

Planning & Engineering Office of Project Development

700 E Broadway Avenue Pierre, South Dakota 57501-2586 O: 605.773.3275 | F: 605.773.2614 dot.sd.gov

November 18, 2024

ADDENDUM NO. 1

RE: Item #1, November 20, 2024 Letting - NH-CR 0034(193)402, PCN 0609, Moody County - Grading, PCC Surfacing, Curb & Gutter, Sidewalk, Lighting

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 Index of Special Provisions and replace with attached Index of Special Provisions revised 11/14/24.

Please remove the "Special Provision Regarding Right of Entry/Work Limits", dated 10/21/24.

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 110E0605 "Remove Chain Link Fence" Bid Item 450E4819 "54" CMP 16 Gauge, Furnish" Bid Item 450E4820 "54" CMP, Install" Bid Item 450E5235 "54" CMP Flared End, Furnish" Bid Item 450E5236 "54" CMP Flared End, Install" Bid Item 450E9234 "Slipline 54" Pipe" Bid Item 621E0050 "5' Chain Link Fence with Top Rail" Bid Item 621E0430 "Double Vehicular Swing Gate" Bid Item 621E0600 "Chain Link Fence Post"

Quantities for Bid Items were changed:

Bid Item 450E0192 "42" RCP Class 2, Furnish" changed from 188 to 164 Ft
Bid Item 450E0200 "42" RCP, Install" changed from 188 to 164 Ft
Bid Item 450E2032 "42" RCP Flared End, Furnish" changed from 8 to 4 Each
Bid Item 450E2033 "42" RCP Flared End, Install" changed from 8 to 4 Each
Bid Item 634E0020 "Pilot Car" changed from 2,500.00 to 250.00 Hour
Bid Item 650E1079 "Modified Type F68 Concrete Curb and Gutter" changed from 2,853 to 2,849 Ft

Bid Item 650E1080 "Type F68 Concrete Curb and Gutter" changed from 301 to 303 Ft Bid Item 720E1015 "Bank and Channel Protection Gabion" changed from 20.0 to 24.0 CuYd Bid Item 831E0110 "Type B Drainage Fabric" changed from 58 to 68 SqYd

Bid Items were removed:

Bid Item 450E9232 "Slipline 48" Pipe"

PLANS: Please destroy sheets A2, A3, B2, B9, B15-B20, B35, B36, B39, B41, B43, B78, C2, C4, X104-X107 and Z2 replace with the enclosed sheets, dated 11/5/24,11/15/24 & 11/18/24. Sheets 146a, 146b, and 146c were added.

Sheets A2 & B2:

Bid Items were added:

Bid Item 110E0605 "Remove Chain Link Fence" Bid Item 450E4819 "54" CMP 16 Gauge, Furnish" Bid Item 450E4820 "54" CMP, Install" Bid Item 450E5235 "54" CMP Flared End, Furnish" Bid Item 450E5236 "54" CMP Flared End, Install" Bid Item 450E9234 "Slipline 54" Pipe" Bid Item 621E0050 "5' Chain Link Fence with Top Rail" Bid Item 621E0430 "Double Vehicular Swing Gate" Bid Item 621E0600 "Chain Link Fence Post"

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Bid Item 720E1015 "Bank and Channel Protection Gabion" changed from 20.0 to 24.0

CuYd

Bid Item 831E0110 "Type B Drainage Fabric" changed from 58 to 68 SqYd

Bid Items were removed:

Bid Item 450E9232 "Slipline 48" Pipe"

- Sheet A3 & C2: Quantities for Bid Item 634E0020 "Pilot Car" changed from 2,500.00 to 250.00 hours
- **Sheet B9**: TABLE OF PVC COATED BANK AND CHANNEL PROTECTION GABIONS AND DRAINAGE FABRIC was revised.
- **<u>Sheets B15 B17</u>**: PIPE QUANTITIES table was revised.
- **Sheet B18**: FENCE QUANTITIES table was revised.
- **Sheets B19 & B20:** PAVEMENT, CURB AND GUTTER, AND SIDEWALK QUANTITIES table was revised.

Sheets B35 & B36: Entrance at Sta 375 was revised. Pipe notes for Sta 370+61 were revised.

Sheet B39, B41 & B43: Chain Link Fence & Chain Link Fence Install Notes were added.

Sheet B78: CURB & GUTTER LAYOUT was revised for the entrance at 375+42 Lt.

<u>Sheet B146a – B146c</u>: Standard Plates 620.21, 621.01, 621.03, 621.04, 621.10 were added.

<u>Sheet C2</u>: SEQUENCE OF OPERATIONS note for Phase 2 was revised.

Sheet C4: PORTABLE TEMPORARY CONTROL SIGNAL note was revised.

<u>Sheet X104 – X107</u>: Entrance at 375+42 Lt changed from 24' to 32' and storm sewer and drop inlet were revised.

Sheet Z2: Slipline changed from 48" RC Pipe in place to 54" CM Pipe and install notes were revised.

Sincerely,

Sam Weisgram Engineering Supervisor

SW/cj

CC: Travis Dressen, Mitchell Region Engineer Harry Johnston, Sioux Falls Area Engineer

REV 11/14/24

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): <u>NH-CR 0034(193)402</u>

PCN: 0609

TYPE OF WORK: GRADING, PCC SURFACING, CURB & GUTTER, SIDEWALK, LIGHTING

COUNTY: MOODY

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.

Jim Baltzer is the official in charge of the Madison Career Center for Moody County.

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Special Provision for Contract Time, dated 9/30/24.

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

Special Provision for On-The-Job Training Program, dated 3/10/16.

Special Provision Regarding Combination Bids, dated 10/3/24.

Special Provision Regarding Restricted Work at Drainage Crossings or Wetlands, dated 10/21/24.

Special Provision for Contractor Furnished Mix Design for PCC Pavement, dated 8/30/18.

Special Provision for Pavement Smoothness with 0.2" Blanking Band, dated 11/30/18.

Special Provision for Contractor Staking with Machine Control Grading Option, dated 9/30/24.

List of Utilities.

Special Provision for Steel Beam Guardrail AASHTO M 180 Designation, date 10/8/24.
Special Provision for Acknowledgment and Certification Regarding Article 3, Section 12 of the South Dakota Constitution, dated 8/24/23.
Special Provision for Buy America, dated 5/1/24.
Special Provision for Liability Insurance, dated 4/21/22.

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

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 2/9/24.

Special Provision For EEO Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts, dated 2/5/24.

Special Provision For Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. October 23, 2023), dated 10/18/23.

Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. 10/23/23).

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 SD20230032, dated 3/10/23.

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 12/6/23.

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/StormWater Construction.aspx

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENT

Section B – Grading

BID ITEM	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	135	Each
009E3225	Reestablish Public Land Survey System Corner	6	Each
009E3230	Grade Staking	5.538	Mile
009E3245	Final Cross Section Survey	1.798	Mile
009E3250	Miscellaneous Staking	1.798	Mile
009E3280	Slope Staking	1.798	Mile
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	47	Ft
110E0400	Remove Drop Inlet	21	Each
110E0600	Remove Fence	4,062	Ft
110E0605	Remove Chain Link Fence	352	Ft
110E1010	Remove Asphalt Concrete Pavement	1,812.3	SqYd
110E1100	Remove Concrete Pavement	40,200.9	SqYd
110E1130	Remove Concrete Driveway Pavement	892.6	SqYd
110E1140	Remove Concrete Sidewalk	4.7	SqYd
120E0010	Unclassified Excavation	79,475	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E1000	Muck Excavation	1,654	CuYd
120E2000	Undercutting	19,225	CuYd
120E6100	Water for Embankment	515.6	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
260E6010	Granular Material	247.0	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	18,802.6	Ton
380E3520	6" PCC Approach Pavement	983.3	SqYd
380E3540	8" PCC Approach Pavement	339.8	SqYd
380E4050	8" PCC Fillet Section	356.6	SqYd
421E0100	Pipe Culvert Undercut	131	CuYd
450E0122	18" RCP Class 2, Furnish	4,436	Ft
450E0130	18" RCP, Install	4,436	Ft
450E0142	24" RCP Class 2, Furnish	512	Ft
450E0150	24" RCP, Install	512	Ft
450E0162	30" RCP Class 2, Furnish	618	Ft
450E0170	30" RCP, Install	618	Ft
450E0182	36" RCP Class 2, Furnish	50	Ft
450E0190	36" RCP, Install	50	Ft
450E0192	42" RCP Class 2, Furnish	164	Ft
450E0200	42" RCP, Install	164	Ft
450E2008	18" RCP Flared End, Furnish	3	Each
450E2009	18" RCP Flared End, Install	3	Each

Section B – Grading, Continued

BID ITEM	ITEM	QUANTITY	UNIT
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E2032	42" RCP Flared End, Furnish	4	Each
450E2033	42" RCP Flared End, Install	4	Each
450E2200	24" RCP Sloped End, Furnish	2	Each
450E2201	24" RCP Sloped End, Install	2	Each
450E3012	24" RCP Arch Class 2, Furnish	492	Ft
450E3020	24" RCP Arch, Install	492	Ft
450E3022	30" RCP Arch Class 2, Furnish	666	Ft
450E3030	30" RCP Arch, Install	666	Ft
450E3032	36" RCP Arch Class 2, Furnish	142	Ft
450E3040	36" RCP Arch, Install	142	Ft
450E4512	36" RCP Arch Flared End, Furnish	2	Each
450E4513	36" RCP Arch Flared End, Install	2	Each
450E4600	24" RCP Arch Sloped End, Furnish	3	Each
450E4601	24" RCP Arch Sloped End, Install	3	Each
450E4604	30" RCP Arch Sloped End, Furnish	7	Each
450E4605	30" RCP Arch Sloped End, Install	7	Each
450E4606	36" RCP Arch Sloped End, Furnish	2	Each
450E4607	36" RCP Arch Sloped End, Install	2	Each
450E4759	18" CMP 16 Gauge, Furnish	530	Ft
450E4760	18" CMP, Install	530	Ft
450E4789	36" CMP 16 Gauge, Furnish	56	Ft
450E4790	36" CMP, Install	56	Ft
450E4819	54" CMP 16 Gauge, Furnish	32	Ft
450E4820	54" CMP, Install	32	Ft
450E5025	36" CMP Elbow, Furnish	2	Each
450E5026	36" CMP Elbow, Install	2	Each
450E5235	54" CMP Flared End, Furnish	4	Each
450E5236	54" CMP Flared End, Install	4	Each
450E5318	36" CMP Sloped End, Furnish	2	Each
450E5319	36" CMP Sloped End, Install	2	Each
450E5406	18" CMP Safety End, Furnish	16	Each
450E5407	18" CMP Safety End, Install	16	Each
450E5509	18" CMP Arch 16 Gauge, Furnish	54	Ft
450E5510	18" CMP Arch, Install	54	Ft
450E6006	18" CMP Arch Safety End, Furnish	2	Each
450E6007	18" CMP Arch Safety End, Install	2	Each
450E8910	Cleanout for Culvert Treatment	2	Each
450E9234	Slipline 54" Pipe	316	Ft
462E0100	Class M6 Concrete	153.2	CuYd
462E0250	Cellular Grout	78.6	CuYd
464E0100	Controlled Density Fill	3.9	CuYd

A2 to A3 A4 to A6

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
480E0100	Reinforcing Steel	27,607	Lb
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	2,587	Ft
620E0040	Type 4 Right-of-Way Fence	1,033	Ft
620E0060	Type 6 Right-of-Way Fence	489	Ft
620E1020	2 Post Panel	25	Each
620E1030	3 Post Panel	10	Each
620E2016	16' Tubular Gate	2	Each
621E0050	5' Chain Link Fence with Top Rail	325	Ft
621E0430	Double Vehicular Swing Gate	1	Each
621E0600	Chain Link Fence Post	39	Each
650E0079	Modified Type B68 Concrete Curb and Gutter	2,631	Ft
650E0080	Type B68 Concrete Curb and Gutter	5,134	Ft
650E1079	Modified Type F68 Concrete Curb and Gutter	2,849	Ft
650E1080	Type F68 Concrete Curb and Gutter	303	Ft
650E3060	Type B6 Concrete Curb	19	Ft
650E4679	Modified Type P8 Concrete Gutter	320	Ft
650E4680	Type P8 Concrete Gutter	484	Ft
650E6080	8" Concrete Valley Gutter	48	Ft
651E0040	4" Concrete Sidewalk	19,335	SqFt
651E0060	6" Concrete Sidewalk	27,793	SqFt
651E0160	6" Reinforced Concrete Sidewalk	168	SqFt
651E0540	4" Colored Concrete Sidewalk	6,889	SqFt
651E0560	6" Colored Concrete Sidewalk	303	SqFt
651E0740	4" Reinforced Colored Concrete Sidewalk	30	SqFt
651E7000	Type 1 Detectable Warnings	550	SqFt
670E1200	Type B Frame and Grate	70	Each
670E2200	Type C Frame and Grate	9	Each
670E3300	Type E Frame and Grate	1	Each
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	7	Each
670E5400	Precast Drop Inlet Collar	71	Each
671E4548	48" Manhole Cone Section	4.0	Ft
671E6007	Type A7 Manhole Frame and Lid	2	Each
720E1015	Bank and Channel Protection Gabion	24.0	CuYd
831E0110	Type B Drainage Fabric	68	SqYd
831E0300	Reinforcement Fabric (MSE)	1,800	SqYd
900E0010	Refurbish Single Mailbox	4	Each

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
TS	SOUTH DAKOTA	NH-CR 0034(193)402	A2	A6
	Plotting Date:	11/18/2024 Revised 11/1	.8/2024 MS	

INDEX OF SHEETS

Estimate of Quantities for Sections B, C, D, L, F, M, and S Environmental Commitments

Section B – Grading, Continued

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMEN

Section C – Traffic Control

BID ITEM NUMBER	ІТЕМ	QUANTITY	UNIT
634E0010	Flagging	500.0	Hour
634E0020	Pilot Car	250.0	Hour
634E0110	Traffic Control Signs	1,244.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	60	Each
634E0380	Tubular Marker	210	Each
634E0390	Replace Tubular Marker	50	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	3,500	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	432	Ft
634E0640	Temporary Pavement Marking	22,364	Ft
634E0900	Portable Temporary Traffic Control Signal	2	Unit
634E0919	Driveway Assistance Device	10.0	Mth
634E1002	Detour and Restriction Signing	563.0	SqFt
634E1020	Temporary Business Signing	50.0	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each

Section F – Surfacing

BID ITEM NUMBER	ІТЕМ	QUANTITY	UNIT
120E6200	Water for Granular Material	539.3	MGal
260E1010	Base Course	25,740.4	Ton
260E1030	Base Course, Salvaged	18,802.6	Ton
260E2010	Gravel Cushion	443.2	Ton
260E6000	Granular Material, Furnish	45.0	Ton
320E1200	Asphalt Concrete Composite	2,772.5	Ton
320E5020	Saw Joint in Asphalt Concrete	301	Ft
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.2	Mile
380E0050	8" Nonreinforced PCC Pavement	43,369.2	SqYd
380E3040	8" PCC Driveway Pavement	138.1	SqYd
380E6000	Dowel Bar	25,869	Each
380E6110	Insert Steel Bar in PCC Pavement	92	Each
380E6450	Saw Joint in PCC Pavement	15,363.7	Ft
380E6548	Grind Sinusoidal Centerline Rumble Stripe in PCC Pavement	0.3	Mile

Section L – Signal and Lighting

BID ITEM	ITEM	QUANTITY	UNIT
110E1540	Remove Luminaire Pole Footing	30	Each
635E0050	Breakaway Base Luminaire Pole with Arm, 50' Mounting Height	6	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	36	Each
635E5025	2.5' Diameter Footing	291.0	Ft
635E5301	Type 1 Electrical Junction Box	3	Each
635E5302	Type 2 Electrical Junction Box	4	Each
635E5400	Electrical Service Cabinet	3	Each
635E6200	Miscellaneous, Electrical	Lump Sum	LS
635E7500	Remove and Reset Luminaire Pole	30	Each
635E8110	1" Rigid Conduit, Schedule 40	45	Ft
635E8120	2" Rigid Conduit, Schedule 40	6,600	Ft
635E8210	1" Rigid Conduit, Schedule 80	60	Ft
635E8220	2" Rigid Conduit, Schedule 80	335	Ft
635E8620	2" Conduit, SDR 13.5	450	Ft
635E9011	1/C #1 AWG Copper Wire	3,580	Ft
635E9012	1/C #2 AWG Copper Wire	9,330	Ft
635E9013	1/C #3 AWG Copper Wire	3,785	Ft
635E9014	1/C #4 AWG Copper Wire	3,730	Ft
635E9016	1/C #6 AWG Copper Wire	6,060	Ft
635E9018	1/C #8 AWG Copper Wire	1,440	Ft
635E9020	1/C #10 AWG Copper Wire	5,450	Ft
635E9024	1/C #14 AWG Copper Wire	3,600	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	2,520	Ft

BID ITEM	ITEM	QUANTITY	UNIT
633E0010	Cold Applied Plastic Pavement Marking, 4"	36,130	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	336	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	34	Each
633E0225	Preformed Thermoplastic Pavement Marking, 24"	168	Ft
633E0230	Preformed Thermoplastic Pavement Marking, Area	180	SqFt
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	36,130	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	504	Ft
633E5020	Grooving for Cold Applied Plastic Pavement Marking, Area	180	SqFt
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	34	Each

Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	22.3	CuYd
110E1700	Remove Silt Fence	1,661	Ft
230E0010	Placing Topsoil	6,691	CuYd
730E0100	Cover Crop Seeding	10.0	Bu
730E0206	Type D Permanent Seed Mixture	586	Lb
730E0212	Type G Permanent Seed Mixture	274	Lb
731E0200	Fertilizing	6.70	Ton
732E0100	Mulching	21.0	Ton
732E0500	Fiber Reinforced Matrix	5.2	Ton
734E0103	Type 3 Erosion Control Blanket	250	SqYd
734E0180	Sediment Filter Bag	2,780	Ft
734E0185	Remove and Reset Sediment Filter Bag	695	Ft
734E0325	Surface Roughening	1.5	Acre
734E0602	Low Flow Silt Fence	3,022	Ft
734E0604	High Flow Silt Fence	3,622	Ft
734E0610	Mucking Silt Fence	461	CuYd
734E0620	Repair Silt Fence	1,661	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	82	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	91	Ft
734E5005	Dewatering	Lump Sum	LS
900E1320	Construction Entrance	2	Each

SPECIFICATIONS

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

NUMBER	IIEM	QUANTITY	UNIT
110E1540	Remove Luminaire Pole Footing	30	Each
635E0050	Breakaway Base Luminaire Pole with Arm, 50' Mounting Height	6	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	36	Each
635E5025	2.5' Diameter Footing	291.0	Ft
635E5301	Type 1 Electrical Junction Box	3	Each
635E5302	Type 2 Electrical Junction Box	4	Each
635E5400	Electrical Service Cabinet	3	Each
635E6200	Miscellaneous, Electrical	Lump Sum	LS
635E7500	Remove and Reset Luminaire Pole	30	Each
635E8110	1" Rigid Conduit, Schedule 40	45	Ft
635E8120	2" Rigid Conduit, Schedule 40	6,600	Ft
635E8210	1" Rigid Conduit, Schedule 80	60	Ft
635E8220	2" Rigid Conduit, Schedule 80	335	Ft
635E8620	2" Conduit, SDR 13.5	450	Ft
635E9011	1/C #1 AWG Copper Wire	3,580	Ft
635E9012	1/C #2 AWG Copper Wire	9,330	Ft
635E9013	1/C #3 AWG Copper Wire	3,785	Ft
635E9014	1/C #4 AWG Copper Wire	3,730	Ft
635E9016	1/C #6 AWG Copper Wire	6,060	Ft
635E9018	1/C #8 AWG Copper Wire	1,440	Ft
635E9020	1/C #10 AWG Copper Wire	5,450	Ft
635E9024	1/C #14 AWG Copper Wire	3,600	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	2,520	Ft

	STATE OF	PROJECT	SHEET	TOTAL SHEETS
IIS	DAKOTA	NH-CR 0034(193)402	A3	A6
	Plotting Date:	11/18/2024 Revised 11/1	L8/2024 MS	

Section M – Pavement Marking

Section S - Permanent Signing

BID ITEM	ІТЕМ	QUANTITY	UNIT
110E0130	Remove Traffic Sign	51	Each
110E7150	Remove Sign for Reset	3	Each
632E1320	2.0"x2.0" Perforated Tube Post	406.8	Ft
632E1340	2.5"x2.5" Perforated Tube Post	185.5	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	277.8	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	268.3	SqFt
632E3500	Reset Sign	3	Each
632E3700	Radar Speed Sign	2	Each

SECTION B ESTIMATE OF QUANTITIES

BID ITEM	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	135	Each
009E3225	Reestablish Public Land Survey System Corner	6	Each
009E3230	Grade Staking	5.538	Mile
009E3245	Final Cross Section Survey	1.798	Mile
009E3250	Miscellaneous Staking	1.798	Mile
009E3280	Slope Staking	1.798	Mile
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	47	Ft
110E0400	Remove Drop Inlet	21	Each
110E0600	Remove Fence	4,062	Ft
110E0605	Remove Chain Link Fence	352	Ft
110E1010	Remove Asphalt Concrete Pavement	1,812.3	SqYd
110E1100	Remove Concrete Pavement	40,200.9	SqYd
110E1130	Remove Concrete Driveway Pavement	892.6	SqYd
110E1140	Remove Concrete Sidewalk	4.7	SqYd
120E0010	Unclassified Excavation	79,475	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
120E1000	Muck Excavation	1,654	CuYd
120E2000	Undercutting	19,225	CuYd
120E6100	Water for Embankment	515.6	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
260E6010	Granular Material	247.0	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	18,802.6	Ton
380E3520	6" PCC Approach Pavement	983.3	SqYd
380E3540	8" PCC Approach Pavement	339.8	SqYd
380E4050	8" PCC Fillet Section	356.6	SqYd
421E0100	Pipe Culvert Undercut	131	CuYd
450E0122	18" RCP Class 2, Furnish	4,436	Ft
450E0130	18" RCP, Install	4,436	Ft
450E0142	24" RCP Class 2, Furnish	512	Ft
450E0150	24" RCP, Install	512	Ft
450E0162	30" RCP Class 2, Furnish	618	Ft
450E0170	30" RCP, Install	618	Ft
450E0182	36" RCP Class 2, Furnish	50	Ft
450E0190	36" RCP, Install	50	Ft
450E0192	42" RCP Class 2, Furnish	164	Ft
450E0200	42" RCP, Install	164	Ft
450E2008	18" RCP Flared End, Furnish	3	Each
450E2009	18" RCP Flared End, Install	3	Each

BID ITEM	ITEM	QUANTITY	UNIT
450E2028	36" RCP Flared End, Furnish	1	Each
450E2029	36" RCP Flared End, Install	1	Each
450E2032	42" RCP Flared End, Furnish	4	Each
450E2033	42" RCP Flared End, Install	4	Each
450E2200	24" RCP Sloped End, Furnish	2	Each
450E2201	24" RCP Sloped End, Install	2	Each
450E3012	24" RCP Arch Class 2, Furnish	492	Ft
450E3020	24" RCP Arch, Install	492	Ft
450E3022	30" RCP Arch Class 2, Furnish	666	Ft
450E3030	30" RCP Arch, Install	666	Ft
450E3032	36" RCP Arch Class 2, Furnish	142	Ft
450E3040	36" RCP Arch, Install	142	Ft
450E4512	36" RCP Arch Flared End, Furnish	2	Each
450E4513	36" RCP Arch Flared End, Install	2	Each
450E4600	24" RCP Arch Sloped End, Furnish	3	Each
450E4601	24" RCP Arch Sloped End, Install	3	Each
450E4604	30" RCP Arch Sloped End, Furnish	7	Each
450E4605	30" RCP Arch Sloped End, Install	7	Each
450E4606	36" RCP Arch Sloped End, Furnish	2	Each
450E4607	36" RCP Arch Sloped End, Install	2	Each
450E4759	18" CMP 16 Gauge, Furnish	530	Ft
450E4760	18" CMP, Install	530	Ft
450E4789	36" CMP 16 Gauge, Furnish	56	Ft
450E4790	36" CMP, Install	56	Ft
450E4819	54" CMP 16 Gauge, Furnish	32	Ft
450E4820	54" CMP, Install	32	Ft
450E5025	36" CMP Elbow, Furnish	2	Each
450E5026	36" CMP Elbow, Install	2	Each
450E5235	54" CMP Flared End, Furnish	4	Each
450E5236	54" CMP Flared End, Install	4	Each
450E5318	36" CMP Sloped End, Furnish	2	Each
450E5319	36" CMP Sloped End, Install	2	Each
450E5406	18" CMP Safety End, Furnish	16	Each
450E5407	18" CMP Safety End, Install	16	Each
450E5509	18" CMP Arch 16 Gauge, Furnish	54	Ft
450E5510	18" CMP Arch, Install	54	Ft
450E6006	18" CMP Arch Safety End, Furnish	2	Each
450E6007	18" CMP Arch Safety End, Install	2	Each
450E8910	Cleanout for Culvert Treatment	2	Each
450E9234	Slipline 54" Pipe	316	Ft
462E0100	Class M6 Concrete	153.2	CuYd
462E0250	Cellular Grout	78.6	CuYd
464E0100	Controlled Density Fill	3.9	CuYd

		STATE OF	PR	OJECT	SHEET	TOTA SHEE			
		SOUTH DAKOTA	NH-CR 0	034(193)402	B2	B14			
		Plotting Date:	11/18/2024	1 Revised	11/18/2024 MS				
BID ITEM	ITEM			QUANTITY	UNIT				
480E0100	Reinforcing Steel			27,607	Lb				
600E0300	Type III Field Laboratory			1	Each				
620E0020	Type 2 Right-of-Way Fence			2,587	Ft				
620E0040	Type 4 Right-of-Way Fence			1,033	Ft				
620E0060	Type 6 Right-of-Way Fence			489	Ft				
620E1020	2 Post Panel			25	Each				
620E1030	3 Post Panel			10	Each				
620E2016	16' Tubular Gate			2	Each				
621E0050	5' Chain Link Fence with Top Rail			325	Ft				
621E0430	Double Vehicular Swing Gate			1	Each				
621E0600	Chain Link Fence Post			39	Each				
650E0079	Modified Type B68 Concrete Curb	and Gutter		2,631	Ft				
650E0080	Type B68 Concrete Curb and Gutte	эr		5,134	Ft				
650E1079	Modified Type F68 Concrete Curb	and Gutter		2,849	Ft				
650E1080	Type F68 Concrete Curb and Gutte	ər		303	Ft				
650E3060	Type B6 Concrete Curb			19	Ft				
650E4679	Modified Type P8 Concrete Gutter			320	Ft				
650E4680	Type P8 Concrete Gutter			484	Ft				
650E6080	8" Concrete Valley Gutter			48	Ft				
651E0040	4" Concrete Sidewalk			19,335	SqFt				
651E0060	6" Concrete Sidewalk			27,793	SqFt				
651E0160	6" Reinforced Concrete Sidewalk			168	SqFt				
651E0540	4" Colored Concrete Sidewalk			6,889	SqFt				
651E0560	6" Colored Concrete Sidewalk			303	SqFt				
651E0740	4" Reinforced Colored Concrete Si	dewalk		30	SqFt				
651E7000	Type 1 Detectable Warnings			550	SqFt				
670E1200	Type B Frame and Grate			70	Each				
670E2200	Type C Frame and Grate			9	Each				
670E3300	Type E Frame and Grate			1	Each				
670E5340	4' x 11' Precast Concrete Type S D	rop Inlet Lid		7	Each				
670E5400	Precast Drop Inlet Collar			71	Each				
671E4548	48" Manhole Cone Section			4.0	Ft				
671E6007	Type A7 Manhole Frame and Lid			2	Each				
720E1015	Bank and Channel Protection Gabi	on		24.0	CuYd				
831E0110	Type B Drainage Fabric			68	SqYd				
831E0300	Reinforcement Fabric (MSE)			1,800	SqYd				
900E0010	Refurbish Single Mailbox			4	Each				

STORM SEWER

Reinforced concrete pipe may be bell and spigot. The pipe sections will be adjoined such that the ends are fully entered, and the inner surfaces are reasonably flush and even.

Lift holes in the reinforced concrete pipe will be plugged with grout.

Watertight joints are required for reinforced concrete pipe, drop inlets, manholes, and junction boxes where storm sewers run parallel to and within 10 feet horizontally from existing or proposed water mains.

Watertight joints are required where reinforced concrete pipes, drop inlets, manholes, or junction boxes cross water mains and are separated a distance of 18 inches or less, above or below, the water main.

If watertight joints are required then the watertight joints will extend for a distance of 10 feet beyond the water main. This measurement will be from the sealed concrete joint to the outer most surface of the water main.

Watertight joint seals will conform to the following requirements:

- 1. Reinforced Concrete Pipe (Circular): Gasketed pipe will conform to the requirements of ASTM C443 and the gasket will be in conformance with Section 990 of the Specifications. Non-gasketed concrete pipe will be sealed with a mastic joint seal conforming to the requirements of ASTM C990 and encased with a minimum 2-foot wide by 6-inch thick M6 concrete collar reinforced with 6x6 W2.9 x W2.9 wire mesh.
- 2. Reinforced Concrete Pipe (Arch): Gasketed pipe will conform to the requirements of ASTM C443 and the gasket will be in conformance with Section 990 of the Specifications. Non-gasketed concrete pipe joints will be sealed with a hydrophilic flexible water stop seal and wrapped with a 1-foot wide strip of fabric above the cradle. The fabric will conform to the requirements of Section 831 of the Specifications for Type A Drainage Fabric. The hydrophilic flexible water stop will be from the list below.
- 3. Drop Inlets, Manholes, and Junction Boxes: Joints will be sealed with one of the following methods:
 - A flexible strip seal placed in the joints conforming to the Α. requirements of ASTM C990 and the perimeter encased with a minimum 2-foot wide by 6-inch thick M6 concrete collar reinforced with 6x6 W2.9 x W2.9 wire mesh.
 - Β. A hydrophilic flexible water stop seal placed in the joints and a 1-foot wide strip of fabric wrapped around the perimeter of the pipe. The fabric will conform to the requirements of Section 831 of the Specifications for Type A Drainage Fabric. The hydrophilic flexible water stop will be from the list below.
 - C. A self-adhesive external joint seal wrap. The seal wrap will be from the list below.

Approved List of Self-adhesive Joint Wrap

Product	Manufacturer	TABLE OF CLASS	M6 CONCRETE & REIN	FORCING STEEL
Mar Mac Seal Wrap	Mar Mac Construction Products McBee, SC 843-335-5909 <u>www.marmac.com</u>	Item Drop Inlets Junction Boxes _	Class M6 Concrete (CuYd) 146.4 6.8	Reinforcing Steel (Lb) 26,170 1,437
ConWrap CS-212	Concrete Sealants, Inc. Tipp City, OH 800-332-7325 http://www.conseal.com	Totals: COLORED CONCR	153.2 ETE FOR SIDEWALK BO	27,607 DULEVARDS
Approved List of Hydro	ophilic Flexible Water Stop Seal:	The colored concrete an equal approved b	e will have the integral col y the Engineer.	lor Solomon Brick
<u>Product</u> Waterstop RX	<u>Manufacturer</u> Cetco Hoffman Estates, IL 800-527-9948	Brick Red requires a	ColorFlo Liquid Color Color #417 Brick Red Solomon Colors, Inc. <u>www.solomoncolors.co</u> a rate of 12.50 pounds of	I <u>com</u> f Solomon ColorF
Conseal CS-231	Concrete Sealants, Inc. Tipp City, OH 800-332-7325 http://www.conseal.com	per cubic yard of con the manufacturer's acrylic curing and se meet ASTM C309. T an equal approved b	recete. The colored concre recommendations with t aling compound. The cur he curing and sealing pro- y the Engineer.	ete must be cured two coats of a n ring and sealing co oduct will be DEC

Gaskets and seals (mastic, waterstop, and seal wraps) will be installed in accordance with the Manufacturer's recommendations.

The cost for furnishing and installing all gaskets, mastic joint seal, water stop seal, seal wrap, concrete collars, and for plugging the lift holes will be incidental to the contract unit price per foot for the corresponding pipe contract item.

ADJUSTEMENT OF MANHOLES

The Contractor will adjust manholes to the extent necessary on this project. Adjusting the manholes may consist of removing the upper course of brick or removing the concrete walls, replacing the removed materials with brick or Class M6 concrete, placing adjusting rings if necessary, and resetting the manhole frame and lid. The elevation of the lid will be set at the same elevation of the adjacent new pavement or surrounding ground. All manhole frames, lids, and rings that are cracked or broken due to carelessness of the Contractor will be replaced with new manhole frames, lids, and rings that conform with the Specifications at the Contractor's expense. Manholes will be adjusted to the satisfaction of the Engineer.

See City of Colman project PCN X06M (City Project Number 21005951 for a table of adjust manholes. See bid item for adjust manhole in City of Colman plans (PCN X06M).

White pigmented cure will not be used. The Contractor will protect the colored concrete to ensure white pigmented curing compound will not come in contact with the colored concrete. All costs for furnishing, handling, applying the curing and sealing compound, and liquid integral color, including the materials, equipment, labor, and incidentals necessary will be incidental to the contract unit price for "4" or 6" Colored Concrete Sidewalk" or "4" Colored Reinforced Concrete Sidewalk.

TABLE OF PVC COATED BANK AND CHANNEL PROTECTION GABIONS AND DRAINAGE FABRIC

		Bank and Channel Protection Gabion (CuYd)	Type B Drainage Fabric
Station	L/R	、 <i>,</i>	(SqYd)
370+26	89' R	12.0	34
370+47	89' R	12.0	34
	Totals:	24.0	68

8" PCC FILLET SECTIONS

Payment for "8" PCC Fillet Section" will be based on plans quantity. If additions or reductions to the area of PCC fillet sections are ordered by the Engineer, payment will be made in accordance with the contract unit price per square yard for "8" PCC Fillet Section".

STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	NH-CR 0034(193)402	B9	B149
Plotting Date	11/15/2024 Revised 11/1	5/2024 AR	

Red #417 or

-lo #417 Red according to non-yellowing ompound will CRA-SEAL or

DECRA-SEAL W.R. Meadows, Inc. 1-800-342-5976 www.wrmeadows.com

PIPE QUANTITIES

Reinforced Concrete RCP Ends Circular															e Corrugated Metal			CMP	CMP Ends						
		Re	inforced Co	ncrete			CP Ends	Sircular	_	ŀ	RCP Er	nds Arch	ו 	Slipline Pipe		Corruga	ated Meta	1	Elbow	Arch	CN	VIP Ends Circu	Jar		
NH-CR 0034(193)403		Circu	lar	A	rch		Flared	Slo	oped	5	Sloped		Flared	Circular		Circula	r	Arch	Circular	Safety	Safety	Sloped	Flared	Cleanout for Culvert	
PCN 0609	18" Cl.2	24" 30 CI.2 CI.	" 36" 4 2 CI.2 C	2" 24" 3 1.2 CI.2 C	30" 36' 31.2 CI.2	2 36"	42"	18" 2	24"	24"	30"	36"	36"	54"	18" 16 Ga	36" 16 Ga	54" 16 Ga	18" 16 Ga	36" 50°	18"	18"	36"	54"	Treatment	
Station Offset (L/R)	Ft	Ft Ft	t Ft F	t Ft	Ft Ft	Each	Each B	ach E	ach	Each	Each	Each	Each	Ft	Ft	Ft	Ft	Ft	Each	Each	Each	Each	Each	Each	
370+61														316			32						4	1	1
371+77.47-59.00' R to 372+54.56-59.00' R		76							1									-							
372+54.56-59.00' R to 372+79.44-59.00' R		24							1																
372+54.56-59.00° R to 372+89.16-22.67° R	50																								
372+89.16-22.67° R to 375+92.47-22.67° R	300								_																
374+89.99-67.85° L to 375+57.64-66.39° L	66							1																	
375+57.64-66.39° L to 375+98.00-68.70° L	40							1																	
3/5+92.4/-22.6/° R to 3/5+92.4/-22.6/° L	44							-							-										
-3/9+09.62-60.57 L to 360+05.76-39.65 L	96							1																	1
379+40.01-22.10 R to 381+63.77-21.17 R	222														-										
380+05.76-39.65° L to 380+27.19-47.01° L	20														-		_	-							
301+03.77-35.95 L to 301+03.77-47.34 L	0								_						-										
301+03.77-35.95 L to 301+03.77-21.17 L	12			40		_																			
301+03.77-21.17 L to 301+03.77-21.17 R				40						1					-										
381+63.77-21.17 R to 381+63.77-47.17 R	20			20						1					-			-							
301+03.77-21.17 R to 302+00.00-23.63 R	30					-									-			-							
301+03.77-21.17 L to 302+00.00-23.03 L	30																	-							
362+00.00-23.63 L to 362+43.23-21.17 L	30														-			-							Pipes denoted with an asterisk(*)
302+00.00-23.03 R to 302+43.23-21.17 R	30					-												-							indicate that the entire length or a portion
302+43.23-21.17 R to 304+17.01-21.17 R	20														-										of the pipe requries watertight joints in
394+17.01-21.17 K to 364+17.01-10.17 L	19																								accordance with the STORM SEWER
304+17.01-10.17 L to 304+19.09-37.32 L	10			20						1															plan note.
385+44.03-21.17 K to 365+44.03-40.75 K				20						-															
385+44.83-34.52' L to 385+44.83-18.17' L	14			50														-							
*385+44 83-21 17' R to 387+54 97-21 17' R	208	_																-							1
387+54 97-18 17' L to 387+54 97-21 17' R	38																	-							1
*387+54 97-21 17' R to 389+53 45-21 17' R	196																								1
389+53 45-18 17' L to 389+53 45-21 17' R	38																								1
393+21-58' R															80						2				
393+77 56-21 17' R to 393+77 56-47 11' R					18						1							-			2				1
393+77 56-18 17' L to 393+77 56-21 17' R					36						· ·														1
393+77 56-46 28' L to 393+77 56-18 17' L					20						1														1
393+77.56-21.17' R to 394+12.61-21.17' R				30																					
393+77.56-18.17' L to 394+12.61-18.17' L				30																					
394+12.61-18.17' L to 394+50.00-20.63' L	30																								
394+12.61-21.17' R to 394+50.00-23.62' R	30																								1
394+50.00-20.63' L to 394+87.39-18.17' L	30																								
394+50.00-23.63' R to 394+87.39-21.17' R	30																								
396+31.14-52.67' R to 396+90.50-21.17' R				66						1															1
396+53-63' R															34		1				2				1
396+90.50-18.17' L to 396+90.50-21.17' R	36																1								
396+90.50-21.17' R to 398+12.57-21.10' R				112													1								
398+05.54-18.17' L to 398+05.54-21.17' R				36													1								
398+12.57-45.92' L to 398+05.54-18.17' L				26		1									1		1								
*398+05.54-21.10' R to 399+39.43-21.23' R	130														1										
398+26-52' R															66						2				
Subtotal:	1998	100		416	74			3	2	3	2			316	180		32	1			6		4	1	

STATE OF	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	NH-CR 0034(193)402	B15	B149
Plotting Date:	11/18/2024 Revised 11/1	8/2024 MS	

PIPE QUANTITIES

			Reinfor	ced Cor	ncrete			R	CP Ends	Circul	ar		RCP E	inds Arc	:h	Slipline Pipe		Corrugat	ed Meta	ıl	CMP	CMP Ends	СМ	P Ends Circ	cular		
		с	ircular			Arch	1		Flared		Sloped		Sloped	1	Flared	Circular	┢	Circular		Arch	Elbow	Arch	Safety	Sloped	Flared	Cleanout for	
NH-CR 0034(193)403		-							- Iai ca		Cioped		Ciopee		1 Idrod	Circular		en ourai		741011	Onoular	Galety	Galety	Cloped	T larea	Treatment	1
PCN 0609	18" CI.2	24" Cl.2	30" 3 CI.2 CI	6" 42 . 2 Cl.	2" 24" .2 CI.2	2 CI.2	36" Cl.2	36"	42"	18"	24"	24"	30"	36"	36"	54"	18" 16 G	36" a 16 Ga	54" 16 Ga	18" 16 Ga	36" 50°	18"	18"	36"	54"		
Station Offset (L/R)	Ft	Ft	Ft F	t Fi	t Ft	Ft	Ft	Each	Each	Each	Each	Each	Each	Each	Each	Ft	Ft	Ft	Ft	Ft	Each	Each	Each	Each	Each	Each	1
399+39.43-18.17' L to 399+39.43-21.23' R	38																										1 //
399+39.43-21.17' R to 400+40.33-18.17' R	98																										1
400+40.33-18.17' L to 400+40.33-18.17' R	36																										1
402+52.50-18.17' L to 402+52.50-18.17' R	36																										1
*402+52.50-18.17' R to 404+15.90-18.17' R	160																										1
*403+37.25-48.51' L to 404+05.94-40.52' L						68							1														1
404+05.94-40.52' L to 404+15.90-18.17' L			20																								1
404+15.90-18.17' L to 404+15.90-18.17' R			32																								
404+15.90-18.17' R to 404+15.90-42.88' R	20																										
404+15.90-18.17' R to 405+50.44-18.17' R			130																								1
405+50.44-18.17' L to 405+50.44-18.17' R	34																										1
405+50.44-18.17' R to 407+03.67-18.17' R			150																								1
407+03.67-18.17' L to 407+03.67-18.17' R	32																										1
*407+03.67-18.17' L to 407+39.33-50.75' L	48																										1
407+03.67-18.17' R to 408+17.16-18.17' R			108																								1
*407+82.67-50.75' L to 408+17.16-18.17' L	48																										1
408+17.16-18.17' L to 408+17.16-18.17' R	32																										1
408+17.16-18.17' R to 409+99.68-18.17' R			178																								Pipes denoted with an asterisk() indicate
409+99.68-18.17' R to 409+99.68-51.07' R			2	2				1																			that the entire length or a portion of the
409+99.68-18.17' L to 409+99.68-18.17' R		34																									pipe requires watertight joints in
409+99.68-18.17' L to 409+99.68-37.68' L	18																										nlan note
*411+36.33-49.19' L to 411+67.67-49.19' L					30		-																				plan note.
*411+67.67-49.19' L to 412+07.91-20.63' L					46		-																				1
411+67.00-18.17' R to 412+07.91-20.63' R	34						-																				1
412+07.91-47.52' L to 412+07.91-20.63' L							16								1												1
412+07.91-20.63' L to 412+07.91-20.63' R						-	36																				1
412+07.91-20.63' R to 412+07.91-49.29' R							18							1													1
412+46.99-47.15' L to 412+46.99-18.17' L						-	20								1												1
412+46.99-18.17' L to 412+46.99-18.17' R							32																				1
412+46.99-18.17' R to 412+46.99-49.20' R							20							1													1
412+46.99-18.17' R to 415+79.54-18.17' R						328																					
415+62.54-41.68' R to 415+79.54-18.17' R	26																										1
415+79.54-18.17' L to 415+79.54-18.17' R	34						-																				
415+79.54-18.17' R to 418+02.29-18.17' R	220					-	-																				1
418+02.29-18.17' L to 418+02.29-18.17' R	34																										
422+11.62-22.67' L to 422+11.62-22.67' R	44																										
422+11.62-22.67' R to 423+84.96-22.67' R	170																										
422+48-55' R																				54		2					
423+84.96-22.67' R to 425+48.05-22.67' R	160																										1
424+25-55' R																	66						2				1
424+28-59' L																	76						2				1
425+48.05-22.67' R to 427+67.08-22.67' R	214																										1
426+14-55' R																	60						2				1
427+67.08-22.66' R to 430+45.00-22.67' R		274																									
428+24-63' R																	80						2				
428+43-100' R to 428+75-85' R																		56			2			2			
																	1										1 I'
Subtotal:	1536	308	618 2	2	76	396	142	1					1	2	2		282	56		54	2	2	8	2			1 1
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STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH-CR 0034(193)402	B16	B149
Plotting Date:	11/18/2024 Revised 11/1	L8/2024 MS	

PIPE QUANTITIES

		F	Reinforce	d Concret	e			RCP En	ds Circu	ılar		RCP	Ends A	rch		Slipline Pipe	С	orrugate	ed Metal		CMP Elbow	CMP Ends Arch	CM	P Ends Cir	rcular		
		Circ	cular		A	rch		Flared	1	Slope	d	Slope	ed	Flare	ed	Circular	(Circular		Arch	Circular	Safety	Safety	Sloped	Flared	Cleanout for	
PCN 0609	18"	24" 30"	36"	42"	24" 3	0" 36	" 36"	42"	18"	24"	24"	30"	36"	36	.	54"	18"	36"	54"	18"	36"	18"	18"	36"	54"	Culvert	
	CI.2	CI.2 CI.2	Cl. 2	CI.2	CI.2 C	1.2 Cl.:	2										16 Ga	16 Ga	16 Ga 1	16 Ga	50°					Treatment	
Station Offset (L/R)	Ft	Ft Ft	Ft	Ft	Ft	Ft Ft	Eacl	h Each	Each	Each	Each	n Each	h Each	n Eac	:h	Ft	Ft	Ft	Ft	Ft	Each	Each	Each	Each	Each	Each	
430+45.00-53.16' R to 430+45.00-22.67' R				22				1																			
430+45.00-22.67' R to 430+45.00-47.08' L				62				1																			
430+80.00-53.99' R to 430+80.00-25.13' R				18				1																			
430+80.00-25.13' R to 430+80.00-48.17' L				62				1																			
430+80.00-25.13' R to 431+14.83-24.13' R			28																								
431+14.83-24.13' R to 432+21.82-34.67' R		104																									
432+21.82-34.67' R to 433+41.67-34.67' R	116																										
433+56.63-63.00' R to 433+72.91-62.69' R						14						1															
433+72.91-62.69' R to 433+74.91-79.89' R						14																					
433+72.91-62.69' R to 434+36.22-63.00' R						60						1															
433+41.67-34.67' R to 434+50.10-22.67' R	106																										
434+50.10-22.67' R to 436+09.88-22.67' R	156																										
436+09.88-22.67' R to 438+20.20-22.67' R	206																										
438+20.20-22.67' R to 439+49.67-34.67' R	128																										
439+49.67-34.67' R to 441+42.18-34.67' R	190																										
441+42.18-62.88' R to 441+79.71-62.88' R					:	36						1															
441+79.71-62.88' R to 442+42.76-62.88' R						50						1															
441+79.71-62.88' R to 441+82.147-76.85' R						12																					
447+20-55' L																	68						2				
																											Pipes denoted with an asterisk(*) indicate
													-														that the entire length or a portion of the
																											pipe requires watertight joints in
														-													accordance with the STORM SEWER plan
																											note.
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STATE OF	PROJE	ст	SHEET	TOTAL
SOUTH DAKOTA	NH-CR 0034	(193)402	B17	B149
Plotting Date:	11/18/2024	Revised 11	/18/2024 MS	

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FENCE QUANTITIES

					Pi	abt of Way Fence			Chain Link Eanoa Bost	Post 6	Danole		Gates		Stream Crossings	Г
						gitt-of-way rence			Chain Link Fence Fost	FOST	aneis			N.A.B.I.	N.A.B.I.	L
			Type 2	Туре 4	Туре 6	5' Chain Link Fence with Top Rail & 3-Strand	Remove Chain Link	Remove Fence		2 Post Panel	3 Post Panel	40' Double Vehicle	16' Tubular Gate	30' Barbed Wire Gate	Stream Crossing	
						Barbed Wire Top	Fence					Swing Gate				L
Station	to Station	Side (L/R)	(Ft)	(Ft)	(Ft)	(Ft)	(Ft)	(Ft)	(Each)	(Each)	(Each)	(Each)	(Each)	(Each)	(Each)	L
NH-CR 00	034(193)403															L
357+15	367+42	L	1026					1026			2					F
368+07	372+24	L			489			403		10					1	L
372+24	373+57	L						139							1	L
383+88	384+36	L				50	50		7						1	L
391+00	394+02	L				275	302		32			1			1	L
447+19	452+17	L	498					498		2	2		2	1		
																L
357+15	367+42	R		1033				1033			2					
368+07	372+19	R	546					468		11	2				1	L
447+18	452+17	R	517					495		2	2					L
		Total:	2587	1033	489	325	352	4062	39	25	10	1	2	1	2	

STATE OF	PROJECT	SHEET	TOTAL
SOUTH			SHEETS
DAKOTA	NH-CR 0034(193)402	B18	B149
Plotting Date:	11/05/2024		

Post Type and Sequence: Right-of-way fence shall be constructed using alternate wood and steel posts except as noted.

			IRF	2 ΔΝ		רו וב		R	ΔΝ		2	חו		Λ/	ΔΙ	K (וור				C	STATE OF SOUTH DAKOTA	PROJECT NH-CR 0034(193)402	SHEET TOTAL SHEETS B19 B149
		$, \mathbf{U}$				50		\ ,						/ / /			хU				0	Plotting Date:	11/05/2024	
		Fillet Section		Concrete Cu	b and Gutter		Concrete Curb	Cor	ncrete Gutte	r	PCC /	Approac	h Paven	nent			Concre	ete Sidev	valk		Detectable Warning			
		PCC	Туре В	Modified Type B	Type F	Modified Type F	Туре В	Type P	Modified Type P	alley	Туре	Α	Тур	e B			Colo	ored	Reinforced	Reinforced Colored	Type 1			
		8"	68	68	68	68	6	8"	8"	8"	6"	8"	6"	8"	4"	6"	4"	6"	6"	4"		1		
Station	to Station	SqYd	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Sq Yd	Sq Yd	Sq Yd	SqYd	SqFt	SqFt	SqFt	SqFt	SqFt	SqFt	SqFt			
Sewage Lagoon Entra	ance to Crummer Ave																					-		
375+55.97-73.89' L 379+20.28-18.00' L	379+20.28-18.00' L 383+12.62-16.50' L	105.4	98.6	313.3	72.9 5.0	329.3	18.7			-+												-		
383+12.62-16.50' L	384+95.88-16.50' L		211.1							37.1				<u> </u>		905.5	288.7				16.0	1		
384+95.88-16.50' L 393+00.50-16.50' L	393+00.50-16.50' L 397+54.00-16.50' L		764.5					40.0			63.5			63.5		6020.2 3040.9	2257.6		168.0	30.0				
397+54.00-16.50' L	399+77.75-57.50' L		209.7					40.0					83.8			1520.1					20.0			
Cemetery Entrance to S	W 3rd Street Apartments																					-		
372+52.89-101.75' R	377+31.00-18.00' R				100.7	443.2																		
377+31.00-18.00' R 379+47 43-17 48' R	379+47.43-17.48' R			1 127 6		196.4			20.0				18.5 28.1									-		
391+15.00-16.50' R	393+00.57-16.50' R			149.6					36.0		26.7		20.1									-		
393+00.57-16.50' R	396+43.01-16.50' R			302.7					40.0			29.4												
SW 3rd Street Apartme	ents to Florence Avenue																					-		
396+43.01-16.50' R	398+13.54-16.50' R		40.7	130.5					40.0				46.2		591.9		355.6				00.0			
400+84.44-16.50' R	400+84.44-16.50' R 401+34.00-16.50' R		25.6	203.2				24.0	24.0				32 48		67.8		337.5				20.0	-		
401+34.00-16.50' R	402+78.38-69.74' R	25.9	124.2					24.0					47.9		505.1	224.7					20.0	1		
Crummer Avenue t	to Florence Avenue																							
400+05.75-57.50' L	403+54.00-47.50' L	25.9	355.2													3054.9					62.0			
Florence Avenue	to Loban Avenue																					-		
403+10.38-69.74' R	404+48.94-16.50' R	25.9	141.2												691.5	228.9					30.0	1		
404+48.94-16.50' R 404+81.17-16.50' R	404+81.17-16.50' R 406+56.34-16.50' R		12.2 145.2					20.0			42.7 56.3				665.8							-		
406+56.34-16.50' R	407+21.92-16.50' R		47.6					18.0			42.3				177.9									
407+21.92-16.50' R 408+32 00-16 50' R	408+32.00-16.50' R 408+94 58-16 50' R		78.1					32.0			62.0				414.9						10.0	-		
408+94.58-16.50' R	415+15.00-41.50' R	25.9	577.4					24.0			50.7				3057.3	152.7					40.0			
Florence Avenue	e to Main Avenue																					-		
403+82.00-47.50' L	404+80.17-16.50' L	25.9	79.2													804.9	384.4				26.0			
404+80.17-16.50' L	407+41.00-60.15' L		257.4					32.0					67.2			1878.0	1142.2				26.0	-		
Main Avenue to	o Perry Avenue									-+												-		
407+81.00-60.15' L	408+74.92-16.50' L		122.5					40.0					40.0			803.5		01.0			26.0	1		
408+74.92-16.50' L 410+07.18-16.50' L	410+07.18-16.50' L 411+38.00-54.98' L	25.9	110.3 32.6					16.0 76.0		10.5	135.1		42.0			839.8 353.1		61.6 240.9			26.0	-		
Perry Avenue to	o Loban Avenue																							
411+66.00-44.50' L	415+18.66-54.48' L	51.6	331.7													3021.2					52.0	-		
Subt	total:	312.4	4219.7	2,227.0	178.5	968.9	18.7	440.0	200.0	47.6	529.9	29.4	413.7	63.5	7648.1	22848.4	5869.1	302.5	168.0	30.0	374.0			

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PA\	/EMENT		JKF	3 Aľ	ND (GU	I I E F	く. /	4N	\mathbf{D}	S	Ut	_VV	AL	K (JU	AN				кота NH-CR 0034(193)402	B20 E
		, –						-, -												Plotti	g Date: 11/05/2024	
		Fillet Section		Concrete Cu Modified	urb and Gutte	r Modified	Concrete Curb	Co	ncrete Gut	tter	PCC	Approac	h Pavemen			Conc	rete Side	walk	Deinforced	Detectable Warning		
		PCC	Туре В	Туре В	Type F	Type F	Туре В	Type P	Type P	Valley	Туре	θA	Туре В			Col	ored	Reinforced	Colored	Type 1		
		8"	68	68	68	68	6	8"	8"	8"	6"	8"	6"	5" 4"	6"	4"	6"	6"	4"			
Station	to Station	SqYd	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Sq Yd	Sq Yd	Sq Yd S	Yd SqF	t SqFt	SqFt	SqFt	SqFt	SqFt	SqFt		
S Loban Ave	e to S Allen Ave		<u> </u>											_								
415+46 48-54 48' I	417+77 01-16 50' I	18.2	218.1											_	1874 9	2				26.0		
417+77.01-16.50' L	420+13.36-51.37' L	10.2	242.3					16.0			39.7				1772.	3				20.0		
415+43.00-47.50' R	418+15.99-16.50' R	25.9	255.2					28.0				56.2		1233	.4 213.7 5 101.6					20.0		
410+15.99-10.50 K	420+13.33-57.47 K		107.0					20.0				36.2		730	5 191.0					20.0		
S Allen Ave to	Access Easement																					
420+45.28-55.48' L	422+19.11-18.00' L		6.0	192.6										809	6 186.3	338.7				20.0		
420+45 44 61 07' D	400±07 00 19 00' P		6.0	211.2										702	1 102 3					20.0		
420+45.44-61.97 R 422+27 99-18 00' R	422+27.99-18.00 R 424+05.00-18.00' R		6.0	211.5		136.9			40.0			63.5		623	8					20.0		
424+05.00-18.00' R	425+93.93-18.00' R		l			148.9			40.0			63.6		685	3							
425+93.93-18.00' R	428+03.58-62.00' R				6.0	192.6			40.0			63.6		705	6 103.0					10.0		
Access Lasome	ent to S Summit Ave		 		17.0	E92.2								2454	C 205 9					I I		
428±43 58 62 00' P	133+80 35 70 39' D							-												20.0		
428+43.58-62.00' R	433+80.35-79.38' R				17.5	563.3								2431	.0 200.0					20.0		
428+43.58-62.00' R S Summit Ave t	433+80.35-79.38' R to S Enterprise Ave				17.5	503.3								2431	.0 200.0					20.0		
428+43.58-62.00' R S Summit Ave t 434+15.91-79.34' R	433+80.35-79.38' R to S Enterprise Ave 441+87.58-76.23' R				31.8	817.9								3655	.0 203.8	681.3				20.0		
428+43.58-62.00' R S Summit Ave t 434+15.91-79.34' R 442+23.57-75.80' R	433+80.35-79.38' R to S Enterprise Ave 441+87.58-76.23' R 442+58.55-26.02' R				31.8 69.8	817.9								3655	.0 203.8	681.3				20.0		
428+43.58-62.00' R S Summit Ave t 434+15.91-79.34' R 442+23.57-75.80' R	433+80.35-79.38' R to S Enterprise Ave 441+87.58-76.23' R 442+58.55-26.02' R				31.8 69.8	817.9								3655	0.0 203.8	681.3				20.0		
428+43.58-62.00' R S Summit Ave t 434+15.91-79.34' R 442+23.57-75.80' R	433+80.35-79.38' R to S Enterprise Ave 441+87.58-76.23' R 442+58.55-26.02' R Subtotal:	44 1	914.6	403.9	31.8 69.8	817.9		44.0	120.0	0.0	39.7	246.9	0.0	3655	.0 203.8	681.3	0.0		0.0	20.0		





		STATE OF SOUTH DAKOTA	NH-0	PROJECT	193)403	SHEET	TOTAL SHEETS B149]
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Published Date: 2025	SDDOT	CHAIN LII
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STATE OF SOUTH	IH-CR 0034(193)402	B14Ch	SHEETS
Plotting Date:	11/05/2024	Б1400	Б140
		-	
Extension Arm			
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GENERAL NOTES:			
Extension arms will be hot dipped galvanized. End and corner arms will be malleable iron. I	ntermediate		
arms may be pressed steel. Arms will have sealed caps and three slots to accommodate the The top wire will be 12 inches above the fabric and 12 inches out from the fence line at an a	e barbed wires. angle of		
approximately 45°. Adjustable arms may be used. Barbed wire will be two strand 12½ gaug	e wire with		
four point round barbs spaced on 5 inch centers.			
Extra payment will not be made for extension arms with barbed wire. Extension arms with b	arbed wire will		
be incidental to the respective "Chain Link Fence" contract item. When extension arms with are attached to gates, the payment for the extension arms with barbed wire will be incidenta	barbed wire al to the respective		
"Gate" contract item.			
1 1 1	June 26, 201	9	
	PLATE NUMBER	8	
$\left \widetilde{\boldsymbol{p}} \right $ barbed wire top for chain link fence	621.04		
	Sheet 1 of 1		
Published Date: 2025	51661 1 01 1		



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STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	NH-CR 0034(193)402	B146c	B146
Plotting Date:	11/05/2024		

SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	500.0	Hour
634E0020	Pilot Car	250.0	Hour
634E0110	Traffic Control Signs	1,244.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	60	Each
634E0380	Tubular Marker	210	Each
634E0390	Replace Tubular Marker	50	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	3,500	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	432	Ft
634E0640	Temporary Pavement Marking	22,364	Ft
634E0900	Portable Temporary Traffic Control Signal	2	Unit
634E0919	Driveway Assistance Device	10.0	Mth
634E1002	Detour and Restriction Signing	563.0	SqFt
634E1020	Temporary Business Signing	50.0	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each

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.

Notes:

Contractor is advised August 9th and 10th, 2025 are Looney Days in the City of Colman. Contractor is advised there will be increased traffic and pedestrians during this period and Contractor will limit traffic disruptions due to the project as much as possible during this period.

Phase 1

General Work Description:

Widening, Temporary Surfacing

Construction:

- 1. Install necessary traffic control and signing
- 2. Widening existing roadway for temporary surfacing
- Install temporary surfacing as per phasing details (quantities included 3. in section F)

Notes:

- Widening and temporary surfacing will be accomplished with use of flaggers and pilot car
- Temporary widening from 354+14 to 357+14 may be installed with phase 2 construction

Phase 2

General Work Description

Construction of south portion of SD Hwy 34 from station 357+14 to 382+00

Construction

- 1. Install necessary traffic control, signing, and remove conflicting pavement markings.
- 2. Remove existing pavement necessary for construction of phase 2
- Install storm sewer, construct necessary grading, and construct center 3. turnlane, eastbound lane, and eastbound shoulder from station 357+14 to 382+00

Notes:

- Traffic will be maintained single lane from station 357+14 to 382+00 with use of temporary traffic signals
- Access to Cemetery will be maintained at all times

Phase 3

General Work Description

Construction of north portion of SD Hwy 34 from station 357+14 to 380+50 and south portion from station 382+00 to 410+30.

Construction

- 1. Install necessary traffic control, signing, and remove conflicting pavement markings.
- 2. Remove existing pavement necessary for construction of phase 3
- 3. Install storm sewer, construct necessary grading, and construct center turnlane, eastbound lane, and eastbound shoulder from station 382+00 to 410+30.
- 4. Install storm sewer, construct necessary grading, and westbound lane from station 357+14 to 380+50

Notes:

- Traffic will be maintained single lane from station 382+00 to 410+30 with use of temporary traffic signals
- Once the center turnlane, eastbound lane, and eastbound shoulder • from station 382+00 to 410+30 are constructed and can carry 2 lanes of traffic, the contractor will be allowed to proceed to phase 4
- Access to either Crummer Ave or Main St will be maintained at all times
- Access to the City of Colman RV Park will be required at all times
- Access to either Allen St or 470th Ave will be required at all times to allow access to the City Park and Golf Course
- Access to either Summit Ave or Enterprise Ave will be required at all times to maintain access to businesses
- Phase construction of Florence St will be required as it is the only access for residents. Contractor will phase construction to maintain a 20' wide gravel surfacing

Phase 4

General Work Description

Construction of north portion of SD Hwy 34 from station 380+50 to 408+75 and south portion from station 410+30 to 447+75.

Construction

- 2.
- 3. to 447+75

Notes:

Phase 5

General Work Description

Construction of north portion of SD Hwy 34 from station 408+75 to 447+75. sidewalk, approach pavements, permanent signing, permanent pavement marking, and lighting.

Construction

- 3.

Notes:

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH-CR 0034(193)402	C2	C27

Rev 11/14/2024 JAP

1. Install necessary traffic control, signing, and remove conflicting pavement markings

Remove existing pavement necessary for construction of phase 4

Install storm sewer, construct necessary grading, and construct center turnlane, eastbound lane, and eastbound shoulder from station 410+30

4. Install storm sewer, construct necessary grading, and westbound lane from station 380+50 to 408+75

• Traffic will be maintained single lane from station 410+30 to 447+75 with use of temporary traffic signals

Once the center turnlane, eastbound lane, and eastbound shoulder from station 410+30 to 447+75 are constructed and can carry 2 lanes of traffic, the contractor will be allowed to proceed to phase 5

Access to either Crummer Ave or Main St will be maintained at all times

1. Install necessary traffic control & signing

2. Remove existing pavement necessary for construction of phase 5 Install storm sewer, construct necessary grading, and westbound lane from station 408+75 to 447+75

4. Install Sidewalk, approach pavements, permanent signing, permanent pavement marking, final erosion control, and lighting 5. Miscellaneous cleanup

• Sidewalk or approach pavements may be installed in prior phases.

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.

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 notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

If inappropriate or conflicting pavement markings exist, the markings will be removed and replaced with applicable temporary pavement markings when the work duration is more than 3 days. When the work duration is less than 3 days, the channelizing devices in the area where the pavement markings conflict will be placed at one-half of the normal channelizing device spacing. Pavement marking removals will be incidental to the contract unit price per foot for "Remove Pavement Marking, 4" or equivalent". Temporary pavement marking will be paid for at the contract unit price per mile/foot for "Temporary Pavement Marking". The additional channelizing devices will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

Road closure signs and barricades as shown on the phasing detail sheets will be positioned to face traffic approaching the project.

OVERWIDTH RESTRICTION AND DETOUR SIGNING

The Contractor will furnish and install the overwidth restriction signs as shown in these plans. Prior to installing the signs, the Contractor will mark the sign locations and review them with the Engineer. Overwidth restriction signs will be installed on fixed location, ground mounted, breakaway supports. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor will remove the overwidth restriction signs.

All costs for furnishing the signs, posts, and mounting hardware, and for installing, maintaining, covering, and removing the overwidth restriction signs will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".

FLAGGING

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

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours.

Also included in the Estimate of Quantities are WAIT FOLLOW PILOT CAR signs for use on low volume intersecting roads, driveways, or as determined by the Engineer. WAIT FOLLOW PILOT CAR signs will not block the view of the stop sign.



It is required that the flaggers and pilot car operators be able to communicate with one another. If an emergency vehicle needs to pass through the project. the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

WORK ZONE SPEED REDUCTION

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

TEMPORARY PAVEMENT MARKING

Temporary pavement markings will be temporary paint, temporary raised pavement markers, or temporary marking tape.

Table of Temporary Tavement Mar	Anga	
Use	Location	Length (Ft)
White Edge Line x 2 – Single Lane	Sta 355+14 to 451+96	9682
Double Yellow x 2 – Two Lanes	Sta 355+14 to 451+96	9682
Temporary Signals – SP 634.26	Varies	3000
		22,364

TEMPORARY PAVEMENT MARKING TAPE, TYPE I

Temporary pavement marking for stop lines for standard plate 634.26 will consist of 4" Temporary Pavement Marking Tape Type I. Placement of each 24" white stop line will be accomplished by placing six pieces of 4" x 12' tape adjacent to one another. Each workspace requires two stop lines which is an equivalent of approximately 144' of 4" tape (3 workspaces at 144' = 432').

PORTABLE TEMPORARY TRAFFIC CONTROL SIGNAL

The Contractor will furnish, install, operate, and maintain a portable temporary traffic control signal during construction phases as determined by the Engineer. There will be one controller and one slave unit per location.

All vehicle signal heads will have backplates with retroreflective border. The vehicle signal head backplates will have a factory applied 3-inch wide yellow retroreflective border. Sheeting for the border will be Type IX or Type XI in conformance with ASTM D4956.

Signal backplates will be polycarbonate, aluminum, or aluminum-composite. Minimum material thicknesses are:

> Polycarbonate, 0.10-inch Aluminum, 0.06-inch Aluminum-Composite, 0.08-inch

Signal backplates will extend not less than 5 inches from the edge of the signal head at the top, bottom, and sides.

All traffic signal equipment and materials will meet the requirements of Sections 635 and 985 of the Specifications except the controller requirements.

All costs involved with constructing and maintaining the portable temporary traffic control signal as specified above, will be included in the contract unit price per unit for "Portable Temporary Traffic Control Signal".

STATE OF	PROJECT	SHEET	TOTAL	
SOUTH DAKOTA	NH-CR 0034(193)402	C4	C27	

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• The Contractor will determine the best temporary pavement marking type to use on the project.

• Temporary paint will not be allowed on new PCCP surfaces.

Table of Temporary Payement Markings



11/05/2024	STATE OF	PROJECT		SHEET	TOTAL SHEETS
	SOUTH DAKOTA	NH-CR 0034(193)402		X104	X128
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MH-CR 0034(193)402 X106 X128 1695.	11/05/2024	STATE OF	PROJECT		SHEET	TOTAL SHEETS
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Plotting Date:



MH-CR 0034(193)402 X107 X128 1695	11/05/2024	STATE OF	PROJECT	SHEET	TOTAL SHEETS
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11/18/2024	STATE OF	PROJECT	SHEET	TOTAL
	SOUTH DAKOTA	NH-CR 0034(193)402	Z2	Z4

Revised 11/18/2024 MS

,	1690
	1685
	1680
	1675
3/0+26-89' R Install Bank and Channel	1670
Protection Gabions (12.0 CY)	Vd)
and Type B Drainage Fablic (34 Sq	1665
370+47-89' R	
Protection Gabions (12.0 CY)	1660
and Typbe B Drainage Fabric (34 S	qYd)
	1655
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371 - O NOF)+61 1645
	160