

PLOT SCALE - 1"=6000'

PLOTTED FROM - TRAB10200

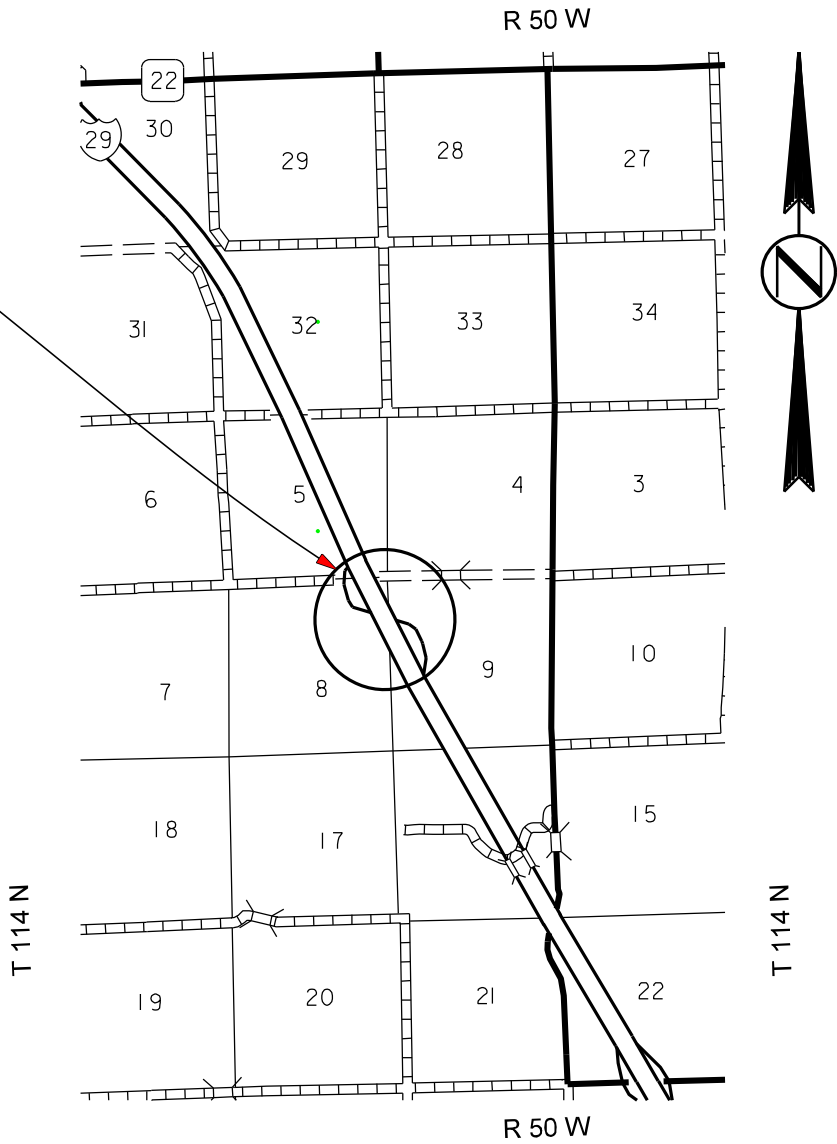
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
**PROJECTS 029 S - 171
& 029 N - 171
INTERSTATE 29
DEUEL COUNTY**

PCC Pavement Removal & AC Composite Resurfacing
PCN i4YY & i50A

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	1	21
Plotting Date: 02/02/2018			

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PROJECT

PCN i4YY SB MRM 160.65 to MRM 161.27
PCN i50A NB MRM 160.37 to MRM 160.92

STORM WATER PERMIT
Major Receiving Body of Water: Hidewood Creek
Total Project Area: 21.0 Acres
Area Disturbed: 4.0 Acres
SB Latitude & Longitude: 44° 42' 04.11" N, 96° 50' 51.61" W
NB Latitude & Longitude: 44° 41' 53.26" N, 96° 50' 35.72" W

PLOT NAME - 1

FILE - ... \TITLE SHEET.DGN

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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Estimate of Quantities – i4YY (SB Rest Area)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1100	Remove Concrete Pavement	7,552.6	SqYd
120E0010	Unclassified Excavation	100	CuYd
120E0600	Contractor Furnished Borrow Excavation	1,469	CuYd
230E0020	Contractor Furnished Topsoil	629	CuYd
260E1010	Base Course	105.0	Ton
320E1200	Asphalt Concrete Composite	570.5	Ton
320E1800	Asphalt Concrete Blade Laid	138.3	Ton
380E6500	Planing PCC Pavement	426.6	SqYd
620E0010	Type 1 Right-of-Way Fence	2,491	Ft
620E1020	2 Post Panel	15	Each
634E0110	Traffic Control Signs	40.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0280	Type 3 Barricade, 8' Single Sided	3	Each
730E0100	Cover Crop Seeding	2.4	Bu
734E0010	Erosion Control	Lump Sum	LS

Estimate of Quantities – i50A (NB Rest Area)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1100	Remove Concrete Pavement	5,674.6	SqYd
120E0600	Contractor Furnished Borrow Excavation	1,103	CuYd
230E0020	Contractor Furnished Topsoil	473	CuYd
320E1200	Asphalt Concrete Composite	587.7	Ton
320E1800	Asphalt Concrete Blade Laid	146.9	Ton
380E6500	Planing PCC Pavement	427.0	SqYd
620E0010	Type 1 Right-of-Way Fence	2,339	Ft
620E1020	2 Post Panel	14	Each
634E0110	Traffic Control Signs	40.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0280	Type 3 Barricade, 8' Single Sided	3	Each
730E0100	Cover Crop Seeding	1.6	Bu
734E0010	Erosion Control	Lump Sum	LS

SPECIFICATIONS

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

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 B4: BALD EAGLE

Bald eagles are known to occur in this area.

Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance.

Action Taken/Required:

The DENR and the US Environmental Protection Agency (EPA) have issued separate general permits for the discharge of storm water runoff. The DENR permit applies to discharges on state land and the EPA permit applies to discharges on federal or reservation land. The Contractor is advised this project is regulated under the Phase II Storm Water Regulations and must receive coverage under the General Permit for Construction Activities. A Notice of Intent (NOI) will be submitted to DENR a minimum of 15 days prior to project start by the DOT Environmental Office. A letter must be received from DENR that acknowledges project coverage under this general permit before project start. The Contractor is advised that permit coverage may also be required by off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

The Contractor shall adhere to the “Special Provision Regarding Storm Water Discharges to Waters of the State”.

A major component of the storm water construction permits is development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is a joint effort and responsibility of the SDDOT and the Contractor. Erosion control measures and best management practices will be implemented in accordance with the SWPPP. The SWPPP is a dynamic document and is to be available on-site at all times.

Information on storm water permits and SWPPPs are available on the following websites:

SDDOT:
<http://www.sddot.com/business/environmental/stormwater/Default.aspx>

DENR: <http://www.denr.sd.gov/des/sw/stormwater.aspx>

EPA: http://cfpub.epa.gov/npdes/home.cfm?program_id=6

Contractor Certification Form:

The “Department of Environmental and Natural Resources – Contractor Certification Form” (SD EForm – 2110LDV1-ContractorCertification.pdf) shall be completed by the Contractor or their certified Erosion Control Supervisor after the award of the contract. Work may not begin on the project until this form is signed.

The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the Surface Water Discharge General Permit for Storm Water Discharges Associated with Construction Activities for the Project.

The online form can be found at:
<http://denr.sd.gov/des/sw/eforms/E2110LDV1-ContractorCertification.pdf>

ENVIRONMENTAL COMMITMENTS

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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 Public ROW.

The waste disposal site(s) shall 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) 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:

1. 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 Public 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 Public ROW through the use of 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) 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: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

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 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 shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

RAMP RESURFACING TYPICAL SECTION

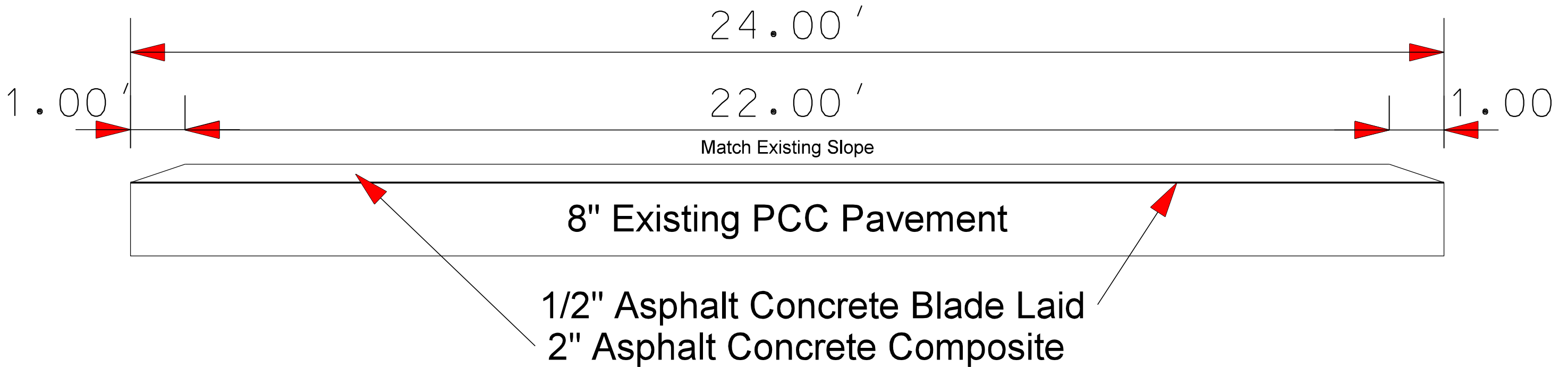
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PLOT SCALE - 1:1.86345

PLOT NAME - 2

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PLOTTED FROM - TRAB10200



SCOPE OF WORK

Work on this project involves Concrete Pavement Removal and Asphalt Concrete Composite Resurfacing at the Hidewood Rest Areas.

COORDINATION OF WORK

Both Truck Parking Areas have work scheduled for the 2018 construction season

- 0009-500, PCN i4YX – Pollinator Habitat

The Contractor shall coordinate the Removal & Resurfacing work with other Contractors who may be working at the Truck Parking Areas.

TABLE OF EXCAVATION QUANTITIES BY BALANCES

	Unclassified Excavation	Contractor Furnished Borrow Exc.	Contractor Furnished Topsoil	Total Excavation
Station to Station	(CuYd)	(CuYd)	(CuYd)	(CuYd)
484+13 - 499+60 (R)	100	1469	629	2198
500+42 - 516+65 (L)	-	1103	473	1576
Totals:	100	2572	1102	3774

The quantities for these items are in the Estimate of Quantities under their respective bid items.

TABLE OF UNCLASSIFIED EXCAVATION

Unclassified Excavation	100
Contractor Furnished Borrow	2572
Excavation	
Contractor Furnished Topsoil	1102
Total	3774

UNCLASSIFIED EXCAVATION

A quantity of 100 cubic yards is included in the Estimate of Quantities. This quantity accounts for the material that will be removed for the additional truck parking area at the Southbound site.

REMOVAL OF EXISTING CONCRETE PAVEMENT
STA. 484+13 to STA. 516+65

The Contractor shall dispose of the concrete pavement and at a site approved by the Engineer.

The existing 8-inch non-reinforced P.C.C. Pavement is typically 24 feet wide on the ramps, 52 feet wide in the car parking area, and 111 feet wide in the truck parking area. This information is from original construction plans and actual pavement conditions may vary. The existing contraction joints are spaced at approximately 20 feet.

At the Northbound site, there is approx. 500' of curb and gutter on the west side of the car parking and 75' of sidewalk between the truck and car parking that shall be removed. See Sheet 11. Removal of these items will not be measured for payment. All costs associated with the removal of these items shall be incidental to the contract unit price per square yard for REMOVE CONCRETE PAVEMENT.

The Southbound departure and both northbound entrance and departure lanes shall be saw cut at the joint of the adjacent lane. For the Southbound entrance lane see Sheet 12. All costs associated with saw cutting shall be incidental to the contract unit price per square yard for REMOVE CONCRETE PAVEMENT. After removing all concrete pavement, edges of the old roadway that are higher than the removed pavement will be knocked down and filled with topsoil for the first 100' past the saw cut.

TABLE OF CONCRETE PAVEMENT REMOVAL

Station	to	Station	Description	Quantity (SqYd)
484+13		499+60	Southbound Truck Parking	7552.6
500+42		516+65	Northbound Car Parking	5674.6
Total:				13227.6

TRAFFIC CONTROL – GENERAL NOTES

The Contractor shall notify the SDDOT Watertown Area office two weeks prior to start of construction to allow for closure of the Truck Parking Areas.

Truck Parking Areas will be closed during the Concrete Pavement Removal activities and re-opened after removal is completed. Prior to the Asphalt Concrete Resurfacing the Truck Parking Areas will be closed again to be opened after resurfacing is complete.

Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the worksites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of the vegetation, surfacing, embankment, delineators and existing signs or barricades 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.

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

Traffic Control Devices shall be installed per Standard Plate 634.01 starting at the off ramp for each Truck Parking area.

INVENTORY OF TRAFFIC CONTROL DEVICES

I-29 SB – i4YY

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	EXPRESSWAY / INTERSTATE			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	1	48" x 24"	8.0	8.0
		EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT			
		40.0			

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Single Sided	3 Each

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I-29 NB – i50A

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	EXPRESSWAY / INTERSTATE			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	1	48" x 24"	8.0	8.0
		EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT			
		40.0			

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Single Sided	3 Each

CONTRACTOR FURNISHED BORROW EXCAVATION

Contractor Furnished Borrow Excavation will be placed under the Contractor Furnished Topsoil to bring the finished elevation to what the existing pavement was after removal. Compaction shall be to the satisfaction of the Engineer. All costs to furnish the Contractor Furnished Borrow Excavation shall be incidental to the contract unit price per cubic yard for CONTRACTOR FURNISHED BORROW EXCAVATION.

CONTRACTOR FURNISHED TOPSOIL

It is anticipated that a larger volume of topsoil will be needed for the new grade than can be salvaged from the existing grade. The Contractor will be required to furnish and place 4 inches of topsoil on roadway inslopes and areas as determined by the Engineer during construction.

Contractor furnished topsoil shall be free from clay lumps, stones, coarse gravel, or similar objects larger than 1/2 inch in diameter. Brush, stumps, roots, wood, objectionable weeds, litter, or any other material which may be harmful to plant growth will not be allowed. Organic material shall be decomposed. Topsoil material shall be approved by the Engineer.

All costs to furnish and place the Contractor furnished topsoil shall be incidental to the contract unit price per cubic yard for CONTRACTOR FURNISHED TOPSOIL.

BASE COURSE

Approximately 105 tons of Base Course will be required under the new expanded truck parking area. Compaction shall be to the satisfaction of the Engineer.

ASPHALT CONCRETE BLADE LAID

Included in the Estimate of Quantities is 285.2 tons of Asphalt Concrete Blade Laid and shall be tight bladed on the existing surface 24 feet wide on the entrance and exit ramps, 52 feet wide on the SB car parking area and 111 feet wide on the NB truck parking area prior to the overlay. A sufficient amount of material shall be kept in front of the blade to fill and level all joints, cracks and other surface irregularities. Payment for asphalt binder shall be incidental to the contract unit price per ton for ASPHALT CONCRETE BLADE LAID.

The blade used to tight blade the materials hall be equipped with gates, wings or other devices approved by the Engineer to prevent the material from windrowing at the edges of the blade. A paver may be used to place the material provided it is equipped with a solid screed bar plate measuring a minimum of 12” wide by 1 1/2” think that forces the mixture into the joints and cracks to adequately level and fill them while not exceeding the application rates set up in the Plans.

Mineral Aggregate for tight bladed material shall use only the fine aggregate components combined in the same proportions as the Asphalt Concrete Composite mix. Quality testing is not required on the coarse aggregate (+No. 4 sieve) in this mixture.

The tight bladed material shall be compacted by at least 2 complete coverages with pneumatic tired rollers.

All loose existing joint material shall be removed and the surface shall be thoroughly swept with a rotary broom to remove all loose PCC pavement and joint material from the cracks and spall areas prior to placing the Blade Laid Mix. Cost for removing the material and brooming shall be included in the contract unit price per ton for ASPHALT CONCRETE BLADE LAID.

Asphalt Concrete Blade Laid shall be completed prior to Asphalt Concrete Composite paving operations begin.

ASPHALT CONCRETE COMPOSITE

Asphalt Concrete Composite shall conform to Sec. 234 of the Spec Book with the exception of asphalt binder PG 64-22, which is not allowed.

COVER CROP SEEDING

Coordination with the pollinator habitat Contractor will determine if Cover Crop Seeding will be necessary.

EROSION CONTROL

The estimated area requiring erosion control is 119,100 square feet. All costs for the erosion control work for furnishing, placing, and maintaining erosion control including equipment, labor, and seeding shall be incidental to the contract lump sum price for EROSION CONTROL.

The limits of erosion control work will be determined by the Engineer during construction.

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:

<i>Glomus intraradices</i>	25%
<i>Glomus aggregatu</i>	25%
<i>Glomus mosseae</i>	25%
<i>Glomus etunicatum</i>	25%

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:

Product	Manufacturer
MycoApply	Mycorrhizal Applications, Inc. Grants Pass, OR Phone: 1-866-476-7800 www.mycorrhizae.com

Permanent Seeding

The areas to be seeded consist of areas disturbed within 25 feet adjacent to the edge of existing pavement. There will be a 25 foot buffer between the existing pavement and the pollinator habitat.

Type C Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	16
Canada Wildrye	Mandan	2
Total:		18

STORM WATER POLLUTION PREVENTION PLAN CHECKLIST
*(The numbers right of the title headings are **reference numbers** to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES*

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SITE DESCRIPTION (4.2 1)

- **Project Limits: See Title Sheet (4.2 1.b)**
- **Project Description: See Title Sheet (4.2 1.a.)**
- **Site Map(s): See Title Sheet and Plans (4.2 1.f. (1)-(6))**
- **Major Soil Disturbing Activities** (check all that apply)
 - ☐ Clearing and grubbing
 - ☐ Excavation/borrow
 - ☒ Grading and shaping
 - ☐ Filling
 - ☐ Cutting and filling
 - ☒ Other (describe): Concrete Pavement Removal
- **Total Project Area 21.0 (4.2 1.b.)**
- **Total Area To Be Disturbed 4.0 (4.2 1.b.)**
- **Existing Vegetative Cover (%) 10%**
- **Soil Properties: USDA-NRCS Soil Series Classification: Kranzburg-Brookings silty clay loams (4.2 1. d.)**
- **Name of Receiving Water Body/Bodies** Hidewood Creek **(4.2 1.e.)**

ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)

(Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)

- **PCC Pavement Removal & Planing PCC Pavement.**
- **Stabilize disturbed areas.**
- **Complete final grading.**
- **Complete final ACC paving.**
- **Reseed areas disturbed by removal activities.**

EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f))

(Check all that apply)

- **Stabilization Practices (See Detail Plan Sheets)**
 - ☒ Temporary Seeding (Cover Crop Seeding)
 - ☒ Permanent Seeding
 - ☐ Sodding
 - ☐ Planting (Woody Vegetation for Soil Stabilization)
 - ☐ Mulching (Grass Hay or Straw)
 - ☐ Fiber Mulching (Wood Fiber Mulch)
 - ☐ Soil Stabilizer
 - ☐ Bonded Fiber Matrix
 - ☐ Fiber Reinforced Matrix
 - ☐ Erosion Control Blankets
 - ☐ Vegetation Buffer Strips
 - ☐ Surface Roughening (e.g. tracking)
 - ☐ Dust Control (See Section F – Surfacing Plans)
 - ☐ Other:
- **Structural Temporary Erosion and Sediment Controls**
 - ☐ Silt Fence
 - ☐ Floating Silt Curtain
 - ☐ Erosion Bales
 - ☐ Temporary Berm (Windrow)
 - ☐ Temporary Slope Drain
 - ☐ Erosion Control Wattles
 - ☐ Temporary Sediment Barriers
 - ☐ Turf Reinforcement Mat
 - ☐ Riprap

- ☐ Gabions
- ☐ Rock Check Dams
- ☐ Sediment Traps/Basins
- ☐ Culvert Inlet Protection
- ☐ Transition Mats
- ☐ Median/Area Drain Inlet Protection
- ☐ Curb Inlet Protection
- ☐ Stabilized Construction Entrances
- ☐ Entrance/Exit Equipment Tire Wash
- ☐ Interceptor Ditch
- ☐ Concrete Washout Facility
- ☐ Temporary Diversion Channel
- ☐ Work Platform
- ☐ Temporary Water Barrier
- ☐ Temporary Water Crossing
- ☐ Other:
- **Wetland Avoidance**

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes ☐ No ☒ If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.
- **Storm Water Management (4.2 2.b., (1) and (2))**

Storm water management will be handled by temporary controls outlined in “EROSION AND SEDIMENT CONTROLS” above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.
- **Other Storm Water Controls (4.2 2.c., (1) and (2))**
 - **Waste Disposal**

All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The general Contractor’s representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.
 - **Hazardous Waste**

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the individual designated as the Contractor’s on-site representative will be responsible for seeing that these practices are followed.
 - **Sanitary Waste**

Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management Contractor or as required by any local regulations.

MAINTENANCE AND INSPECTION (4.2 3. and 4.2 4.)

- **Maintenance and Inspection Practices**
 - Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.
 - All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.
 - Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches 1/3 of the height of the silt fence.
 - Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure’s capacity, and at the conclusion of the construction.
 - Check dams will be inspected for stability. Sediment will be removed when depth reaches 1/2 the height of the dam.
 - All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
 - Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
 - The SDDOT Project Engineer and Contractor’s Erosion Control Supervisor are responsible for inspections. Maintenance, repair activities are the responsibility of the Contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

NON-STORM WATER DISCHARGES (3.0)

The following non-storm water discharges are anticipated during the course of this project (check all that apply).

- ☐ Discharges from water line flushing.
- ☐ Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- ☐ Uncontaminated ground water associated with dewatering activities.

MATERIALS INVENTORY (4.2. 2.c.(2))

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the headings “EROSION AND SEDIMENT CONTROLS” and “SPILL PREVENTION” (check all that apply).

- ☒ Concrete and Portland Cement
- ☐ Detergents
- ☐ Paints
- ☒ Metals
- ☒ Bituminous Materials
- ☐ Petroleum Based Products
- ☐ Cleaning Solvents
- ☐ Wood
- ☐ Cure
- ☐ Texture
- ☐ Chemical Fertilizers
- ☐ Other:

SPILL PREVENTION (4.2 2.c.(2))

➤ Material Management

- Housekeeping
 - Only needed products will be stored on-site by the Contractor.
 - Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
 - Products must be stored in original containers and labeled.
 - Material mixing will be conducted in accordance with the manufacturer's recommendations.
 - When possible, all products will be completely used before properly disposing of the container off-site.
 - The manufacturer's directions for disposal of materials and containers will be followed.
 - The Contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
 - Dust generated will be controlled in an environmentally safe manner.
 - Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.
- Hazardous Materials
 - Products will be kept in original containers unless the container is not resealable.
 - Original labels and material safety data sheets will be retained in a safe place to relay important product information.
 - If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
 - Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
 - Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, residuals from concrete saw cutting (either wet or dry), and mixer washout waters will be collected on site and managed to prevent contamination of storm water runoff.

➤ Product Specific Practices (6.8)

- Petroleum Products
 - All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.
- Fertilizers
 - Fertilizers will be applied only in the amounts specified by the SDDOT. Once applied, fertilizers will be worked into the soil to limit the exposure to storm water. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.
- Paints
 - All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the

manufacturer's instructions and any applicable state and local regulations.

- Concrete Trucks
 - Contractors will provide designated truck washout facilities on the site. These areas must be self-contained and not connected to any storm water outlet of the site. Upon completion of construction, the area at the washout facility will be properly stabilized.
- Spill Control Practices (4.2 2 c.(2))
 - In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.
 - For all hazardous materials stored on site, the manufacturer's recommended methods for spill cleanup will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
 - Appropriate cleanup materials and equipment will be maintained by the Contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for cleanup purposes.
 - All spills will be cleaned immediately after discovery and the materials disposed of properly.
 - The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
 - After a spill a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
 - The Contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator. The Contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.
- Spill Response (4.2 2 c.(2))
 - The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.
 - The Contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
 - If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
 - Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the Contractor at the site.
 - If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The Contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.

- If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SD DENR.
- Personnel with primary responsibility for spill response and clean up will receive training by the Contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

SPILL NOTIFICATION

In the event of a spill, the Contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to DENR immediately **if any one of the following** conditions exists:
 - The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water).
 - The discharge causes an immediate danger to human health or safety.
 - The discharge exceeds 25 gallons.
 - The discharge causes a sheen on surface water.
 - The discharge of any substance that exceeds the ground water quality standards of ARSD (Administrative Rules of South Dakota) chapter 74:51:01.
 - The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:51:01.
 - The discharge of any substance that harms or threatens to harm wildlife or aquatic life.
 - The discharge of crude oil in field activities under SDCL (South Dakota Codified Laws) chapter 45-9 is greater than 1 barrel (42 gallons).

To report a release or spill, call DENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to DENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at (800) 424-8802.

CONSTRUCTION CHANGES (4.4)

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

CERTIFICATIONS

➤ **Certification of Compliance with Federal, State, and Local Regulations**

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

➤ **South Dakota Department of Transportation**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Authorized Signature (See the General Permit, Section 6.9.1.C.)

➤ **Prime Contractor**

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature

CONTACT INFORMATION

➤ **Contractor Information:**

- Prime Contractor Name: _____
- Contractor Contact Name: _____
- Address: _____
- _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **Erosion Control Supervisor**

- Name: _____
- Address: _____
- _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **SDDOT Project Engineer**

- Name: _____
- Business Address: _____
- Job Office Location: _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **SD DENR Contact Spill Reporting**

- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➤ **SD DENR Contact for Hazardous Materials.**

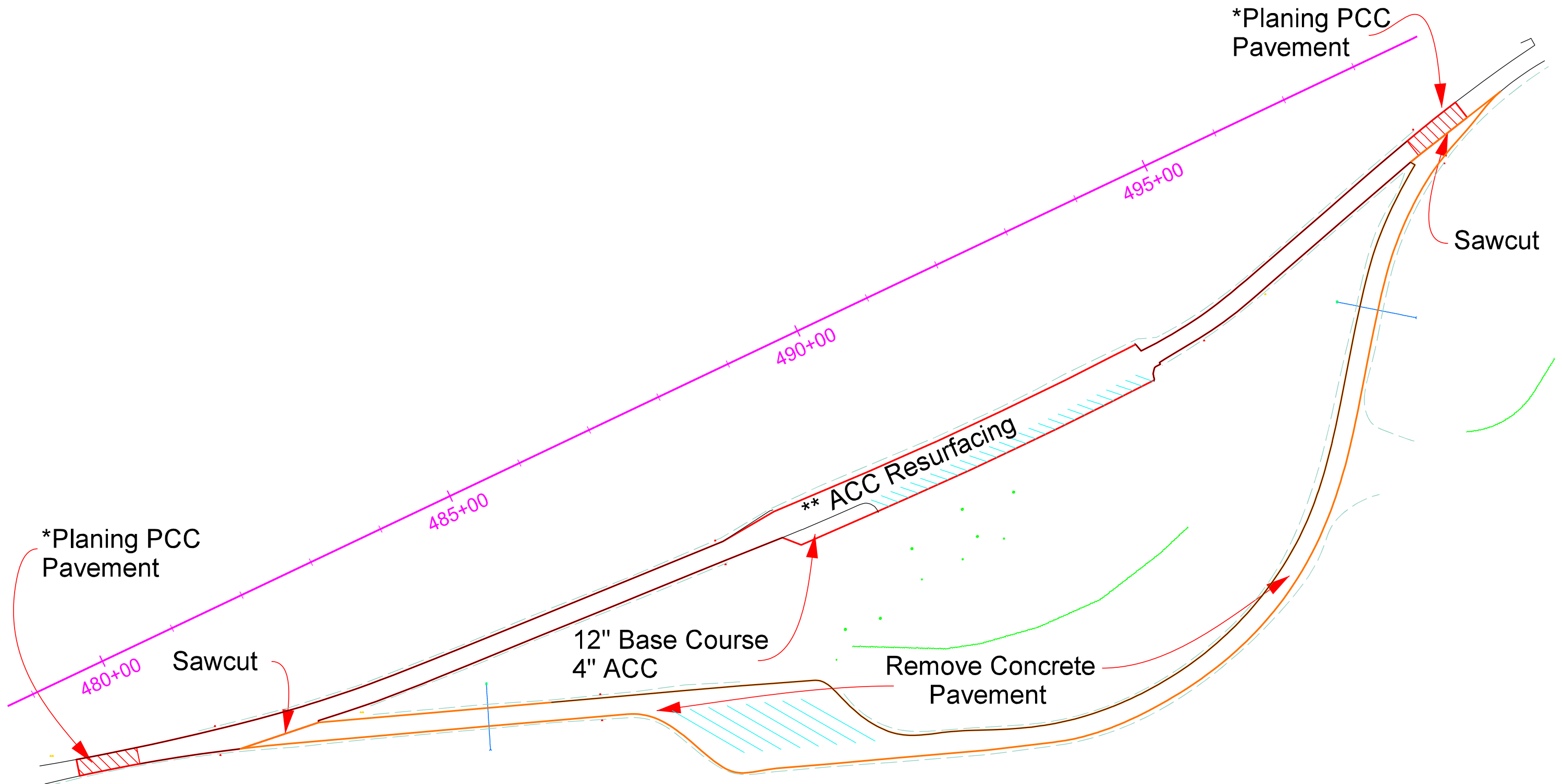
- (605) 773-3153

➤ **National Response Center Hotline**

- (800) 424-8802.

Southbound Rest Area

STATE OF SOUTH DAKOTA	PROJECT		SHEET NO.	TOTAL SHEETS
	029 S - 171	029 N - 171	10	21
Plotting Date: 02/02/2018				



* See Sheet 14 for Planing PCC Pavement limits

** ACC Resurfacing will consist of 1 - 2" Lift other than New Parking Area (See Sheet 13)

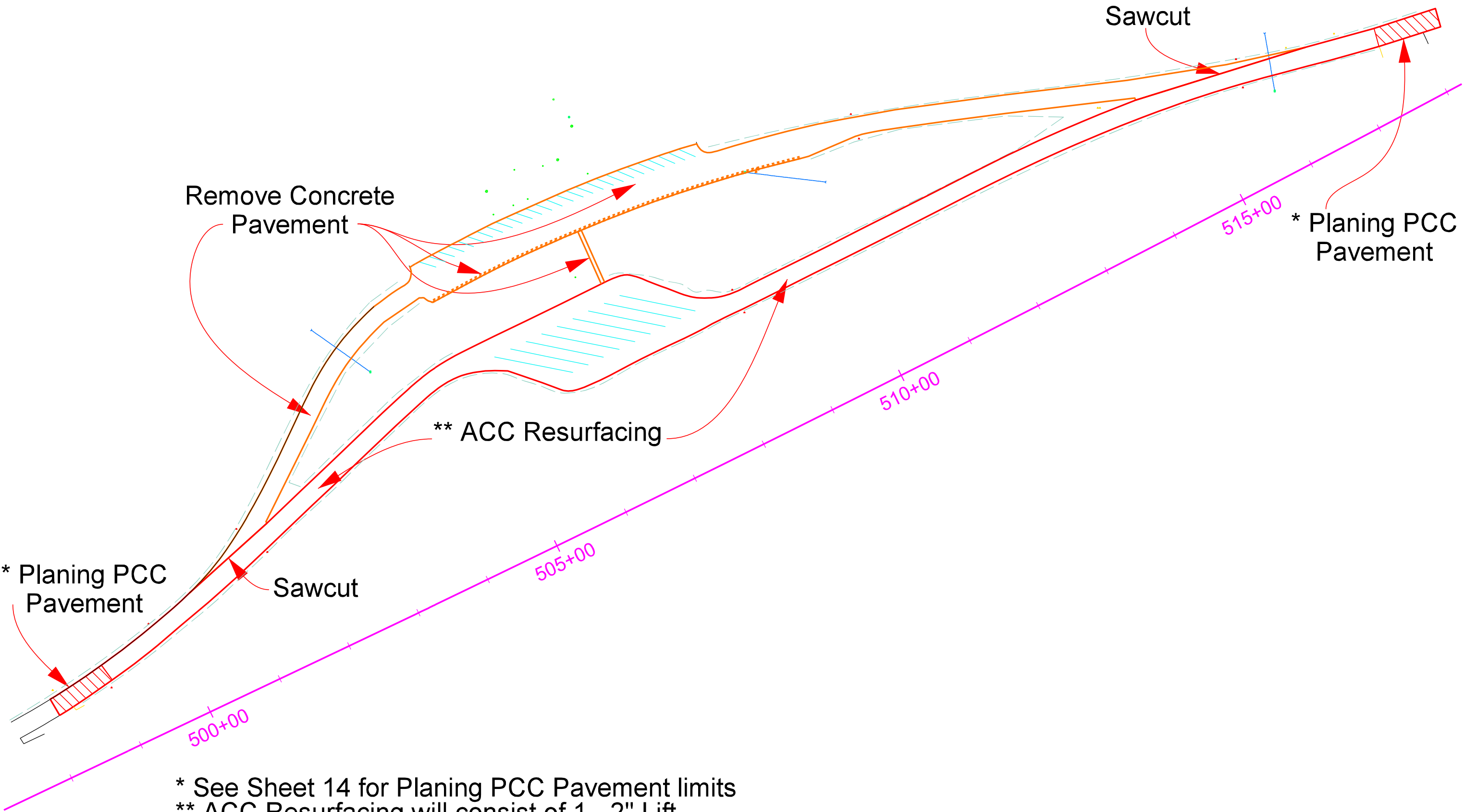
Northbound Rest Area

STATE OF SOUTH DAKOTA	PROJECT		SHEET NO.	TOTAL SHEETS
	029 S - 171	029 N - 171	11	21
Plotting Date: 02/02/2018				

PLOT SCALE - 1:120

PLOT NAME - 4

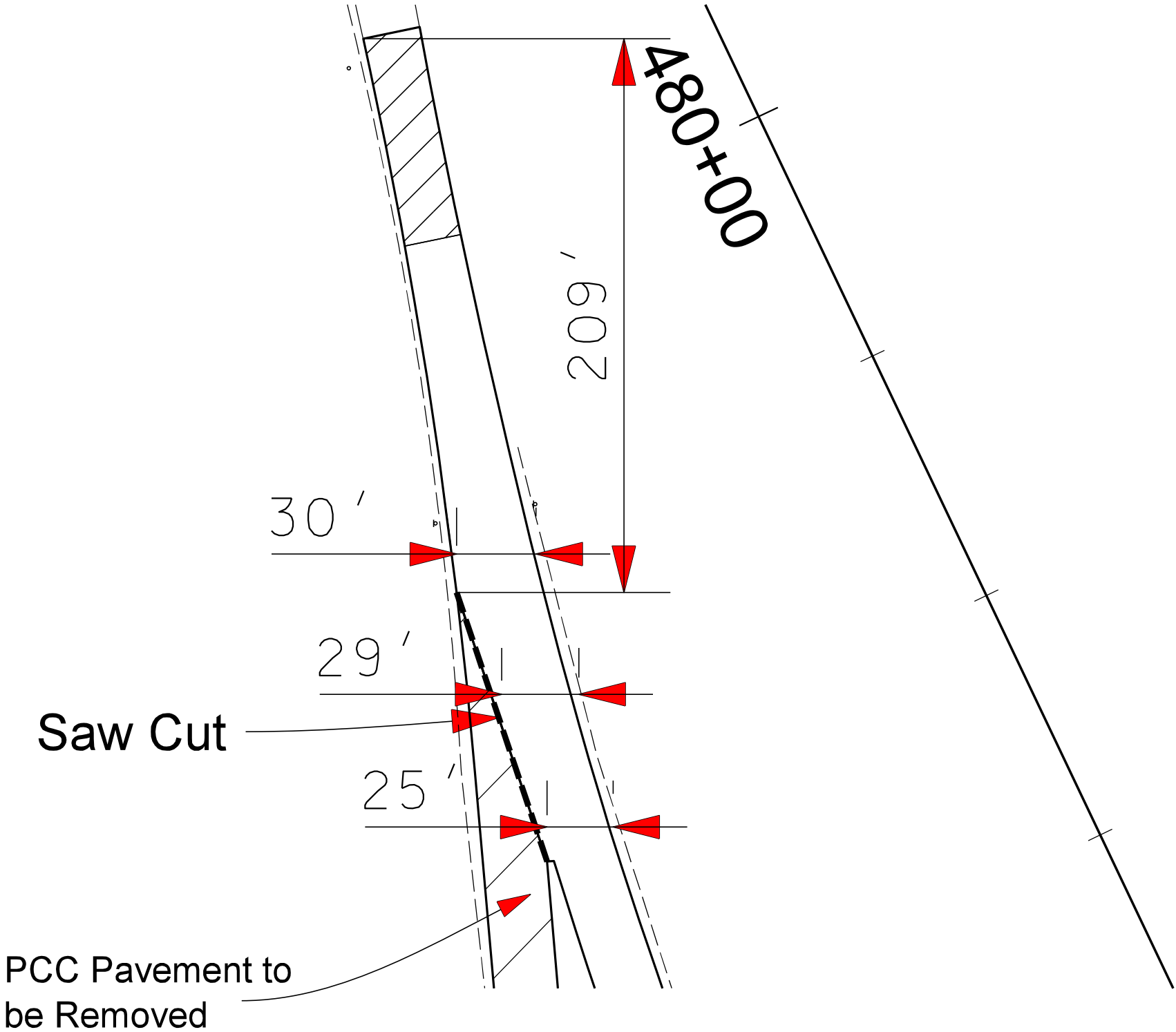
FILE - ... \BUTTERFLY&RESURF.NB.DGN



* See Sheet 14 for Planing PCC Pavement limits
** ACC Resurfacing will consist of 1 - 2" Lift

SOUTHBOUND SAWCUT LAYOUT

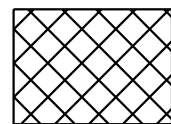
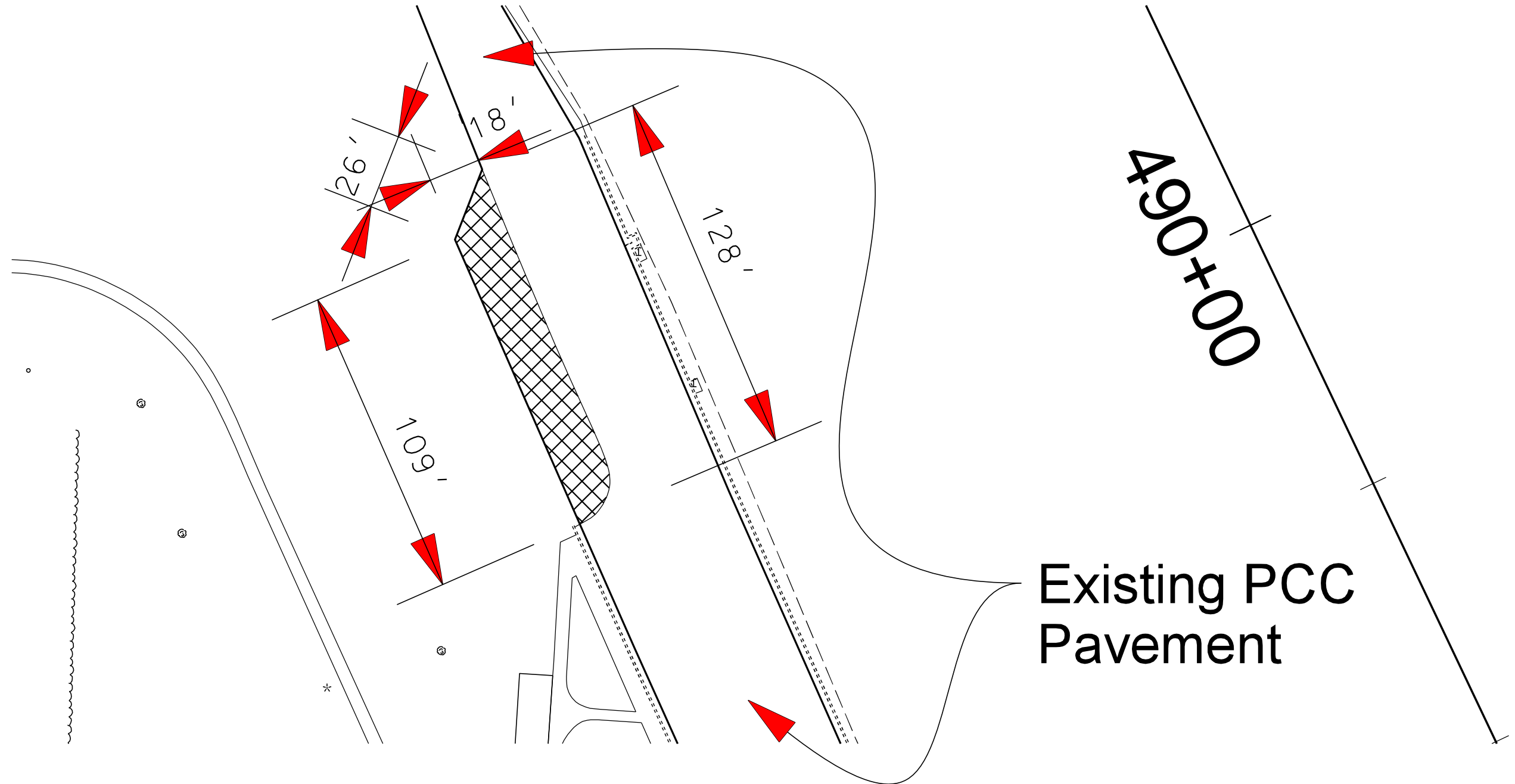
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	12	21
Plotting Date: 02/02/2018			



NEW PARKING LAYOUT

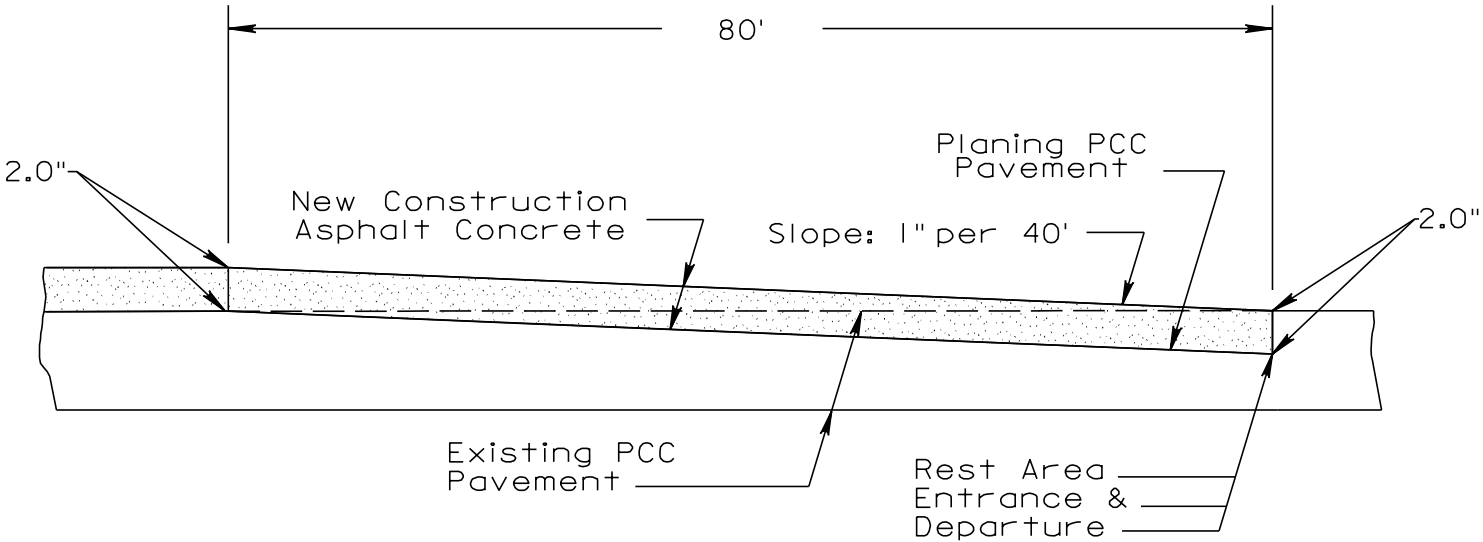
Southbound Truck Parking Area

STATE OF SOUTH DAKOTA	PROJECT		SHEET NO.	TOTAL SHEETS
	029 S - 171	029 N - 171	13	21
Plotting Date: 02/02/2018				



- New Parking Area will consist of 12" of Base Course and 2 - 2" Lifts of Asphalt Concrete Composite. Prior to placement of Base Course, the ground will be scarified and recompact.

PLANING PCC PAVEMENT



In order to construct the new surfacing flush with the existing roadway at the following location(s) and to provide depth for additional asphalt concrete, it will be necessary to plane full roadway width the existing concrete material to the limits shown in the above layout. All costs associated with this work shall be incidental to the contract unit price per square yard for Planing PCC Pavement.

Included in the Estimate of Quantities are 427 square yards for Planing PCC Pavement for each Truck Parking Area (Total of 854 square yards).

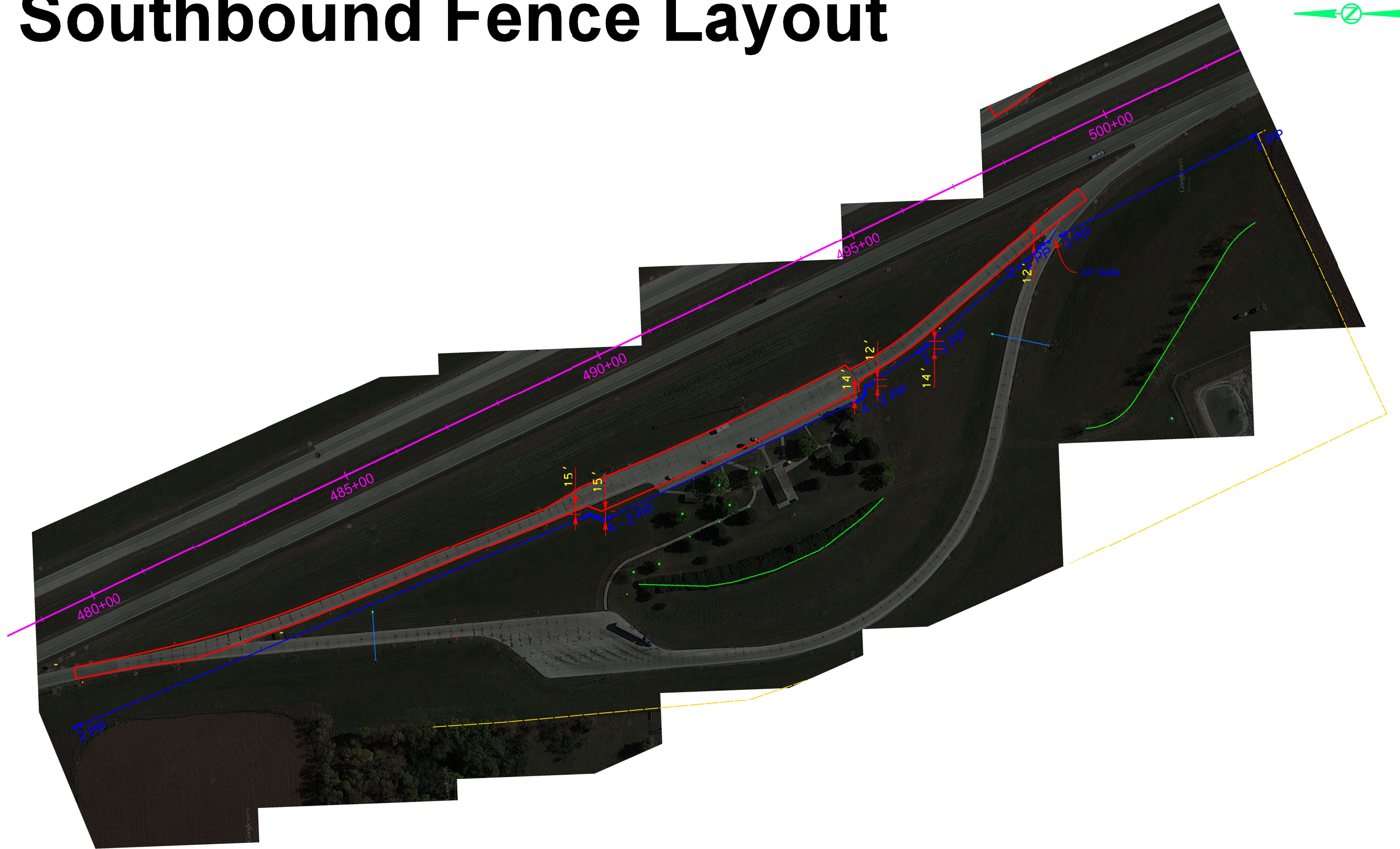
Location	Depth x	Width	Remarks
Sta 479+12 R to Sta 479+89 R	2.0"	24'	SB Entrance
Sta 498+24 R to Sta 499+02 R	2.0"	24'	SB Departure
Sta 498+19 L to Sta 499+00 L	2.0"	24'	NB Entrance
Sta 517+53 L to Sta 518+35 L	2.0"	24'	NB Departure

PLOT SCALE - 1"=160'

PLOTTED FROM - TRAB10200

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	15	21
Plotting Date: 02/02/2018			

Southbound Fence Layout

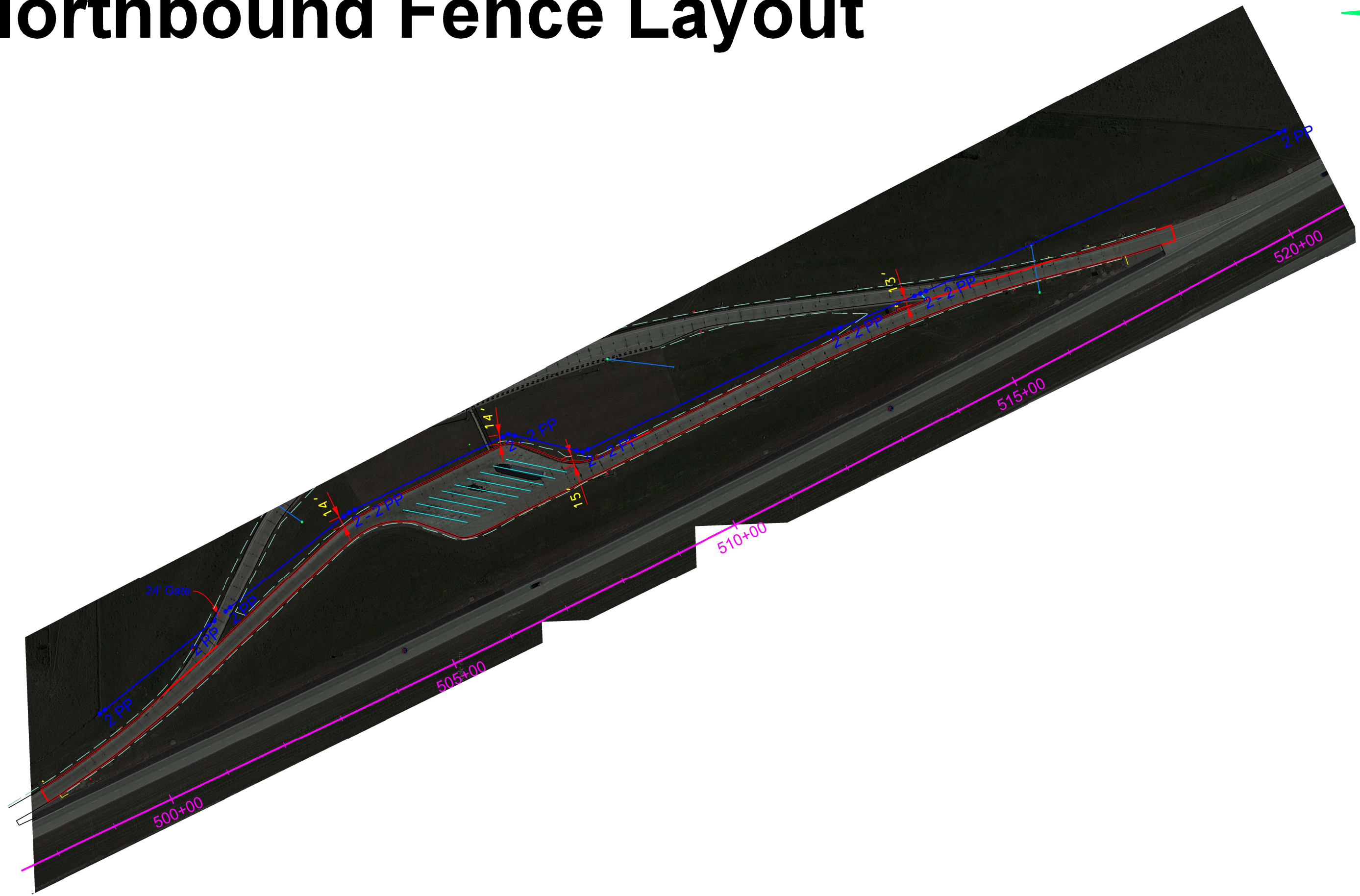


PLOT NAME - 8

FILE - ... \SB_FENCE.DGN

Northbound Fence Layout

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	16	21
Plotting Date: 02/02/2018			



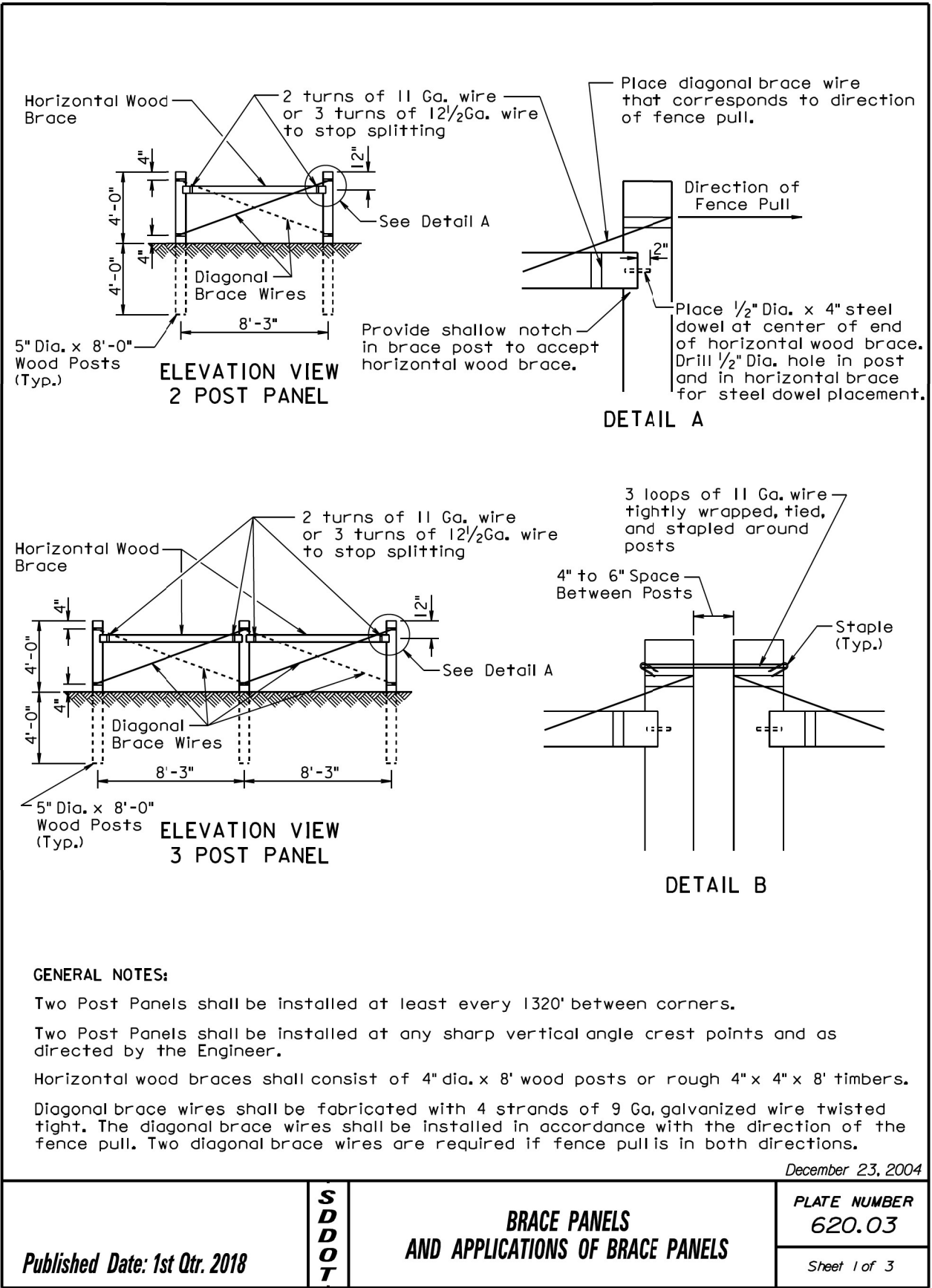
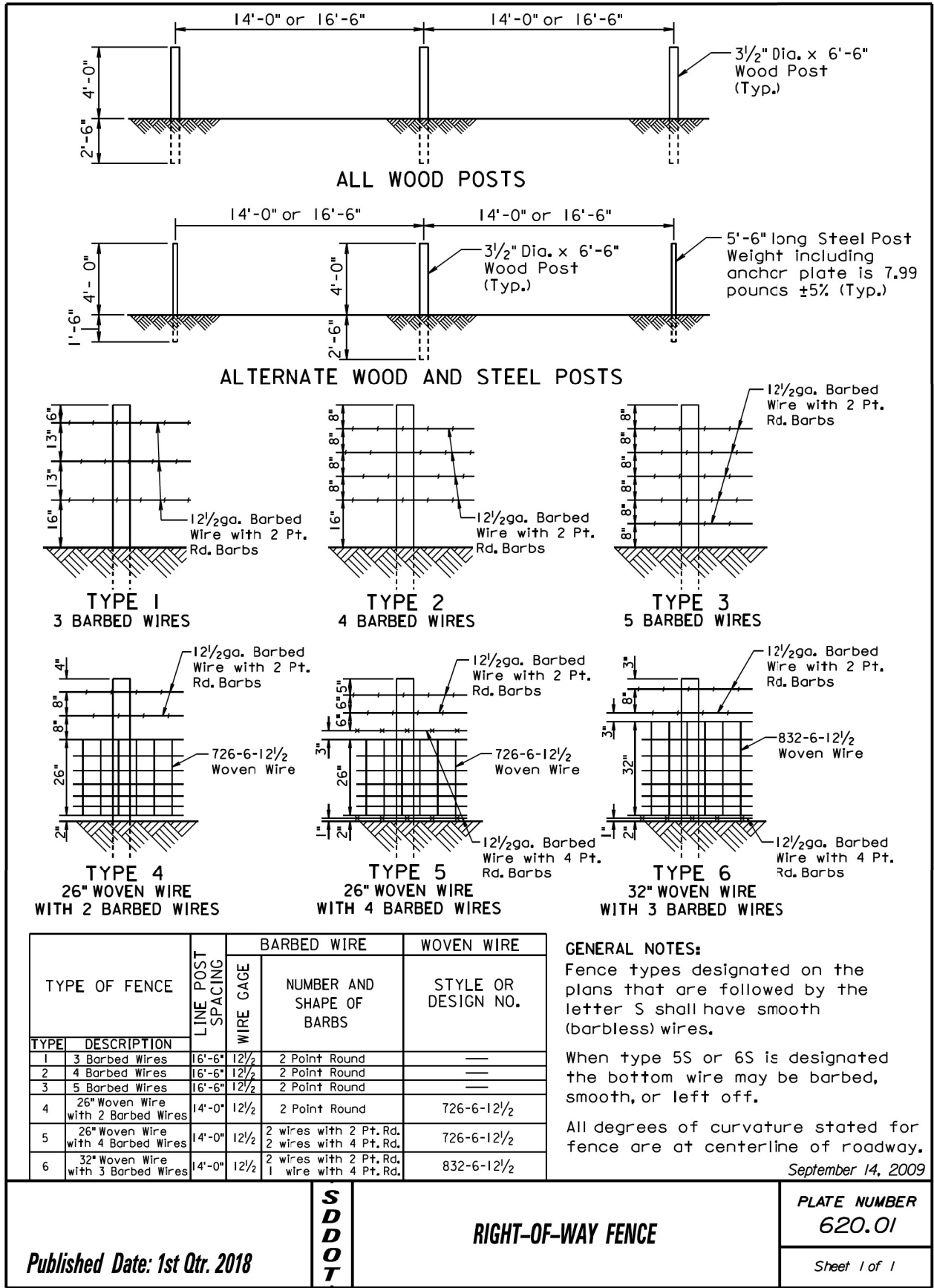
PLOT SCALE - 1"=150'

PLOTTED FROM - TRAB10200

PLOT NAME - 9

FILE - ... \NB_FENCE.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	17	21
Plotting Date: 02/02/2018			

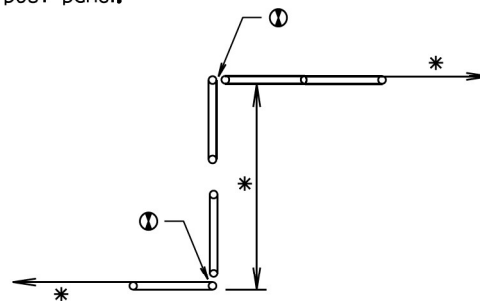
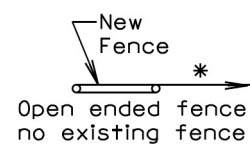
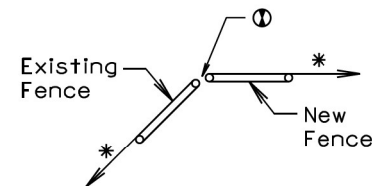


SPACING OF 2 POST PANELS WITHIN CURVES	
DEGREE OF CURVE	SPACING OF 2 POST PANEL
less than 3°15'	•• 1320'
3°15' and greater	••At P.C., P.T., and at every 1320' between P.C. and P.T.

GENERAL NOTE:

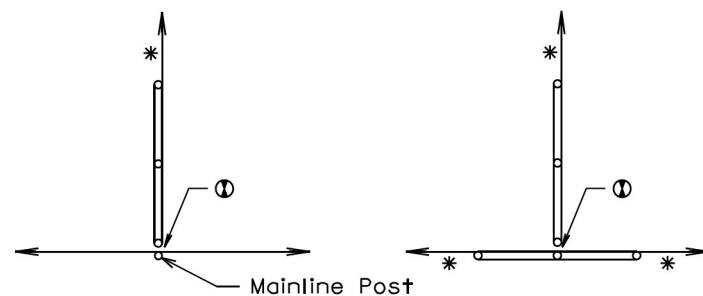
All degrees of curvature stated for fence are at centerline of roadway.

- * If fence length is less than 600' to next corner use a 2 post panel.
- * If fence length is greater than 600' to next corner use a 3 post panel.
- * * Fence lengths greater than 1320' and less than 2640' place 2 Post Panel approximately at midpoint.
- ① See Detail B on Sheet 1 of 3.

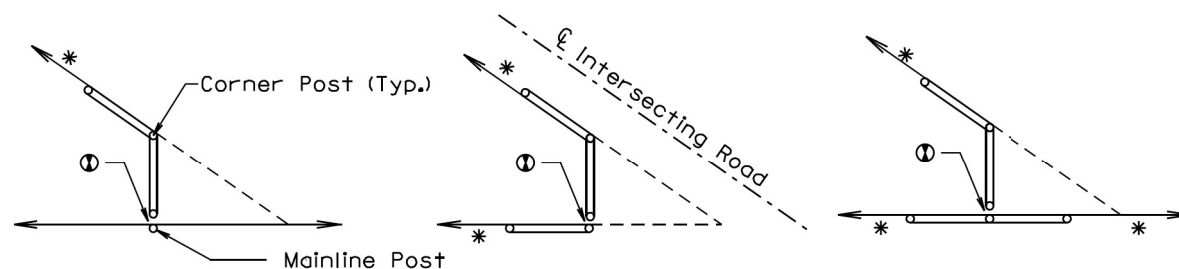


BEGIN OR END FENCE
(where new fence ties into existing fence)

SHORT JOGS IN FENCE



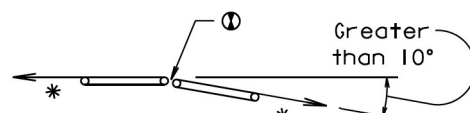
CROSS FENCE



SHARP ANGLES IN CROSS FENCE



Additional fence panel is NOT required when an angle in the mainline fence is 10° and less.



Additional fence panel is required when an angle in the mainline fence is greater than 10°.

ANGLES IN MAINLINE FENCE

December 23, 2004

Published Date: 1st Qtr. 2018

SDOT

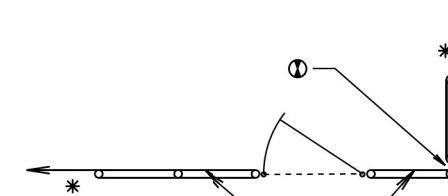
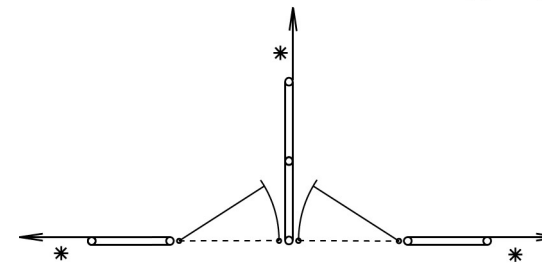
BRACE PANELS AND APPLICATIONS OF BRACE PANELS

PLATE NUMBER
620.03

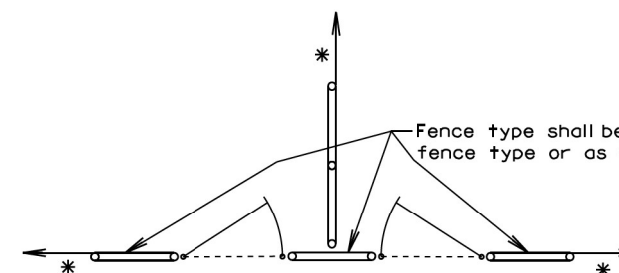
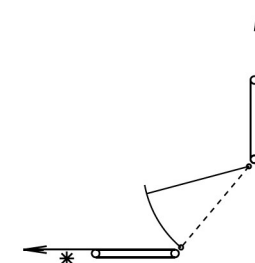
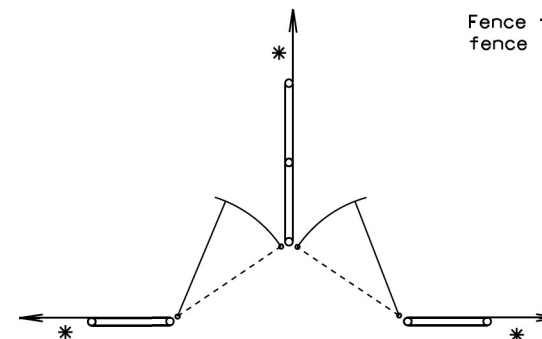
Sheet 2 of 3



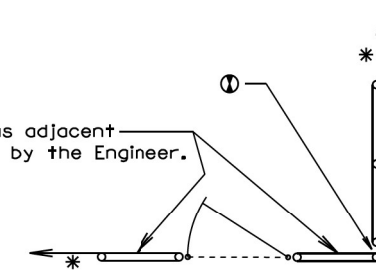
ENTRANCE
(NOT ON CORNER)



Fence type shall be same as adjacent fence type or as directed by the Engineer.



DOUBLE ENTRANCES



ENTRANCES AT CORNERS

GATES

- * If fence length is less than 600' to next corner use a 2 post panel.
If fence length is greater than 600' to next corner use a 3 post panel.
- ① See Detail B on Sheet 1 of 3.

December 23, 2004

Published Date: 1st Qtr. 2018

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BRACE PANELS AND APPLICATIONS OF BRACE PANELS

PLATE NUMBER
620.03

Sheet 3 of 3

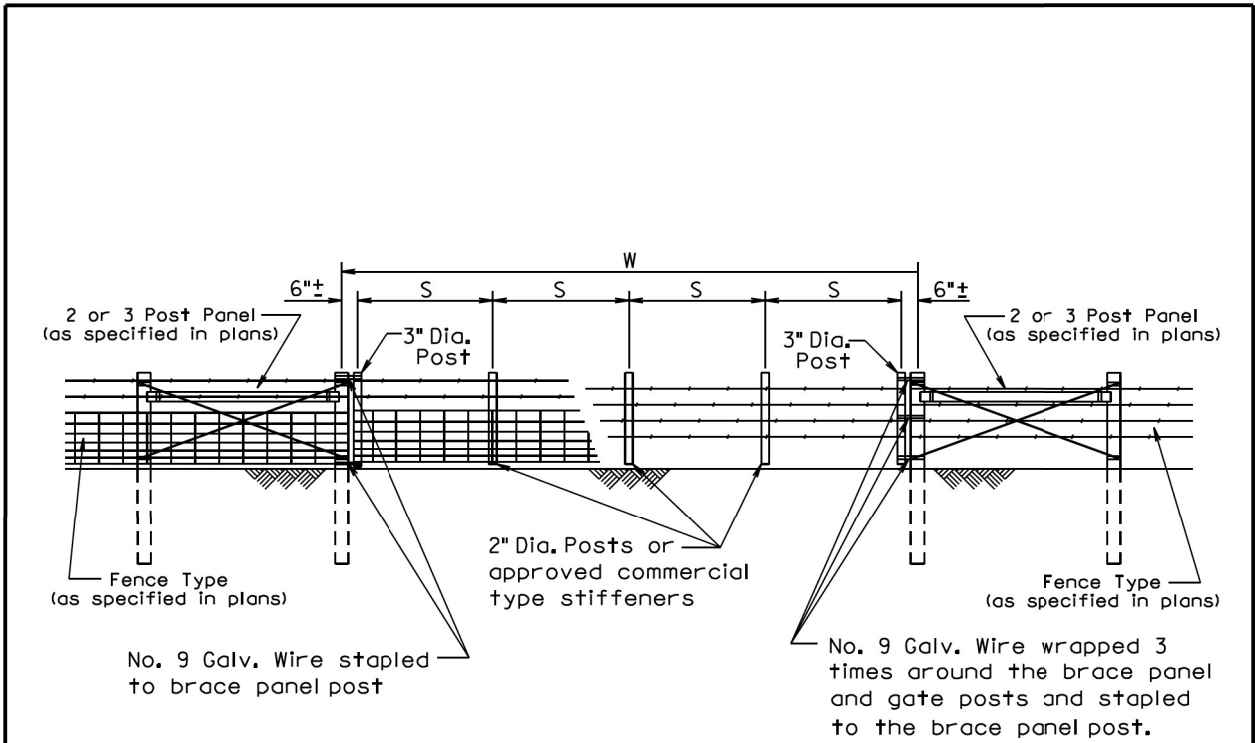
PLOT SCALE - 1:200

-PLOTTED FROM - TRAB10200

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	19	21
Plotting Date: 02/02/2018			

PLOT NAME - 12

FILE - ... \STD PLATES.dgn



W Gate Width (ft.)	S Post Spacing
16	3 @ 5'-0" ±
20	4 @ 4'-9" ±
24	4 @ 5'-9" ±
30	5 @ 5'-10" ±
40	6 @ 6'-6" ±

GENERAL NOTES:

Creosote treatment of the gate posts will not be accepted.

The type of fencing in the gate shall be of the same type as specified for the adjacent Right-of-Way fence.

All costs for furnishing and constructing the wire gate(s) shall be incidental to the contract unit price per Ft for the respective Right-of-Way fence bid item.

March 31, 2000

<i>Published Date: 1st Qtr. 2018</i>	S D D O T	WIRE GATES	PLATE NUMBER 620.20
			Sheet 1 of 1

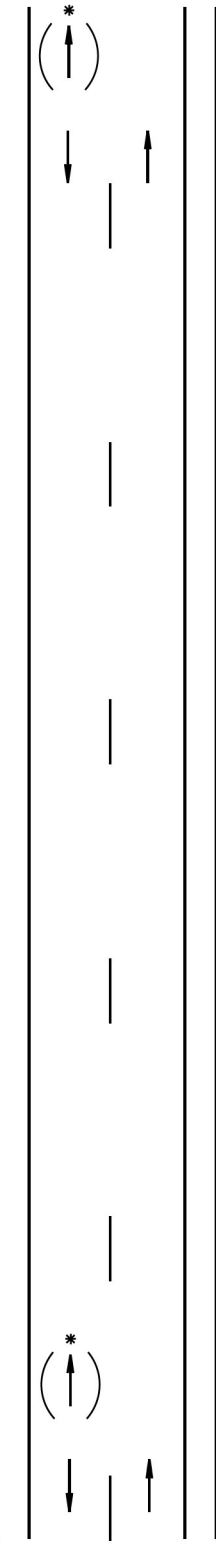
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

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

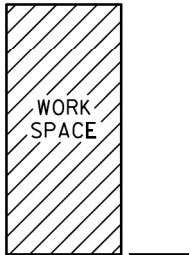
The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

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

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

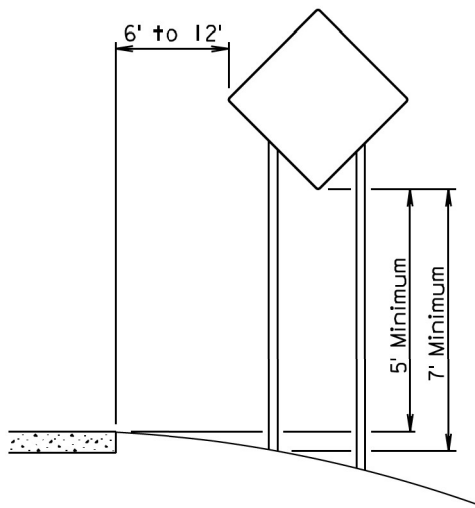


Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 80	1000

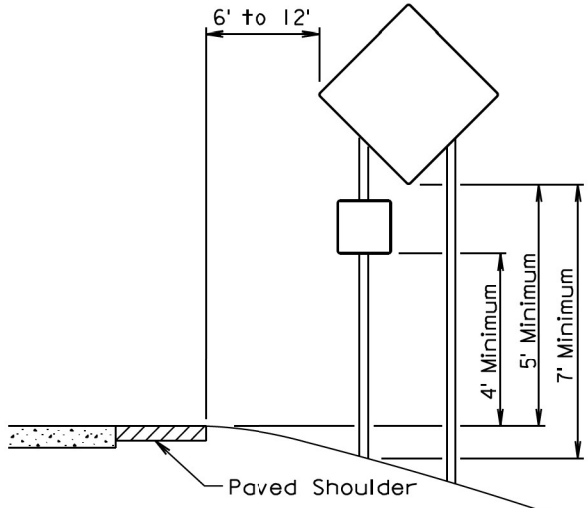


April 15, 2015

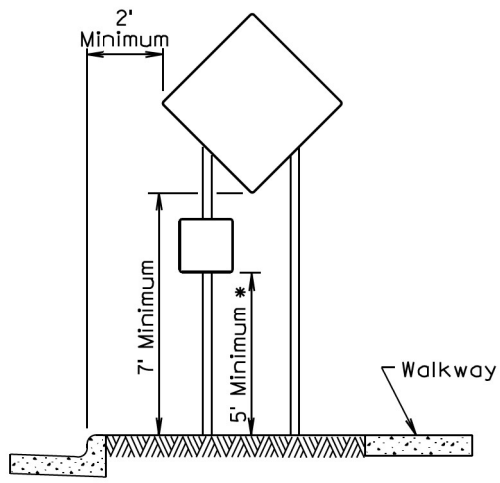
Published Date: 1st Qtr. 2018	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
			Sheet 1 Of 1



RURAL DISTRICT

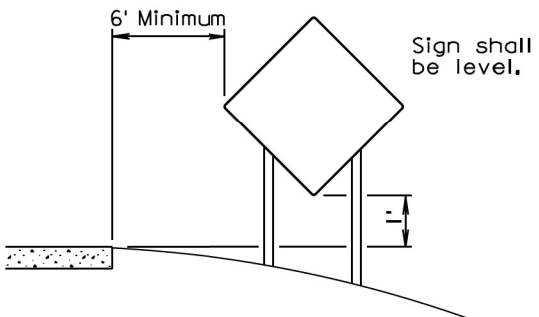


RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



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)

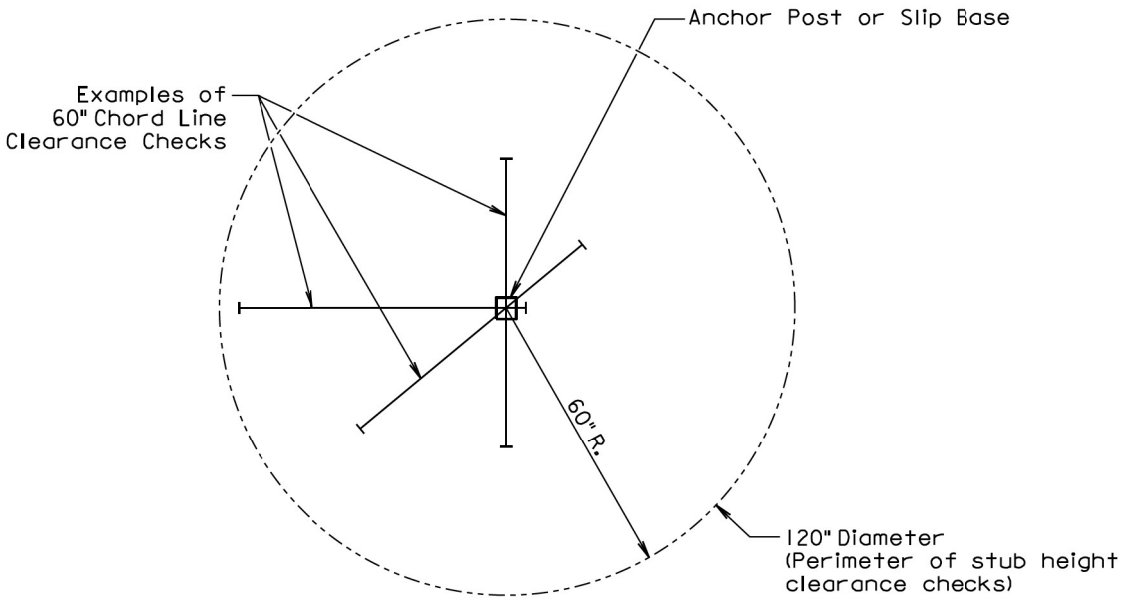
September 22, 2014

Published Date: 1st Qtr. 2018	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1

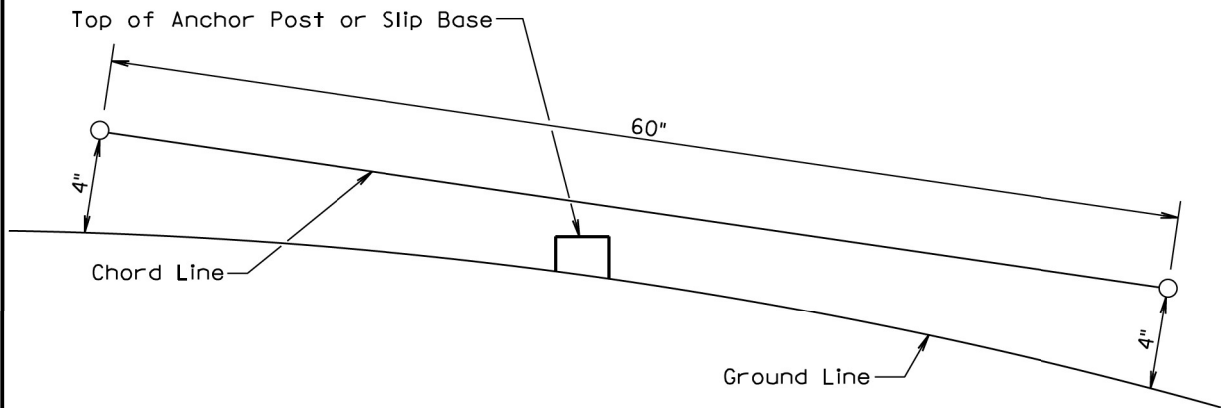
PLOT SCALE - 1:200

-PLOTTED FROM - TRAB10200

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 S - 171 029 N - 171	21	21
Plotting Date: 02/02/2018			



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

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

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

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

July 1, 2005

Published Date: 1st Qtr. 2018	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

PLOT NAME - 14

FILE - ... \STD PLATES1.DGN