

Department of Transportation

Rapid City Region Office

2300 Eglin Street

P.O. Box 1970

Rapid City, SD 57709-1970

Phone: 605/394-2244

FAX: 605/394-1904

September 4, 2018

ADDENDUM NO. 1

RE: September 9, 2018 Rapid City Region Office Informal Letting
020-471, Harding County, PCN i5ek
Asphalt Concrete Repair on Hwy 20

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made part of your proposal for the referenced project.

PROPOSAL:

- Please replace the DOT-123 with the attached DOT-123.

PLANS:

- Please replace sheet 2, 4, 5, and 10 with the attached. The Reinforcement Fabric (MSE) quantity was revised, the temporary pavement marking tape was removed and the MRM location on sheet 10 was corrected.

Sincerely,

John Rehorst
Region Design Engineer

**SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
CONTRACT PROPOSAL**

DOT-123
March 2017
2 of 2

CODE	PROJECT			MAINT UNIT	CONTROL REFERENCE	AFE	FUNCTION	BEGIN MRM	END MRM
	PRE	ROUTE	AGR						
		020		471		i5ek	2103	0458	0230

CONTRACTOR'S PROPOSAL STATEMENT

The undersigned does hereby agree to furnish the labor and/or material in the quantities, at the unit price, for the purpose, in the place and in accordance with attached provisions upon approval of this Proposal by the State Transportation Commission. This document becomes the Contract when signed by the Contractor and a Department of Transportation Representative. The Contractor agrees to provide services in compliance with the Americans with Disabilities Act of 1990. The Contractor agrees to provide a certificate of insurance prior to commencing work, for liability coverage for the duration of the work as per the current edition of the SDDOT Standard Specifications for Roads and Bridges.

SUBSTANTIAL COMPLETION DATE	<u>N/A</u>	PROPOSED START DATE	_____
FIELD WORK COMPLETION DATE	<u>June 7, 2019</u>	SIGNATURE	_____
SUBSCRIBED AND SWORN TO BEFORE ME THE		PRINTED NAME	_____
_____ DAY OF _____, 20__		COMPANY	_____
_____		STR. ADDRESS	_____
_____		CITY, STATE, ZIP	_____
NOTARY - My Commission Expires _____ (SEAL)		FEDERAL TAX ID NUMBER	_____

TO BE FILLED OUT BY STATE PERSONNEL:

RECOMMENDED FOR APPROVAL:		
_____	CONSTRUCTION & MAINTENANCE ENGINEER	DATE _____
_____	REGION ENGINEER	DATE _____
APPROVED FOR THE TRANSPORTATION COMMISSION		
NAME _____	TITLE _____	DATE _____
APPROVED as per Federal Highway Stewardship Provisions this _____ day of _____, 20__.		
PROJECT DEVELOPMENT ENGINEER _____		

This document is for information only. Do not use for bidding purposes.

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	1	LS
120E0010	Unclassified Excavation	830	CuYd
230E0100	Remove and Replace Topsoil	1	LS
260E1010	Base Course	1,780.8	Ton
320E1200	Asphalt Concrete Composite	2,015.3	Ton
332E0010	Cold Milling Asphalt Concrete	14,178	SqYd
430E0700	Precast Concrete Headwall for Drain	8	Each
633E1400	Pavement Marking Paint, 4" White	9,180	Ft
633E1405	Pavement Marking Paint, 4" Yellow	6,885	Ft
634E0010	Flagging	480.0	Hour
634E0020	Pilot Car	240.0	Hour
634E0110	Traffic Control Signs	625.6	SqFt
634E0120	Traffic Control, Miscellaneous	1	LS
634E0275	Type 3 Barricade	6	Each
634E0640	Temporary Pavement Marking	13,770	Ft
680E0240	4" Corrugated Polyethylene Drainage Tubing	128	Ft
680E0440	4" Slotted Corrugated Polyethylene Drainage Tubing	104	Ft
680E2500	Porous Backfill	37.9	Ton
730E0210	Type F Permanent Seed Mixture	3	Lb
731E0100	Fertilizing	150	Lb
732E0250	Fiber Mulching	200	Lb
734E0154	12" Diameter Erosion Control Wattle	240	Ft
831E0110	Type B Drainage Fabric	148	SqYd
831E0300	Reinforcement Fabric (MSE)	1,244	SqYd

SPECIFICATIONS

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

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Section A 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. 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: <http://www.sddot.com/resources/Manuals/EnvironProcManual.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 Office at 605-773-3098 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

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 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 C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species waters within South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment to prevent and control the introduction and spread of invasive species into the project vicinity.

Action Taken/Required:

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

Additional information and mapping of Aquatic Invasive Species in South Dakota can be accessed at: <http://sdleastwanted.com/maps/default.aspx>.

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 Environment 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 completely 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 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.

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.

Revised 9/4/18 jpr

Table of Materials Quantities

Location	Length	Width	Cold Milling Asphalt Concrete	Unclassified Excavation	Reinforcement Fabric (MSE)	Type B Drainage Fabric	Porous Backfill	Base Course	Asphalt Concrete Composite	4" Corrugated Polyethylene Drainage Tubing	4" Slotted Corrugated Polyethylene Drainage Tubing	Precast Concrete Headwall for Drain	Description
MRM	(Ft)	(Ft)	(SqYd)	(CuYd)	SqYd	(SqYd)	(Ton)	(Ton)	(Ton)	(Ft)	(Ft)	(Each)	
4.58 to 4.64	520	30	1733.3						195				2" AC Mill and Overlay
4.82 to 4.96	940	30	3133.3						352.6				2" AC Mill and Overlay
14.55 to 14.65	550	32	711.1	830	1244	148	37.9	1780.8	500	128	104	8	See details for Unclassified Excavation and Surfacing
22.55 to 23.00	2580	30	8599.9						967.7				2" AC Mill and Overlay
Total			14178	830	1244	148	37.9	1780.8	2015.3	128	104	8	

TRAFFIC CONTROL – GENERAL NOTES

The Contractor shall submit a Sequence of Operations to the Engineer for approval one week prior to the pre-construction meeting. Requests to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of one week prior to potential implementation.

Unless otherwise stated in these plans, no work will be allowed during hours of darkness.

Existing guide, route, informational logo, regulatory, warning signs and delineation shall be temporarily reset and maintained during construction as directed by the Engineer. Removing, relocating, salvaging and resetting of the above items shall be the responsibility of the Contractor.

Non-applicable traffic control devices shall be completely covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 2 calendar days.

All regulatory signs shall have a minimum mounting height of 5' in rural locations, even when mounted on portable supports.

All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.

The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.

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

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

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

Temporary Flexible Vertical Markers (Tabs) shall be used for lane closure tapers or lane shift tapers and shall be installed at 5' spacing. Tabs used for tapers will not be measured for payment. All costs associated to furnish, install, maintain (including replacement as required by the Engineer at no added cost to the Department), and remove all markers will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

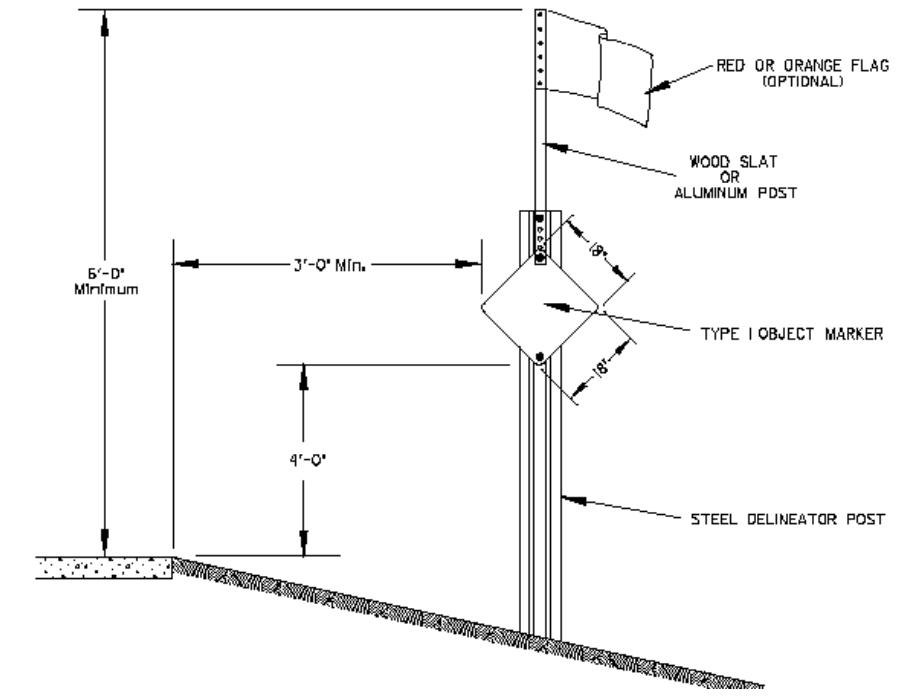
SHEETING FOR TRAFFIC CONTROL SIGNS

All fluorescent orange background material on traffic control signs, all temporary delineators, and all temporary STOP (R1-1), YIELD (R1-2), DO NOT ENTER (R5-1), and WRONG WAY (R5-1a) signs shall conform to the requirements of ASTM D4956 Type IX or XI. All other traffic control signs and background colors shall conform to the requirements of ASTM D4956 Type IV.

BUMP MARKERS

Bump markers shall be placed adjacent to the bump location.

After placing the bump markers, "Bump" warning signs with the appropriate speed advisory plates shall be placed 500 feet to 750 feet in advance of the bump location in rural areas, or 250 feet to 500 feet in advance of the bump location in urban areas. These distances may be adjusted by the Engineer if local conditions do not allow the placement of warning signs within the specified areas. The steel delineator post shall be 1.12 lb/ft flanged channel post for ground mounted installation. If the duration is less than 3 days, the Type 1 Object Marker can be installed on temporary supports. All costs for bump markers shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.



INVENTORY OF TRAFFIC CONTROL DEVICES

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	2	30"	5.2	10.4
R4-7	KEEP RIGHT (symbol)	2	24" x 30"	5.0	10.0
W1-3	REVERSE TURN (L or R)	2	48" x 48"	16.0	32.0
W3-1	STOP AHEAD (symbol)	2	48" x 48"	16.0	32.0
W8-1	BUMP	4	48" x 48"	16.0	64.0
W8-7	LOOSE GRAVEL	2	48" x 48"	16.0	32.0
SPECIAL	WINDROW	2	48" x 48"	16.0	32.0
W13-1P	ADVISORY SPEED (plaque) (20 MPH)	4	30" x 30"	6.3	25.2
W20-1	ROAD WORK AHEAD	8	48" x 48"	16.0	128.0
W20-4	ONE LANE ROAD AHEAD	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	6	48" x 48"	16.0	96.0
W21-3	ROAD MACHINERY AHEAD	2	48" x 48"	16.0	32.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	8	36" x 18"	4.5	36.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS					625.6
SQFT					

TEMPORARY PAVEMENT MARKING

The Contractor shall place temporary pavement marking. Temporary pavement marking paint shall be used on the milled surface. Temporary Temporary Flexible Vertical Markers (Tabs) shall be used on the finished asphalt surface. Temporary pavement markings for the centerline of the roadway throughout the full length of the project shall meet the requirements of Section 634 of the Specifications. Covers on tabs shall be removed prior to opening the roadway to normal traffic flow.

The Contractor shall use protective marker covers.

The Contractor shall be responsible for maintaining a visible and reflective centerline throughout the project. Any marking covered or damaged shall be replaced prior to the end of the day. All costs associated with this work shall be incidental to the contract unit price per foot for Temporary Pavement Marking.

Flagger symbol signs (W20-7) and flaggers, or a shadow vehicle equipped with high-intensity rotating, flashing, oscillating or strobe lights shall be positioned on the roadway shoulder in advance of the workers for the installation of temporary road markers. The traffic control device used shall be moved to provide proper warning of the work operation. A ROAD WORK AHEAD (W20-1) sign, a worker symbol sign (W21-1) or a BE PREPARED TO STOP (W3-4) sign shall be mounted on the rear of the shadow vehicle. The method of traffic control used by the Contractor for this work shall be approved by the Engineer.

All costs for temporary pavement marking including furnishing, applying, uncovering, maintenance and removal of tabs shall be incidental to the contract unit price per mile for Temporary Pavement Marking.

PERMANENT PAVEMENT MARKING

The Contractor shall survey and mark the location of no passing zones prior to covering pavement marking.

The Contractor shall repaint all of the existing pavement marking paint including centerline, edge line, lane lines, etc. The Contractor shall provide a copy of the pavement marking inventory to the Engineer.

Application of permanent pavement marking may begin 7 calendar days following completion of the fog seal and shall be completed within 14 calendar days following completion of the fog seal.

Striper and advance and trailing warning vehicles shall be equipped with flashing amber or arrow panel warning lights.

All costs associated with this work shall be incidental to the contract unit price per foot for Pavement Marking Paint, 4" White or Yellow.

RATES OF APPLICATION

Centerline striping (yellow) – 25.0 gallons per mile. *
 4" Edgeline striping (white) - 33.8 gallons per mile. **
 Glass Beads – 8 lbs. per gallon of paint

* Rate is a Region average. The actual gallons used will vary depending upon the number of No Passing Zones.

** Rate is for both edge lines.

Location	Length (Ft)	Temporary Pavement Marking (Ft)	Pavement Marking Paint, 4" White (Ft)	Pavement Marking Paint, 4" Yellow (Ft)
MRM	(Ft)	(Ft)	(Ft)	(Ft)
4.62	520	1560	1040	780
4.804	940	2820	1880	1410
14.596	550	1650	1100	825
22.775	2580	7740	5160	3870
Total		13770	9180	6885

REMOVE AND REPLACE TOPSOIL

Prior to beginning underdrain construction, a 4" depth of topsoil shall be bladed to the side on the respective inslopes and left in a windrow at the edge of the work limits. Following completion of underdrain construction, topsoil shall be bladed back over the inslopes to the point indicated on the typical section.

All cost associated with removing and replacing the topsoil along areas to be resurfaced shall be incidental to the lump sum price for Remove and Replace Topsoil.

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum shall consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier shall provide certification of the fungal species claimed and the live propagule count. The inoculum shall include the following fungal species:

- 25% *Glomus intraradices*
- 25% *Glomus aggregatum or deserticola*
- 25% *Glomus mosseae*
- 25% *Glomus etunicatum*

All seed shall be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed shall be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The mycorrhizal inoculum shall be as shown below or an approved equal:

<u>Product</u>	<u>Manufacturer</u>
MycoApply	Mycorrhizal Applications, Inc. Grants Pass, OR Phone: 1-866-476-7800 www.mycorrhizae.com
AM 120 Multi Species Blend	Reforestation Technologies Int. Gilroy, CA Phone: 1-800-784-4769 www.reforest.com

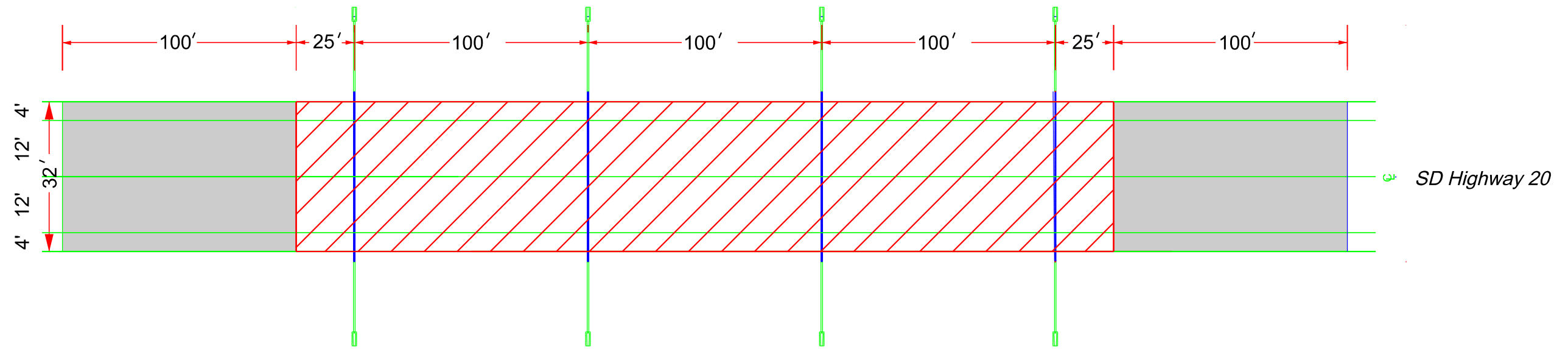
UNCLASSIFIED EXCAVATION AND SURFACING DETAILS





MRM 14.55 to MRM 14.65

STATE OF SOUTH DAKOTA	PROJECT 020-471	SHEET 10	TOTAL SHEETS 18
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Plotting Date: 09/04/2018
Revised 8/28/18 GDS

(Not to scale)



-  4" Slotted Corrugated Polyethylene Drainage Tubing
-  4" Corrugated Polyethylene Drainage Tubing and Precast Concrete Headwall
-  Asphalt Concrete Composite Overlay
-  Digout 2' deep and replace with 1.5' Base Course and 6" of Asphalt Concrete Composite (final 2" lift of the 6" AC composite to be completed with overlay)