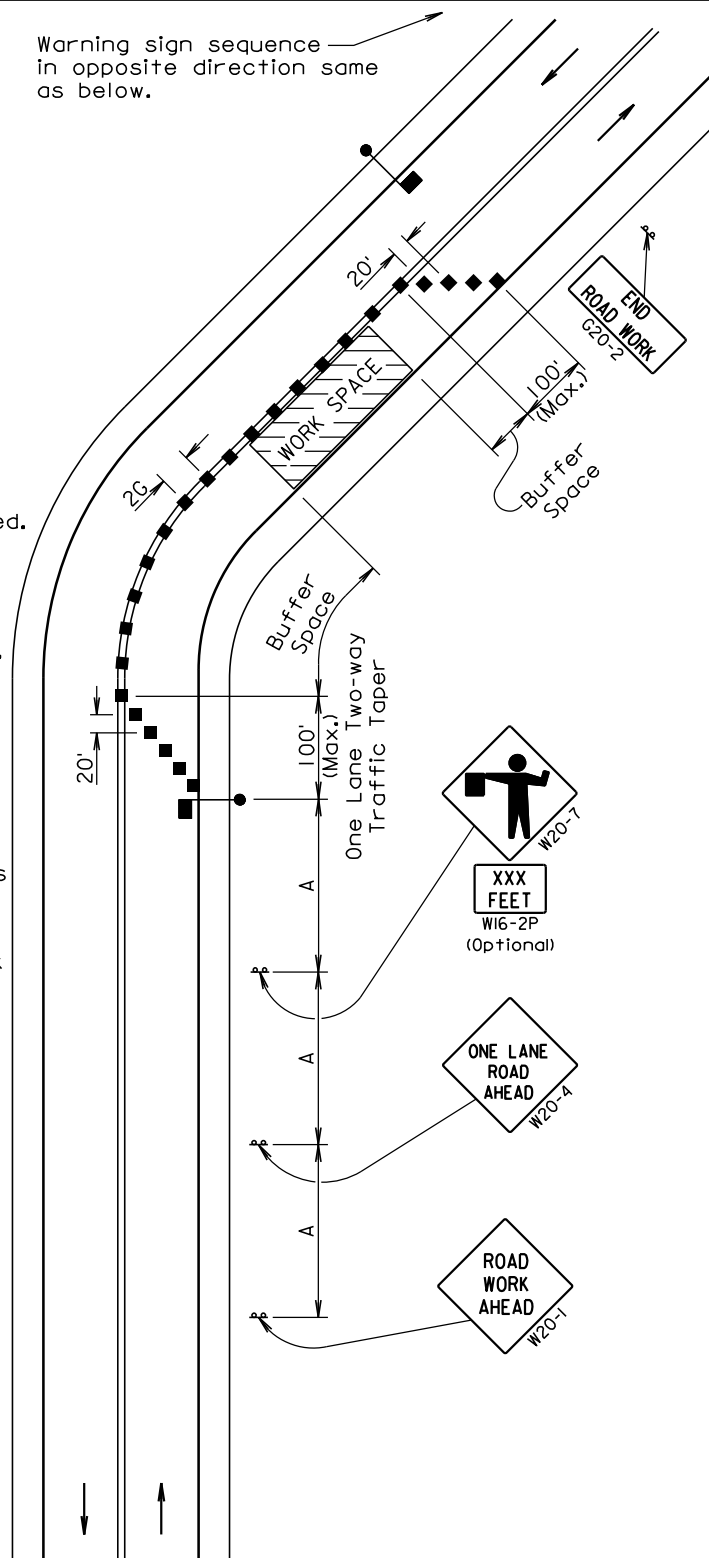
END  
ROAD WORK  
G20-2

Channelizing devices and flaggers shall 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.

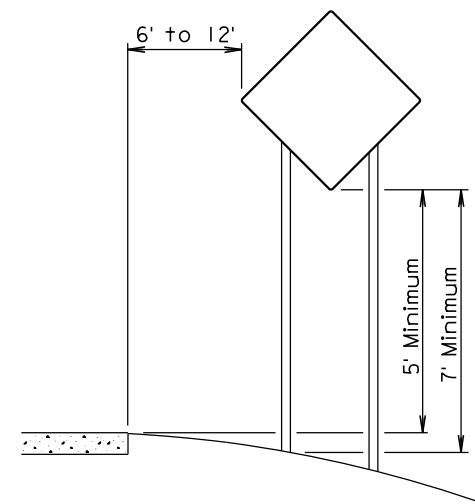
The length of A may be adjusted to fit field conditions.

Warning sign sequence  
in opposite direction same  
as below.

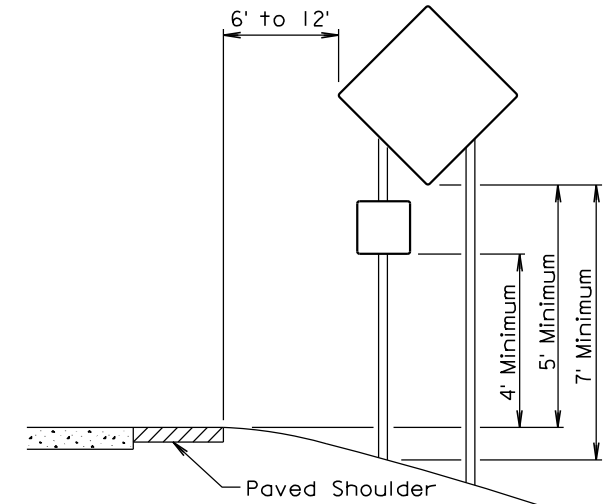


September 22, 2014

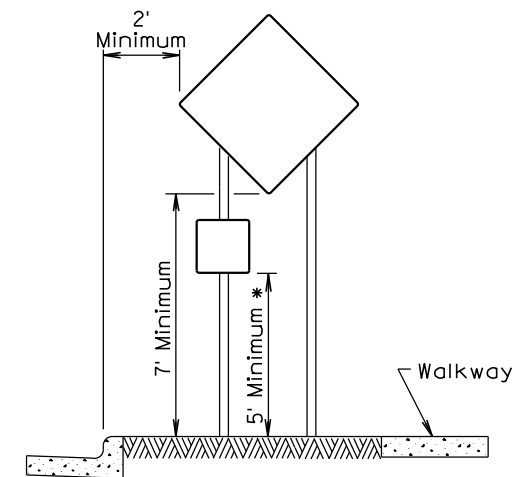
Published Date: 2nd Qtr. 2016	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1



RURAL DISTRICT

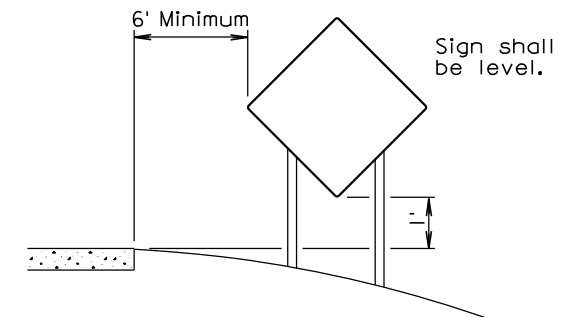


RURAL DISTRICT WITH  
SUPPLEMENTAL PLATE



URBAN DISTRICT

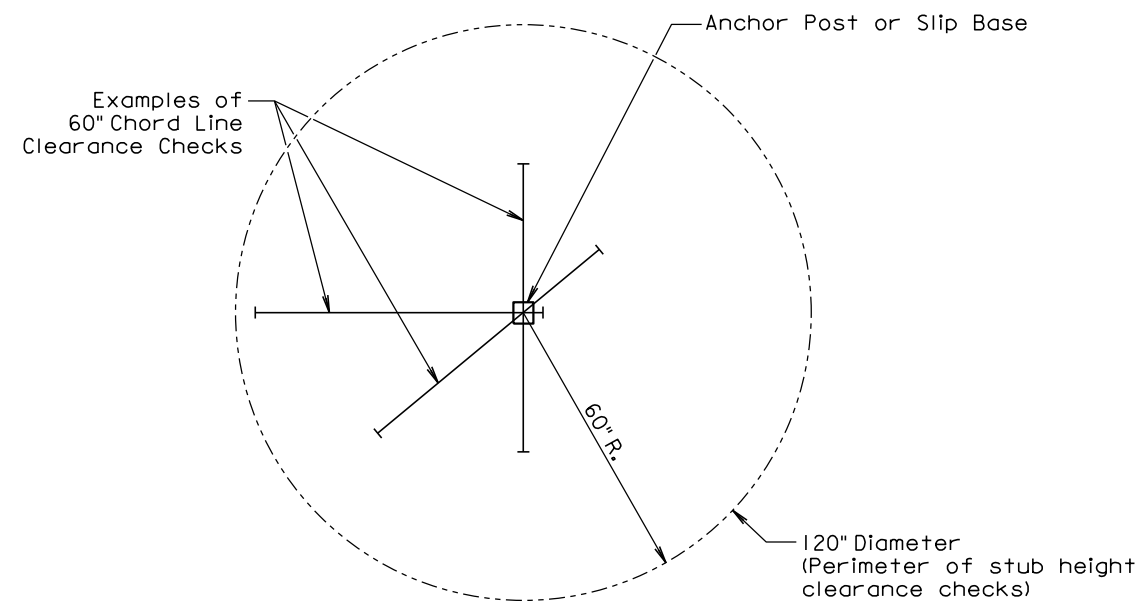
\* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.



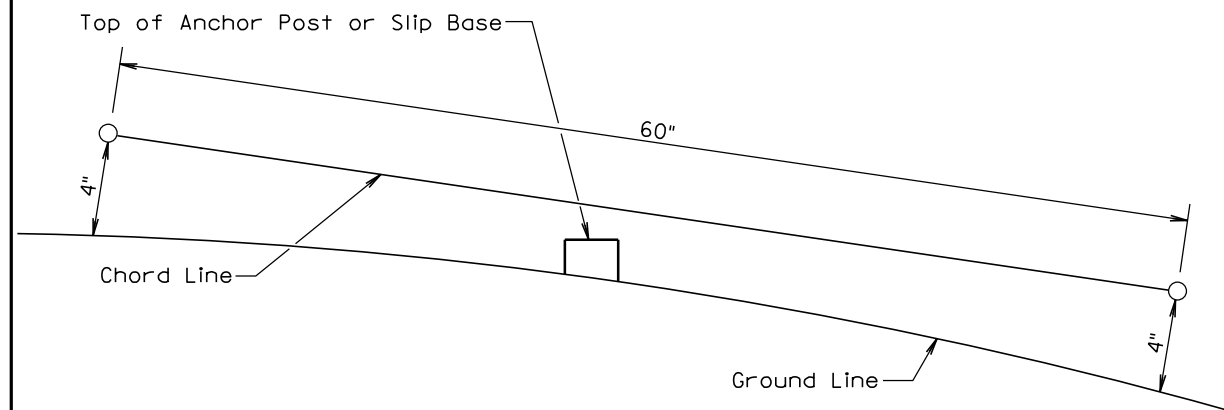
RURAL DISTRICT  
3 DAY MAXIMUM  
(Not applicable to regulatory signs)

September 22, 2014

Published Date: 2nd Qtr. 2016	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

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