

March 15, 2023

ADDENDUM NO. 1

**RE: Item #2, March 22, 2023 Letting - P 6403(10), PCN 08P3, Pennington County - Grading,
Drainage, Base Course, Asphalt Concrete Surfacing**

TO WHOM IT MAY CONCERN:

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

SPECIAL PROVISIONS: Please remove the NOTICE TO CONTRACTORS, date 8/16/18 and replace with the attached NOTICE TO CONTRACTORS, dated 3/15/23.
Field Work Completion date changed from August 30, 2024 to September 13, 2024.

Please remove the Index of Special Provisions and replace with attached Index of Special Provisions revised 3/7/23.

Please remove the "Special Provision for Contract Time", dated 2/14/23 and replace with the "Special Provision for Contract Time", dated 3/7/23.

SDEBS BID PROPOSAL: *The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.*

Bid Items were added:

Bid Item 260E1030 "Base Course, Salvaged"

Quantities for Bid Items were changed:

Bid Item 260E1010 "Base Course" changed from 57,702.0 to 71,877.0 Ton

Bid Item 320E3000 "Compaction Sample" changed from 114 to 6 Each

Bid Item 630E2015 "W Beam Guardrail Flared End Terminal" changed from 8 to 10 Each

Bid Items were removed:

Bid item 630E2010 "W Beam Guardrail End Terminal"

PLANS: Please destroy sheets 2, 8, 14, 15, 26-28, 30-32, 126, & 127 and replace with the enclosed sheets, dated 3/14/2023.

Sheet 2: Bid Items were added:

Bid Item 260E1030 "Base Course, Salvaged"

Quantities for Bid Items were changed:

Bid Item 260E1010 "Base Course" changed from 57,702.0 to 71,877.0 Ton

Bid Item 320E3000 "Compaction Sample" changed from 114 to 6 Each

Bid Item 630E2015 "W Beam Guardrail Flared End Terminal" changed from 8 to 10
Each

Bid Items were removed:

Bid item 630E2010 "W Beam Guardrail End Terminal"

Sheet 8: COUNTY RESPONSIBILITIES note was added.

Sheet 14: RATES OF MATERIALS and SEQUENCE OF OPERATIONS notes were revised.

Sheet 15: SEQUENCE OF OPERATIONS note was revised.

Sheets 26-28: Typical Sections were revised.

Sheet 30: Phase 1 FIXED LOCATION SIGNING sheet was revised.

Sheet 31: Phase 2 FIXED LOCATION SIGNING sheet was revised.

Sheet 32: Phase 3 FIXED LOCATION SIGNING sheet was revised.

Sheets 126 & 127: Standard Plate 630.81 was removed, and Standard Plate 630.10 was added.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Todd Seaman, Rapid City Region Engineer
Mike Carlson, Rapid City Area Engineer

NOTICE TO CONTRACTORS

Bid proposals for this project will be prepared, transmitted, and received electronically by the South Dakota Department of Transportation (SDDOT) via the South Dakota Electronic Bid System until 10 A.M. Central time, on March 22, 2023, at which time the SDDOT will open bids. All bids will be checked for qualifications with results posted on the SDDOT website. The South Dakota Transportation Commission will consider all bids at a scheduled Commission meeting.

The work for which proposals are hereby requested is to be completed within the following requirement(s):

FIELD WORK COMPLETION: **SEPTEMBER 13, 2024**

CONSTRUCTION SCHEDULE / PROJECT MANAGEMENT:

The project category is Category III

The project type is Grading

The geographic zone is Zone 3

THE DBE GOAL FOR THIS PROJECT IS: **NOT SPECIFIED**

WORK TYPE FOR THIS PROJECT IS: **WORK TYPE 1**

Bidding package for the work may be obtained at:

<http://apps.sd.gov/hc65bidletting/ebslettings1.aspx#no-back-button>

An electronic version of the most recent version of the South Dakota Standard Specifications for Roads and Bridges may be obtained at <https://dot.sd.gov/doing-business/contractors/standard-specifications/2015-standard-specifications>

The electronic bid proposal must be submitted by a valid bidder as designated by their company's <https://apps.sd.gov/HC65C2C/EBS/BidAdminAuthorizationForm.pdf>. A bidding administrator will have privileges in the SDEBS to prepare bids, submit bids, and authorize additional company employees to prepare and submit bids. Additionally, a bidding administrator will be responsible for maintaining the list of authorized bidders for the company and will have the ability to add employees, remove employees, and set-up bidder identifications and passwords within the SDEBS. Bidding Administrator authorization will remain in full force and effect until written notice of termination of this authorization is sent by an Officer of the company and received by the Department.

A bidder identification and password, coupled with a company identification previously assigned by the Department, will serve as authentication that an individual is a valid bidder for the company.

REV 3/7/23

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): P 6403(10) **PCN:** 08P3

TYPE OF WORK: GRADING, DRAINAGE, BASE COURSE, ASPHALT CONCRETE SURFACING

COUNTY: PENNINGTON

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Kara Palmer is the official in charge of the Hot Springs Career Center for Pennington County.

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Special Provision for Contract Time, dated 3/7/23.

Special Provision for Prosecution and Progress, dated 1/21/21.

Special Provision Regarding Section 404 of the Clean Water Act, dated 2/21/23.

Fact Sheet #14.

Special Provision for Fire Plan, dated 5/8/14.

**Special Provision for Contractor Staking with Machine Control
Grading Option, dated 2/9/23.**

Special Provision for Restriction on Contracts with Prohibited Entities, dated 1/25/23.

Special Provision for Buy America, dated 1/20/23.

Special Provision for Liability Insurance, dated 4/21/22.

Special Provision for Responsibility for Damage Claims, dated 4/21/22.

Special Provision for Grass Seed Substitution, dated 2/9/23.

Special Provision for Restriction of Boycott of Israel, dated 1/31/20.

Special Provision for Contractor Administered Preconstruction Meeting, dated 12/18/19.

Fuel Adjustment Affidavit, DOT form 208 dated 7/15.

Standard Title VI Assurance, dated 3/1/16.

Special Provision For Disadvantaged Business Enterprise, dated 8/14/18.

Special Provision For EEO Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts, dated 9/1/97.

Special Provision For Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. July 5, 2022), dated 7/12/22.

Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. 7/5/22).

Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 10/24/19.

Wage and Hour Division US Department of Labor Washington DC. - US Dept. of Labor Decision Number SD180001, dated 4/6/18.

Special Provision for Supplemental Specifications to 2015 Standard Specifications for Roads and Bridges, dated 9/7/22.

Special Provision for Price Schedule for Miscellaneous Items, dated 10/7/20.

Special Provision Regarding Storm Water Discharge, dated 5/8/18.

General Permit for Storm Water Discharges Associated with Construction Activities, dated 4/1/18

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

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
CONTRACT TIME**

**PROJECT P 6403(10); PCN 08P3
PENNINGTON COUNTY**

MARCH 7, 2023

Tree Clearing Work

Tree clearing work may take place at any time during the contract (no spring start restrictions or interim completion date restrictions).

Phase 1 Work Restriction and Interim Completion Requirement

The Contractor will not begin work in the Phase 1 portion of the project prior to May 1, 2023.

The Contractor will complete all work in the Phase 1 portion of the project by the October 13, 2023 interim completion date. Interim completion date can be extended with written permission from the Area Engineer depending on favorable long range weather forecast.

All of Phase 1 and remaining grading work must have 8" of granular base applied, final stabilization, and dust control chlorides applied by the interim completion date.

No mainline asphalt concrete paving will be placed in 2023 unless approved by the Area Engineer.

If the Contractor does not complete the work by the interim completion requirement, the Department will make a disincentive assessment in the amount of \$500 per working day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentive. The Department will use a negative quantity of days for assessing disincentives. The Department will count working days in accordance with Section 8.6 C.

Phase 2 Work Restriction

The Contractor will not begin work in the 2024 Construction season prior to April 29, 2024.

Field Work Completion

The Contractor will complete the project by the September 13, 2024 field work completion date.

Failure to Complete on Time

The Contractor will complete all work on the project prior to the field work completion requirement. If the Contractor does not complete all work by the field work completion requirement, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all field work.

In the event the Contractor does not complete all field work on time, the Department will count working days in accordance with Section 8.6 C.

Expected Adverse Weather Days

The Department has provided Attachment 1 for information purposes only as a guide to bidders. Table 1 depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a grading project in Zone 3.

The Department will consider expected adverse weather days cumulative in nature over the time period when the Contractor is actively pursuing completion of the work. The Department will not consider adverse weather days during an extended period of time when the Contractor is not pursuing completion of the work. When considering a time extension for interim completion or field work completion of the project, the Engineer will compare the total number of expected adverse weather days against the total number of actual adverse weather days for the time period during which the work was being completed.

* * * * *

ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

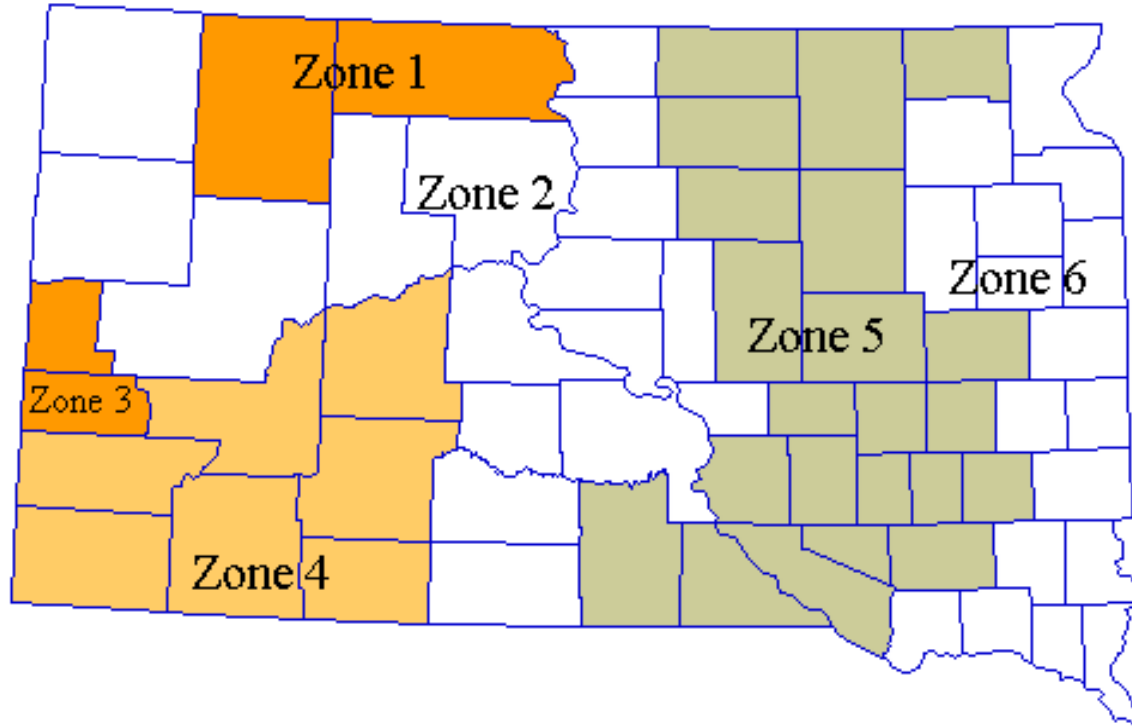


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

NOTE: Includes Holidays and Weekends.

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	2	333

Revised Date: 3/14/2023

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	20.48	Mile
009E3280	Slope Staking	20.480	Mile
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0210	Remove Building(s)	Lump Sum	LS
110E0550	Remove Cattle Guard	1	Each
110E0600	Remove Fence	46,941	Ft
110E1690	Remove Sediment	86.7	CuYd
110E1700	Remove Silt Fence	22,447	Ft
110E7802	Remove Fence for Reset	1,372	Ft
120E1000	Muck Excavation	2,178	CuYd
120E1100	Unclassified/Rock Excavation	493,590	CuYd
120E1200	Blasting	1,000	CuYd
120E2000	Undercutting	98,758	CuYd
120E6100	Water for Embankment	1,250.0	MGal
120E6200	Water for Granular Material	460.0	MGal
205E0010	Dust Control Chloride	71,000	Lb
205E0030	Dust Control Nonchloride	5,000	Lb
230E0010	Placing Topsoil	31,944	CuYd
240E0010	Obliterate Old Road	58	Sta
250E0020	Incidental Work, Grading	Lump Sum	LS
260E1010	Base Course	71,877.0	Ton
260E1060	Base Course, Modified	2,393.0	Ton
260E1030	Base Course, Salvaged	35,655.0	Ton
260E5000	Shot Rock	15,987.0	Ton
260E6010	Granular Material	5,873.0	Ton
270E0110	Salvage and Stockpile Granular Material	35,655.0	Ton
320E0007	PG 64-28 Asphalt Binder	1,964.0	Ton
320E1050	Class E Asphalt Concrete	37,306.0	Ton
320E3000	Compaction Sample	6	Each
330E0100	SS-1h or CSS-1h Asphalt for Tack	55.0	Ton
421E0100	Pipe Culvert Undercut	23	CuYd
450E4758	18" CMP 14 Gauge, Furnish	3,014	Ft
450E4760	18" CMP, Install	3,014	Ft
450E4768	24" CMP 14 Gauge, Furnish	316	Ft
450E4770	24" CMP, Install	316	Ft
450E4778	30" CMP 14 Gauge, Furnish	160	Ft
450E4780	30" CMP, Install	160	Ft
450E4788	36" CMP 14 Gauge, Furnish	130	Ft
450E4790	36" CMP, Install	130	Ft
450E4798	42" CMP 14 Gauge, Furnish	76	Ft
450E4800	42" CMP, Install	76	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
450E5015	24" CMP Elbow, Furnish	1	Each
450E5016	24" CMP Elbow, Install	1	Each
450E5211	18" CMP Flared End, Furnish	61	Each
450E5212	18" CMP Flared End, Install	61	Each
450E5215	24" CMP Flared End, Furnish	12	Each
450E5216	24" CMP Flared End, Install	12	Each
450E5219	30" CMP Flared End, Furnish	4	Each
450E5220	30" CMP Flared End, Install	4	Each
450E5227	42" CMP Flared End, Furnish	1	Each
450E5228	42" CMP Flared End, Install	1	Each
450E5406	18" CMP Safety End, Furnish	40	Each
450E5407	18" CMP Safety End, Install	40	Each
450E5420	36" CMP Safety End, Furnish	4	Each
450E5423	36" CMP Safety End, Install	4	Each
600E0300	Type III Field Laboratory	1	Each
620E0010	Type 1 Right-of-Way Fence	26,009	Ft
620E0020	Type 2 Right-of-Way Fence	18,208	Ft
20E0030	Type 3 Right-of-Way Fence	2,980	Ft
620E0260	Modified Type 6 Right-of-Way Fence	1,116	Ft
620E1020	2 Post Panel	65	Each
620E1030	3 Post Panel	59	Each
620E4100	Reset Fence	1,372	Ft
630E1010	Straight Class A W Beam Guardrail with Wood Posts	1,290.0	Ft
630E2015	W Beam Guardrail Flared End Terminal	10	Each
634E0010	Flagging	5,040.0	Hour
634E0020	Pilot Car	1,680.0	Hour
634E0110	Traffic Control Signs	751.7	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	24	Each
634E0320	Temporary Flexible Vertical Markers (Tabs)	10.1	Mile
634E0630	Temporary Pavement Marking	20.4	Mile
634E1215	Contractor Furnished Portable Changeable Message Sign	5	Each
700E0210	Class B Riprap	12.0	Ton
730E0100	Cover Crop Seeding	29.7	Bu
730E0208	Type E Permanent Seed Mixture	1,188	Lb
731E0200	Fertilizing	59.40	Ton
732E0100	Mulching	178.2	Ton
734E0042	Soil Stabilizer	1,000.0	SqYd
734E0101	Type 1 Erosion Control Blanket	500	SqYd
734E0154	12" Diameter Erosion Control Wattle	27,814	Ft
734E0165	Remove and Reset Erosion Control Wattle	6,922	Ft
734E0325	Surface Roughening	104.4	Acre

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
734E0400	Rock Check Dam	105.0	CuYd
734E0510	Shaping for Erosion Control Blanket	450	Ft
734E0604	High Flow Silt Fence	22,447	Ft
734E0610	Mucking Silt Fence	1,560	CuYd
734E0620	Repair Silt Fence	5,610	Ft
831E0202	Woven Separator Fabric, Modified	17,500	SqYd
900E0010	Refurbish Single Mailbox	17	Each
900E1080	Orange Plastic Safety Fence	9700	Ft

SPECIFICATIONS

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

CLEARING AND DISPOSAL OF TIMBER

A. U.S. Forest Service Land

The Contractor will dispose of the brush and stumps remaining after Pennington County has logged the merchantable timber. The merchantable timber will be removed during the winter months of 2020/2021 and will be completed prior to this contract and work commencing. Merchantable timber was defined as any standing timber greater than 6 inch in diameter at breast height (DBH).

Slash and non-merchantable timber will be disposed of by chipping and/or mastication. All residue from chipping will be spread and broadcast, per Forest Service regulations avoiding large piles or concentrations of chips greater than 3" in depth.

Stumps from right-of-way clearing will be disposed of at locations off the right-of-way; as well as off land managed and owned by the Forest Service

B. Landowner Property

Merchantable timber will be defined as any species of tree with an inside bark diameter of 6 inches or greater and length greater than 8 feet. Merchantable timber will be limbed and decked outside the right-of-way.

Slash and non-merchantable timber will be disposed of by chipping and/or mastication. All residue will be spread and broadcast, per Forest Service regulations.

Stumps from right-of-way clearing will be disposed of at locations off the right-of-way; as well as off land managed and owned by the Forest Service

GRADING OPERATIONS

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment minus Waste.

Water for Granular Material is estimated at the rate of 5 gallons of water per ton of Base Course.

The estimated cubic yards of excavation and/or embankment required to construct outlet ditches, ditch blocks, and approaches are included in the earthwork balance notes on the profile sheets.

Special ditch grades and other sections of the roadway different than the typical section(s) will be constructed to the limits shown on the cross sections. If significant changes to the cross sections are necessary during construction, the Engineer will contact the Designer for the proposed change.

Generally, all shallow inlet and outlet ditches as noted on the plan sheets will be cut with a 10-foot wide bottom with 5:1 backslopes. However, the Engineer may direct the Contractor to adjust the ditch width for proper alignment with the drainage structure.

Temporary fence and/or permanent fence will be placed ahead of the grading operation unless otherwise directed by the Engineer.

A copy of the soils profile is available for review at the Rapid City Area Office, the Local Government Assistance Office in the SDDOT Central Office in Pierre as well as by emailing SDDOT Bid Letting Office at DOTBids@state.sd.us. The soils profile was created in 2009 and may not be completely accurate due to changes in alignment.

TYPE III FIELD LABORATORY

Substitution of a cellular telephone for the hard-wired touch-tone telephone is not allowed, as state personnel need the ability to download information over direct phone lines. The phone is intended for state personnel usage only. Contractor personnel are prohibited from using this phone unless pre-approved by the Project Engineer. The Contractor will submit a copy of each monthly bill for calls charged to this phone at the end of each month. The Engineer will then audit the bills to ensure all calls are legitimate and then initiate a Construction Change Order (CCO) to reimburse the Contractor for the actual phone calls made, including local and long distance calls. Reimbursement will not be made for fees associated with the purchase, installation, disconnection, monthly line charges, and incidentals involved in the installation, maintenance, and disconnection of the phone (including attachments). These items will be incidental to the contract unit price per each for "Type III Field Laboratory".

UTILITIES

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor will contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

COUNTY RESPONSIBILITIES

Pennington County will be responsible for the following at no cost to the Contractor:

- 1. Right of way and temporary and permanent easements.
- 2. Coordination of any utility adjustments.
- 3. Furnish and install permanent pavement markings.
- 4. Furnish and install new permanent signing according to MUTCD standards.
- 5. Furnish and install temporary fencing.
- 6. Remove silt fence in permanent seeded areas.

SHRINKAGE FACTOR: Embankment

Station	to	Station	% Shrinkage
0+00		36+00	35
36+00		74+00	25
74+00		190+00	30
190+00		221+00	25
221+00		290+00	10
290+00		364+00	25
364+00		382+00	15
382+00		414+00	20
414+00		532+00	15
532+00		583+50	40

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	8	333

Revised 3/14/2023

TABLE OF UNCLASSIFIED EXCAVATION

	(CuYd)
Excavation	341,752
Undercut	98,758
Topsoil	31,944
Unstable Material Excavation	2,667
Salvage & Stockpile Granular Material	18,469
Total	493,590



PIPE FOR APPROACHES AND INTERSECTING ROADS

Class 2 reinforced concrete pipe, high density polyethylene pipe, corrugated polypropylene pipe, or steel reinforced polyethylene pipe may be substituted for corrugated metal pipe at approaches and intersecting roads at no additional cost to the State.

INTERSECTING ROADS AND ENTRANCES

Intersecting roads and entrances will be satisfactorily cleared of vegetation, shaped and compacted prior to placement of mainline surfacing. This work will be considered incidental to other contract items. Separate measurement and payment will not be made.

CLASS E ASPHALT CONCRETE

Mineral Aggregate for Class E Asphalt Concrete will conform to the requirements for Class E, Type 1. All other requirements for Class E will apply.

RATES OF MATERIALS

The Estimate of Quantities is based on the following quantities of materials per station.

Base Course 214.7 tons

Water for Granular Material at the rate of 0.85 MGal

CLASS E ASPHALT CONCRETE – Each 2 inch LIFT

Crushed Aggregate	33.49 tons
PG 64-28 Asphalt Binder	1.76 tons
Total Mix	35.25tons

The exact proportions of these material will be determined on construction.

Tack Application Rate: (Rate = 0.075 gallon per square yard).

TABLE OF GUARDRAIL

Station	to	Station	L/R
105+00		109+00	R
146+00		148+00	R
209+00		213+00	L
228+00		230+50	L
231+10		232+50	L

W BEAM GUARDRAIL TANGENT END TERMINAL

Payment for the W beam guardrail tangent end terminal will be based on a length of 50 feet and will be in accordance with Specifications Section 630.5 B.

MAILBOXES

If required, the Contractor will reset the existing mailboxes on new posts with the necessary support hardware for single mailbox assemblies. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor will coordinate with the Engineer on the

proper postal representative to contact and where Refurbish Mailbox is required.

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware will be incidental to the contract unit price per each for “Refurbish Single Mailbox”.

TABLE OF REFURBISH MAILBOX

Station	R/L	Offset	Single (Each)
24+30	R	16.07	1
114+86	R	22.06	1
133+33	R	13.58	1
206+00	R	14.44	1
232+78	R	18.93	1
242+34	R	11.45	1
242+90	R	11.96	1
270+85	L	0.82	1
336+90	R	21.32	1
395+87	R	21.4	1
430+35	R	13.2	1
430+38	R	13.12	1
430+40	R	13.38	1
448+45	R	19.03	1
448+48	R	19.45	1
455+65	R	15.28	1
455+72	R	14.28	1
Total			17

BRACE PANELS FOR ROW FENCE

The E-Z Brace or an approved equal may be utilized as an alternate horizontal brace in the brace panels if approved by the Engineer. The E-Z Brace will be attached to each wood post utilizing two 5/16” x 3” lag screws. Holes of appropriate diameter, based on wood post condition, will be drilled before placement of lag screws. The following are contacts regarding the E-Z Brace:

Location	Straight Class B Guardrail w/ Wood Posts (Ft)	W Beam Guardrail End Terminal (Each)	W Beam Guardrail Flared End Terminal (Each)
105+00 to 109+00R	400	0	2
146+00 to 148+00 R	200	0	2
209+00 to 213+00 L	400	0	2
228+00 to 230+50 L	150	1	1
231+10 to 232+50 L	140	1	1
Totals:	1290	2	8

Roger Papka
E-Z Brace
1160 Karen St.
Watertown, SD 57201
605-881-6142

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	14	333

Revised 3/14/2023

PLACING TOPSOIL

The thickness will be approximately 4 inches within the right-of-way and 6 inches on temporary easements.

The estimated amount of topsoil to be placed is as follows:

Station	to	Station	Topsoil (CuYd)
0+00		534+31	31,944
Total:			31,944

SEQUENCE OF OPERATIONS

The traffic control sheets have the project divided into three phases.

- Phase 1 – Grading, Sub-base, & Base Course - Sta: 365+00 to 534+30
- Phase 2 – Grading, Sub-base, & Base Course – Sta: 0+00 to 365+00
- Phase 3 – Asphalt Paving, Season 2 – Sta: 0+00 to 534+92

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

The Contractor’s sequence of operations / Traffic Control Plan will include sequencing and methodology to handle local and emergency traffic during construction. There are approximately 27 homes along the 10 mile stretch of road, many of which are 12-month residences. The Traffic Control Plan will address accommodating these residents with access to their homes.

Phase 1 is a road closure within the phase limits. Local traffic is required to be maintained. It is anticipated that pilot car and flagging stations and communication with local residents of temporary access and routes could be employed.

Phase 2 is anticipated to run pilot car and flagging stations for the entirety of Phase 2 construction activities.

Phase 3 is anticipated to run pilot car and flagging stations to accommodate the asphalt paving and remaining work.

Asphalt paving operations may not begin until the grading, subbase, and base course operations are complete throughout the entire project length most likely during Season 2, at which time asphalt paving can commence. Paving sequence will minimize truck haul on previously placed asphalt.

During grading, sub-base, & aggregate base operations it is anticipated that the Water for Embankment or Water for Granular will also control dust creation. Once the gravel



SEQUENCE OF OPERATIONS (continued)

within a section is completed the Contractor will maintain the surface in a state that will not produce dust. This water is separate from the above-mentioned items and will be incidental to the project.

Dust control chloride will be used in the following locations upon the beginning of haul operations through the area.

Begin Station	End Station	Length (ft)
14+00	30+00	1,600
113+00	117+00	400
216+00	291+00	7,500

The dust control chloride quantity anticipates the need for two applications throughout these areas.

Dust control chlorides will not be used in areas adjacent to the wetlands as listed in the Environmental Commitments and tabled in “Commitment A Wetlands”, Non-Chloride
Snow removal between the 1st Season and the 2nd Season (between October 14th 2023 and April 28th 2024) will be conducted by Pennington County staff, no gravel maintenance or correcting grade slope or crowns will be completed by Pennington County staff.

The Contractor is advised that the County will implement Spring Load Limits on various routes surrounding the project. The exact dates and duration are set based on how severe the winter has been as well as the spring weather the area is experiencing at the time.

In addition, dependent upon the haul routes used haul road agreements will be required as per SDDOT procedure.

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.

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

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent 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.

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

At no time will a vertical drop-off of greater than 3 inches be left overnight adjacent to the traveled way. The Contractor will utilize embankment material to ensure a 3-inch vertical drop-off is not exceeded. The slope of the embankment material will not be steeper than a 4:1 within 30 feet of the traveled way.

The Contractor will furnish, install, maintain, and remove TRUCK CROSSING (W8-6) signs daily. The TRUCK CROSSING signs will be displayed always when haul vehicles are hauling material. When hauling conditions no longer exist, the signs will be covered or removed from view. The exact number and location will be determined during construction. Payment for additional signs will be based on the contract unit price per square foot for “Traffic Control Signs”.

GROOVED PAVEMENT (W8-15) signs with MOTORCYCLE (W8-15P) plaques are required in advance of areas that have been cold milled and are not resurfaced the same day. The GROOVED PAVEMENT sign assemblies will be installed a minimum of 1000 feet in advance of cold milled sections and remain in place until the sections have been resurfaced.

A mobile work operation will be allowed provided the rumble strip or rumble stripe grooving, flush sealing, and pavement marking can be completed satisfactorily by a continuously moving work operation. A mobile work operation will require approval by the Engineer.

TEMPORARY PAVEMENT MARKING

Temporary Flexible Vertical Markers (Tabs) will be used on the top lift of asphalt surfacing for centerline delineation, lane lines, skips, and as directed by the Engineer. Tabs will be offset 6-inches from the location shown for permanent pavement markings. Centerline will be double yellow lines with tabs spaced at 5’ the entire project length.

Temporary flexible vertical markers (tabs) will be required on the top lift of asphalt concrete surfacing.

Temporary pavement marking paint will not be allowed on the final lift of asphalt surfacing. Temporary pavement marking paint will not be allowed on the chip seal, fog seal, or flush seal. Temporary flexible vertical markers (tabs) must be used on the final lift of asphalt surfacing. The Contractor may use tabs with covers, uncovering them for the chip seal, fog seal, or flush seal. As an alternative, the Contractor may install new tabs for the fog seal or flush seal.

Covers on the tabs will be sufficiently secured to prevent traffic from dislodging the cover and when removed, the covers will be properly disposed of. The Contractor will remove and properly dispose of the tabs after permanent pavement marking is applied. Method of removal will be nondestructive to the

road surface and will be accomplished within one week of completion of the permanent pavement marking.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	15	333

Revised 3/14/2023

Full reflectivity of all temporary flexible vertical markers (tabs) is required at all times. The Contractor will be required to replace any missing or non-reflective tabs after each installation as detailed below at no additional cost to the State.

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 the following fungal species:

25%	<i>Glomus intraradices</i>
25%	<i>Glomus aggregatum or deserticola</i>
25%	<i>Glomus mosseae</i>
25%	<i>Glomus etunicatum</i>

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.

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

Product

MycosApply

Manufacturer

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

AM 120 Multi Species Blend

Reforestation Technologies Int.
Gilroy, CA
Phone: 1-800-784-4769
www.reforest.com

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% (P2O5) available phosphate, a minimum of 4% (K2O) 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.

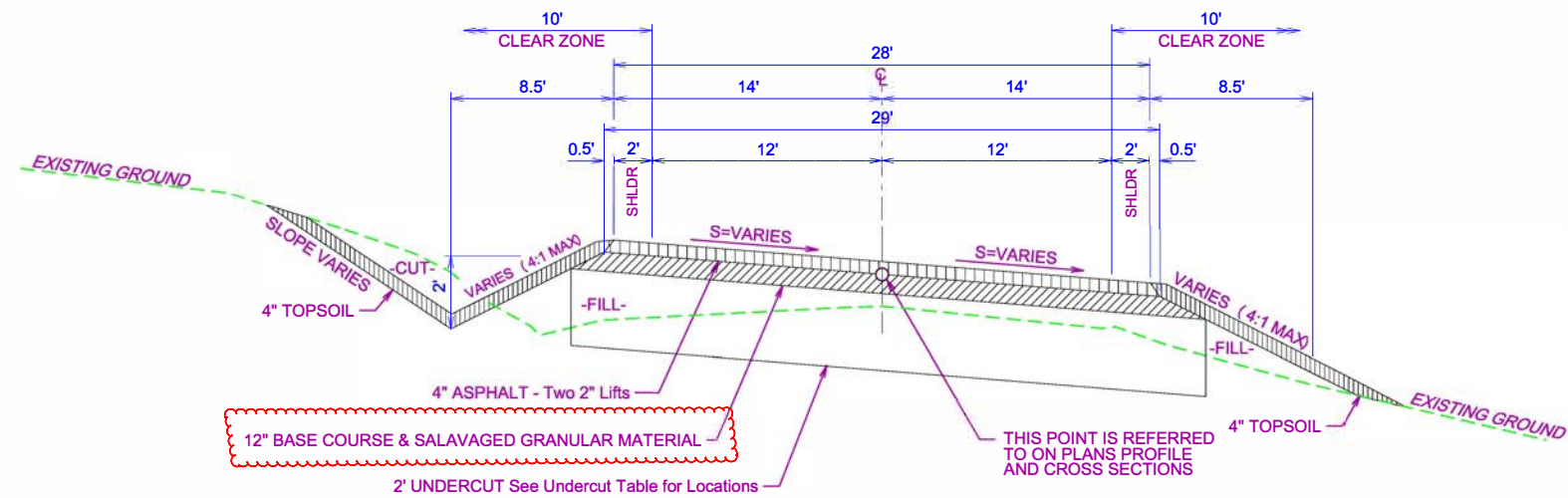
The fertilizer will have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer will also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The fertilizer will be applied at a rate of 2,000 pounds per acre in accordance with the manufacturer’s recommended method of application.

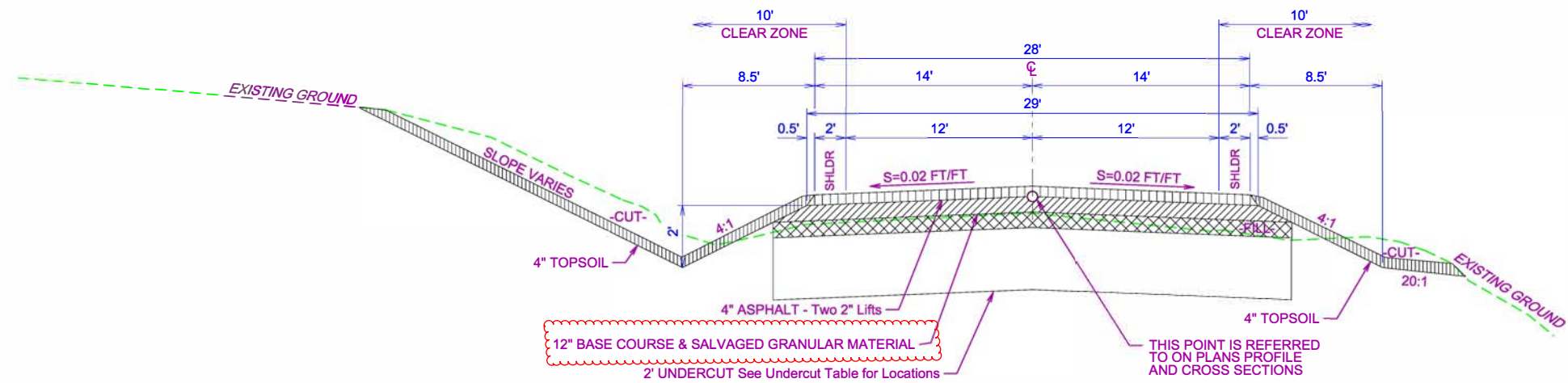


STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	26	333

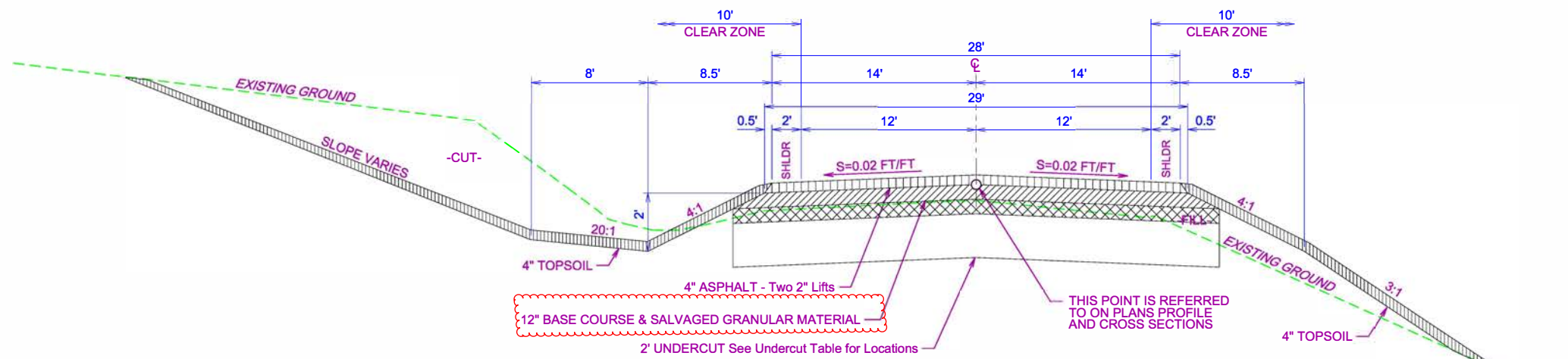
Plotting Date: 3/15/2023
Revision Date: 3/14/2023



SUPERELEVATED SECTION
See Superelevated Table for Locations



V-DITCH SECTION
See Cross Sections for Locations

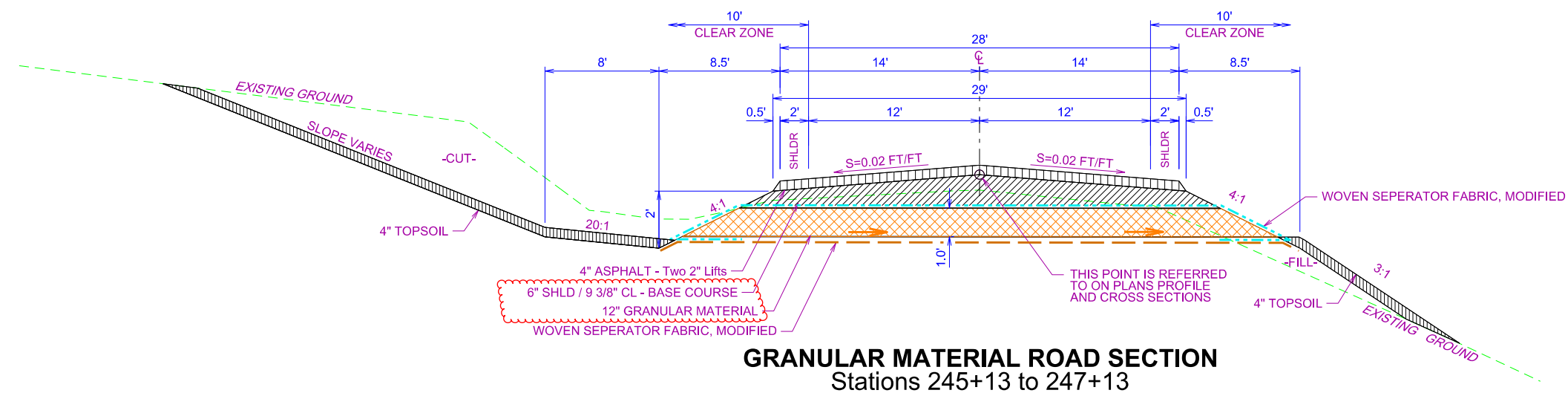


DITCH SECTION
See Cross Sections for Locations

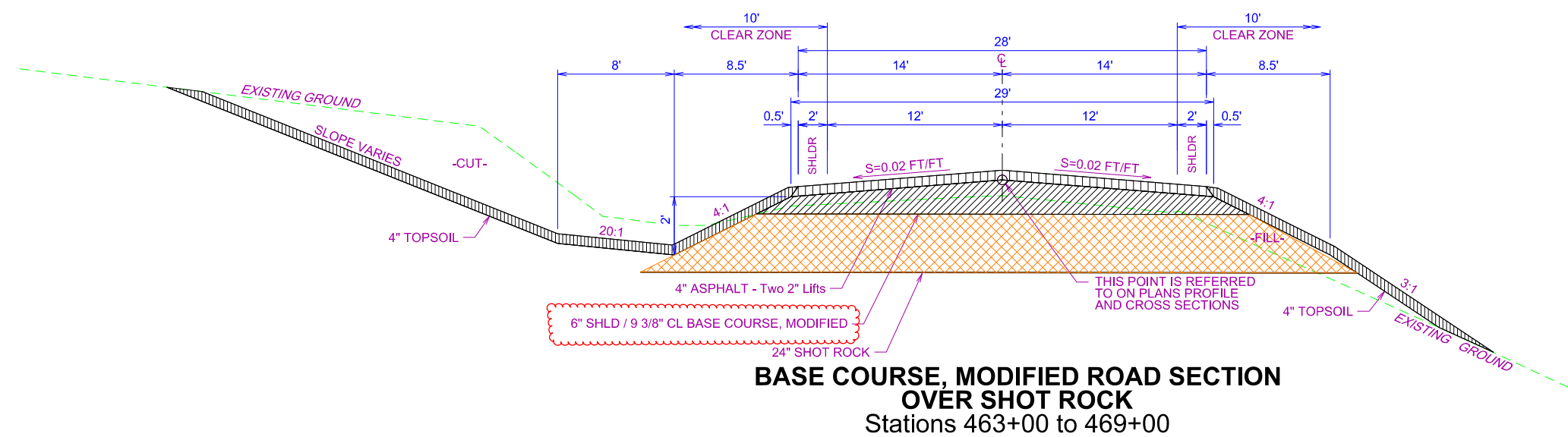


STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	27	333

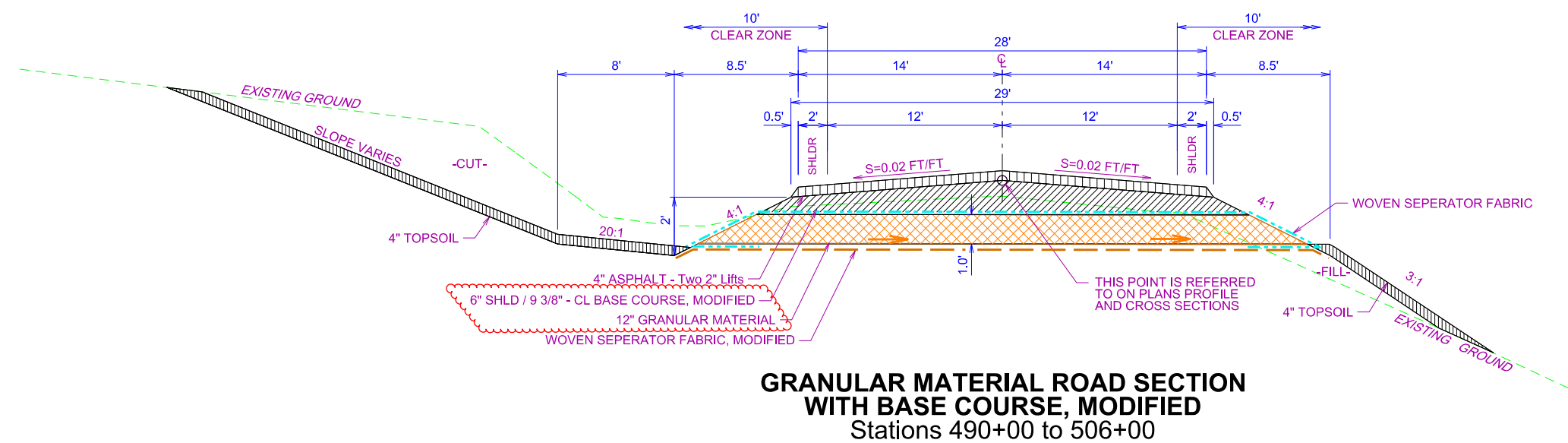
Plotting Date: 3/14/2023
Revision Date: 3/14/2023



GRANULAR MATERIAL ROAD SECTION
Stations 245+13 to 247+13



**BASE COURSE, MODIFIED ROAD SECTION
OVER SHOT ROCK**
Stations 463+00 to 469+00

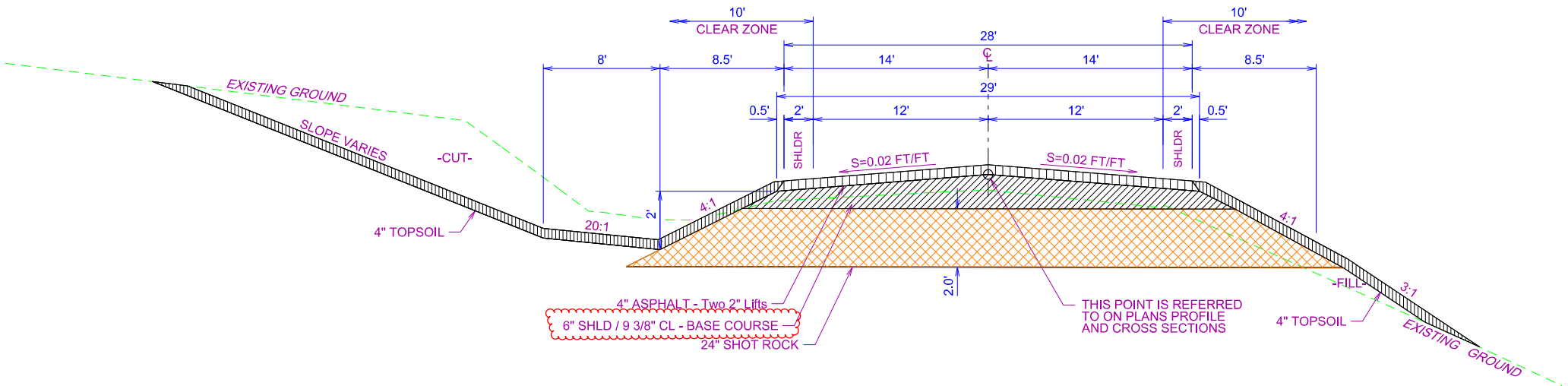


**GRANULAR MATERIAL ROAD SECTION
WITH BASE COURSE, MODIFIED**
Stations 490+00 to 506+00

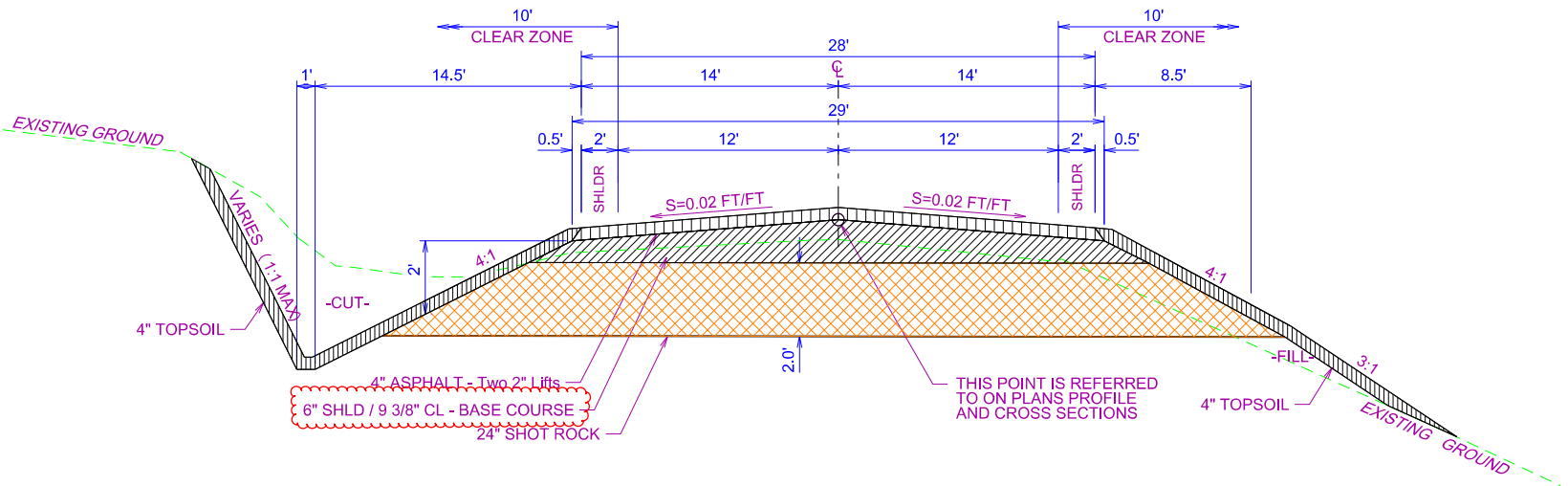


STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	28	333

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SHOT ROCK ROAD SECTION
Stations 386+00 to 388+50, 395+50 to 396+50,
404+75 to 406+25, 447+75 to 449+25,
455+50 to 463+00, & 482+25 to 484+75



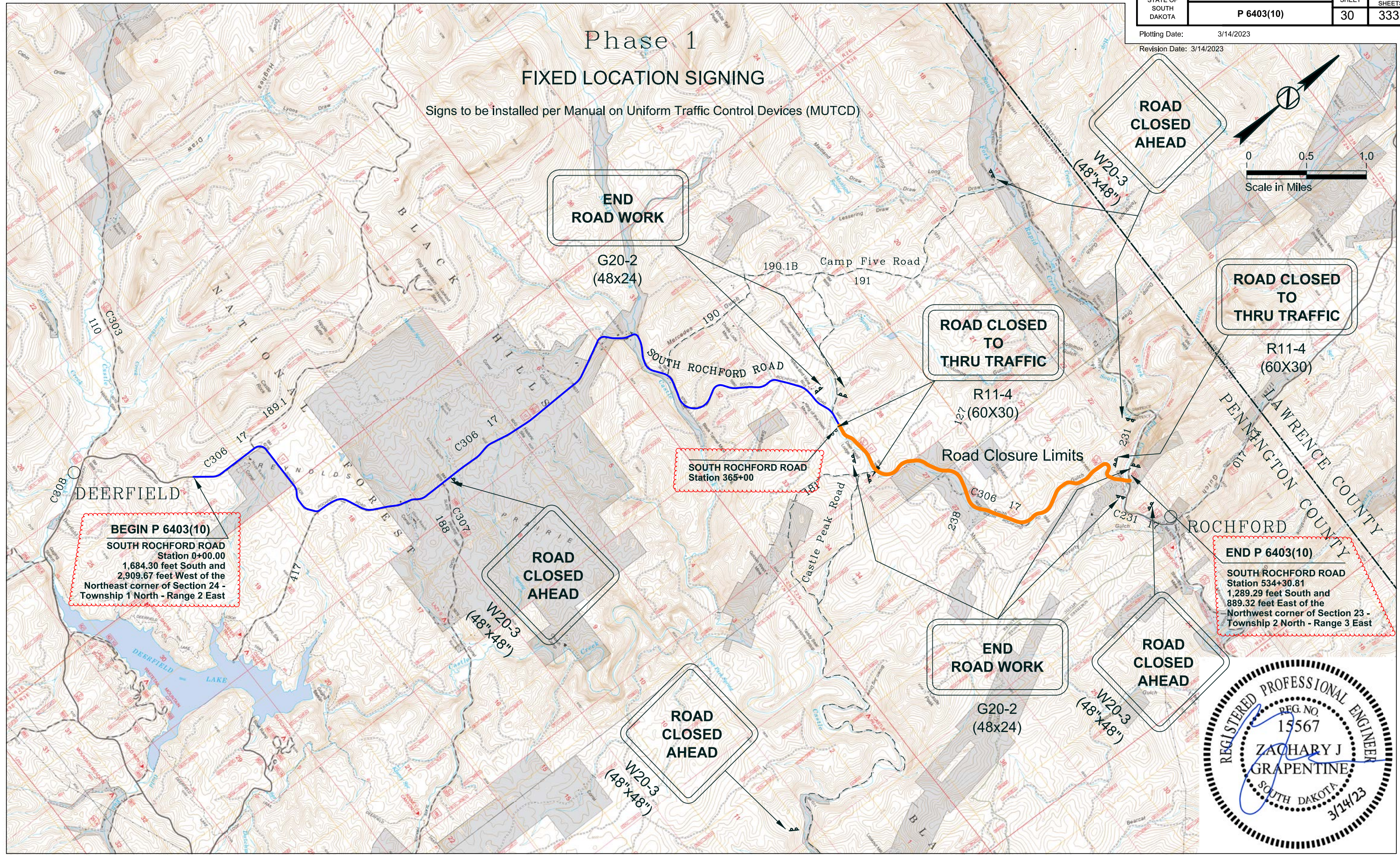
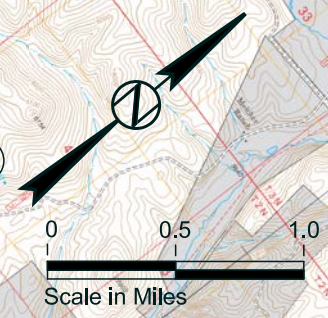
SHOT ROCK ROAD SECTION
Station 510+50 to 512+00



Phase 1

FIXED LOCATION SIGNING

Signs to be installed per Manual on Uniform Traffic Control Devices (MUTCD)

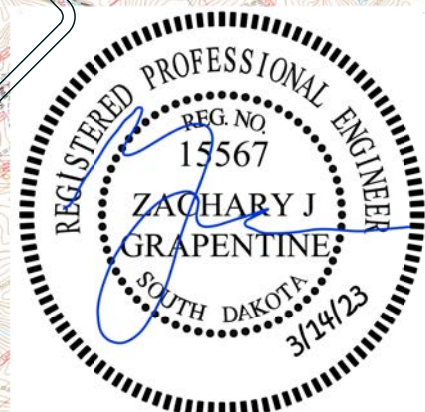


BEGIN P 6403(10)
SOUTH ROCHFORD ROAD
Station 0+00.00
1,684.30 feet South and
2,909.67 feet West of the
Northeast corner of Section 24 -
Township 1 North - Range 2 East

SOUTH ROCHFORD ROAD
Station 365+00

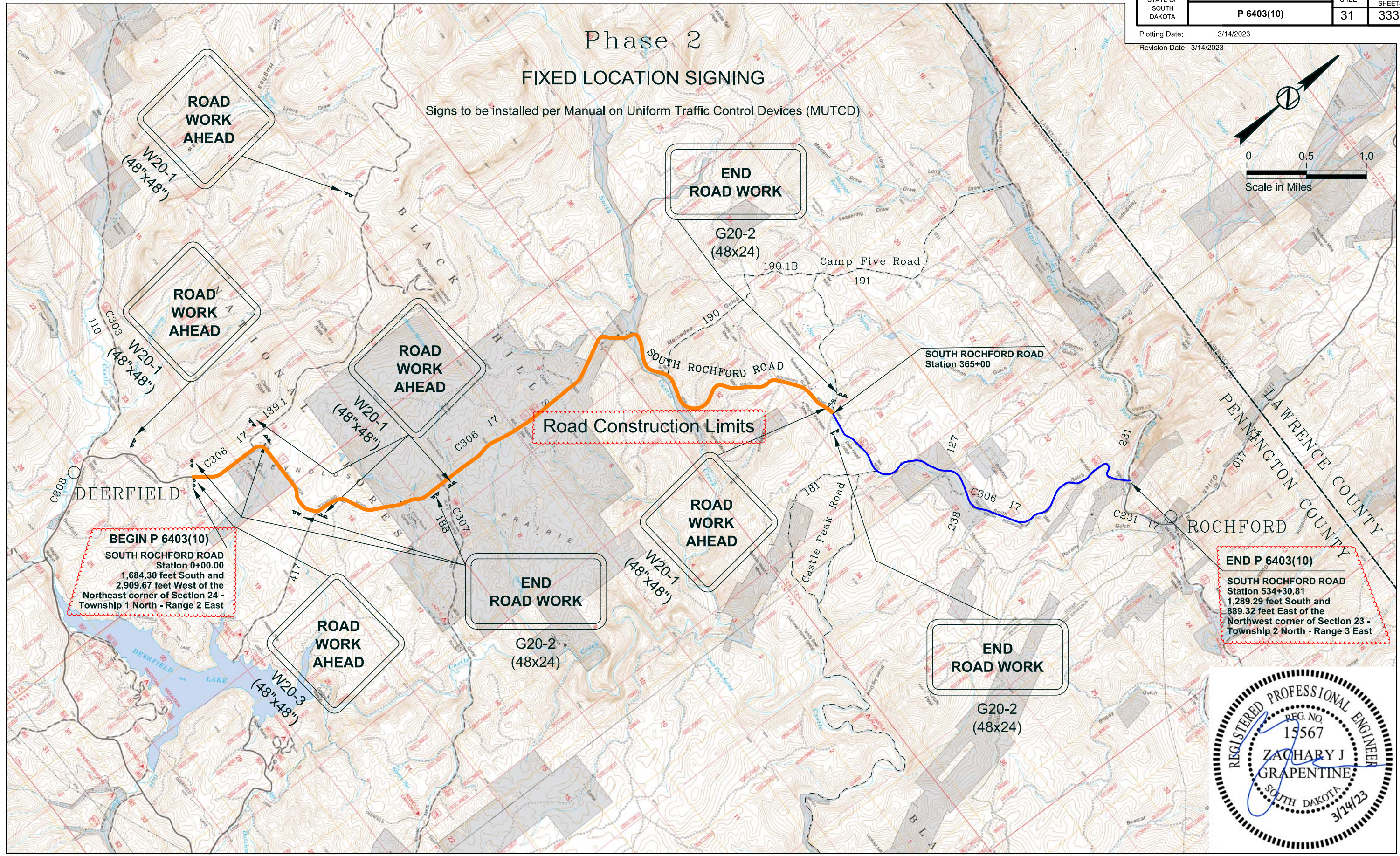
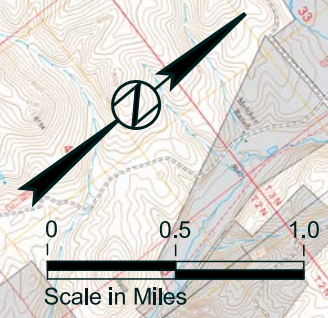
Road Closure Limits

END P 6403(10)
SOUTH ROCHFORD ROAD
Station 534+30.81
1,289.29 feet South and
889.32 feet East of the
Northwest corner of Section 23 -
Township 2 North - Range 3 East



Phase 2 FIXED LOCATION SIGNING

Signs to be installed per Manual on Uniform Traffic Control Devices (MUTCD)



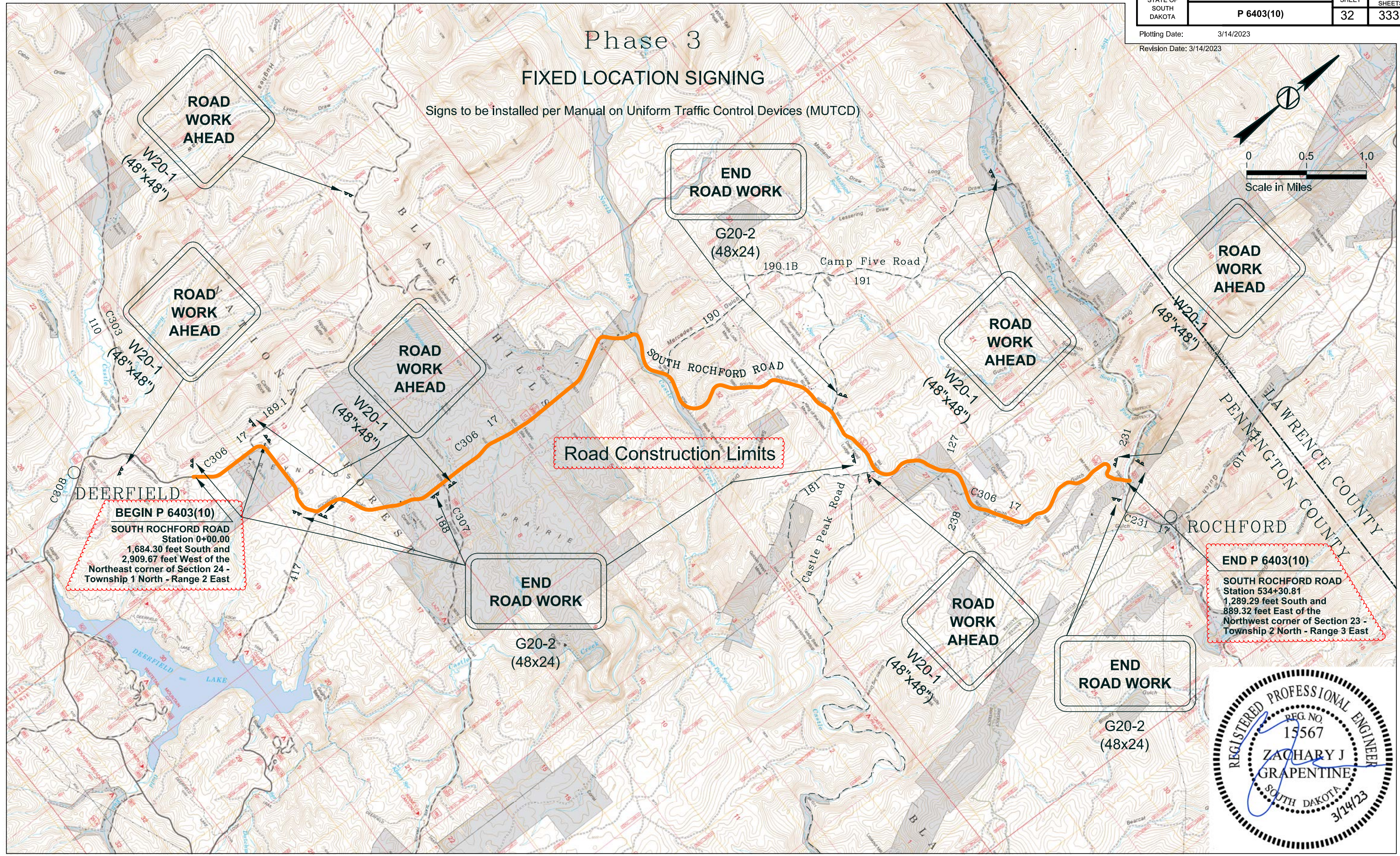
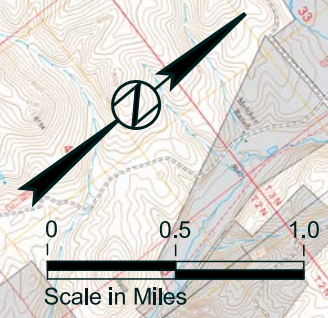
BEGIN P 6403(10)
SOUTH ROCHFORD ROAD
Station 0+00.00
1,684.30 feet South and
2,909.67 feet West of the
Northeast corner of Section 24 -
Township 1 North - Range 2 East

END P 6403(10)
SOUTH ROCHFORD ROAD
Station 534+30.81
1,289.29 feet South and
889.32 feet East of the
Northwest corner of Section 23 -
Township 2 North - Range 3 East



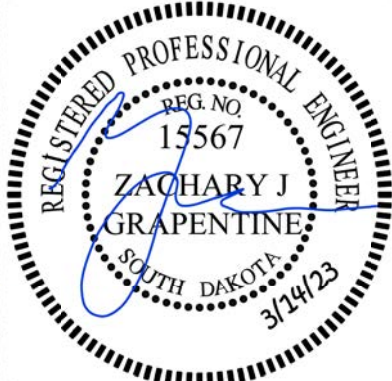
Phase 3
FIXED LOCATION SIGNING

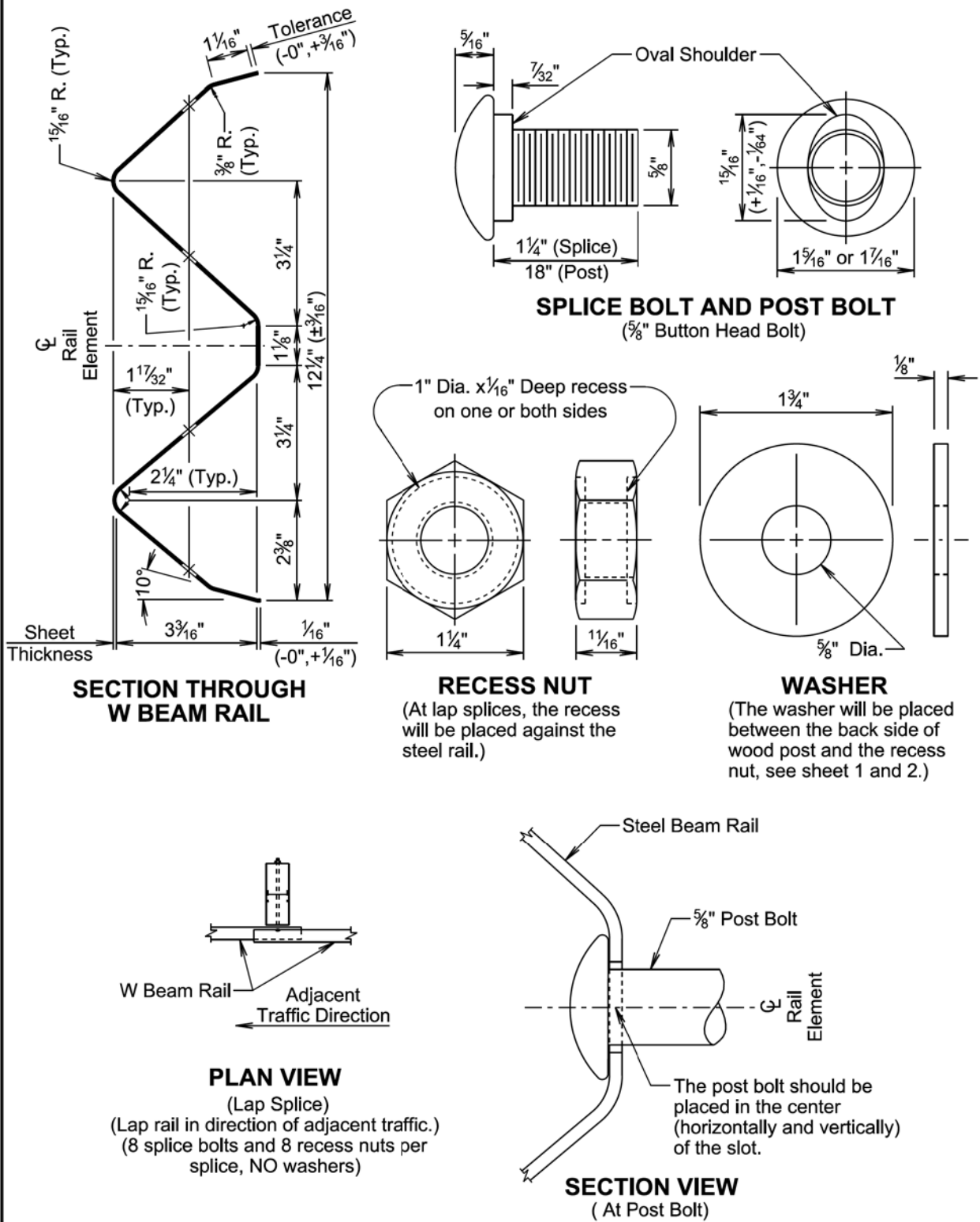
Signs to be installed per Manual on Uniform Traffic Control Devices (MUTCD)



BEGIN P 6403(10)
SOUTH ROCHFORD ROAD
Station 0+00.00
1,684.30 feet South and
2,909.67 feet West of the
Northeast corner of Section 24 -
Township 1 North - Range 2 East

END P 6403(10)
SOUTH ROCHFORD ROAD
Station 534+30.81
1,289.29 feet South and
889.32 feet East of the
Northwest corner of Section 23 -
Township 2 North - Range 3 East





Deleted Plate 630.81

September 14, 2019

Published Date: 1st Qtr. 2023

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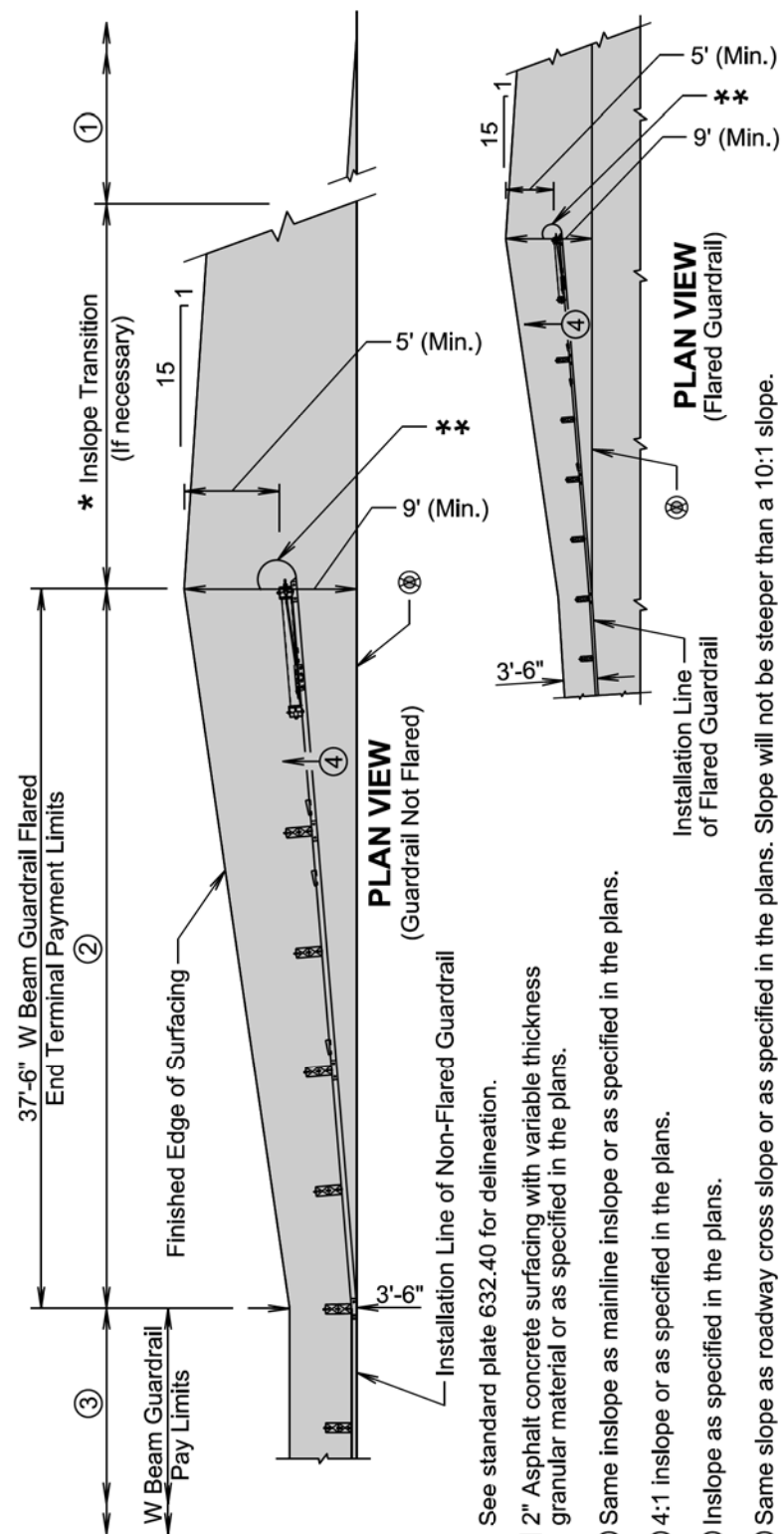
W BEAM GUARDRAIL

PLATE NUMBER
630.10

Sheet 5 of 5

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 6403(10)	127	333

Plotting Date: 3/13/2023



**** See standard plate 632.40 for delineation.**

- 2" Asphalt concrete surfacing with variable thickness granular material or as specified in the plans.
- ① Same inslope as mainline inslope or as specified in the plans.
- ② 4:1 inslope or as specified in the plans.
- ③ Inslope as specified in the plans.
- ④ Same slope as roadway cross slope or as specified in the plans.

GENERAL NOTES:

The flared guardrail end terminals above are for illustrative purpose only.

- ★ The length of inslope transition varies with the amount of change between inslopes. The length of the transition will change 100' for every whole number change in the inslope. For Example: if the inslope changes from a 5:1 to a 4:1 the length of the inslope transition would be 100'. If the inslope changes from a 6:1 to a 4:1 the length of the inslope transition would be 200'.

- ⑩ The installation reference line for flared guardrail end terminals will always be parallel to the roadway.

Asphalt concrete will be the same type used elsewhere on the project or will be as specified in the plans. If asphalt concrete is not specified in the plans, the asphalt concrete will conform to the Specifications for "Asphalt Concrete Composite."

Granular material will be the same type used elsewhere on the project or will be as specified in the plans. If granular material type is not specified in the plans, the material will conform to the Specifications for "Base Course". The granular material will be placed the same thickness as the mainline surfacing or as specified in the plans.

November 14, 2018

PLATE NUMBER
630.86

Sheet 1 of 1

Published Date: 1st Qtr. 2023

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**EMBANKMENT, SURFACING, AND PAYMENT
LIMITS FOR W BEAM GUARDRAIL
FLARED END TERMINAL**

Added Plate 630.86