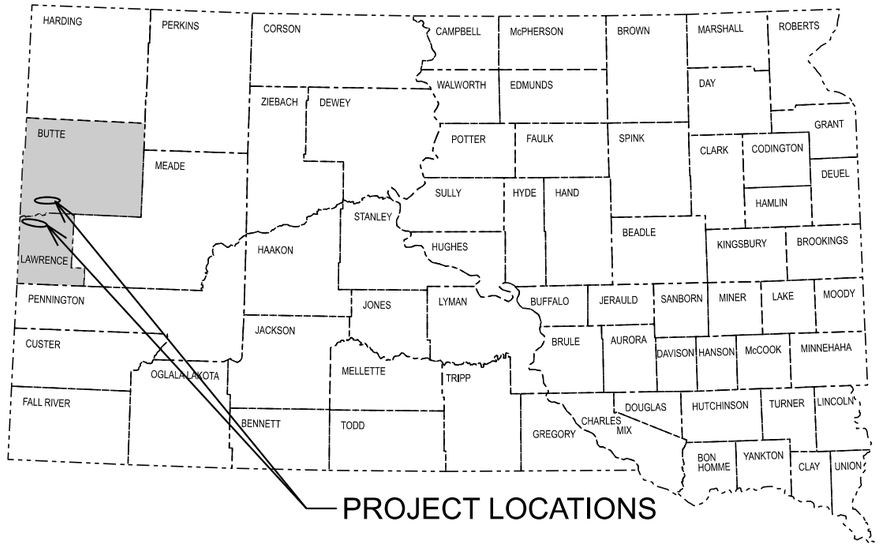
SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	1/29

Plotting Date: 5/2/2025

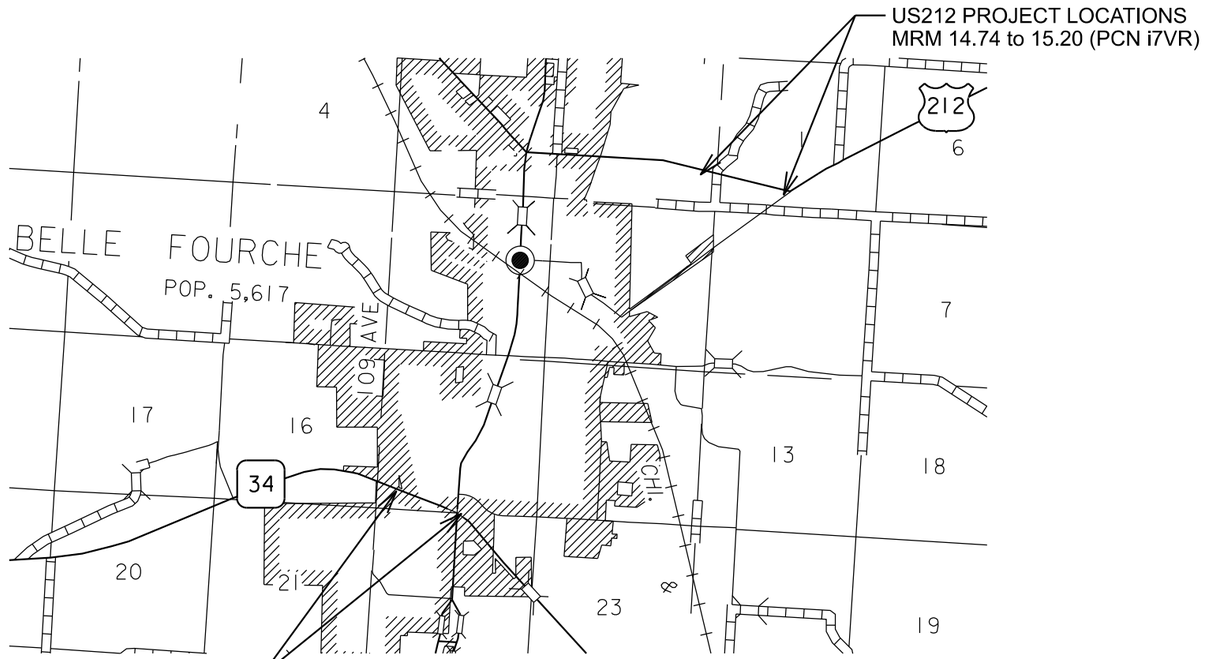
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

212-471, 034-471 & 090 E-451
US HIGHWAY 212, SD HIGHWAY 34 & INTERSTATE 90
BUTTE & LAWRENCE COUNTY

Ditch Cleanout
PCN i7VR, i7VQ, i7VP



INDEX OF SHEETS



DESIGN DESIGNATION (US212)

ADT (2024)	2874
ADT (2042)	4124
DHV	657
D	50.0%
T DHV	8.7%
T ADT	4.0%
V	65 MPH

DESIGN DESIGNATION (SD34)

ADT (2024)	1901
ADT (2042)	2729
DHV	306
D	50.0%
T DHV	9.7%
T ADT	4.4%
V	50 MPH

DESIGN DESIGNATION (I90)

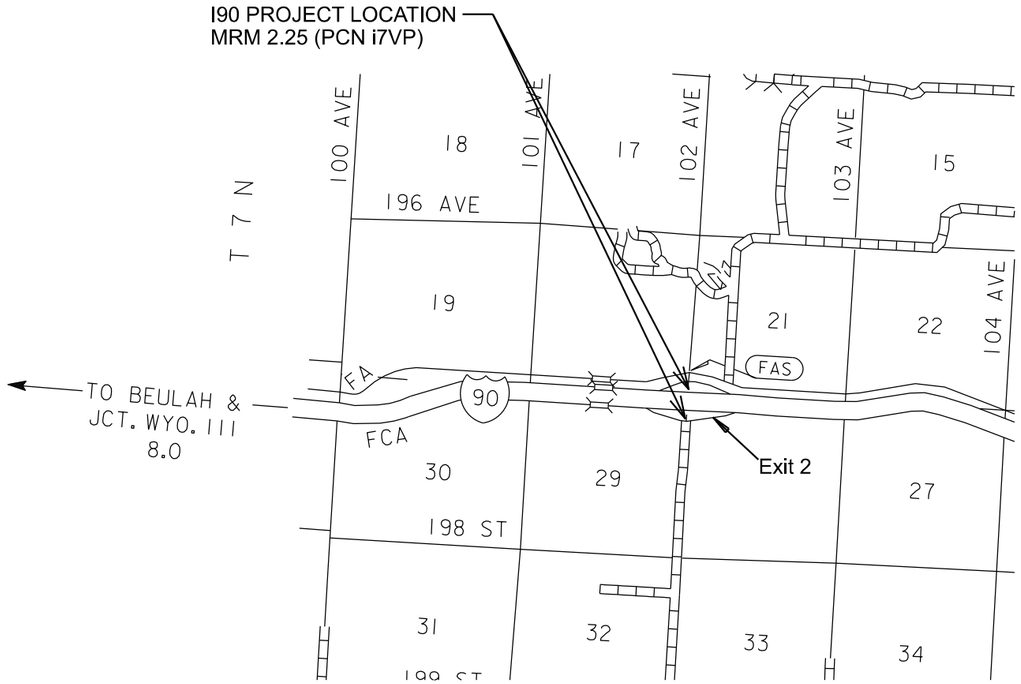
ADT (2024)	3652
ADT (2042)	5631
DHV	827
D	51.0%
T DHV	17.3%
T ADT	7.9%
V	75 MPH

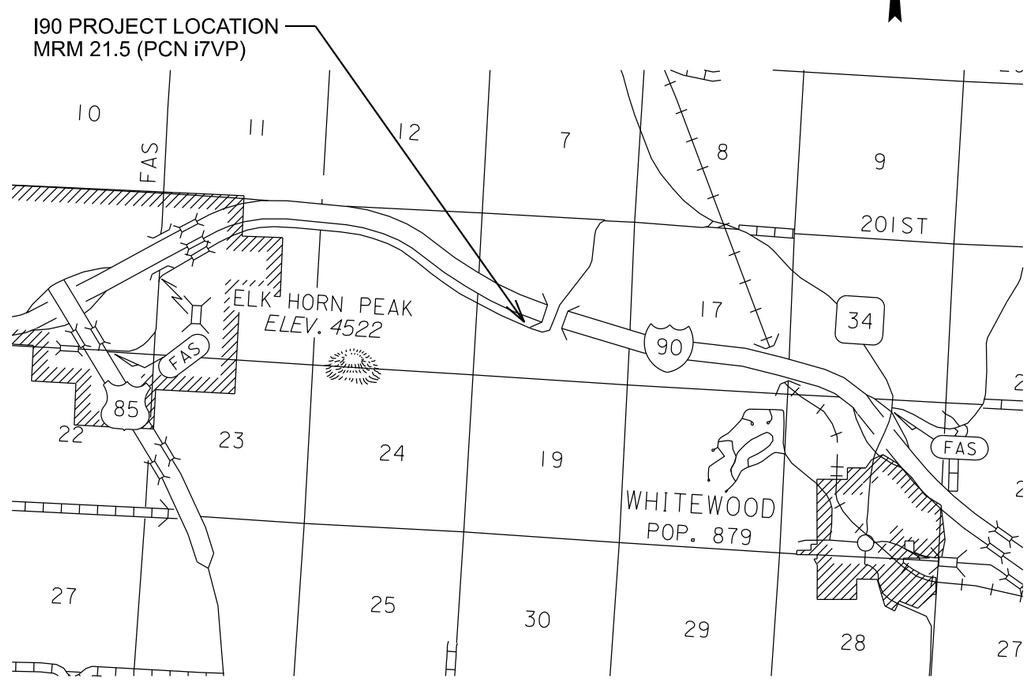
STORM WATER PERMIT

Major Receiving
Body of Water: Tribuataries of Crow Creek
Tributaries of the Belle Fourche River
Area Disturbed: 2.55 ac.
Total Project Area: 8 ac.
Approx. Begin Lat,Long:

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	2/29

Plotting Date: 5/2/2025





ESTIMATE OF QUANTITIES

US212, i7VR

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
120E0600	Contractor Furnished Borrow	943	CuYd
120E1000	Muck Excavation	1,207	CuYd
120E4100	Reprofiling Ditch	3.3	Sta
230E0100	Remove and Replace Topsoil	Lump Sum	LS
250E0020	Incidental Work, Grading	Lump Sum	LS
260E3010	Gravel Surfacing	15.4	Ton
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	365.5	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	7	Each
730E0210	Type F Permanent Seed Mixture	39	Lb
731E0100	Fertilizing	2,250	Lb
732E0100	Mulching	3.0	Ton
734E0154	12" Diameter Erosion Control Wattle	440	Ft

SD34, i7VQ

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E1700	Remove Silt Fence	22	Ft
120E1000	Muck Excavation	389	CuYd
120E4100	Reprofiling Ditch	4.5	Sta
230E0100	Remove and Replace Topsoil	Lump Sum	LS
450E8900	Cleanout Pipe Culvert	5	Each
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	194.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
730E0210	Type F Permanent Seed Mixture	13	Lb
731E0100	Fertilizing	750	Lb
732E0100	Mulching	1.0	Ton
734E0604	High Flow Silt Fence	90	Ft
734E0610	Mucking Silt Fence	6	CuYd
734E0620	Repair Silt Fence	22	Ft

Interstate 90, i7VP

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E1700	Remove Silt Fence	25	Ft
120E1000	Muck Excavation	238	CuYd
120E4100	Reprofiling Ditch	4.3	Sta
230E0100	Remove and Replace Topsoil	Lump Sum	LS
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	178.0	SqFt
634E0110	Traffic Control Signs	320.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	3	Each
634E0420	Type C Advance Warning Arrow Board	1	Each
634E1255	Contractor Furnished Speed Monitoring Radar Trailer	1	Each
730E0210	Type F Permanent Seed Mixture	13	Lb
731E0100	Fertilizing	750	Lb
732E0100	Mulching	1.0	Ton
734E0604	High Flow Silt Fence	165	Ft
734E0610	Mucking Silt Fence	11	CuYd
734E0620	Repair Silt Fence	25	Ft

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

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

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

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

COMMITMENT 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 (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

Action Taken/Required:

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

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< https://sdleastwanted.sd.gov/maps/default.aspx>

< South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance and/or work in a waterway.

Action Taken/Required:

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at:
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPAppendixCCA2018Fillable.pdf >

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

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

SDDOT: < https://dot.sd.gov/doing-business/environmental/stormwater >

DANR:<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/default.aspx>

EPA: < https://www.epa.gov/npdes >

COMMITMENT H: WASTE DISPOSAL SITE

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

Action Taken/Required:

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

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

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

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

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

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

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

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

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

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

Action Taken/Required:

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

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

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

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

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

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

UTILITIES

The Contractor will contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It will be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

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 will contact the Engineer to determine modifications that will be necessary to avoid utility impacts.

MUCK EXCAVATION

Muck excavation is anticipated to be throughout the project. The estimated quantity of 1,834 cubic yards of muck excavation will be paid for at the contract unit price per cubic yard for “Muck Excavation”.

Muck excavation consists of the removal of highly organic and/or highly saturated material. Highly organic muck material will not be used in the embankment but may be used as topsoil. Muck material may be used as fill if it is properly handled and dried prior to placement.

Field measurement of muck excavation will not be made.

REMOVE AND REPLACE TOPSOIL

Available topsoil will be salvaged and stockpiled prior to grading. Limits of work, depth of salvage, and stockpile locations will be directed by the Engineer. Following completion of the grading, topsoil will be spread evenly over the disturbed areas.

The estimated amount of topsoil to be removed and replaced is as follows:

Alignment	Remove and Replace Topsoil (CuYd)
I7VR	845
I7VQ	172
I7VP	246
Total:	1263

All costs associated with removing and replacing the topsoil on the projects will be incidental to the lump sum price for “Remove and Replace Topsoil”.

SHRINKAGE FACTOR: Embankment +20%

REPROFILING DITCH

The ditches to be reprofiled will maintain their existing shape. The ditch profile will be staked by the Engineer prior to clean out with a straight grade. The Contractor will cut and fill the ditch as needed to eliminate low spots and ensure positive drainage. Excess material will be treated as waste.

Disturbed areas will be restored to the satisfaction of the Engineer. Cost for this work, including labor and equipment necessary to remove and dispose of any silt and vegetation and reshape the ditch will be included in the contract unit price per station for Reprofiling Ditch.

TABLE OF REPROFILING DITCH

Alignment	Station to	Station	Offset (L/R)	Length (Sta)
US 212	1+85	5+18	R	3.34
SD 34	23+50	27+20	L	4.5
			Totals:	7.84

CONTRACTOR FURNISHED BORROW EXCAVATION

The Contractor will provide a suitable site for Contractor furnished borrow excavation material. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. The borrow material will be approved by the Engineer. The plans quantity for “Contractor Furnished Borrow Excavation” as shown in the Estimate of Quantities will be the basis of payment for this item.

Restoration of the Contractor furnished borrow excavation site will be the responsibility of the Contractor.

The Contractor can use the Muck Excavation if it can be dried, placed, leveled and seeded adjacent to the wetland. If the muck excavation is unusable, the contractor will handle it as waste. If it can used, it will be paid as Contractor Furnished Borrow.

TABLE OF EXCAVATION QUANTITIES BY BALANCES

Alignment	Station	to	Station	* Muck Exc. (CuYd)	* Contractor Furnished Borrow Exc. (CuYd)	Total Excavation (CuYd)	** Waste (CuYd)
US 212	23+95		29+95	1207	943	2150	0
SD 34	8+00		12+00	389	0	389	389
Exit 2 West	1+86		8+35	119	0	119	119
Exit 2 East	1+76		8+04	119	0	119	119
			Totals:	1834	943	2777	627

WASTE EXCAVATION

The quantity of waste in the Table of Excavation Quantities by Balances that is muck excavation or excess excavation material will be disposed of at a Contractor furnished site acceptable to the Engineer.

DEWATERING FOR CHANNEL CLEANOUT

During dewatering operations turbid water will be placed on vegetated areas to ensure sediment does not enter any streams or lakes. The contractor will use silt fence or wattles to separate the sediment from the water.

All costs associated with dewatering will be incidental to the contract unit price per cubic yard for Muck Excavation.

INCIDENTAL WORK, GRADING

Alignment	Station	Description
US 212	4+44 to 5+18 R	Take Out Approach & 18"-60' CMP & 2 End Sections
US 212	6+08 to 6+71 R	Take out 76' CMP & 2 End Sections
US 212	22+93 L/R	10'x8' RCBC Inlet/Outlet Cleanout

CLEANOUT PIPE CULVERT

Material in existing pipe culvert will be cleaned out by water flushing or other approved methods.

Material removed from the pipe culvert will become property of the Contractor for disposal.

The Contractor will implement appropriate sediment control measures prior to water flushing to prevent discharges from the project boundaries.

The pipe culvert will be cleaned to the satisfaction of the Engineer.

All costs to dewater, clean pipe, and dispose of removed materials will be incidental to the contract unit price per each for "Cleanout Pipe Culvert".

CONTROLLED DENSITY FILL FOR PIPE

Controlled density fill will be in conformance with Section 464 of the Specifications.

The controlled density fill will be used to plug existing culverts.

TABLE OF PIPE QUANTITES

Table Of Pipe Quantities			
			Pipe Culvert Cleanout
Alignment	Station	Offset (L/R)	Ea
SD 34	11+80 to 12+32	R	1
SD 34	23+75	174' L	2
SD 34	26+20 to 26+75	L	1
SD 34	27+20 to 27+83	L	1
		Totals:	5

ADDITIONAL QUANTITIES

Included in the Estimate of Quantities is:

15.4 Tons of Gravel Surfacing for placing 4" of Gravel Surfacing on Marvin Road at the pipe removal location.

MULCHING (GRASS HAY OR STRAW)

An additional 1.0 tons of Grass Hay or Straw Mulch has been added to the Estimate of Quantities for temporary erosion control on areas determined by the Engineer during construction.

If the Contractor uses a no-till drill, mulch may be applied prior to seeding and the mulch can then be punched into the soil by the no-till drill. If the Contractor uses this process, the no-till drill seeding will be completed immediately following the mulch application and the mulch will be punched into the soil at a 3-inch depth.

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum will 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 will provide certification of the fungal species claimed and the live propagule count. The inoculum will include a minimum 25% the fungal species *Rhizophagus intraradices*. The remaining 75% may include other endomycorrhizal fungal species.

All seed will 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 will be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

FERTILIZING

The Contractor will apply an all-natural slow release fertilizer prior to seeding or placing sod. The all-natural fertilizer will have a minimum guaranteed analysis of 4-4-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 2.07%, a minimum of 4% (P_2O_5) available phosphate, a minimum of 4% (K_2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer will be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer will have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer will also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The fertilizer will be applied at a rate of 1,500 pounds per acre in accordance with the manufacturer's recommended method of application.

The Fertilizer provided will be from the approved product list. The approved product list may be viewed at the following internet site:

https://apps.sd.gov/HC60ApprovedProducts/main.aspx

PERMANENT SEEDING

The areas to be seeded consist of all newly graded areas within the project limits.

Type F Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	7
Green Needlegrass	Lodorm, AC Mallard Ecovar	4
Sideoats Grama	Butte, Pierre	3
Blue Grama	Bad River	2
Oats or Spring Wheat: April through May; Winter Wheat: August through November		10
	Total:	26

EROSION CONTROL WATTLE

Erosion control wattles for restraining the flow of runoff and sediment will be installed at locations noted in the table and at locations determined by the Engineer during construction. Refer to Standard Plate 734.06 for details.

The Contractor will provide certification that the erosion control wattles do not contain noxious weed seeds.

Erosion control wattles will remain on the project to decompose.

The erosion control wattle provided will be from the approved product list. The approved product list for erosion control wattle may be viewed at the following internet site:

https://apps.sd.gov/HC60ApprovedProducts/main.aspx

TABLE OF EROSION CONTROL WATTLE

Alignment	Station	Location	Diameter (Inch)	Quantity (Ft)
US 212	1+70 R	Hwy Ditch Bottom	12	40
US 212	24+00 to 27+87 R	Along Fill and Irrigation Ditch	12	400
			Total:	440

HIGH FLOW SILT FENCE

The high flow silt fence fabric provided will be from the approved product list. The approved product list for high flow silt fence may be viewed at the following internet site:

https://apps.sd.gov/HC60ApprovedProducts/main.aspx

High flow silt fence will be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.05 for details.

TABLE OF HIGH FLOW SILT FENCE

Alignment	Station	Location	Quantity (Ft)
SD 34	9+32 R	Pipe Inlet	25
SD 34	23+48 L	Pipe Inlets	40
SD 34	26+75 L	Pipe Inlet	25
Exit 2 West	3+10	Pipe Inlet	25
Exit 2 West	6+61	Pipe Inlet	25
Exit 2 West	9+23	Pipe Inlets	40
Exit 2 East	2+92	Pipe Inlet	25
Exit 2 East	6+42	Pipe Inlet	25
Exit 2 East	8+06 L	Pipe Inlet	25
			255

STORMWATER POLLUTION PREVENTION PLAN CHECKLIST

*(The numbers left of the title headings are **reference numbers** to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES (Stormwater Permit))*

5.3 (2): STAFF TRAINING/SWPPP IMPLEMENTATION

To promote stormwater management awareness specific for this project, the Contractor's Erosion Control Supervisor should provide correspondence of how the SWPPP will be implemented. The Contractor's Erosion Control Supervisor is responsible for providing this information at the preconstruction meeting, and subsequently completing an attendance log, which should identify site-specific implementation of the SWPPP and the names of the personnel who attended the preconstruction meeting. Documentation of the preconstruction meeting will be filed with the SWPPP documents.

5.3 (3): DESCRIPTION OF CONSTRUCTION ACTIVITIES

- **5.3 (3a): Project Limits** (See Title Sheet)
- **5.3 (3a): Project Description** (See Title Sheet)
- **5.3 (4): Site Map(s)** (See Title Sheet and Plans)
- **Major Soil Disturbing Activities** (check all that apply)
  - ☒ Clearing and grubbing
  - ☒ Excavation/borrow
  - ☒ Grading and shaping
  - ☐ Filling
  - ☐ Other (describe):
- **5.3 (3b): Total Project Area** 8 ac
- **5.3 (3b): Total Area to be Disturbed** 2.55 ac
- **5.3 (3c): Maximum Area Disturbed at One Time**1.8 ac
- **5.3 (3d): Existing Vegetative Cover (%)**
- **5.3 (3d): Description of Vegetative Cover**

- **5.3 (3e): Soil Properties:**

- **5.3 (3f): Name of Receiving Water Body/Bodies**
- **5.3 (3g): Location of Construction Support Activity Areas**

5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES

The Contractor will enter the Estimated Start Date.

Description	Estimated Start Date
Install stabilized construction entrance(s).	
Install perimeter protection where runoff may exit site.	
Install perimeter protection around stockpiles.	
Install channel and ditch bottom protection.	
Clearing and grubbing.	
Remove and stockpile topsoil.	
Stabilize disturbed areas.	
Install utilities, storm sewers, curb and gutter.	
Install inlet and culvert protection after completing storm drainage and other utility installations.	
Final grading.	
Final paving.	
Removal of protection devices.	
Reseed areas disturbed by removal activities.	

5.3 (5): DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES

All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report. Include the technical reasoning for selecting each control. (check all that apply)

Perimeter Controls (See Detail Plan Sheets)

Description	Estimated Start Date
☐ Natural Buffers (within 50 ft of Waters of State)	
☐ Silt Fence	
☒ Erosion Control Wattles	
☐ Temporary Berm / Windrow	
☐ Floating Silt Curtain	
☐ Stabilized Construction Entrances	
☐ Entrance/Exit Equipment Tire Wash	
☐ Other:	

Structural Erosion and Sediment Controls

Description	Estimated Start Date
☒ Silt Fence	
☐ Temporary Berm/Windrow	
☐ Erosion Control Wattles	
☐ Temporary Sediment Barriers	
☐ Erosion Bales	
☐ Temporary Slope Drain	
☐ Turf Reinforcement Mat	
☐ Riprap	
☐ Gabions	
☐ Rock Check Dams	
☐ Sediment Traps/Basins	
☐ Culvert Inlet Protection	
☐ Transition Mats	
☐ Median/Area Drain Inlet Protection	
☐ Curb Inlet Protection	
☐ Interceptor Ditch	
☐ Concrete Washout Facility	
☐ Work Platform	
☐ Temporary Water Barrier	
☐ Temporary Water Crossing	
☐ Permanent Stormwater Ponds	
☐ Permanent Open Vegetated Swales	
☐ Natural Depressions to allow for Infiltration	
☐ Sequential Systems that combine several practices	
☐ Other:	

Dust Controls

Description	Estimated Start Date
☐ Tarps & Wind impervious fabrics	
☐ Watering	
☐ Stockpile location/orientation	
☐ Dust Control Chlorides	
☐ Other	

Dewatering BMPs

Description	Estimated Start Date
☐ Sediment Basins	
☐ Dewatering bags	
☐ Weir tanks	
☐ Temporary Diversion Channel	
☐ Other:	

Stabilization Practices (See Detail Plan Sheets)
(Stabilization measures will begin the following work day whenever earth disturbing activity on any portion of the site has temporarily or permanently ceased. Temporary stabilization will be completed as soon as practicable but no later than 14 days after initiating soil stabilization activities (**3.18**))

Description	Estimated Start Date
☐ Vegetation Buffer Strips	
☐ 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	
☐ Surface Roughening (e.g. tracking)	
☐ 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.

5.3 (6): PROCEDURES FOR INSPECTIONS

- Inspections will be conducted at least once every 7 days.
- 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 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 ½ 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 and 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.

5.3 (7): POST CONSTRUCTION STORMWATER MANAGEMENT

Stormwater management will be handled by temporary controls outlined in "DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES" above, and any permanent controls needed to meet permanent stormwater management needs in the post construction period will be shown in the plans and noted as permanent.

5.3 (8): POLLUTION PREVENTION PROCEDURES

5.3 (8a): Spill Prevention and Response Procedures

➢ **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/or 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.

- Hazardous Materials
  - Products will be kept in original containers unless the container is not resealable and provide secondary containment as applicable.
  - 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 stormwater system or stormwater 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 stormwater runoff.

➢ **Spill Control Practices**

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.

➢ **Spill Response**

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into stormwater runoff and conveyance systems. If the release has impacted on-site stormwater, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens stormwater 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 SDDANR.
- Personnel with primary responsibility for spill response and cleanup 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.

5.3 (8b): WASTE MANAGEMENT PROCEDURES

➢ **Waste Disposal**

- All liquid waste materials will be collected and stored in approved sealed containers. 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. The Contractor is responsible for ensuring 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 Contractor 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 which must be secured to prevent tipping and serviced in a timely manner by a licensed waste management Contractor or as required by any local regulations.

5.3 (9): CONSTRUCTION SITE POLLUTANTS

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 heading "POLLUTION PREVENTION PROCEDURES" (check all that apply).

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

Product Specific Practices

- **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 stormwater. 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 stormwater outlet of the site. Upon completion of construction, the area at the washout facility will be properly stabilized.

5.3 (10): NON-STORMWATER DISCHARGES

The following non-stormwater 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.

5.3 (11): INFEASIBILITY DOCUMENTATION

If it is determined to be infeasible to comply with any of the requirements of the Stormwater Permit, the infeasibility determination must be thoroughly documented in the SWPPP.

7.0: 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 SDDANR immediately **if any one of the following** conditions exists:
  - The release or spill threatens or is able to threaten waters of the state (surface water or ground water)
  - The release or spill causes an immediate danger to human health or safety
  - The release or spill exceeds 25 gallons
  - The release or spill causes a sheen on surface water
  - The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01
  - The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01
  - The release or spill of any substance that harms or threatens to harm wildlife or aquatic life
  - The release or spill is required to be reported according to Superfund Amendments and Reauthorization Act (SARA) Title III List of Lists, Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right to Know Act, US Environmental Protection Agency.

- To report a release or spill, call SDDANR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central Standard Time). To report the release after hours, on weekends or holidays, call South Dakota Emergency Management at 605-773-3231. Reporting the release to SDDANR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, you must also contact local authorities to determine the local reporting requirements for releases. A written report of the unauthorized release of any regulated substance, including quantity discharged, and the location of the discharge will be sent to SDDANR within 14 days of the discharge.

5.4: SWPPP 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 7.4 (1))

➢ **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

The following personnel are duly authorized representatives and have signatory authority for modifications made to the SWPPP:

➢ **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: _____

➢ **SDDANR Contact Spill Reporting**
- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➢ **SDDANR Contact for Hazardous Materials.**
- (605) 773-3153

➢ **National Response Center Hotline**
- (800) 424-8802.

➢ **SDDANR Stormwater Contact Information**
- SDDANR Stormwater (800) 737-8676
- Surface Water Quality Program (605) 773-3351

5.5: REQUIRED SWPPP MODIFICATIONS

➢ **5.5 (1): Conditions Requiring SWPPP Modification**

The SWPPP must be modified, including the site map(s), in response to any of the following conditions:

- When a new operator responsible for implementation of any part the SWPPP begins work on the site.
- When changes to the construction plans, sediment and erosion control measures, or any best management practices on site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered by inspections.
- To reflect areas on the site map where operational control has been transferred (including the date of the transfer) or has been covered under a new permit since initiating coverage under this general permit.
- If inspections by site staff, local officials, SDDANR, or U.S. EPA determine that SWPPP modifications are necessary for compliance with the Stormwater Permit.
- To reflect any revisions to applicable federal, state, or local requirements that affect the control measures implemented at the site.
- If approved by the Secretary, to reflect any changes in chemical water treatment systems or controls, including the use of a different water treatment chemical, age rates, different areas, or methods of application.

➢ **5.5 (2): Deadlines for SWPPP Modification**

Any required revisions to the SWPPP must be completed within 7 calendar days following any of the items listed above.

➢ **5.5 (3): Documentation of Modifications to the Plan**

All SWPPP modification records are required to be maintained showing the dates of when the modification occurred. The records must include the name of the person authorizing each change and a brief summary of all changes.

➢ **5.5 (4): Certification Requirements**

All modifications made to the SWPPP must be signed and certified as required in Section 7.4.

➢ **5.5 (5): Required Notice to Other Operators**

If there are multiple operators at the site, the Contractor's Erosion Control Supervisor must notify each operator that may be impacted by the change to the SWPPP within 24 hours.

When modifications as described above occur, the SWPPP will be modified to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP using the DOT 298 form and drawings on the plan will be modified to reflect the needed changes. Copies of the DOT 298 forms and the SWPPP will be retained on site in a designated place for review throughout the course of the project. A copy of the DOT 298 form will be given to the Contractor Erosion Control Supervisor and a copy will be emailed to the SDDOT Environmental Section in accordance with the DOT 298 Form.

SEQUENCE OF OPERATIONS

US 212 MRM 14.74 to 15.20 (PCN i7VR)
The Contractor will utilize Standard Plates 634.03 & 634.23 on US 212 and 634.29 on Marvin Rd to complete this work.

SD 34 MRM 9.66 to 10.00 (PCN i7VQ)
The Contractor will utilize Standard Plates 634.03 & 634.23 on SD 34 and 634.01 on US 85 to complete this work.

Interstate 90 Exit 2, Red Hill Rd (PCN i7VP)
The Contractor will utilize Standard Plates 634.03 & 634.23 on Red Hill Rd and 634.01 on the Interstate off ramps to complete this work.

Interstate 90 MRM 21.5 (PCN i7VP)
The Contractor will utilize Standard Plates 634.61 & 634.63 to complete this work.

If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

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

All temporary speed limit signs will have a minimum mounting height of 5 feet in rural locations, even when mounted on portable supports.

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

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

A Type 3 Barricade will be installed at the end of a lane closure taper as detailed in these plans.

Construction vehicles will exit or enter the construction work zone at locations identified by the Engineer. At no time will construction vehicles utilize the maintenance crossovers or the Interstate median to exit or enter Interstate traffic.

LANE CLOSURES

Interstate lane closures will be removed when work will not be occurring for a period of 3 or more calendar days. Activities that do not involve workers being present, such as curing time for concrete, constitute work. Lane closures will not be set up on a Friday if no work will be occurring on Saturday or Sunday. In these cases, the lane closure will be installed on Monday.

FLAGGING

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

WORK ZONE SPEED REDUCTION

The Department is required to obtain a speed reduction resolution prior to the installation of any SPEED LIMIT (R2-1) signs shown on standard plate 634.63. To provide adequate time for the resolution to be enacted, the Contractor will inform the Engineer a minimum of 3 weeks prior to the scheduled installation of any work zone speed reduction signs on the project. The information provided by the Contractor will include the anticipated date of sign installation, the newly reduced speed limit, the location of the work zone, and the anticipated completion date of work requiring the speed reduction.

CONTRACTOR FURNISHED SPEED MONITORING RADAR TRAILER

The Contractor will provide 1 radar speed feedback trailers to monitor traffic speeds on designated routes at locations specified in the field by the Engineer.

The radar speed feedback sign assembly will include a speed limit sign mounted in conjunction with the radar speed feedback display. The speed display will not flash vehicle speeds exceeding the speed limit or any other messages.

All costs associated with furnishing, maintaining, transporting, relocating if necessary, and removing the radar speed feedback trailers from locations specified by the Engineer will be incidental to the contract unit price per each for "Contractor Furnished Speed Monitoring Radar Trailer".

PRESS RELEASE ANNOUNCEMENTS

The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide the Engineer with pertinent information 7 days prior to any phase change or any other major change that affects traffic flow.

TRAFFIC CONTROL SIGN TABLES

US 212 MRM 14.74 to 15.20 (PCN i7VR)

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R11-2	ROAD CLOSED	2	48" x 30"	10.0	20.0
R11-3a	ROAD CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY	1	60" x 30"	12.5	12.5
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-2	DETOUR AHEAD	1	48" x 48"	16.0	16.0
W20-3	ROAD CLOSED AHEAD	1	48" x 48"	16.0	16.0
W20-4	ONE LANE ROAD AHEAD	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	6	36" x 18"	4.5	27.0
M4-8	DETOUR	3	24" x 12"	2.0	6.0
M4-10	DETOUR ARROW (L or R)	2	48" x 18"	6.0	12.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			365.5

SD 34 MRM 9.66 to 10.00 (PCN i7VQ)

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	5	48" x 48"	16.0	80.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	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	4	36" x 18"	4.5	18.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			194.0

TRAFFIC CONTROL SIGN TABLES, CONTINUED

Interstate 90 (PCN i7VP)

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD				EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R2-1	SPEED LIMIT __		24" x 30"	5.0		6	36" x 48"	12.0	72.0
W3-5	SPEED REDUCTION AHEAD (__ MPH)		48" x 48"	16.0		3	48" x 48"	16.0	48.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)		48" x 48"	16.0		2	48" x 48"	16.0	32.0
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0	6	48" x 48"	16.0	96.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0		48" x 48"	16.0	
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0		48" x 48"	16.0	
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0		48" x 48"	16.0	
W21-5a	LEFT or RIGHT SHOULDER CLOSED		48" x 48"	16.0		2	48" x 48"	16.0	32.0
W21-5b	LEFT or RIGHT SHOULDER CLOSED AHEAD		48" x 48"	16.0		2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	4	36" x 18"	4.5	18.0	1	48" x 24"	8.0	8.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			178.0	EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT			320.0

HORIZONTAL ALIGNMENT DATA

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	14/29

SD 34

Type	Station			Northing	Easting
POB	0+00.000			321829.423	962196.556
		TL= 1191.541	N68°49'12"W		
PI	11+91.541			321398.920	963307.608
		TL= 1364.269	N68°42'16"W		
PC	25+55.810			320903.449	964578.725
PI	28+43.871	R = 794.283	Delta = 39°52'05" R	320798.832	964847.117
PT	31+08.496			320546.491	964986.052
		TL= 42.089	N28°50'11"W		
POE	31+50.585			320509.621	965006.352

SD 34, Ditch 1

Type	Station			Northing	Easting
POB	0+00.000			321485.654	962923.943
		TL= 390.059	110°41'59"		
POE	3+90.059			321347.780	963288.822

SD 34, Ditch 2

Type	Station			Northing	Easting
POB	0+00.000			321371.340	963016.216
		TL= 88.897	22°36'22"		
POE	0+88.897			321453.407	963050.388

US 212

Type	Station			Northing	Easting
POB	0+00.000			332540.478	972226.159
		TL= 2454.663	N73°19'50"W		
PC	24+54.663			331836.346	974577.718
PI	27+38.504	R = 849.063	Delta = 36°58'10" R	331754.926	974849.630
PT	30+02.511			331526.351	975017.912
		TL= 86.444	N36°21'40"W		
POE	30+88.955			331456.613	975069.255

US 212, Wetland Inlet Channel

Type	Station			Northing	Easting
POB	0+00.000			331419.186	974651.959
		TL= 37.807	54°26'13"		
PI	0+37.807			331441.174	974682.714
		TL= 181.413	48°37'33"		
POE	2+19.219			331561.083	974818.847

Exit 2, West Ditch

Type	Station			Northing	Easting
POB	0+00.000			285398.958	922902.755
		TL= 98.544	03°49'56"		
PI	0+98.544			285497.282	922909.341
		TL= 87.463	00°48'44"		
PI	1+86.007			285584.736	922910.581
		TL= 58.680	05°48'16"		
PI	2+44.687			285643.115	922916.516
		TL= 66.133	00°05'54"		
PI	3+10.820			285709.248	922916.629
		TL= 223.601	02°32'17"		
PI	5+34.421			285932.630	922926.531
		TL= 69.236	07°10'57"		
PI	6+03.657			286001.323	922935.187
		TL= 57.892	357°12'31"		
PI	6+61.549			286059.146	922932.368
		TL= 74.750	350°46'42"		
PI	7+36.299			286132.930	922920.389
		TL= 60.937	356°35'08"		
PI	7+97.236			286193.759	922916.760
		TL= 126.062	356°23'56"		
POE	9+23.298			286319.572	922908.842

Exit 2, East Ditch

Type	Station			Northing	Easting
POB	0+00.000			285408.158	923019.149
		TL= 175.610	01°12'31"		
PI	1+75.610			285583.729	923022.853
		TL= 116.470	03°18'42"		
PI	2+92.081			285700.005	923029.581
		TL= 232.755	02°40'43"		
PI	5+24.836			285932.506	923040.459
		TL= 118.008	02°54'19"		
PI	6+42.844			286050.362	923046.440
		TL= 81.666	01°08'45"		
PI	7+24.510			286132.012	923048.073
		TL= 178.294	00°28'14"		
POE	9+02.804			286310.300	923049.538

I90 MRM 21.5

Type	Station			Northing	Easting
POB	0+00.000			257625.104	1007717.647
		TL= 471.114	N71°52'59"W		
PI	4+71.114			257478.607	1008165.404
		TL= 329.200	N72°56'29"W		
POE	8+00.314			257382.035	1008480.121

CONTROL DATA

US212 & SD34 Control Data				
POINT	**DESCRIPTION**	**NORTHING**	**EASTING**	**ELEVATION**
BF24	CP-Rebar W/Cap	321168.555	961867.875	3157.247
AD9009	CP- Harn	331941.197	975612.715	3056.95
CP3	CP-Rebar W/Cap	321057.455	964478.368	3123.992

The coordinates shown above are based on the South Dakota State Plane Coordinate System. North Zone (NAD 83/2011); epoch 2010.00; GEOID18; SF = 0.9998166253. The elevations shown on this sheet are based on NAVD 88.

I90 Exit 2 Control Data				
POINT	**DESCRIPTION**	**NORTHING**	**EASTING**	**ELEVATION**
I90-2.39	REFMRK-Frost	286001.483	923891.199	3471.985
EXIT2	REFMRK-Rebar	286395.014	922900.016	3451.048
C2	REFMRK-Rebar	285802.939	923049.244	3472.494

The coordinates shown above are based on the South Dakota State Plane Coordinate System. North Zone (NAD 83/2011); epoch 2010.00; GEOID12A; SF = 0.999927196. The elevations shown on this sheet are based on NAVD 88.

I90 MRM 21.5 Control Data				
POINT	**DESCRIPTION**	**NORTHING**	**EASTING**	**ELEVATION**
I90 19.58	REFMRK-Brass	261077.155	998984.374	3694.348
I90 20.97	REFMRK-Brass	258671.647	1005745.385	3779.516
CP21.5	REFMRK-Spk Behind Guardrail	257464.599	1008278.200	3850.374

The coordinates shown above are based on the South Dakota State Plane Coordinate System. North Zone (NAD 83/2011); epoch 2010.00; GEOID12A; SF = 0.999915196. The elevations shown on this sheet are based on NAVD 88.

LEGEND

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	16/29

Plotting Date: 5/2/2025

- Anchor
- Antenna
- Approach
- Assumed Corner
- Azimuth Marker
- BBQ Grill/ Fireplace
- Bearing Tree
- Bench Mark
- Box Culvert
- Bridge
- Brush
- Buildings
- Bulk Tank
- Cattle Guard
- Cemetery
- Centerline
- Cistern
- Clothes Line
- Control Point
- Commercial Sign Double Face
- Commercial Sign One Post
- Commercial Sign Overhead
- Commercial Sign Two Post
- Concrete Symbol
- Creek Edge
- Curb/Gutter
- Curb
- Dam Grade/Dike/Levee
- Deck Edge
- Ditch Block
- Doorway Threshold
- Drainage Profile
- Drop Inlet
- Edge Of Asphalt
- Edge Of Concrete
- Edge Of Gravel
- Edge Of Other
- Edge Of Shoulder
- Elec. Trans./Power Jct. Box
- Fence Barbwire
- Fence Chainlink
- Fence Electric
- Fence Misc.
- Fence Rock
- Fence Snow
- Fence Wood
- Fence Woven
- Fire Hydrant
- Flag Pole
- Flower Bed
- Gas Valve Or Meter
- Gas Pump Island
- Grain Bin
- Guardrail
- Guide Sign One Post
- Guide Sign Two Post
- Gutter
- Guy Pole
- Haystack
- Hedge
- Highway ROW Marker
- Interstate Close Gate
- Iron Pin
- Irrigation Ditch
- Lake Edge
- Lawn Sprinkler
- Mailbox
- Manhole Electric
- Manhole Gas
- Manhole Misc
- Manhole Sanitary Sewer
- Manhole Storm Sewer
- Manhole Telephone
- Manhole Water
- Merry-Go-Round
- Microwave Radio Tower
- Misc. Line
- Misc. Property Corner
- Misc. Post
- Overhang Or Encroachment
- Overhead Utility Line — OH —
- Parking Meter
- Pedestrian Push Button Pole
- Pipe With End Section
- Pipe With Headwall
- Pipe Without End Section
- Playground Slide
- Playground Swing
- Power And Light Pole
- Power And Telephone Pole
- Power Meter
- Power Pole
- Power Pole And Transformer
- Power Tower Structure
- Propane Tank
- Property Pipe
- Property Pipe With Cap
- Property Stone
- Public Telephone
- Railroad Crossing Signal
- Railroad Milepost Marker
- Railroad Profile
- Railroad R.O.W. Marker
- Railroad Signs
- Railroad Switch
- Railroad Track
- Railroad Trestle
- Rebar
- Rebar With Cap
- Reference Mark
- Regulatory Sign One Post
- Regulatory Sign Two Post
- Retaining Wall
- Riprap
- River Edge
- Rock And Wire Baskets
- Rockpiles
- Satellite Dish
- Septic Tank
- Shrub Tree
- Sidewalk
- Sign Face
- Sign Post
- Slough Or Marsh
- Spring
- Stream Gauge
- Street Marker
- Subsurface Utility Exploration Test Hole
- Telephone Fiber Optics — T/F —
- Telephone Junction Box
- Telephone Pole
- Television Cable Jct Box
- Television Tower
- Test Wells/Bore Holes
- Traffic Signal
- Trash Barrel
- Tree Belt
- Tree Coniferous
- Tree Deciduous
- Tree Stumps
- Triangulation Station
- Underground Electric Line — P —
- Underground Gas Line — G —
- Underground High Pressure Gas Line — HG —
- Underground Sanitary Sewer — S —
- Underground Storm Sewer — S —
- Underground Tank
- Underground Telephone Line — T —
- Underground Television Cable — TV —
- Underground Water Line — W —
- Warning Sign One Post
- Warning Sign Two Post
- Water Fountain
- Water Hydrant
- Water Meter
- Water Tower
- Water Valve
- Water Well
- Weir Rock
- Windmill
- Wingwall
- Witness Corner

- State and National Line
- County Line
- Section Line
- Quarter Line
- Sixteenth Line
- Sixty-Fourth Line
- Property Line
- Construction Line
- ROW Line
- New ROW Line
- Cut and Fill Limits
- Control of Access
- New Control of Access
- Proposed ROW (After Property Disposal)

- Drainage Arrow

- Remove Concrete Pavement
- Remove Concrete Driveway Pavement
- Remove Asphalt Concrete Pavement
- Salvage Asphalt Concrete Pavement
- Remove Concrete Sidewalk
- Remove Concrete Median Pavement
- Remove Concrete Curb and/or Gutter

- Detectable Warning Pedestrian Push Button Pole and 30" x 48" Clear Space with 1.5% slope

US 212 MRM 14.74 to 15.20 (PCN i7VR)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	17/29

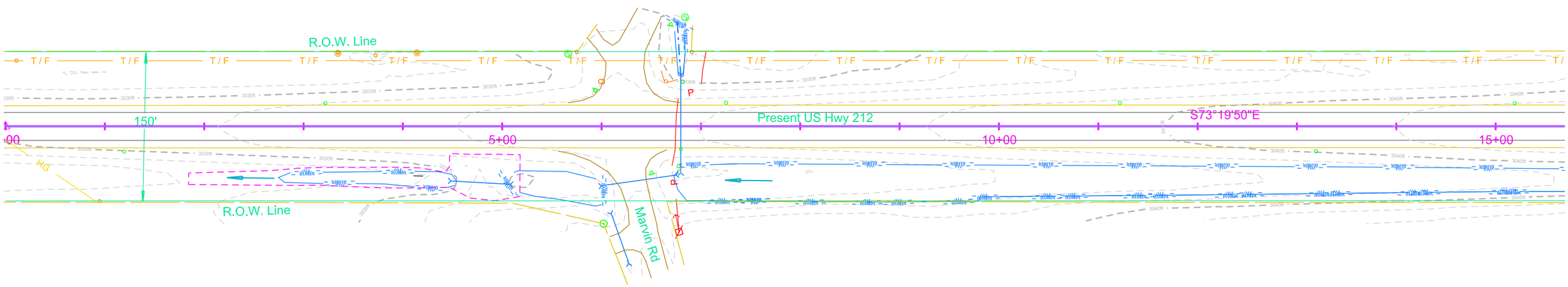
Plotting Date: 5/2/2025

US 212
4+44 R to 5+18 R
Take Out Approach
& 18"-60' CMP
& 2 End Sections
(Incidental Work, Grading)

US 212
1+85 R to 5+18 R
Reprofile Ditch (3.34 Sta.)

US 212
6+08 R to 6+71 R
Take Out 76' CMP
& 2 End Sections
(Incidental Work, Grading)

US 212
6+80 R to 15+68 R
Clear Ditch of Vegetation
(Clearing)



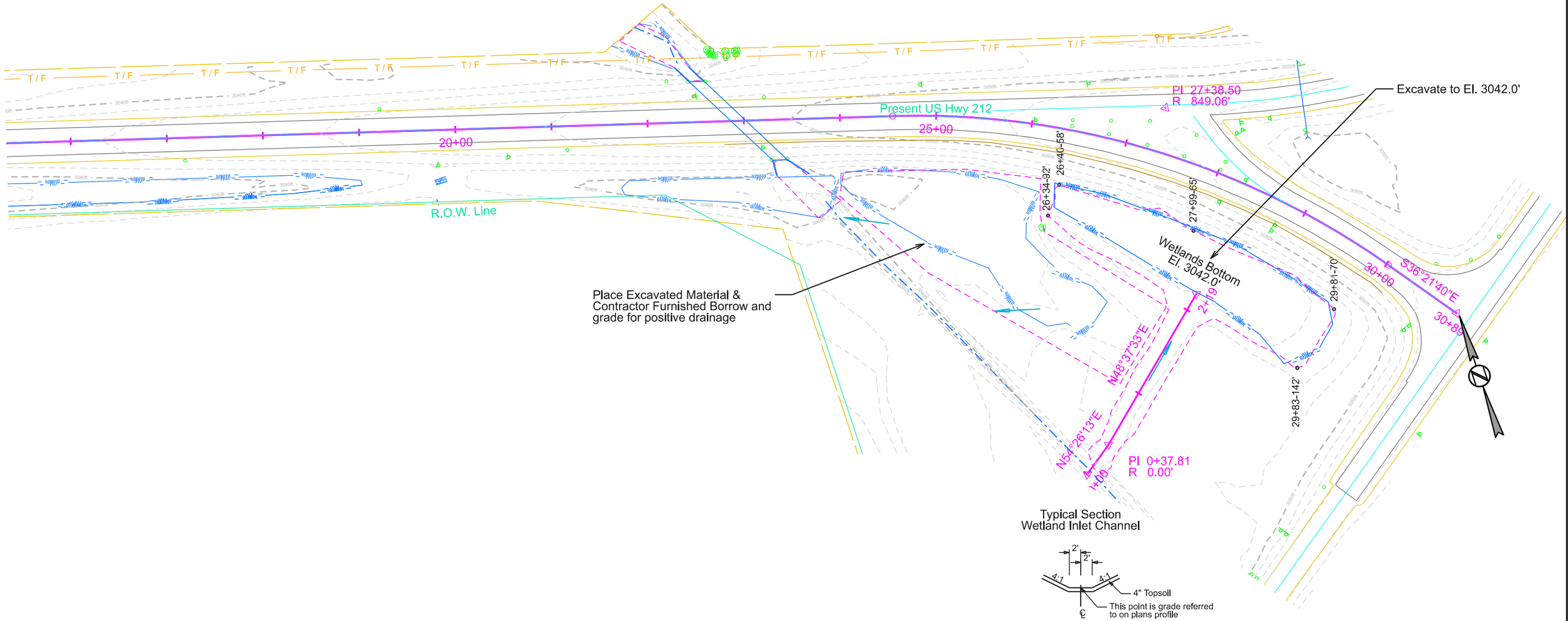
US 212 MRM 14.74 to 15.20 (PCN i7VR)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	18/29

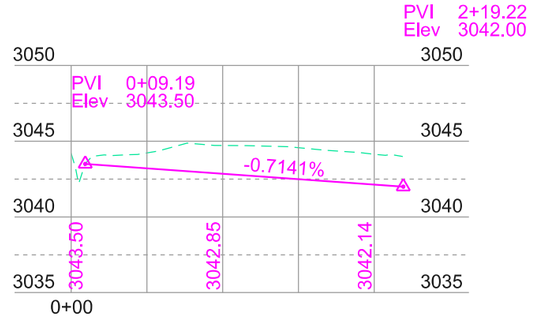
Plotting Date: 5/2/2025

US 212
15+68 R to 19+00 R
Clear Ditch of Vegetation
(Clearing)

US 212
22+93 L/R
RCBC Inlet/Oulet Cleanout
Incidental Work, Grading



Typical Section
Wetland Inlet Channel



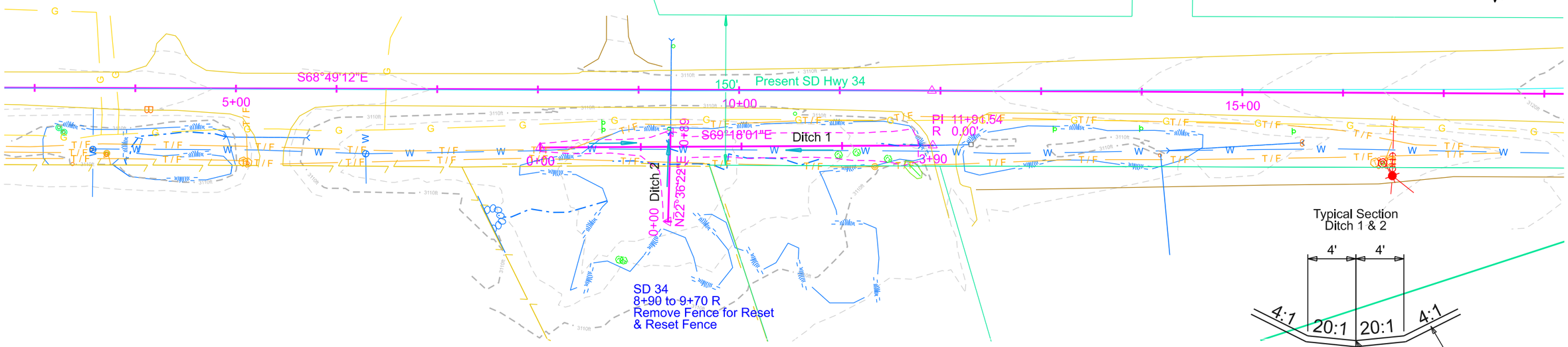
SD 34 MRM 9.66 to 10.00 (PCN i7VQ)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	19/29

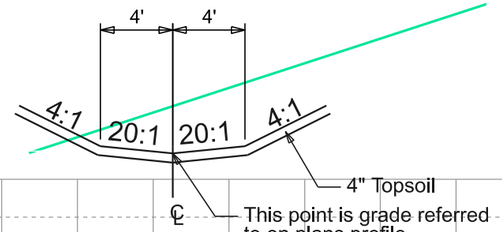
Plotting Date: 5/2/2025

SD 34
11+80 R to 12+32 R
Pipe Culvert Cleanout
(100% Plugged)

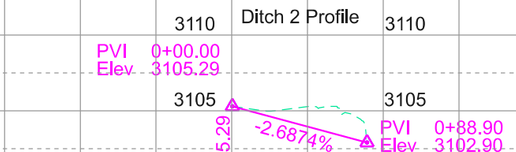
SD 34
12+25 R to 14+60 R
Clear Vegetation from Ditch
(Clearing)



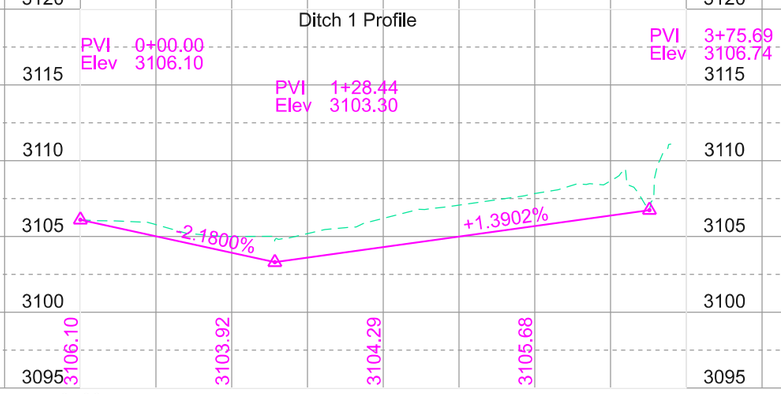
Typical Section
Ditch 1 & 2



Ditch 2 Profile



Ditch 1 Profile



SD 34 MRM 9.66 to 10.00 (PCN i7VQ)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	20/29

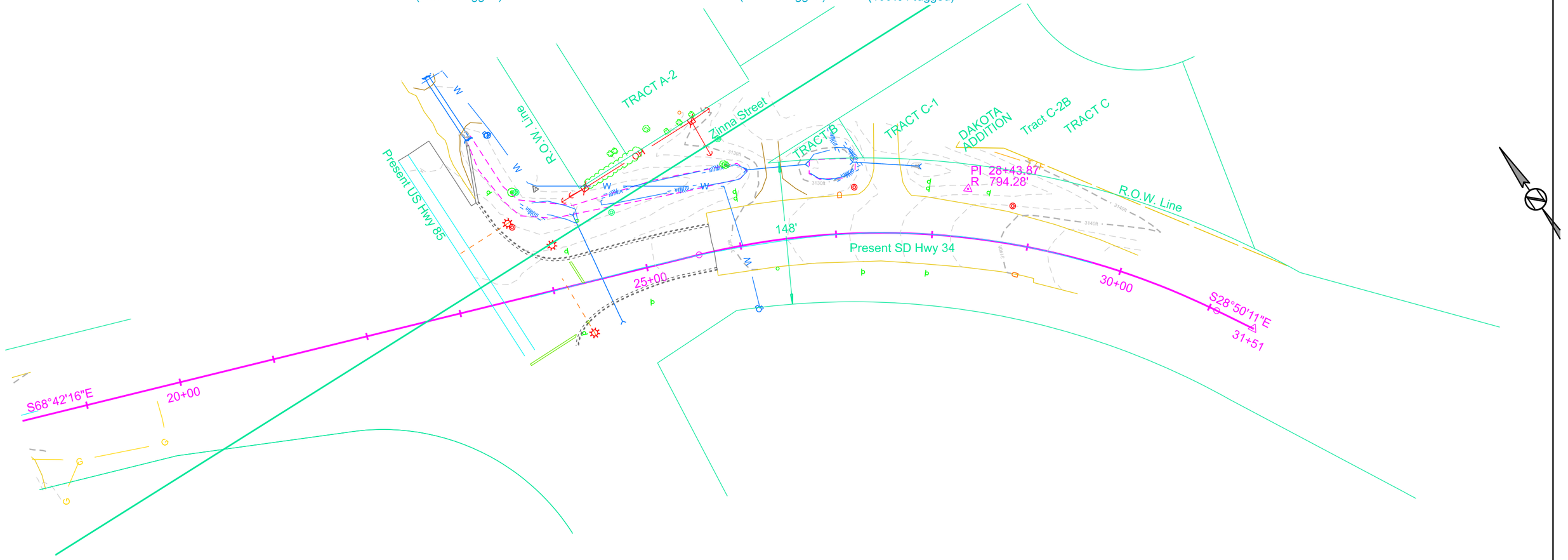
Plotting Date: 5/2/2025

SD34
23+75 - 174' L
Pipe Culvert Cleanout (2)
(100% Plugged)

SD34
23+50 L to 27+20 L
Reprofile Ditch (4.5 Sta)

SD34
26+20 to 26+75 L
Pipe Culvert Cleanout
(100% Plugged)

SD34
27+20 to 27+83 L
Pipe Culvert Cleanout
(100% Plugged)



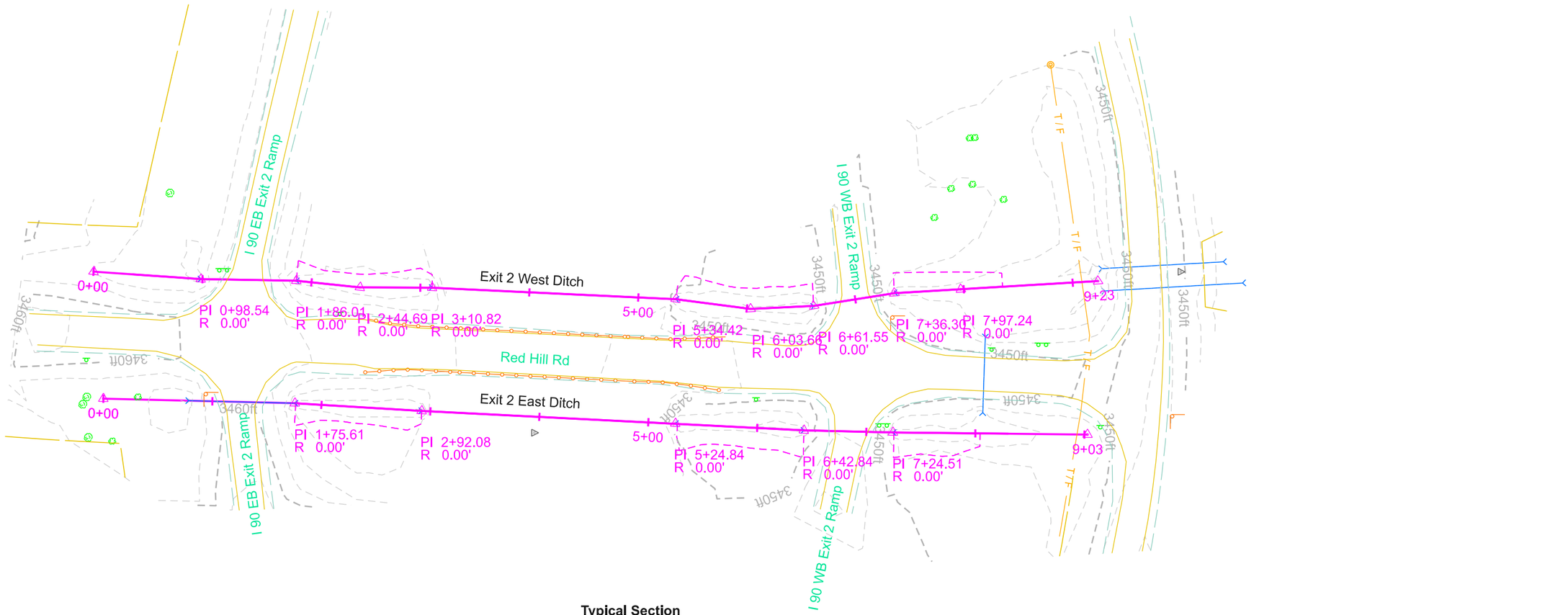
I90 Exit 2, Red Hill Rd (PCN i7VP)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	21/29

Plotting Date: 5/2/2025

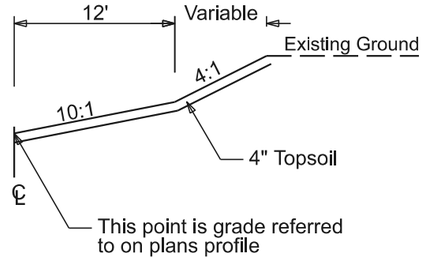
East Ditch
0+00 to 0+78
Clear Ditch of Vegetation
(Clearing)

East Ditch
8+05 to 9+02
Clear Ditch of Vegetation
(Clearing)



Typical Section
West Ditch (Reversed)
1+86 to 3+11
5+34 to 6+61
7+36 to 8+35

East Ditch
1+76 to 2+92
5+26 to 6+42
7+25 to 8+04

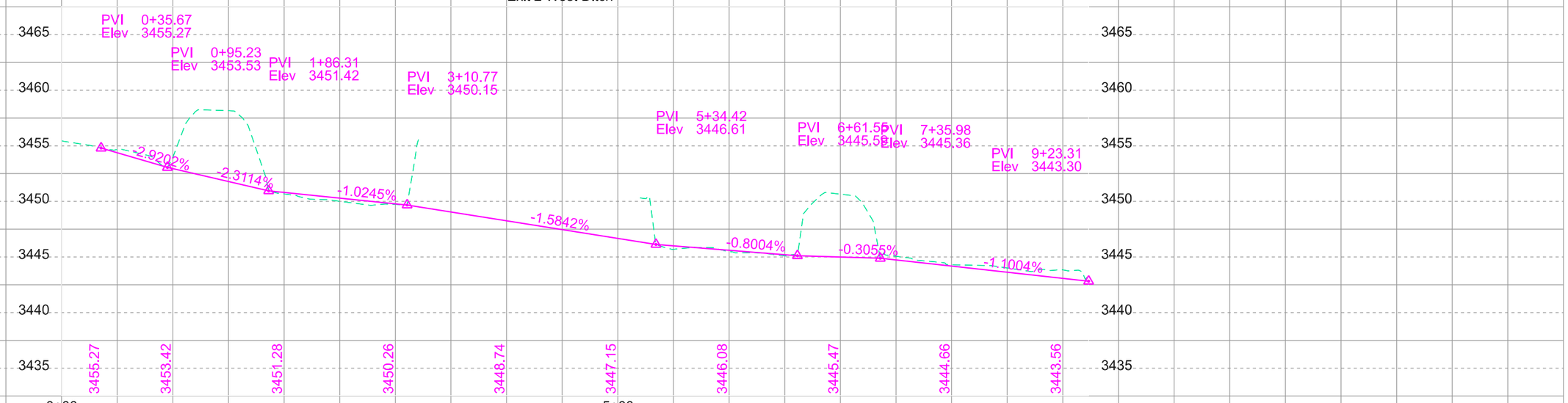


I90 Exit 2, Red Hill Rd (PCN i7VP)

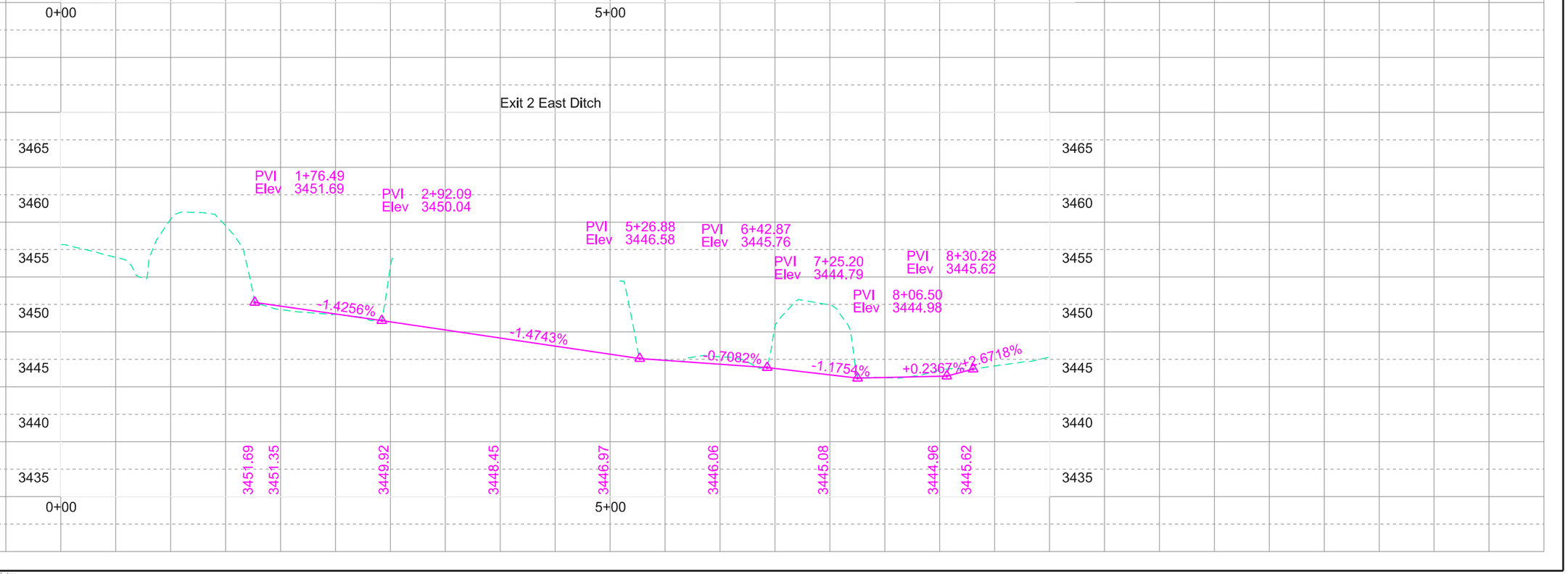
SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	22/29

Plotting Date: 5/2/2025

Exit 2 West Ditch



Exit 2 East Ditch



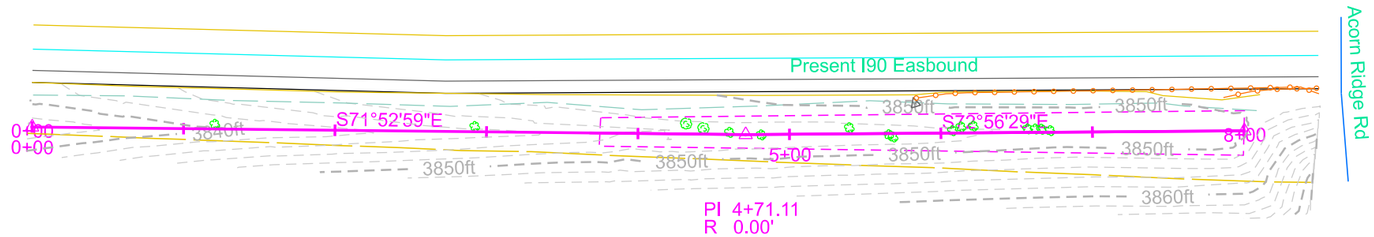
I90 MRM 21.5 (PCN i7VP)

SD DOT	PROJECT	SECTION	SHEET
	212-471 & 034-471 & 090 E-451	Non	23/29

Plotting Date: 5/2/2025

I90 EB Ditch
1+20 to 8+00
Clear Ditch of Trees & Vegetation
(Clearing)

I90 EB Ditch
3+70 to 8+00
Reprofile Ditch (4.30 Sta.)



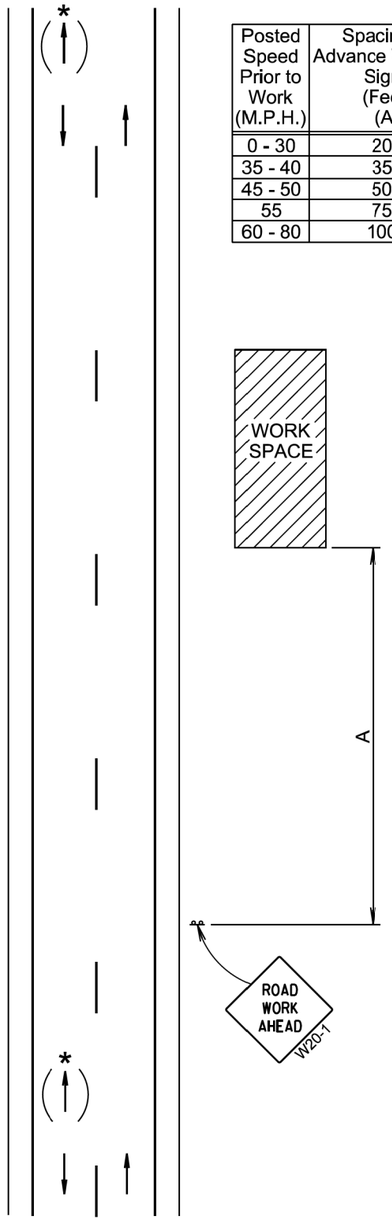
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

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

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

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

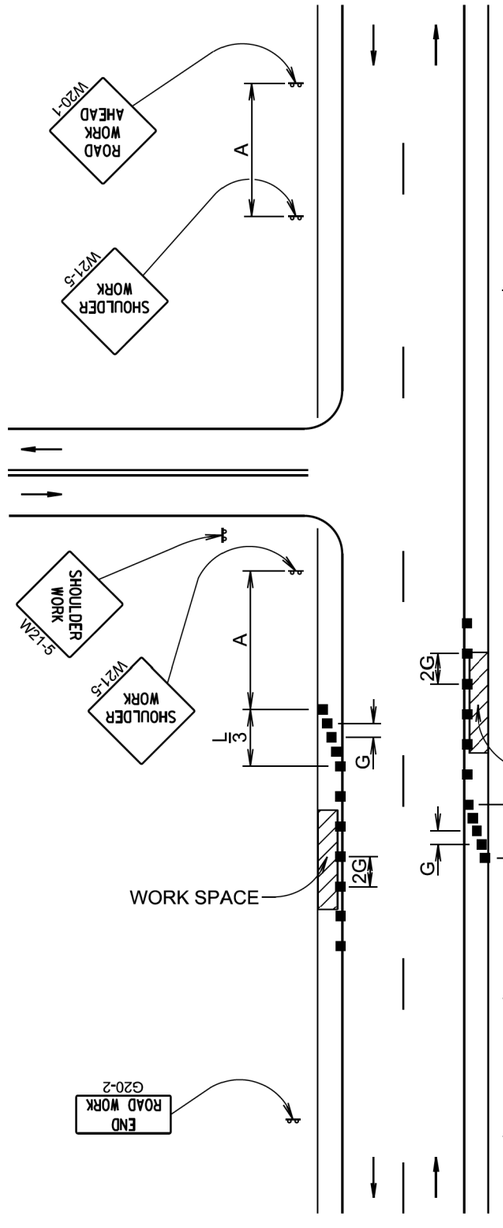
For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



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

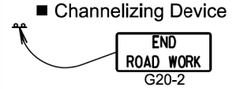
January 22, 2021

Published Date: 2025	SDDOT	WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01 Sheet 1 of 1



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

■ Channelizing Device



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

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

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

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

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

January 22, 2021

Published Date: 2026	SDDOT	WORK ON SHOULDERS	PLATE NUMBER 634.03 Sheet 1 of 1

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

Flagger

Channelizing Device

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

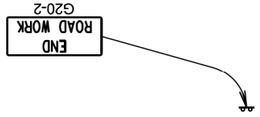
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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

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

The channelizing devices will be drums or 42" cones.

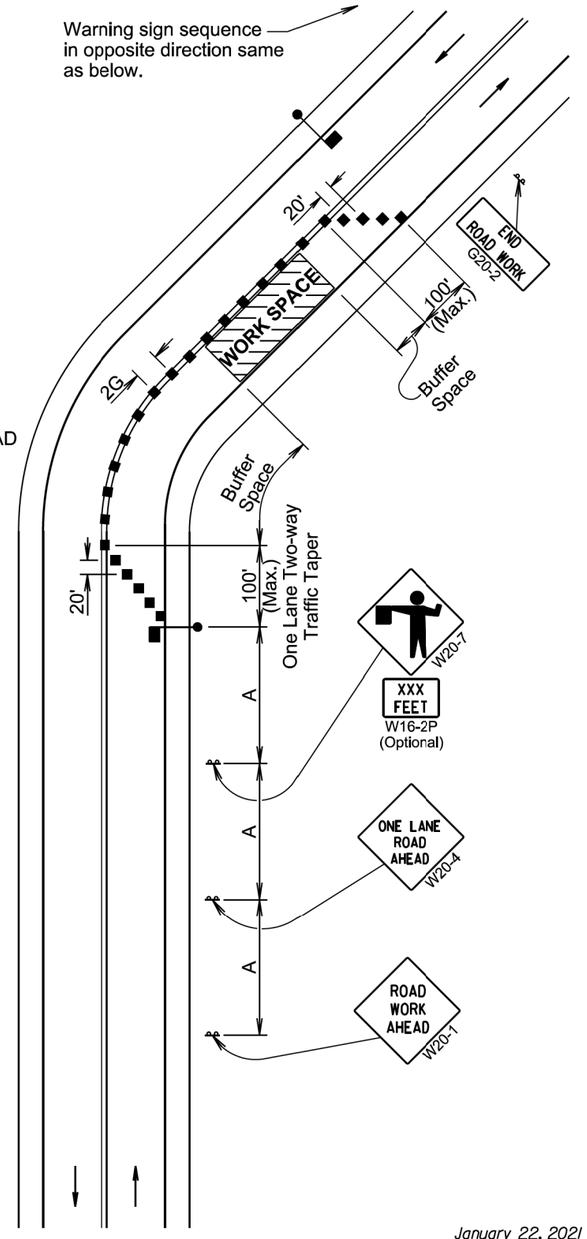
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



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

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

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



January 22, 2021

Published Date: 2025	SDDOT	LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1

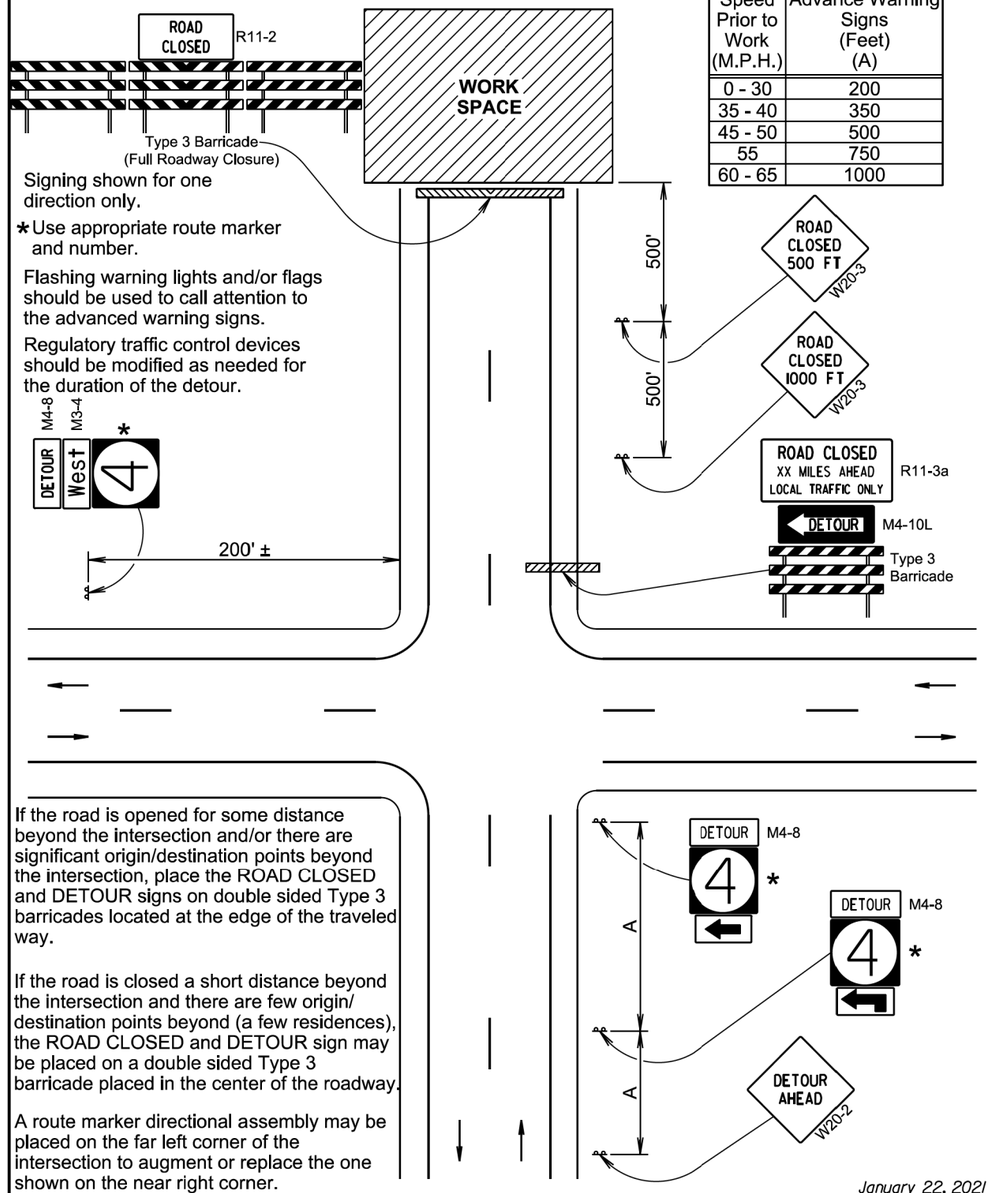
Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 65	1000

Signing shown for one direction only.

* Use appropriate route marker and number.

Flashing warning lights and/or flags should be used to call attention to the advanced warning signs.

Regulatory traffic control devices should be modified as needed for the duration of the detour.



If the road is opened for some distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, place the ROAD CLOSED and DETOUR signs on double sided Type 3 barricades located at the edge of the traveled way.

If the road is closed a short distance beyond the intersection and there are few origin/destination points beyond (a few residences), the ROAD CLOSED and DETOUR sign may be placed on a double sided Type 3 barricade placed in the center of the roadway.

A route marker directional assembly may be placed on the far left corner of the intersection to augment or replace the one shown on the near right corner.

January 22, 2021

Published Date: 2026	SDDOT	ROAD CLOSED WITH OFF-SITE DETOUR	PLATE NUMBER 634.29
			Sheet 1 of 1

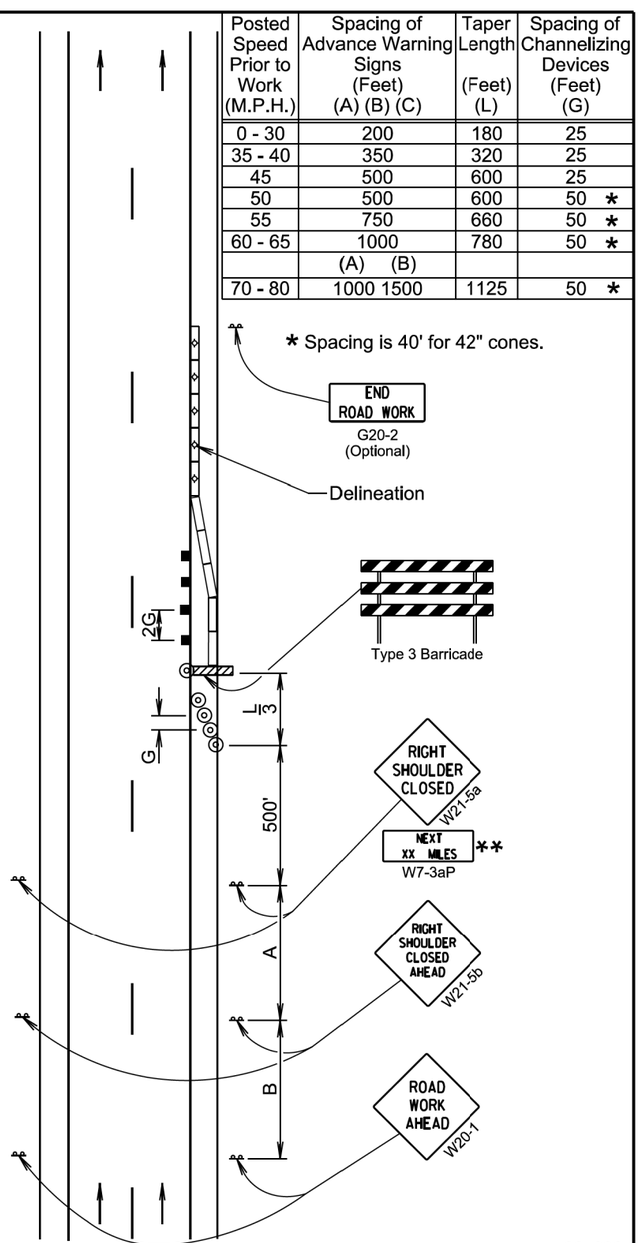
◎ Reflectorized Drum
■ Channelizing Device
▭ Movable Concrete Barrier
** For distances ½ mile or greater.

42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

This standard plate shows one method which may be used to close a shoulder of a roadway for a long term project. The Engineer will determine if the use of barriers is required. If barriers are required, the layout details will be included elsewhere in the plans.

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A) (B) (C)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50 *
55	750	660	50 *
60 - 65	1000	780	50 *
	(A) (B)		
70 - 80	1000 1500	1125	50 *

* Spacing is 40' for 42" cones.



January 22, 2021

Published Date: 2026 | SDDOT | SHOULDER CLOSED | PLATE NUMBER 634.61 | Sheet 1 of 1

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A) (B) (C)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 65	1000
	(A) (B) (C)
70 - 80	1000 1500 2640

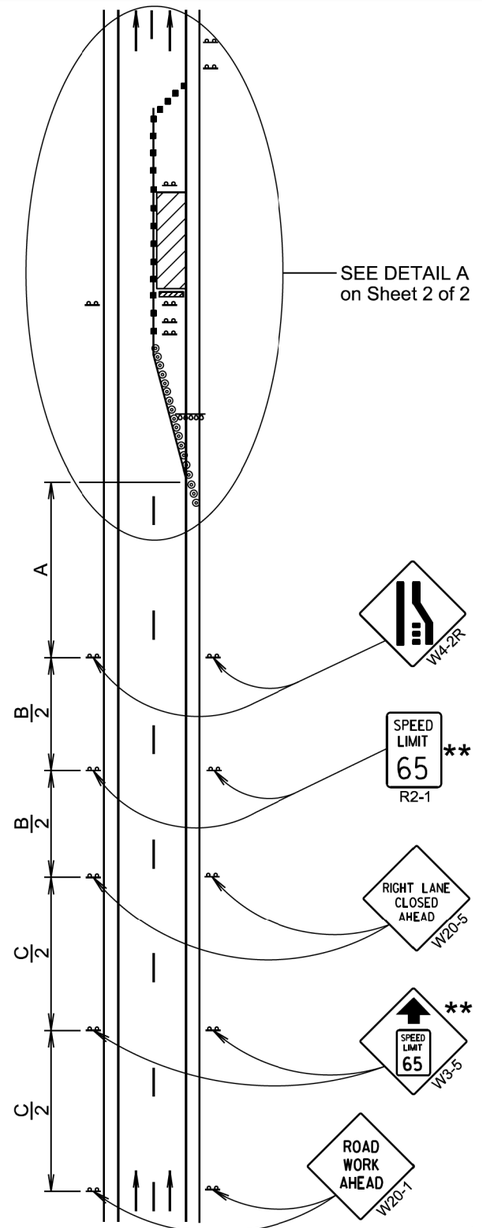
** Speed appropriate for location.

◎ Reflectorized Drum

■ Channelizing Device

ROAD WORK AHEAD sign is only required in advance of the first lane closure.

High speed is defined as having a posted speed limit greater than 45 mph.



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Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)	Taper Length (Feet) (L)
0 -30	25	180
35 - 40	25	320
45	25	600
50	50 *	600
55	50 *	660
60 - 65	50 *	780
70 - 80	50 *	960

* Spacing is 40' for 42" cones.

** Speed appropriate for location.

*** Use speed limit designated for the condition when workers are present in the work space. Signs will be covered or removed when workers are not present.

◎ Reflectorized Drum

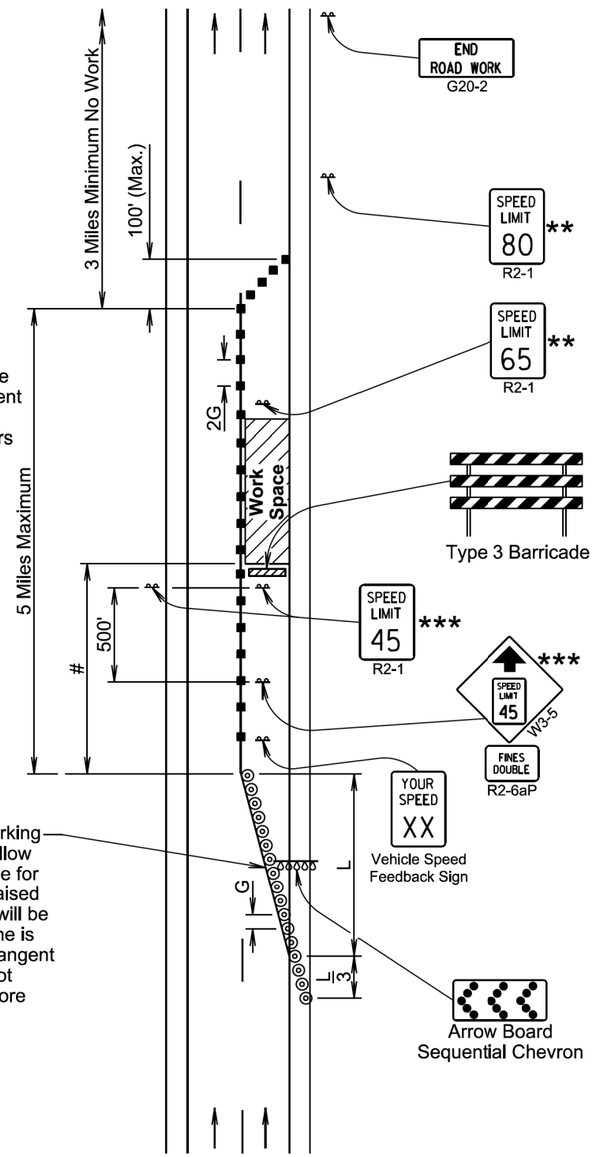
■ Channelizing Device

The Work Space will be a minimum of 500' from the end of the taper.

The channelizing devices will be 42" cones or drums.

42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

4" white temporary pavement marking tape for right lane closures, 4" yellow temporary pavement marking tape for left lane closures, or temporary raised pavement markers at 5' spacing will be installed in the taper when the lane is closed overnight, and along the tangent section where the skip lines do not exist and the lane is closed for more than 3 days.



DETAIL A

April 8, 2025

Published Date: 2026

SDDOT

WORK ZONE SPEED REDUCTION FOR INTERSTATE AND HIGH SPEED MULTI-LANE HIGHWAYS

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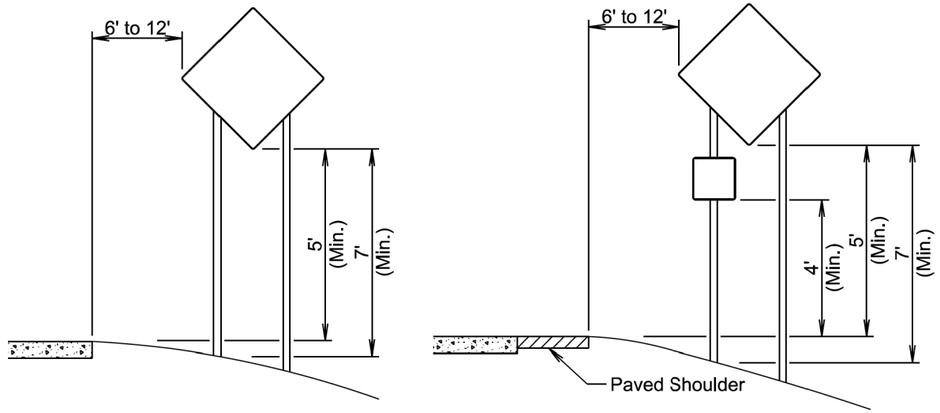
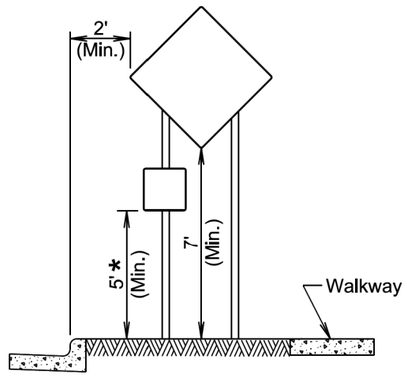
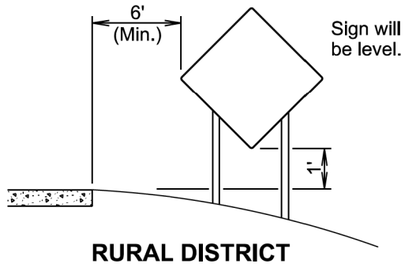


RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT



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

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

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CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)

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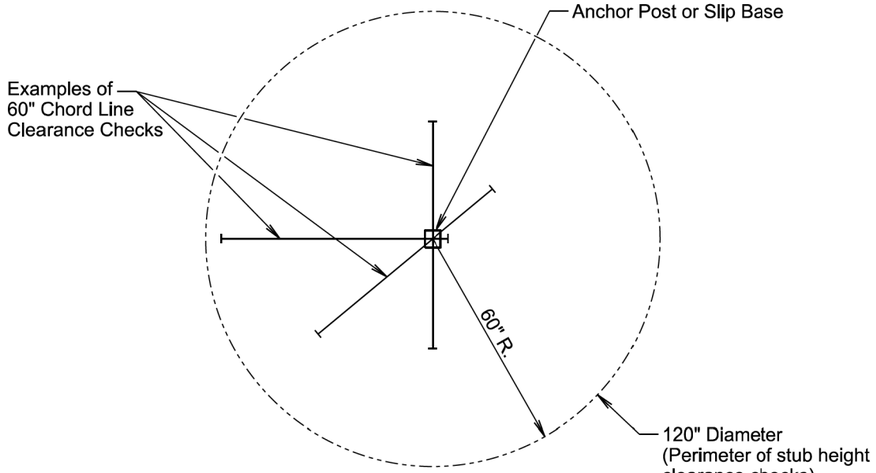
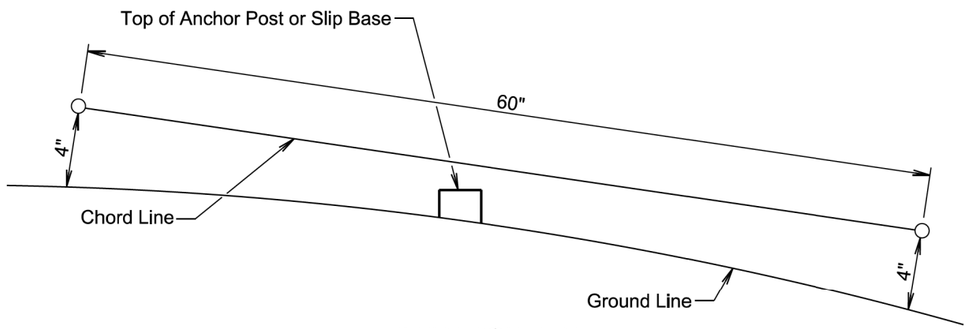
Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

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

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

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

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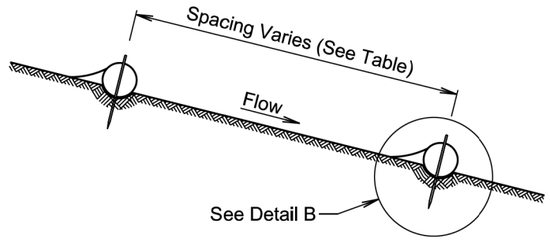
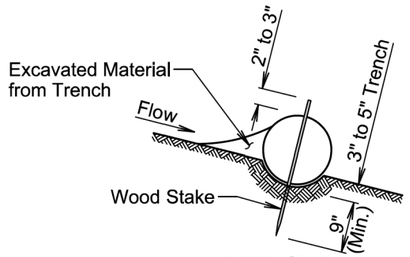
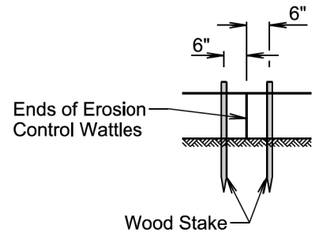


ELEVATION VIEW
(Cut or Fill Slope Installation)

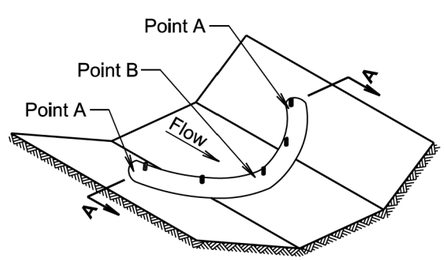
CUT OR FILL SLOPE INSTALLATION	
Slope	Spacing (Ft.)
1:1	10
2:1	20
3:1	30
4:1	40



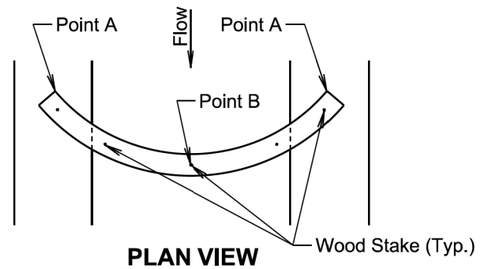
DETAIL B
(Typical of All Installations)



DETAIL C
(See General Notes)

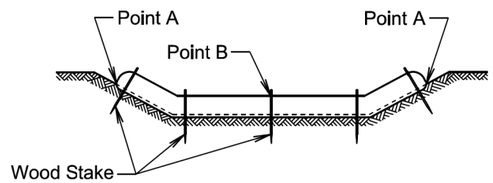


ISOMETRIC VIEW
(Ditch Installation)



PLAN VIEW
(Ditch Installation)

DITCH INSTALLATION	
Grade	Spacing (Ft.)
2%	150
3%	100
4%	75
5%	50



SECTION A-A

February 14, 2020

Published Date: 2025	SDDOT	EROSION CONTROL WATTLE	PLATE NUMBER 734.06 Sheet 1 of 2

GENERAL NOTES:

At cut or fill slope installations, wattles will be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor will dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes will be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes will be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles will be 3' to 4'.

Where installing running lengths of wattles, the Contractor will butt the second wattle tightly against the first and will not overlap the ends. See Detail C.

The Contractor and Engineer will inspect the erosion control wattles in accordance with the storm water permit. The Contractor will remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

Sediment removal, disposal, or necessary shaping will be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping will be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials will be incidental to the contract unit price per foot for the corresponding erosion control wattle contract item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials will be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

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