

May 8, 2026

ADDENDUM NO. 2

RE: Item #1, May 13, 2026 Letting - IM-CR-EM 0901(187)44, PCN 034J, 0A9K, Meade County - Grading, Structures (6x6 CIP or Precast, 2-10x6 CIP, 3-10x4 Precast, 7x6 CIP or Precast, 242'-6" Prestressed Girder, 64' Prestressed Girder, 10x10 CIP or Precast, 3-12x5 CIP), PCC Surfacing, 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: NO CHANGE

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 120E0900 "Contaminated Material Excavation"
Bid Item 634E1245 "Maintenance of Queue Detection System"
Bid Item 634E1260 "Truck/Trailer Mounted Attenuator"

Quantities for Bid Items were changed:

Bid Item 634E1240 "Queue Detection System" changed from 20 to 2 Each

PLANS: Please destroy sheets A1-A2, A5-A9, B2, B6, B55, B67, B70, C2, C4 & S4 and replace with the enclosed sheets, dated 5/4/26. Sheets B55A & C4A were added.

Sheets A1 & B2:Section B – Grading

Bid Items were added:

Bid Item 120E0900 "Contaminated Material Excavation"

Sheets A2 & C2:Section C – Traffic Control

Bid Items were added:

Bid Item 634E1245 "Maintenance of Queue Detection System"
Bid Item 634E1260 "Truck/Trailer Mounted Attenuator"

Quantities for Bid Items were changed:

Bid Item 634E1240 "Queue Detection System" changed from 20 to 2 Each

Sheet A5:

ENVIRONMENTAL COMMITMENTS notes were revised.
COMMITMENTS A1 & A2 notes were revised.

- Sheet A6:** COMMITMENT B5 notes were revised.
COMMITMENT C notes were revised.
COMMITMENT D2 notes were revised.
- Sheet A7:** COMMITMENT E notes were revised.
COMMITMENT G notes were deleted.
COMMITMENT I notes were revised.
- Sheet A8:** COMMITMENT J notes were revised.
COMMITMENTS K/K1 notes were deleted.
COMMITMENT L notes were revised.
- Sheet A9:** COMMITMENT M notes were deleted.
COMMITMENT Q notes were revised.
- Sheet B6:** SELECT FILL MATERIAL notes table was revised.
- Sheet B55:** TYPICAL GRADING SECTIONS were revised.
- Sheet B55A:** Sheet was added for additional TYPICAL GRADING SECTIONS.
- Sheet B67:** Wetland Impact notes were revised.
- Sheet B70:** Wetland Impact notes were revised.
- Sheet C4:** QUEUE DETECTION SYSTEM notes were revised.
- Sheet C4A:** Sheet was added for OPERATION AND MAINTENANCE OF QUEUE DETECTION SYSTEM notes.
- Sheet S4:** ROAD CLOSURE WARNING SIGNS notes were revised.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/gp

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

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS



STATE OF SOUTH DAKOTA

PROJECT

IM-CR-EM 0901(187)44

SHEET A1
TOTAL SHEETS A9

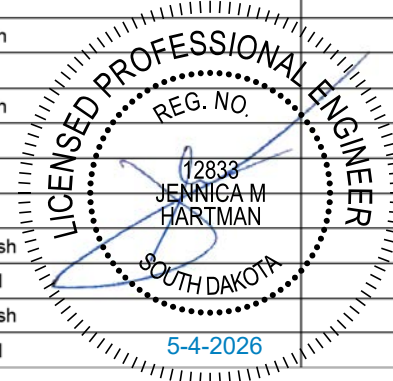
Plotting Date: 5/7/2026

Rev: 9/25/2025 BRC
Rev: 3/06/2026 MRM
Rev: 5/04/2026 MRM

Section B - Grading MEAD034J

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	136	Each
009E3225	Reestablish Public Land Survey System Corner	2	Each
009E3230	Grade Staking	16.527	Mile
009E3245	Final Cross Section Survey	7.751	Mile
009E3250	Miscellaneous Staking	7.751	Mile
009E3280	Slope Staking	7.751	Mile
009E3290	Structure Staking	7	Each
009E3301	Engineer Directed Surveying/Staking	100.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0020	Clear and Grub Tree	56	Each
100E0100	Clearing	Lump Sum	LS
110E0400	Remove Drop Inlet	12	Each
110E0600	Remove Fence	9,851	Ft
110E0605	Remove Chain Link Fence	24	Ft
110E0655	Remove Interim Crossover Closure	224	Ft
110E0700	Remove 3 Cable Guardrail	712	Ft
110E0730	Remove Beam Guardrail	1,894.0	Ft
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	4	Each
110E1100	Remove Concrete Pavement	13,951.0	SqYd
110E1160	Remove Concrete Barrier	1,163	Ft
110E6230	Remove W Beam Guardrail for Reset	216.0	Ft
110E7800	Remove Chain Link Fence for Reset	1,727	Ft
110E7802	Remove Fence for Reset	3,009	Ft
120E0010	Unclassified Excavation	519,537	CuYd
120E0300	Borrow Unclassified Excavation	45,400	CuYd
120E0500	Option Borrow Excavation	318,349	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E1000	Muck Excavation	1,409	CuYd
120E2000	Undercutting	194,063	CuYd
120E6000	Water for Dust Control	1,000.0	MGal
120E6100	Water for Embankment	10,444.0	MGal
120E7500	Aggregate Column	4,145.2	CuYd
240E0010	Obliterate Old Road	6	Sta
250E0020	Incidental Work, Grading	Lump Sum	LS
260E6010	Granular Material	2,714.7	Ton
270E0020	Salvage and Stockpile Asphalt Mix Material	15,558.9	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	68,735.5	Ton
270E0110	Salvage and Stockpile Granular Material	27,161.2	Ton
380E3520	6" PCC Approach Pavement	104.0	SqYd
380E4100	10.5" PCC Fillet Section	35.9	SqYd
421E0100	Pipe Culvert Undercut	1,438	CuYd
450E0122	18" RCP Class 2, Furnish	2,414	Ft
450E0130	18" RCP, Install	2,414	Ft
450E0142	24" RCP Class 2, Furnish	1,408	Ft
450E0143	24" RCP Class 3, Furnish	268	Ft
450E0144	24" RCP Class 4, Furnish	162	Ft
450E0150	24" RCP, Install	1,838	Ft
450E0162	30" RCP Class 2, Furnish	1,362	Ft

450E0170	30" RCP, Install	1,362	Ft
450E0182	36" RCP Class 2, Furnish	932	Ft
450E0190	36" RCP, Install	932	Ft
450E0192	42" RCP Class 2, Furnish	52	Ft
450E0200	42" RCP, Install	52	Ft
450E0202	48" RCP Class 2, Furnish	296	Ft
450E0210	48" RCP, Install	296	Ft
450E0222	60" RCP Class 2, Furnish	1,506	Ft
450E0230	60" RCP, Install	1,506	Ft
450E0242	72" RCP Class 2, Furnish	222	Ft
450E0250	72" RCP, Install	222	Ft
450E2008	18" RCP Flared End, Furnish	1	Each
450E2009	18" RCP Flared End, Install	1	Each
450E2016	24" RCP Flared End, Furnish	1	Each
450E2017	24" RCP Flared End, Install	1	Each
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E2036	48" RCP Flared End, Furnish	1	Each
450E2037	48" RCP Flared End, Install	1	Each
450E2052	72" RCP Flared End, Furnish	1	Each
450E2053	72" RCP Flared End, Install	1	Each
450E2200	24" RCP Sloped End, Furnish	4	Each
450E2201	24" RCP Sloped End, Install	4	Each
450E2216	48" RCP Sloped End, Furnish	2	Each
450E2217	48" RCP Sloped End, Install	2	Each
450E2304	18" RCP Safety End, Furnish	2	Each
450E2307	18" RCP Safety End, Install	2	Each
450E2308	24" RCP Safety End, Furnish	3	Each
450E2311	24" RCP Safety End, Install	3	Each
450E3012	24" RCP Arch Class 2, Furnish	82	Ft
450E3020	24" RCP Arch, Install	82	Ft
450E3032	36" RCP Arch Class 2, Furnish	708	Ft
450E3040	36" RCP Arch, Install	708	Ft
450E3072	60" RCP Arch Class 2, Furnish	106	Ft
450E3080	60" RCP Arch, Install	106	Ft
450E4504	24" RCP Arch Flared End, Furnish	2	Each
450E4505	24" RCP Arch Flared End, Install	2	Each
450E4512	36" RCP Arch Flared End, Furnish	6	Each
450E4513	36" RCP Arch Flared End, Install	6	Each
450E4607	36" RCP Arch Sloped End, Install	12	Each
450E4622	36" RCP Arch Sloped End with Bars, Furnish	12	Each
450E4739	12" CMP 16 Gauge, Furnish	84	Ft
450E4740	12" CMP, Install	84	Ft
450E4759	18" CMP 16 Gauge, Furnish	108	Ft
450E4760	18" CMP, Install	108	Ft
450E4768	24" CMP 14 Gauge, Furnish	134	Ft
450E4770	24" CMP, Install	134	Ft
450E5015	24" CMP Elbow, Furnish	2	Each
450E5016	24" CMP Elbow, Install	2	Each
450E5203	12" CMP Flared End, Furnish	4	Each
450E5204	12" CMP Flared End, Install	4	Each
450E5211	18" CMP Flared End, Furnish	2	Each
450E5212	18" CMP Flared End, Install	2	Each



INDEX OF SHEETS	
A1 to A4	Estimate of Quantities for Sections B, C, D, E, F, L, M, and S
A5 to A9	Environmental Commitments

450E5406	18" CMP Safety End, Furnish	2	Each
450E5407	18" CMP Safety End, Install	2	Each
450E5410	24" CMP Safety End, Furnish	1	Each
450E5411	24" CMP Safety End, Install	1	Each
450E8014	24" RCP to CMP Transition, Furnish	1	Each
450E8015	24" Pipe Transition, Install	1	Each
451E0522	12" PVC Pipe	320	Ft
451E0528	18" PVC Pipe	630	Ft
451E6080	Adjust Water Valve Box	1	Each
462E0100	Class M6 Concrete	147.3	CuYd
464E0100	Controlled Density Fill	349.9	CuYd
480E0100	Reinforcing Steel	22,873	Lb
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	1,742	Ft
620E0510	Type 1 Temporary Fence	244	Ft
620E0520	Type 2 Temporary Fence	4,825	Ft
620E1020	2 Post Panel	60	Each
620E1030	3 Post Panel	9	Each
620E2020	20' Tubular Gate	1	Each
620E4100	Reset Fence	3,009	Ft
621E0160	6' Chain Link Fence with Tension Wired Top	19,434	Ft
621E0520	Reset Chain Link Fence	1,727	Ft
629E0110	High Tension 4 Cable Guardrail	1,065	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	10	Each
* 629E1107	Furnish High Tension Cable Guardrail Post	50	Each
* 629E1109	Furnish High Tension Cable Guardrail Post and Sleeve	50	Each
630E0500	Type 1 MGS	200.0	Ft
630E1500	Type 1 Guardrail Transition	2	Each
630E1510	Type 3 Guardrail Transition	8	Each
630E2005	W Beam Guardrail to MGS Transition	1	Each
630E2017	MGS MASH Flared End Terminal	5	Each
630E2018	MGS MASH Tangent End Terminal	6	Each
630E5140	Reset W Beam Guardrail with Wood Posts	216.0	Ft
650E0070	Type B67 Concrete Curb and Gutter	5,062	Ft
650E0105	Type B610.5 Concrete Curb and Gutter	1,063	Ft
650E3060	Type B6 Concrete Curb	361	Ft
650E4670	Type P7 Concrete Gutter	36	Ft
650E4705	Type P10.5 Concrete Gutter	48	Ft
651E0060	6" Concrete Sidewalk	25,441	SqFt
651E7000	Type 1 Detectable Warnings	433	SqFt
670E0200	Type A Frame and Grate	5	Each
670E1200	Type B Frame and Grate Assembly	27	Each
670E2200	Type C Frame and Grate	2	Each
670E4205	Type M Frame and Grate Assembly	9	Each
670E5202	Special Frame and Grate	1	Each
670E5342	4' x 6' Precast Concrete Type S Drop Inlet Lid	2	Each
670E5400	Precast Drop Inlet Collar	32	Each

Plot Scale - 1:200

Plotted From - Marcus, Martinez

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ESTIMATE OF QUANTITIES



STATE OF SOUTH DAKOTA

PROJECT

IM-CR-EM 0901(187)44

SHEET A2

TOTAL SHEETS A9

Plotting Date: 5/7/2026

Rev: 9/25/2025 BRC
Rev: 3/06/2026 MRM
Rev: 3/11/2026 MRM
Rev: 3/25/2026 BRC

Rev: 4/8/2026 BRC
Rev: 5/4/2026 BRC

Section B - Grading (Continued)

671E3072	72" Manhole Base and Barrel Section	1	Each
671E4548	48" Manhole Cone Section	17.0	Ft
671E5072	72" Manhole Cover Slab	1	Each
671E5504	4" Adjusting Ring for Manhole	1	Each
671E6010	Type A10 Manhole Frame and Lid	6	Each
700E0210	Class B Riprap	471.6	Ton
831E0110	Type B Drainage Fabric	1,704	SqYd
900E0010	Refurbish Single Mailbox	4	Each
900E0012	Refurbish Double Mailbox	1	Each
900E1080	Orange Plastic Safety Fence	1,200	Ft
900E1150	Right of Way Marker	39	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

* - Denotes Non-Participating

Section B - Grading MEAD0A9K

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3290	Structure Staking	4	Each
120E0500	Option Borrow Excavation	206,401	CuYd
629E0110	High Tension 4 Cable Guardrail	2,958	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	8	Each
630E0500	Type 1 MGS	100.0	Ft
630E1500	Type 1 Guardrail Transition	6	Each
630E2017	MGS MASH Flared End Terminal	1	Each
630E2018	MGS MASH Tangent End Terminal	3	Each
630E2065	MGS Trailing End Terminal	2	Each

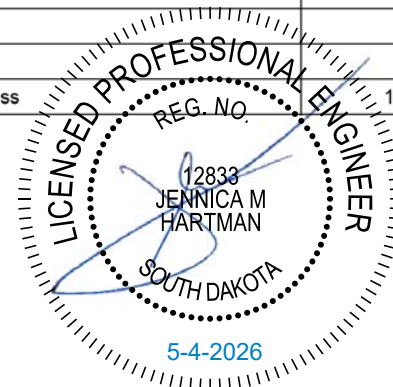
Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
634E0010	Flagging	5,000.0	Hour
634E0020	Pilot Car	1,000.0	Hour
634E0110	Traffic Control Signs	3,167.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0275	Type 3 Barricade	51	Each
634E0330	Temporary Raised Pavement Markers	10,400	Ft
634E0380	Tubular Marker	399	Each
634E0390	Replace Tubular Marker	20	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	462	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	46,268	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	576	Ft
634E0640	Temporary Pavement Marking	40,802	Ft
634E0700	Traffic Control Movable Concrete Barrier	462	Each

634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	885	Each
634E0750	Temporary Concrete Barrier End Protection	12	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	30	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	5	Each
634E1002	Detour and Restriction Signing	837.4	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each
634E1240	Queue Detection System	2	Each
634E1245	Maintenance of Queue Detection System	40	Hour
634E1260	Truck/Trailer Mounted Attenuator	2	Each

Section D - Erosion Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	57.0	CuYd
110E1693	Remove Erosion Control Wattle	5,058	Ft
110E1695	Remove Sediment Filter Bag	2,280	Ft
110E1700	Remove Silt Fence	3,586	Ft
230E0010	Placing Topsoil	57,724	CuYd
230E0020	Contractor Furnished Topsoil	1,135	CuYd
730E0100	Cover Crop Seeding	20.0	Bu
730E0200	Type A Permanent Seed Mixture	1,242	Lb
730E0210	Type F Permanent Seed Mixture	468	Lb
731E0200	Fertilizing	60.00	Ton
732E0100	Mulching	88.0	Ton
734E0044	Soil Stabilizer	87.0	Acre
734E0101	Type 1 Erosion Control Blanket	80,121	SqYd
734E0103	Type 3 Erosion Control Blanket	686	SqYd
734E0132	Type 2 Turf Reinforcement Mat	325.0	SqYd
734E0133	Type 3 Turf Reinforcement Mat	3,775.0	SqYd
734E0140	Erosion Bale	500	Each
734E0154	12" Diameter Erosion Control Wattle	22,405	Ft
734E0165	Remove and Reset Erosion Control Wattle	5,058	Ft
734E0180	Sediment Filter Bag	2,280	Ft
734E0325	Surface Roughening	22.8	Acre
734E0510	Shaping for Erosion Control Blanket	23,982	Ft
734E0602	Lcw Flow Silt Fence	14,653	Ft
734E0604	High Flow Silt Fence	2,760	Ft
734E0610	Mucking Silt Fence	996	CuYd
734E0620	Repair Silt Fence	3,586	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	36	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	16	Ft
734E5000	Dewatering	100	Hour
734E5010	Sweeping	730	Hour
900E1320	Construction Entrance	8	Each
900E5147	Articulated Concrete Mattress	1,232.0	SqYd



Section E - Structure 47-091-555 - Alternate A -

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	71	CuYd
421E0200	Box Culvert Undercut	152	CuYd
460E0120	Class A45 Concrete, Box Culvert	206.6	CuYd
480E0100	Reinforcing Steel	30,418	Lb
700E0210	Class B Riprap	20.5	Ton
831E0110	Type B Drainage Fabric	31	SqYd

Section E - Structure 47-091-555 - Alternate B -

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	68	CuYd
421E0200	Box Culvert Undercut	144	CuYd
560E0074	7'x6' Precast Concrete Box Culvert, Furnish	270.0	Ft
560E0075	7'x6' Precast Concrete Box Culvert, Install	270.0	Ft
560E1074	7'x6' Precast Concrete Box Culvert End Section, Furnish	2	Each
560E1075	7'x6' Precast Concrete Box Culvert End Section, Install	2	Each
700E0210	Class B Riprap	22.2	Ton
831E0110	Type B Drainage Fabric	33	SqYd

Section E - Structure 47-092-556

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	258	CuYd
421E0200	Box Culvert Undercut	817	CuYd
460E0120	Class A45 Concrete, Box Culvert	635.2	CuYd
480E0100	Reinforcing Steel	106,268	Lb
700E0210	Class B Riprap	53.4	Ton
831E0110	Type B Drainage Fabric	72	SqYd
831E0300	Reinforcement Fabric (MSE)	1,179	SqYd

Section E - Structure 47-093-557

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	248	CuYd
421E0200	Box Culvert Undercut	374	CuYd
464E0100	Controlled Density Fill	44.8	CuYd
560E0130	10'x4' Precast Concrete Box Culvert, Furnish	244.0	Ft
560E0131	10'x4' Precast Concrete Box Culvert, Install	244.0	Ft
560E1130	10'x4' Precast Concrete Box Culvert End Section, Furnish	2	Each
560E1131	10'x4' Precast Concrete Box Culvert End Section, Install	2	Each
560E2112	2-10'x4' Precast Concrete Box Culvert, Furnish	244.0	Ft
560E2113	2-10'x4' Precast Concrete Box Culvert, Install	244.0	Ft
560E3112	2-10'x4' Precast Concrete Box Culvert End Section, Furnish	2	Each
560E3113	2-10'x4' Precast Concrete Box Culvert End Section, Install	2	Each
700E0210	Class B Riprap	143.7	Ton
831E0110	Type B Drainage Fabric	152	SqYd

Plot Scale - 1:200

Plotted From - Marcus, Martinez

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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 A: AQUATIC RESOURCES

COMMITMENT A1: WETLANDS

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 0.53 acres of wetlands (includes temporary and permanent) becoming impacted. Refer to Section B – Grading Plans for location and boundaries of the impacted wetlands.

Table of Impacted Wetlands

Wetland No.	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
1	2027+80 - 2029+44 WB	0.071	0.000	0.000	0.000	0.071
2	2031+36 - 2032+02 WB	0.035	0.000	0.028	0.000	0.035
3	1031+95 - 1033+98 EB	0.000	0.057	0.000	0.000	0.057
4	1053+07 - 1035+35 EB; 2053+00 - 2053+37 WB	0.039	0.017	0.000	0.008	0.056
5	Borrow Site	0.280	0.000	0.000	0.000	0.280

Action Taken/Required:

SDDOT will acquire 1.76 credits from the SDDOT BCB1 wetland mitigation bank site or In-Lieu Fee program to mitigate permanent impacts.

Temporary impacts identified in the Table of Impacted Wetlands will not be mitigated as original contours and elevations will be re-established as designated in Section B – Grading Plans. Prior to initiating temporary work in wetlands, the Contractor will submit a plan to the Project Engineer in accordance with Section 7.21 D of the Specifications.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any wetland. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any wetlands beyond the work limits and easements shown in the plans.

COMMITMENT A2: STREAMS

All efforts to avoid and minimize stream impacts from the project have resulted in approximately 0.04 acres of stream (includes temporary and permanent) becoming impacted. Refer to Section B – Grading Plans/plans for location and boundaries of the impacted streams.

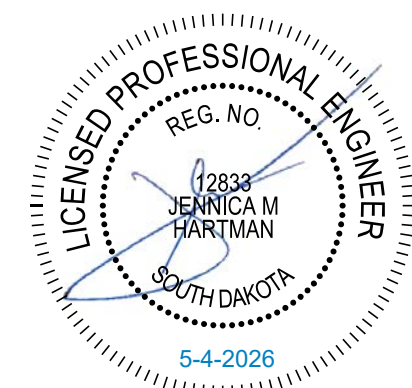
Table of Impacted Streams

Stream Name	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
Intermittent Stream 1a	2031+47 - 1031+63 WB	0	0	0.0003	0	0.0003
Intermittent Stream 1b	2029+76 - 2031+69 WB	0.0081	0	0	0	0.0081
Intermittent Stream 2	2031+73 - 2034+38 WB	0.0145	0	0	0	0.0145
Intermittent Stream 3	1034+31 - 1034+41 EB	0	0.0019	0	0.002	0.0039
Intermittent Stream 4	2053+07 - 2053+23 WB	0.0027	0	0	0	0.0027
Perennial Stream 1	2031+62 - 2031+80 WB	0.0049	0	0.0021	0	0.007

Action Taken/Required:

It has been determined that project impacts do not require mitigation. Temporary impacts identified in the Table of Impacted Streams will not be mitigated as the finished ground under the bridge will be shaped to match the upstream channel and flood plain and the existing low water channel will be maintained as near as practical to the existing location as designated in Section B – Grading Plans.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any stream. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any streams beyond the work limits and easements shown in the plans.



COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B5: NORTHERN LONG-EARED BAT

This project is within the range of suitable habitat for the Northern Long-Eared Bat (NLEB) and project work will avoid conflicts with NLEB roosting habitat.

Action Taken/Required:

The following avoidance, minimization, and mitigation measures are required:

GENERAL AMM 1 - Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

LIGHTING AMM 1 – Direct temporary lighting away from suitable habitat during the active season.

LIGHTING AMM 2 – When installing new or replacing existing permanent lights, use downward facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

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>

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D1: SURFACE WATER QUALITY

Little Elk Creek and Stagebarn Canyon Creek is classified as a cold water marginal fishery with a total suspended solids standard of less than 90 mg/L 30-day average, less than 158 mg/L daily maximum.

This project may be in the vicinity of multiple streams and wetlands. These waters are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that this water body is not impacted.

Action Taken/Required:

The Contractor is advised that the South Dakota Surface Water Quality Standards, administered by the South Dakota Department of Agriculture and Natural Resources (DANR), apply to this project. Special construction measures will be taken to ensure the above standard(s) of the surface waters are maintained and protected.

COMMITMENT D2: SURFACE WATER DISCHARGE

The DANR General Permit for Temporary Discharge is required for temporary dewatering and discharges to waters of the state. The effluent limit for total suspended solids will be 90 mg/L 30-day average. The effluent limit applies to discharges to all waters of the state except discharges to waters classified as cold water permanent fish life propagation waters according to the ARSD 74:51:01:45. For discharges to waters of the state classified as cold water permanent fish life propagation waters, the effluent limit for total suspended solids will be 53 mg/L daily maximum.

The permittee has the option of completing effluent testing or implementing a pollution prevention plan for compliance with this permit. If the permittee develops a pollution prevention plan instead of total suspended solids sampling, the plan must be developed and implemented prior to discontinuing total suspended solids sampling. Refer to Section 4.0 of the permit. If any pollutants are suspected of being discharged, a sample must be taken for those parameters listed in Section 3.4 of the permit.

Refer to Commitment D1: Surface Water Quality for stream classification.

Action Taken/Required:

If construction dewatering is required and this project is currently covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the contractor will need to submit the dewatering information to the SDDANR using the following form:

https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_AddTemplInfoFillable.pdf

The Contractor will provide a copy of the approved permit or the submitted dewatering information to the Project Engineer prior to proceeding with any dewatering activities. The approved permit or submitted dewatering information must be kept on-site and as part of the project records.

Effluent monitoring, as a result of dewatering activities, will be summarized for each month and recorded on a separate Discharge Monitoring Report (DMR) and submitted to DANR monthly. Additional information can be found at: <https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/Ereporting.aspx>

Plotted From - marcus.martinez

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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_CGPA_ppendixCCA2018Fillable.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) 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 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.



COMMITMENT J: CONSTRUCTION PRACTICES FOR TEMPORARY WORKS IN WATERWAYS OF THE U.S.

The Contractor is advised that special construction measures must be taken to ensure that the waterways of the U.S. are not impacted.

Action Taken/Required:

Excavation will not occur below the ordinary high-water elevation in waterways outside of caissons, cribs, cofferdams, steel piling, or sheeting. The natural streambed will not be disturbed unless specified by the plans and under the observation of the Project Engineer. Refer to the Table of U.S. Waterways to Protect for ordinary high-water elevations. Any structure work over or within the waterway will be constructed according to Section 7.21 C of the Specifications.

All dredged or excavated materials will be placed at a site above the ordinary high-water elevation in a confined area (not classified as a wetland) that is a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and inlets to prevent return of such material to the waterway.

The construction of temporary work platforms, crossings, or berms below the ordinary high-water elevation will be allowed if all material placed below the ordinary high-water elevation consists of Class B or larger riprap.

All temporary caissons, cribs, cofferdams, steel piling, sheeting, work platforms, crossings, and berms will be removed with minimal disturbance to the streambed. Proper construction practices will be used to minimize increases in suspended solids and turbidity in the waterway.

Bridge berms, wing dams, traffic diversions, channel reconstruction, stream diversions, grading, etc. will be constructed in close conformity with the plans to ensure that the hydraulic capacity of the waterway is not changed.

Temporary waterway crossings required for the Contractor's construction operations will be constructed with an adequate drainage structure size and minimum fill height to reduce the potential for upstream flooding. The Contractor will be responsible for sizing the temporary drainage structure for these crossings.

All temporary works in waterways of the US are required to be covered in the Corp of Engineers 404 Permit. At the time of the preconstruction meeting, the Contractor will submit documentation for all temporary works for the purpose of complying with the 404 Permit requirements in accordance with Section 423.3 A of the Specifications.

If an on-site construction crossing is used at Sta. 2031+62, the temporary crossing will need to be designed so it will not increase the Q₁₀₀ water surface elevation. The Contractor will submit the proposed temporary crossing geometric layout and structure size at Sta. 2031+62 to the Project Engineer during the preconstruction meeting. This information will be forwarded to the SDDOT Hydraulics Office and Environmental Office for review. Construction of the temporary crossing is not allowed until approval of the proposal is obtained from the SDDOT Hydraulics Office and Environmental Office.

Table of U.S. Waterways to Protect

Station	Waterway	Ordinary High-Water Elevation
1017+70 EBL	Trib. To Elk Creek	3482.0'
1034+34 EBL	Priest Canyon Creek	3479.7'
1043+12 EBL	Trib. To Priest Canyon Creek	3481.6'
1053+12 EBL	Trib. To Elk Creek	3467.5'
1124+34 EBL	Trib. To Elk Creek	3487.3'
1136+96 EBL	Stagebarn Canyon Creek	3510.85'

Stream channel excavation within "Waters of the US" is subject to USACE regulatory jurisdiction. Stream channel excavation cannot exceed the permitted quantities and/or surface area. The 404 Permit is included in the Special Provisions.

The Contractor will take all precautions necessary to prevent any incidental discharges associated with the excavation and hauling of material from the stream channel. This pertains to any excavation operations such as, foundation, pier, or abutment excavation, channel cleanout, excavation for riprap protection, and removal of any temporary fill associated with construction activities.

COMMITMENT L: CONTAMINATED MATERIAL

Contaminated soil and/or known gas stations, underground storage tanks, etc. are located within the project limits. Petroleum contaminated soil may be located at the following sites:

Description	Station	L / R
Elk Creek Market (101 Pine Street)	1048+45	R
Former Sinclair Station / Phillips 66 / Piedmont 66 (near 15891 Sturgis Rd)	1036+81	R
Impacted Residence (on Spring Valley Rd)	1037+34	L
Big D Oil Company (15003 Sturgis Rd)	1072+92	R

Action Taken/Required:

The Contractor will give notice to the Engineer when contaminated soil is encountered on the project. The Engineer will contact the Environmental Office so that contact with the DANR and consultant to inspect and monitor removal of any contaminated soil can be initiated.

The Contractor will be responsible for having the existing underground utilities located in the construction area. Underground utilities damaged by the Contractor due to negligence will be repaired at the Contractor's expense.

Petroleum contaminated soil may be disposed of at Boom Concrete, Inc. (phone 605-456-2600). Measurement of "Contaminated Material Excavation" will be in accordance with Section 120.4 of the Specifications. All costs for excavating and transporting the contaminated materials to the disposal site and all fees charged per cubic yard by the disposal site will be incidental to the contract unit price per cubic yard for "Contaminated Material Excavation".



COMMITMENT N: SECTION 404 PERMIT

The SDDOT has obtained a Section 404 Permit from the USACE for the permanent actions associated with this project.

Action Taken/Required:

The Contractor will comply with all requirements contained in the Section 404 Permit.

The Contractor will also be responsible for obtaining a Section 404 Permit for any dredge, excavation, or fill activities associated with material sources, storage areas, waste sites, and Contractor work sites outside the plan work limits that affect wetlands, floodplains, or waters of the United States.

COMMITMENT Q: ARCHAEOLOGICAL COORDINATION

As a result of a Cultural Resources Survey, historic properties have been identified within and/or adjacent to the project rights-of-way.

The following historic properties have been identified that require avoidance of construction activities:

Table of Historic Properties

Station	Offset (Ft.)	L/R	Environmental Sensitive Site	Action
1089+12 to 1094+40	382 to 500	R	Railroad grade	Do Not Disturb.

The locations and boundaries of the site(s) for avoidance are shown in Section B - Grading Plans.

Action Taken/Required:

If evidence for cultural resources is uncovered during project construction activities, then such activities within 150 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 consult with the Archaeological Research Center (ARC), the SHPO, and FHWA, to determine the appropriate course of action.

All artifacts, features, or other items of interest uncovered by project construction activities will not be displaced unless the landowner and the SHPO consent to it.

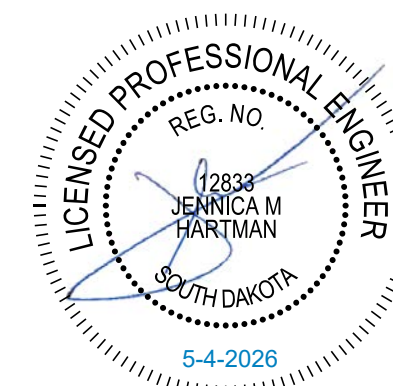
These identified sites cannot be used for material sources, storage areas, waste sites, and/or any other project related activities outside the plan work limits.

COMMITMENT S: FIRE PREVENTION IN THE BLACK HILLS AREA

This project is located within the Black Hills Forest Fire Protection Boundary.

Action Taken/Required:

The Contractor will adhere to the "Special Provision for Fire Plan".



SECTION B ESTIMATE OF QUANTITIES



STATE OF SOUTH DAKOTA

PROJECT

IM-CR-EM-0901(187)44

SHEET

B2

TOTAL SHEETS

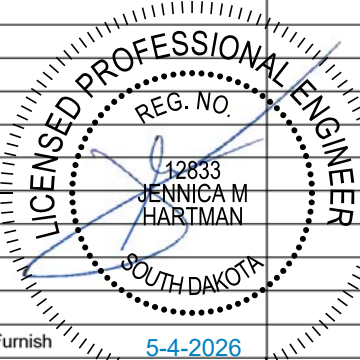
B258

Plotting Date: 5/7/2026

Rev: 9/8/2025 BRC
Rev: 3/6/2026 MRM
Rev: 5/4/2026 MRM

Section B - Grading			
BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	136	Each
009E3225	Reestablish Public Land Survey System Corner	2	Each
009E3230	Grade Staking	16.527	Mile
009E3245	Final Cross Section Survey	7.751	Mile
009E3250	Miscellaneous Staking	7.751	Mile
009E3280	Slope Staking	7.751	Mile
009E3290	Structure Staking	7	Each
009E3301	Engineer Directed Surveying/Staking	100.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0020	Clear and Grub Tree	56	Each
100E0100	Clearing	Lump Sum	LS
110E0400	Remove Drop Inlet	12	Each
110E0600	Remove Fence	9,851	Ft
110E0605	Remove Chain Link Fence	24	Ft
110E0655	Remove Interim Crossover Closure	224	Ft
110E0700	Remove 3 Cable Guardrail	712	Ft
110E0730	Remove Beam Guardrail	1,894.0	Ft
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	4	Each
110E1100	Remove Concrete Pavement	13,951.0	SqYd
110E1160	Remove Concrete Barrier	1,163	Ft
110E6230	Remove W Beam Guardrail for Reset	216.0	Ft
110E7800	Remove Chain Link Fence for Reset	1,727	Ft
110E7802	Remove Fence for Reset	3,009	Ft
120E0010	Unclassified Excavation	519,537	CuYd
120E0300	Borrow Unclassified Excavation	45,400	CuYd
120E0500	Option Borrow Excavation	318,349	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E1000	Muck Excavation	1,409	CuYd
120E2000	Undercutting	194,063	CuYd
120E6000	Water for Dust Control	1,000.0	MGal
120E6100	Water for Embankment	10,444.0	MGal
120E7500	Aggregate Column	4,145.2	CuYd
240E0010	Obliterate Old Road	6	Sta
250E0020	Incidental Work, Grading	Lump Sum	LS
260E6010	Granular Material	2,714.7	Ton
270E0020	Salvage and Stockpile Asphalt Mix Material	15,558.9	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	68,735.5	Ton
270E0110	Salvage and Stockpile Granular Material	27,161.2	Ton
380E3520	6" PCC Approach Pavement	104.0	SqYd
380E4100	10.5" PCC Fillet Section	35.9	SqYd
421E0100	Pipe Culvert Undercut	1,438	CuYd
450E0122	18" RCP Class 2, Furnish	2,414	Ft
450E0130	18" RCP, Install	2,414	Ft
450E0142	24" RCP Class 2, Furnish	1,408	Ft
450E0143	24" RCP Class 3, Furnish	268	Ft
450E0144	24" RCP Class 4, Furnish	162	Ft
450E0150	24" RCP, Install	1,838	Ft
450E0162	30" RCP Class 2, Furnish	1,362	Ft
450E0170	30" RCP, Install	1,362	Ft
450E0182	36" RCP Class 2, Furnish	932	Ft
450E0190	36" RCP, Install	932	Ft
450E0192	42" RCP Class 2, Furnish	52	Ft
450E0200	42" RCP, Install	52	Ft

450E0202	48" RCP Class 2, Furnish	296	Ft
450E0210	48" RCP, Install	296	Ft
450E0222	60" RCP Class 2, Furnish	1,506	Ft
450E0230	60" RCP, Install	1,506	Ft
450E0242	72" RCP Class 2, Furnish	222	Ft
450E0250	72" RCP, Install	222	Ft
450E2008	18" RCP Flared End, Furnish	1	Each
450E2009	18" RCP Flared End, Install	1	Each
450E2016	24" RCP Flared End, Furnish	1	Each
450E2017	24" RCP Flared End, Install	1	Each
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E2036	48" RCP Flared End, Furnish	1	Each
450E2037	48" RCP Flared End, Install	1	Each
450E2052	72" RCP Flared End, Furnish	1	Each
450E2053	72" RCP Flared End, Install	1	Each
450E2200	24" RCP Sloped End, Furnish	4	Each
450E2201	24" RCP Sloped End, Install	4	Each
450E2216	48" RCP Sloped End, Furnish	2	Each
450E2217	48" RCP Sloped End, Install	2	Each
450E2304	18" RCP Safety End, Furnish	2	Each
450E2307	18" RCP Safety End, Install	2	Each
450E2308	24" RCP Safety End, Furnish	3	Each
450E2311	24" RCP Safety End, Install	3	Each
450E3012	24" RCP Arch Class 2, Furnish	82	Ft
450E3020	24" RCP Arch, Install	82	Ft
450E3032	36" RCP Arch Class 2, Furnish	708	Ft
450E3040	36" RCP Arch, Install	708	Ft
450E3072	60" RCP Arch Class 2, Furnish	106	Ft
450E3080	60" RCP Arch, Install	106	Ft
450E4504	24" RCP Arch Flared End, Furnish	2	Each
450E4505	24" RCP Arch Flared End, Install	2	Each
450E4512	36" RCP Arch Flared End, Furnish	6	Each
450E4513	36" RCP Arch Flared End, Install	6	Each
450E4607	36" RCP Arch Sloped End, Install	12	Each
450E4622	36" RCP Arch Sloped End with Bars, Furnish	12	Each
450E4739	12" CMP 16 Gauge, Furnish	84	Ft
450E4740	12" CMP, Install	84	Ft
450E4759	18" CMP 16 Gauge, Furnish	108	Ft
450E4760	18" CMP, Install	108	Ft
450E4768	24" CMP 14 Gauge, Furnish	134	Ft
450E4770	24" CMP, Install	134	Ft
450E5015	24" CMP Elbow, Furnish	2	Each
450E5016	24" CMP Elbow, Install	2	Each
450E5203	12" CMP Flared End, Furnish	4	Each
450E5204	12" CMP Flared End, Install	4	Each
450E5211	18" CMP Flared End, Furnish	2	Each
450E5212	18" CMP Flared End, Install	2	Each
450E5406	18" CMP Safety End, Furnish	2	Each
450E5407	18" CMP Safety End, Install	2	Each
450E5410	24" CMP Safety End, Furnish	1	Each
450E5411	24" CMP Safety End, Install	1	Each
450E8014	24" RCP to CMP Transition, Furnish	1	Each
450E8015	24" Pipe Transition, Install	1	Each
451E0522	12" PVC Pipe	320	Ft
451E0528	18" PVC Pipe	630	Ft
451E6080	Adjust Water Valve Box	1	Each



462E0100	Class M6 Concrete	147.3	CuYd
464E0100	Controlled Density Fill	349.9	CuYd
480E0100	Reinforcing Steel	22,873	Lb
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	1,742	Ft
620E0510	Type 1 Temporary Fence	244	Ft
620E0520	Type 2 Temporary Fence	4,825	Ft
620E1020	2 Post Panel	60	Each
620E1030	3 Post Panel	9	Each
620E2020	20' Tubular Gate	1	Each
620E4100	Reset Fence	3,009	Ft
621E0160	6' Chain Link Fence with Tension Wired Top	19,434	Ft
621E0520	Reset Chain Link Fence	1,727	Ft
629E0110	High Tension 4 Cable Guardrail	1,065	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	10	Each
* 629E1107	Furnish High Tension Cable Guardrail Pcst	50	Each
* 629E1109	Furnish High Tension Cable Guardrail Pcst and Sleeve	50	Each
630E0500	Type 1 MGS	200.0	Ft
630E1500	Type 1 Guardrail Transition	2	Each
630E1510	Type 3 Guardrail Transition	8	Each
630E2005	W Beam Guardrail to MGS Transition	1	Each
630E2017	MGS MASH Flared End Terminal	5	Each
630E2018	MGS MASH Tangent End Terminal	6	Each
630E5140	Reset W Beam Guardrail with Wood Posts	216.0	Ft
650E0070	Type B67 Concrete Curb and Gutter	5,062	Ft
650E0105	Type B610.5 Concrete Curb and Gutter	1,063	Ft
650E3060	Type B6 Concrete Curb	361	Ft
650E4670	Type P7 Concrete Gutter	36	Ft
650E4705	Type P10.5 Concrete Gutter	48	Ft
651E0060	6" Concrete Sidewalk	25,441	SqFt
651E7000	Type 1 Detectable Warnings	433	SqFt
670E0200	Type A Frame and Grate	5	Each
670E1200	Type B Frame and Grate Assembly	27	Each
670E2200	Type C Frame and Grate	2	Each
670E4205	Type M Frame and Grate Assembly	9	Each
670E5202	Special Frame and Grate	1	Each
670E5342	4' x 6' Precast Concrete Type S Drop Inlet Lid	2	Each
670E5400	Precast Drop Inlet Collar	32	Each
671E3072	72" Manhole Base and Barrel Section	1	Each
671E4548	48" Manhole Cone Section	17.0	Ft
671E5072	72" Manhole Cover Slab	1	Each
671E5504	4" Adjusting Ring for Manhole	1	Each
671E6010	Type A10 Manhole Frame and Lid	6	Each
700E0210	Class B Riprap	471.6	Ton
831E0110	Type B Drainage Fabric	1,704	SqYd
900E0010	Refurbish Single Mailbox	4	Each
900E0012	Refurbish Double Mailbox	1	Each
900E1080	Orange Plastic Safety Fence	1,200	Ft
900E1150	Right of Way Marker	39	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

* - Denotes Non-Participating

Plot Scale - 1:200

Plotted From - Marcus.Martinez

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INSLOPE TRANSITIONS

Inslope transitions will be required at various drainage structures and pipe locations. Refer to Standard Plate 120.05 for details.

TABLE OF INSLOPE TRANSITIONS AT PIPE CULVERTS OR REINFORCED CONCRETE BOX CULVERTS

Station	L/R	Type
I-90 EB		
1017+75	L/R	1
1033+48	L/R	1
1043+03	L/R	1
1053+12	L/R	1
1124+34	L/R	1
1137+16	L/R	1

SELECT FILL MATERIAL

Select fill material will be used to construct the roadway embankment at Elk Creek Rd and as fill beneath the bottom of Wall A. The limits are specified in the table below.

Select fill material must meet the following specifications: a maximum liquid limit (LL) of 45, a plastic index (PI) greater than 10 but less than 25, 100% passing the 1 1/2 inch sieve, and a maximum of 70% passing the #4 sieve.

The borrow sources will not contain an adequate amount of + #4 sieve material to meet the gradation requirements. It is estimated that approximately 30% of the total select fill material quantity will need to be supplemented by material between the 1 1/2 inch sieve and the #4 sieve. Selective excavation and/or stockpiling of the borrow material and processing with the supplemented material will be required to produce select fill material. The Contractor is encouraged to review the soil logs and soil borings for the borrow sources to develop a sequence of stockpiling and blending operations that can produce material meeting the specified requirements.

Alignment	Station to Station	Select Fill (CuYd)
Elk Creek Road	503+00 to 504+55	4,558
Elk Creek Road	508+65 to 510+00	27,036
Wall A	108+10 to 206+60	5,796

The Contractor will be responsible for the following minimum testing prior to use of each borrow site:

One test for liquid limit and plastic index, and one sieve analysis from each source prior to placement of material. Test results will be provided to the Project Engineer for verification of specification compliance.

The Department will be responsible for the following minimum testing:

One test for liquid limit and plastic index, and one sieve analysis for every 10,000 cubic yards of material. Independent Assurance testing will not be required.

Plotting Date: 5/5/2026

Rev: 9/30/2025 BRC
Rev: 5/04/2026 MRM

File: ...Section_B-Grading_Notes_Fix.Docx

Plotted From - marcus martinez



TYPICAL GRADING SECTIONS



STATE OF SOUTH DAKOTA

PROJECT
IM-CR-EM-0901(187)44

SHEET
B55
TOTAL SHEETS
B258

Plotting Date: 5/7/2026

Rev: 02/14/2025 MRM
Rev: 05/04/2026 MRM

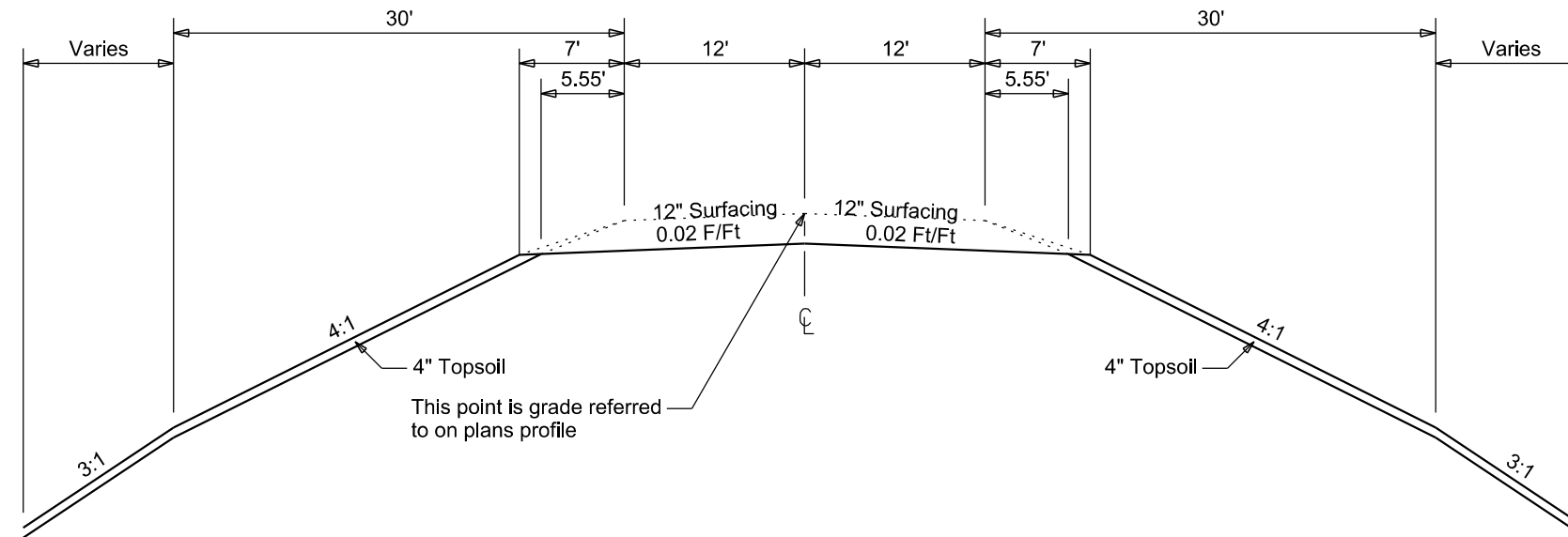
Plot Scale - 1:200

Plotted From - Marcus, Martinez

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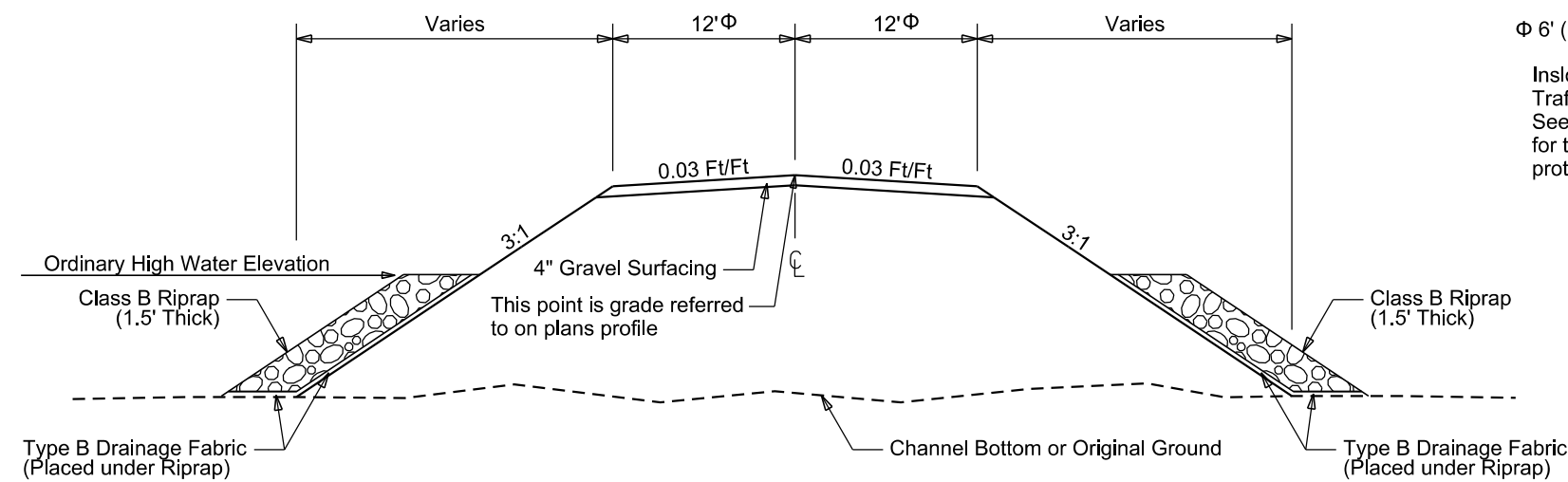
STEAKHOUSE ACCESS ROAD

40+13.15 to 46+67.83



TRAFFIC DIVERSIONS

0+16.29 to 4+83.71 div1015 = 1015+16.65 to 1019+15.57 I-90 EB
 0+39.75 to 4+60.25 div1031 = 1031+94.88 to 1035+93.47 I-90 EB
 0+41.32 to 4+58.68 div1041 = 1041+25.42 to 1045+21.51 I-90 EB
 ⌀ 0+22.58 to 3+27.42 div1052 = 1051+83.18 to 1054+48.83 I-90 EB



⌀ 6' (Single-Lane Diversion)

Inslope protection is only required on the Traffic Diversions 1015 and 1052. See Section B, Traffic Diversions Note for the description of this inslope protection method.

⊕ Centerline



TYPICAL GRADING SECTIONS



STATE OF SOUTH DAKOTA

PROJECT
IM-CR-EM-0901(187)44

SHEET
B55A

TOTAL SHEETS
B258

Plotting Date: 5/7/2026

Rev: 05/04/2026 MRM

Plot Scale - 1:200

Plotted From - Marcus, Martinez

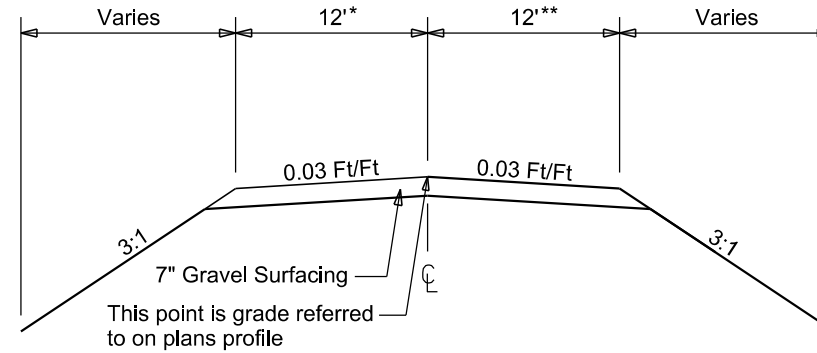
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TRAFFIC DIVERSIONS

666+64.82 to 680+29.73 Sturgis Road
0+00.00 to 22+42.00 div512 = 509+52.53 to 529+95.21 Elk Creek Road

*Sturgis Road - 666+64.82 to 680+29.73 - Varies, Match Ultimate

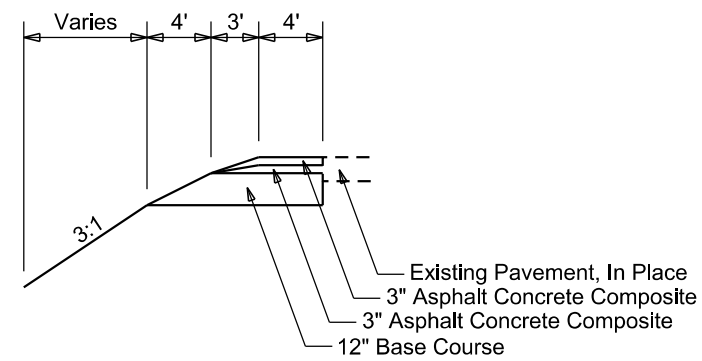
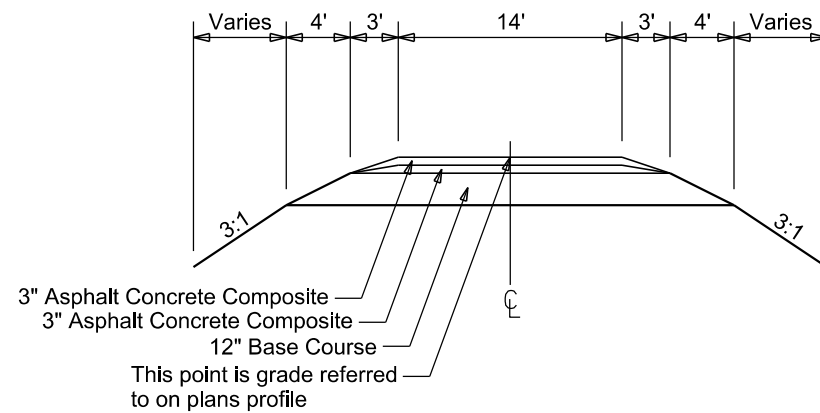
**Sturgis Road - 666+64.82 to 680+29.73 - 0'



RAMP DETOUR

0+00.00 to 8+00.00 div1067a = 1066+54.52 to 1074+35.02 I-90 EB
0+00.00 to 8+00.00 div1067b = 1066+54.52 to 1074+37.67 I-90 EB
0+00.00 to 5+00.00 div1078 = 1077+92.06 to 1082+85.80 I-90 EB
0+00.00 to 12+00.00 div1082 = 1076+53.93 to 1087+78.74 I-90 EB
0+00.00 to 10+27.14 div1102 = 1102+14.98 to 1111+94.38 I-90 EB
0+00.00 to 10+00.00 div1107 = 1103+44.11 to 1113+46.37 I-90 EB

RAMP DETOUR NEXT TO PCC PAVEMENT



Centerline



Plot Scale - 1:100

Plotted From - Marcus Martinez

Retain Drop Inlets at the following locations:
 1024+48-39' R
 1025+65-43' R
 1025+84-47' R
 1024+48 R to 1025+65 R Retain 12" - 116" RCP
 1025+65 R to 1025+84 R Retain 12" - 16" RCP
 1027+44-8' L
 Take out 18"-31' RCP & (2) End Sections (Incidental Work, Grading)
 1027+46-79' L
 Take out 18"-36' RCP & (2) End Sections (Incidental Work, Grading)

1027+43-54' R Retain 30"-34' RCP & (1) Headwall
 1027+44-45' L Take out 30"-190' RCP & (1) End Section (Incidental Work, Grading)
 1028+46-52' R Take out 12"-202' RCP (Incidental Work, Grading)
 1025+40.00-45.40' L to 1027+45.08-45.57' L Install 24"-204' RCP (Between Inlets)
 1025+40.00-45.40' L Install Type M Median Drain (Between Inlet & Outlet)

Remove Barrier Drop Inlets at the Following Locations
 1027+43-50' R
 1029+48-53' R
 1034+54-54' R
 1028+68-3' L to 1031+83 Take out 18"-315' CMP & (2) End Sections (Incidental Work, Grading)
 1027+43.51-50.03' R to 1027+45.08-45.57' L Install 30"-92' RCP (Between Inlets)
 1027+45.08-45.57' L to 1027+46.87-170.48' L Install 36"-116' RCP & 1 Flared End (Between Inlet & Outlet)

1029+18-05' L to 1031+34-05' L Remove Interim Crossover Closure
 1027+43.51-50.03' R to 1029+48.78-53.29' R Install 24"-200' RCP (Between Inlets)
 1027+45.08-45.57' L Install Special Median Drain (See Section E)
 1027+43.51-50.03' R to 1027+43.38-54.76' R Install 30"-4' RCP (Between Existing Pipe and Proposed Inlet)

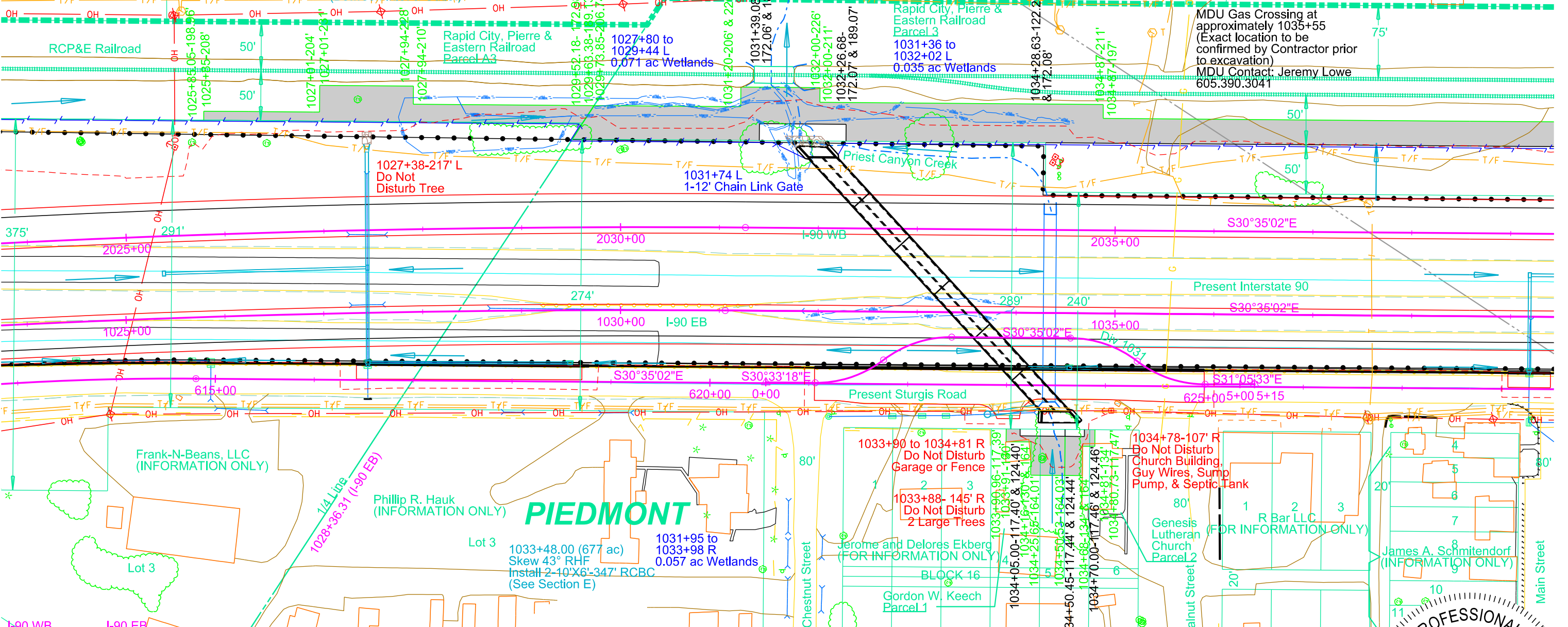
1031+54 to 1034+54-R Take Out 300' Slotted Drain (Incidental Work, Grading)
 1033+72-103' R to 1034+18-101' R Take out 48"-47' RCP & (1) End Section (Incidental Work, Grading)
 1034+34 Take out 2-6'x6'-190' RCBC (Incidental Work, Grading)
 1031+86-154' L End Chain Link Fence

1032+11 to 1033+72 Retain 48"-160' RCP
 Retain Drop Inlets at the following locations:
 1032+76-105' R
 1033+06-105' R
 1033+30-105' R
 1032+11-106' R Retain Sanitary Manhole

Clear and Grub Tree at the following locations:
 1026+47-173' L
 1028+52-172' L to 1029+71-174' L
 1030+00-163' L
 1030+05-164' L
 1031+19-166' to 1031+92-164' L
 1032+89-159' to 1033+31-160' L
 1034+20-115' to 1034+65-115' R
 1036+40-131' to 1037+09-125' L
 1034+17 R
 1035+05 R Remove and Replace Single Mailbox
 1032+19-158' L Begin Chain Link Fence

Plotting Date: 5/8/2026
 Rev: 9/11/2025 BRC
 Rev: 5/04/2026 MRM

1034+14.44-55.30' R to 1034+54.29-55.30' R Install 24"-38' RCP (Between Inlet & RCBC)
 Install Barrier Drop Inlet Double Unit Frame and Grate Assembly at the following locations:
 1027+43.51-50.03' R
 1029+48.78-53.29' R (See Section E)
 1034+54.29-55.30' R Install 3' x 4' Type C Drop Inlet & Type C Frame and Grate
 1033+71.87-102.77' R to 1034+21.72-95.00' R Install 48"-48' RCP (Between Manhole and RCBC)
 1033+71.87-102.77' R Install 72" Type A Precast Manhole & Type A10 Manhole Frame and Lid



I-90 WB
 PI 2027+00.97
 N 165144.03
 E 1080220.55
 Del 3°45'19" R
 Dc 0°26'29"
 T 425.64'
 L 850.97'
 R 12984.00'

I-90 EB
 PI 1026+67.83
 N 165129.37
 E 1080131.63
 Del 3°53'11" R
 Dc 0°26'36"
 T 438.48'
 L 876.63'
 R 12924.00'

Parcel A3
 1025+85.05 to 1029+73.85 L
 Temporary Easement containing 0.2 ac, more or less

Parcel 3
 1029+52.18 to 1051+35.08 L
 Temporary Easement containing 1.2 ac, more or less

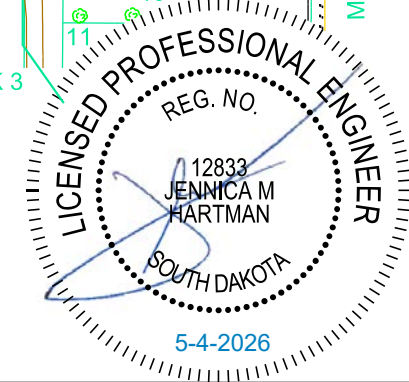
Retain concrete barrier at the following locations (See Section E)
 1024+35.34-42.62' R to 1027+31.90-52.62' R
 1029+60.80-57.71' R to 1031+96.72-57.80' R
 1035+90.72-57.59' R to 1038+97.78-57.66' R

Remove concrete barrier at the following locations
 1027+31.90-52.62' R to 1029+60.80-57.71' R
 1031+96.72-57.80' R to 1035+90.72-57.59' R
 1038+97.78-57.66' R to 1039+40.78-57.67' R

Install special concrete barrier at the following locations (Match existing structure) (See Section E)
 1027+31.90-52.62' R to 1029+60.80-57.71' R
 1031+96.72-57.80' R to 1035+90.72-57.59' R
 1038+97.78-57.66' R to 1039+40.78-57.67' R

Parcel 1
 1033+90.96 to 1034+50.53 R
 Temporary Easement containing 0.1 ac, more or less

Parcel 2
 1034+50.45 to 1034+80.73 R
 Temporary Easement containing 0.1 ac, more or less



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Plot Scale - 1:100

Plotted From - Marcus, Martinez

1039+19-54' R Retain 24"-52' RCP
 1039+20-31' R Take out 24"-50' RCP & (1) End Section (Incidental Work, Grading)
 1039+19.16-42.00' L to 1039+19.28-53.97' R Install 30"-94' RCP (Between Inlets)
 1039+19.16-42.00' L to 1041+24.23-42.00' L Install 30"-204' RCP (Between Inlets)
 1039+19.28-53.97' R to 1039+19.25-59.24' R Install 24"-4' RCP (Between Existing Pipe and Proposed Inlet)
 1041+24.23-42.00' L to 1042+85.96-42.00' L Install 30"-162' RCP (Between Inlets & Culvert)

1041+25-58' R Retain Drop Inlet
 1041+25 R Retain 18"-32' RCP
 1043+07 L Retain 48"-73' RCP & (2) End Sections
 1041+25 Take out 24"-54' RCP & (1) End Section (Incidental Work, Grading)
 1041+24.23-42.00' L to 1041+24.29-54.22' R Install 24"-94' RCP (Between Inlets)
 1042+86-148' L End Chain Link Fence
 1043+20-148' L Begin Chain Link Fence

1042+86 to 1043+12 Take out 24"-26' RCP & (2) End Sections (Incidental Work, Grading)
 1041+24.29-54.22' R to 1041+25.11-59.30' R Install 18"-4' RCP (Between Existing Pipe and Proposed Inlet)
 1046+70.00-53.97' R to 1046+70.00-59.46' R Install 24"-4' RCP (Between Existing Pipe and Proposed Inlet)
 1039+19.16-42.00' L Install Type M Median Drain

1043+15 L Retain 48"-73' RCP & (2) End Sections
 1043+12 Take out 8'X3'-196' RCBC (Incidental Work, Grading)
 Remove Drop Inlets at the Following Locations
 1039+19-54' R
 1041+24-55' R
 1046+69-55' R
 1043+03.00 (502 ac)
 Install 3'-10'X4'-256' RCBC (See Section E)

1046+69-59' R Retain 24"-32' RCP & (1) Headwall
 1042+51-125' L to 1043+29-164' L Clear and Grub Tree
 1046+70-29' R Take out 24"-50' RCP & (1) End Section (Incidental Work, Grading)
 1053+85-58' L Remove Drop Inlet
 Install Barrier Drop Inlet Double Unit & Barrier Drop Inlet Double Unit Frame and Gate Assembly at the following locations:
 1039+19.28-53.97' R
 1041+24.29-54.22' R
 1046+70.00-53.97' R (See Section E)

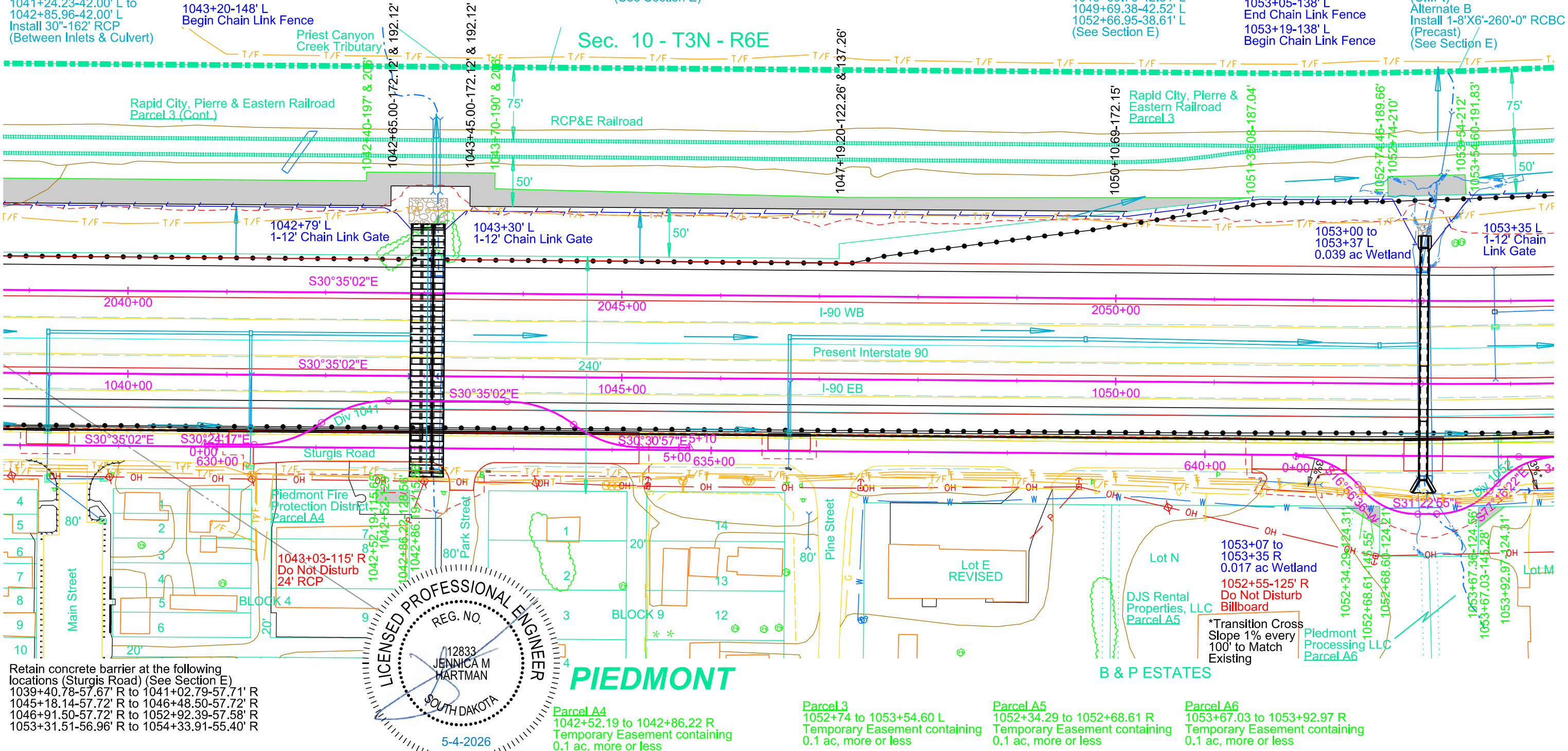
Remove concrete barrier at the Following Locations
 1041+02.79-57.71' R to 1045+18.14-57.72' R
 1046+48.50-57.72' R to 1046+91.50-57.72' R
 1052+92.39-57.58' R to 1053+31.51-56.96' R
 Install special concrete barrier at the Following Locations (Match existing structure) (See Section E)
 1041+02.79-57.71' R to 1045+18.14-57.72' R
 1046+48.50-57.72' R to 1046+91.50-57.72' R
 1052+92.39-57.58' R to 1053+31.51-56.96' R
 1049+69.38-42.52' L to 1052+66.95-38.61' L Install 36"-296' RCP (Between Inlets)

1051+48-100' R to 1052+08-103' R Retain 18"-60' CMP & (2) End Sections
 1053+84-86' L Take out 18"-58' RCP & (1) End Section (Incidental Work, Grading)
 1053+84-34' L Take out 18"-52' RCP & (1) End Section (Incidental Work, Grading)
 1046+69.76-42.31' L to 1049+69.38-42.52' L Install 36"-298' RCP (Between Inlets)
 Install Special Median Drains at the following locations:
 1041+24.23-42.00' L
 1046+69.76-42.31' L
 1049+69.38-42.52' L
 1052+66.95-38.61' L (See Section E)

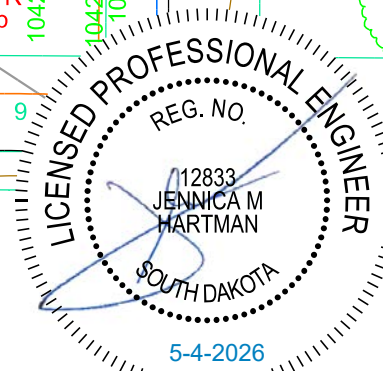
	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
		IM-CR-EM-0901(187)44	B70	B258

Plotting Date: 5/8/2026
 Rev: 9/11/2025 BRC
 Rev: 4/27/2026 MRM
 Rev: 5/04/2026 MRM

1053+87-53' R Retain Drop Inlet
 1053+87-56' R Retain Drop Inlet
 Clear and Grub Tree at the following locations:
 1053+44-143' L
 1053+50-144' L
 1053+12 Take out 2'-6'X6' - 206' RCBC (Incidental Work, Grading)
 1052+66.95-38.61' L to 1053+08.48-39.96' L Install 36"-42' RCP (Between Inlet & Culvert)
 1053+05-138' L End Chain Link Fence
 1053+19-138' L Begin Chain Link Fence
 1053+34-243' L Retain 48"-60' RCP & (2) End Sections
 1053+87-77' R Retain 18"-40' RCP & (1) End Section
 1053+85-72' L Remove Barrier Inlet
 1053+12.00 (DA=246 ac) Alternate A Install 1-7'X6'-260'-8" RCBC (C.I.P.)
 Alternate B Install 1-8'X6'-260'-0" RCBC (Precast) (See Section E)



Retain concrete barrier at the following locations (Sturgis Road) (See Section E)
 1039+40.78-57.67' R to 1041+02.79-57.71' R
 1045+18.14-57.72' R to 1046+48.50-57.72' R
 1046+91.50-57.72' R to 1052+92.39-57.58' R
 1053+31.51-56.96' R to 1054+33.91-55.40' R



PIEDMONT
 Parcel A4
 1042+52.19 to 1042+86.22 R
 Temporary Easement containing 0.1 ac, more or less

Parcel 3
 1052+74 to 1053+54.60 L
 Temporary Easement containing 0.1 ac, more or less

Parcel A5
 1052+34.29 to 1052+68.61 R
 Temporary Easement containing 0.1 ac, more or less

Parcel A6
 1053+67.03 to 1053+92.97 R
 Temporary Easement containing 0.1 ac, more or less

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SECTION C ESTIMATE OF QUANTITIES



STATE OF SOUTH DAKOTA

PROJECT

IM-CR-EM 0901(187)44

SHEET

C2

TOTAL SHEETS

C85

Plotting Date: 5/5/2026 Rev: 2/14/2025 BRC Rev: 9/30/2025 BRC Rev: 3/6/2026 MRM Rev: 3/25/2026 BRC Rev: 4/8/2026 BRC Rev: 5/4/2026 BRC

Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
634E0010	Flagging	5,000.0	Hour
634E0020	Pilot Car	1,000.0	Hour
634E0110	Traffic Control Signs	3,167.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	LS
634E0275	Type 3 Barricade	51	Each
634E0330	Temporary Raised Pavement Markers	10,400	Ft
634E0380	Tubular Marker	399	Each
634E0390	Replace Tubular Marker	20	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	462	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	46,268	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	576	Ft
634E0640	Temporary Pavement Marking	40,802	Ft
634E0700	Traffic Control Movable Concrete Barrier	462	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	885	Each
634E0750	Temporary Concrete Barrier End Protection	12	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	30	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	5	Each
634E1002	Detour and Restriction Signing	837.4	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each
634E1240	Queue Detection System	2	Each
634E1245	Maintenance of Queue Detection System	40	Hour
634E1260	Truck/Trailer Mounted Attenuator	2	Each

Plot Scale - 1:200

Plotted From - Bayley.Colemer

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QUEUE DETECTION SYSTEM CONT.

Each Queue Detection System detector will be capable of establishing priority status based on preset thresholds that are met farthest from the work area and Portable Changeable Message Signs will be capable of receiving messages from multiple detectors, depending on detector priority status.

The system will display the following messages depending on traffic conditions detected and received from the detectors:

During very slow or stopped traffic:

STOPPED
TRAFFIC
XX MI AHD

BE
PREPARED
TO STOP

During moderately slow traffic:

SLOW
TRAFFIC
XX MI AHD

USE
CAUTION

During times of free-flowing traffic, Portable Changeable Message Signs will display a dot in each of the four corners of the display when not required for end-of-queue notification or incident management.

During times of very slow or stopped traffic where the second preset detector threshold is met (30 mph or less), each set of Portable Changeable Message Signs for that direction will notify travelers of stopped traffic, to be prepared to stop, and the approximate distance to the condition.

During times of moderately slow traffic where the first preset detector threshold is met (between 65 mph and 30 mph), each set of Portable Changeable Message Signs for that direction will notify travelers of slow traffic, to use caution, and the approximate distance to the condition.

Hardware requirements will be as follows:

Portable Changeable Message Signs will be Ver-Mac 1210 NTCIP PCMS or approved equal. Microwave detectors will be Wavetronix SS125 or 126 or approved equal. Sensor trailers will be Ver-Mac PST or approved equal. Doppler radar detectors will be Houston Radar DR500 or approved equal.

SEQUENCE OF OPERATIONS

Contractor requests to deviate from the sequence of operations will be submitted in writing to the Engineer for Review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence will be submitted for review a minimum of one week prior to potential implementation.

The traffic control staging has been developed to illustrate an acceptable approach to completing the work within the Contract Time Provisions.

The following requirements/restrictions will apply:

General Requirements:

- Any requests by the Contractor to deviate from the Sequence of Operations must be submitted in writing to the Engineer for review and approval at least one week prior to implementation.
- Approval of alternative sequencing is subject to compliance with the State's intent for traffic control and project sequencing.
- Construction activities may occur in multiple phases or in an order differing from that shown, provided the contractor maintains the traffic control configuration and intent associated with the applicable phase(s) at all times. The sequence of operations illustrates one acceptable approach to completing the work. Alternative approaches may be utilized and are subject to engineer approval.
- Cold weather limitations, periods of inactivity, and any suspension of work Will be governed by the Contract Time Special Provision.
- At any given time, the contractor shall maintain only traffic control configurations that are consistent with details shown in the plans and approved by the engineer.

Sturgis Rally Restrictions:

- All lanes of Interstate 90 (I-90) and Interchange operations must remain open during the timeframe of the Sturgis Rally, with the exception of the second full construction season duration.
- Refer to Contract Time Special Provision for specific rally-related restrictions.

I-90 Fixed Signing

- Use Standard Plate 634.63, in conjunction with fixed signing sheets C14 and C15, to set Work Zone Speed Reduction for I-90.

I-90 Crossovers

- Use Standard Plate 634.66 to set 45 mph crossover signing.



STATE OF
SOUTH
DAKOTA

PROJECT

IM-CR-EM 0901(187)44

SHEET

C4

TOTAL
SHEETS

C85

Plotting Date: 5/7/2026

Rev: 9/30/2025 BRC
Rev: 3/06/2026 BRC
Rev: 3/25/2026 BRC
Rev: 4/8/2026 BRC

Rev: 4/10/2026 BRC
Rev: 4/27/2026 BRC
Rev: 5/4/2026 BRC

I-90 Concrete Box Culvert – Shoulder Work

- Use Standard Plate 634.61 to install shoulder closures at Str. No. 47-091-555 (CBC 1), 47-092-556 (CBC 2), 47-093-557 (CBC 3), 47-094-559 (CBC4), 47-104-570 (CBC 5) and 47-106-572 (CBC 6).
- Protect box culvert replacements with temporary concrete barriers.

The following requirements/restriction apply to Interstate 90:

- Maintain two lanes in each direction with a minimum 12-ft width, except where alternate traffic control configurations are shown in the plans or approved by the engineer for I-90 mainline construction, box culvert construction, ramp tie-ins, structure work, or other phasing operations.
- Daytime lane closures require five days' advance notice and approval by the Engineer.
 - Allowable daytime lane closure activities include:
 - Installation/removal of the concrete barriers
 - Box culvert material and equipment delivery to the I90 shoulder
 - New bridge construction
 - New ramp construction
 - Retaining wall material delivery

PHASE A – Concurrent work items to include:

Exit 46 Interchange – RCP&E RR EAST: Steakhouse Access Rd, Spring Valley Rd, E Hills View Dr, Elk Creek Rd, Temporary Elk Creek Road

- Use Standard Plate No. 634.03 for traffic control when working along the shoulder of Present Elk Creek Road and Spring Valley Road.
- Use Standard Plate No. 634.28 for the construction and maintenance of the Temporary Elk Creek Road Diversion.
- **Elk Creek Road**
 - Complete grading of Temporary Elk Creek Road using the provided alignment and profile prior to implementing the traffic diversion onto the temporary alignment.
 - Temporary Road must always provide 1 lane of traffic in each direction, being separated using channeling devices.
 - Remove Present Elk Creek Road pavement from Proposed Steakhouse Access Road to West Hills View Drive.
 - Begin grading and AC pavement for new Elk Creek Road from RCP&E Railroad to East Valley View Drive (Sta. 508+65 to 527+57).
 - Complete grading and AC Pavement for Lot 9 Access.
 - Work that does not require the use of the temporary alignment can begin at any time (Sta. 508+65 to 513+00 +/-).
 - See Phase A Elk Creek Road Sequencing for subphase completion.



OPERATION AND MAINTENANCE OF QUEUE DETECTION SYSTEM



STATE OF SOUTH DAKOTA

PROJECT	SHEET	TOTAL SHEETS
IM-CR-EM 0901(187)44	C4A	C85

Plotting Date: 5/7/2026

Rev: 5/4/2026 BRC

When road work begins on the project, the Contractor will be responsible for the operation (to include initial and daily system setup and programming) and continued maintenance (to include adjustment and replacement of any parts, materials or appurtenances when necessary) required of the Queue Detection System. The Contractor's operation and maintenance responsibility will end upon the Engineer's acceptance of the work on the project.

Queue Detection System operation or maintenance work is required to be performed by the Contractor when project conditions dictate, lane closures change, the flow of I-90 mainline or interchange ramp traffic is impeded, a potential risk to the public exists or when equipment breaks down or malfunctions. The more serious situations require a high priority response and are to be reacted to as quickly as circumstances allow.

The Contractor should plan for sufficient staff for the operation, maintenance, adjustments, materials, and replacement of the Queue Detection System. The individual(s) responsible for installation, operations and maintenance of the Queue Detection System must be experienced, knowledgeable, and trained with respect to installation, setup, operation and maintenance of the Queue Detection System.

In the event of failure, the Contractor will furnish necessary advance flaggers to safely control or warn traffic until the Queue Detection System is operational. The Contractor will furnish the flaggers within one hour of initial awareness of Queue Detection System failure.

The Contractor will be required to secure the Portable Changeable Message Signs in the proper positions. Relocation of sensor trailers and Portable Changeable Message Signs will be required as part of the work involved in maintaining the Queue Detection System. All Portable Changeable Message Signs and any sensor trailers will be marked with a minimum of two reflectorized drums.

The Queue Detection System including changeable message signs and other electronic materials are to operate 24 hours per day 7 days per week. The equipment will be powered by utility provided power, solar power, battery power, or generator. Solar powered battery units will have a no-charge-life of not less than 30 days. No-charge-life is the number of consecutive days that the system can continue to properly function (normal dimming and full output during varying lighting conditions for the display legend) starting with a full battery charge and with no additional charge provided by the solar cells.

Cost for the installation, daily operation, adjustment, relocation, replacement, technical support, maintenance (labor, materials and equipment), and flagging to control or warn traffic in the event of system failure of the Queue Detection System will be included in the contract unit price per hour for Maintenance of Queue Detection System



DIGITALLY PRINTED SIGNS (CONTINUED)

CERTIFIED DIGITAL SIGN FABRICATOR

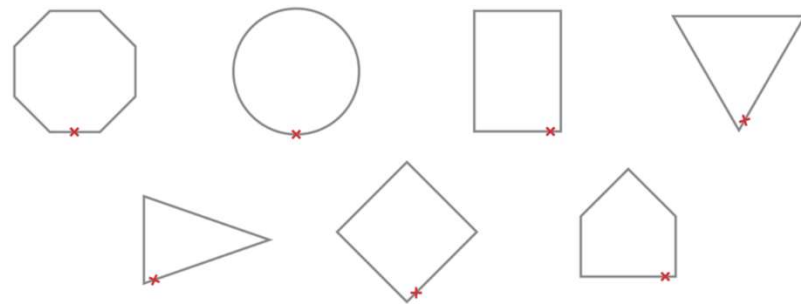
Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

DATE TAGGING SIGNS WITH PERTINENT INFORMATION

All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs
Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.

- Name of sign fabricator



- Date the sign was fabricated (month and year)
- Process that was used for sign fabrication (digitally printed)
- Supplier of sheeting that was used for fabricating the sign.

2. Border date

The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8" sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.

SQUARE TUBE ANCHOR SLEEVE

The Contractor will furnish and install new 2.5" x 2.5" x 18", 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for 2.0" x 2.0" perforated tube posts. A 2.25" x 2.25" x 4', 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

SQUARE TUBE POST SLEEVE

All 2.5" x 2.5", 10 Gauge perforated tube post will be sleeved with a 2-3/16" x 2-3/16" x 4', 10 Gauge perforated tube post.

WINGED SLIP BASE ANCHOR

The Contractor will furnish and install new winged slip base anchors for 2.5" x 2.5" perforated tube posts as required in the Permanent Signing Table. Winged slip base anchors will be installed using the direct drive method. Winged slip base anchors will consist of a slip base (upper), a 48-inch long winged anchor (lower), and a hardware kit.

POLE MOUNTED SIGNS

Signs that are mounted on luminaire poles will be attached with high strength stainless steel bands or galvanized pole clamps. Signs will be attached as recommended by the manufacturer. All sign mounting hardware will be stainless steel or galvanized steel.

Pole mounted signs will be mounted a minimum of 7 ft above the ground. Mounting heights are measured to the bottom of the signs.

All costs for pole sign mounting hardware will be incidental to the contract unit price per square foot for "Flat Aluminum Sign, Nonremovable Copy High Intensity" or "Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity".

INSTALLATION OF OVERLAY

Some of the in place extruded aluminum panels have been previously overlaid. Any rivets and overlay pieces remaining from previous overlays will be removed.

Excess amounts of dirt or other foreign material will be removed from the surface of the extruded aluminum panels. Any surface irregularities (bullet holes) will be repaired prior to the installation of the new overlay.

The new overlays will be installed on the in place extruded aluminum panels. The overlay sections will be fabricated to minimize the number of seams.

Overlays will be attached to the extruded aluminum panels beginning with the pieces along the top of the sign. Fastening will proceed from the top of the overlay downward working out any bulges.

Fasteners will be aluminum rivets 5/32" in diameter. Rivets will be placed at 9" +/- 1" centers along the horizontal and vertical seams. Rivets will be placed 1/4" to 1/2" from the edges of the overlay pieces. Adjoining overlays will be butted tightly together before fastening begins. In addition to the perimeter rivets, fasteners are required inside the overlay spaced approximately 1' vertically and 2' horizontally from the overlay piece edges.

Prior to installing overlays, all in place extruded aluminum panels will be level and edges plumb. Post clips on the back of the sign will be tightened to the post.

All costs for leveling, plumbing and tightening will be incidental to the contract unit price per square foot for "Aluminum Overlay, Nonremovable Copy Super/Very High Intensity".


LOGO SIGNS

The Contractor will remove and reset the existing logos to match the existing signs.

All costs associated with removing and resetting existing logos will be incidental to the contract unit price per square foot for "Extruded Aluminum Sign, Nonremovable Copy High Intensity".

MILEAGE REFERENCE MARKERS

Mileage Reference Markers (MRMs) are to be removed and replaced with a new sign and post at the exact same stations. Payment for this work will be incidental to the various signing contract items.

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		IM-CR-EM 0901(187)44	S4	S57

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Rev: 3/6/2026 MRM
Rev: 5/4/2026 BDH

SIGNPOST INSTALLATION IN CONCRETE

On concrete surfaces, a core will be drilled out or a block out will be used for sign installation. The core or block out diameter will be sized accordingly depending on post size. Concrete surrounding the core or block out must not be cracked or damaged. This method shall apply to posts in concrete including delineators and object markers.

All costs associated with installation in concrete will be incidental to the sign installation.

REMOVE CONCRETE FOOTING

Concrete footings that are to be removed will be removed by the Contractor to a minimum of 2' below the ground surface. Restoration of the disturbed area will be to the satisfaction of the Engineer.

The existing footings located at Exit 46 will be removed by the Contractor as per these plans.

All costs for removing the concrete footings will be incidental to the contract lump sum price for "Remove Concrete Footing(s)".

ROAD CLOSURE WARNING SIGNS

The Contractor shall furnish and install two (2) road closure warning sign assemblies with LED lights as detailed in these plans.

Payment for all cost of labor, materials, and equipment necessary for the sign assemblies, including to furnish and install flashing beacons, conduit, and wiring on signs to the pull box nearest to the base of sign assembly shall be incidental to other various contract unit prices. Wiring shall be three (3) 1/C #8 AWG copper wires.

Payment for the road closure warning signs shall be paid for at the contract unit price per square foot for Flat Aluminum Sign / Nonremovable Copy Super/Very High Intensity.

Payment for the road closure warning signposts, hardware, bases, and labor will be made at the contract unit price per foot for 2.5" x 2.5" Perforated Tube Post.

Payment for all cost of work, labor, materials, and equipment necessary for the transformer and switch assembly, including post, enclosure, flasher, and conduit and wiring from nearest pull box to assembly shall be paid for at the contract lump sum price for Miscellaneous, Electrical. Wiring shall be three (3) 1/C #8 AWG copper wires. Conduit shall be 2" Schedule 40 PVC or HDPE SOR 13.5.

