DEPARTMENT OF TRANSPORTATION

Planning & Engineering
Office of Project Development
700 E. Broadway Avenue
Pierre, SD 57501
O: 605.773.3275
dot.sd.gov

November 12, 2021

Re: Project's IM 0293(106)76, P 1400(16), P 8050(81), P1423(07), IM 0293(112)76, CIP 11076( ) – PCN's 03RA, 05NF, 06XY, 06Y0, 06VQ, X05Q – I29 Exit 77 Grading, Structure, PCC Paving, Sidewalk, Signals, Lighting, Fiber Reinforced Ditch Liner, City Watermain & City Sanitary Sewer.

To Whom It May Concern,

A pre-bid meeting for the 41st Street Interchange Reconstruction project is being held on December 2nd, 2021 at 1:30 PM CST in Sioux Falls, SD. Interested contracting parties are invited to attend the meeting in-person at the Sioux Falls Convention Center however, the meeting will be available via WEBEX. If you plan to participate via WEBEX, please send your email address to james.unruh@hdrinc.com so that you can be sent an invitation.

Sioux Falls Convention Center, Ballroom B
1101 N. West Avenue
Sioux Falls, SD 57104

This meeting will include a presentation of the project covering topics such as the overall scope of work, design aspects, construction sequencing, traffic control, utility coordination, and contract time. There will be an opportunity for Contractors to present questions to Department staff, consultants, and project stakeholders.

Attendance is not a requirement, but all interested contracting parties are strongly encouraged to attend.

Additional instructions regarding the meeting format will be provided at the beginning of the meeting.

We look forward to seeing you there!

Sincerely,
SD DOT

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0293(106)76 & P 1400(16) P 1423(07) & P 8050(81)	1	952

FILE: ...\Section A\A01 Title.dgn
PLOTTING DATE: 10-22-2021
REV DATE: 10-22-2021
INITIAL: JHU

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

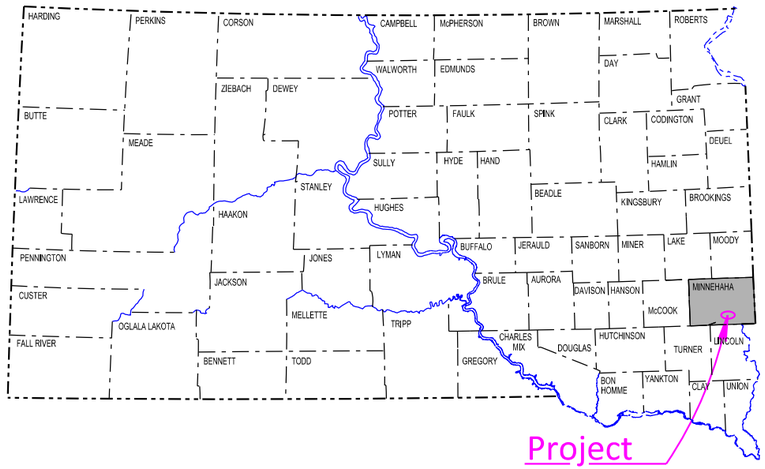
PROJECTS IM 0293(106)76, P 1400(16), P 1423(07), & P 8050(81)

41st Street and I-29

MINNEHAHA COUNTY

GRADING, STRUCTURES, CURB & GUTTER, STORM SEWER, PCC PAVEMENT, SIDEWALK, PAVEMENT MARKING, SIGNALS, LIGHTING, AND PERMANENT SIGNING

PCN 03RA, 05NF, 06Y0, & 06XY



INDEX OF SECTIONS

Section A	Estimate of Quantities and Environmental Commitments
Section B	Grading Plans
Section C	Traffic Control Plans
Section D	Erosion Control Plans
Section E	Structure Plans
Section F	Surfacing Plans
Section H	Landscaping Plans
Section L	Signal and Lighting Plans
Section M	Pavement Marking Plans
Section S	Permanent Signing Plans
Section U	Utility Plans
Section X	Cross Sections
Section Z	Pipe Sections

DESIGN DESIGNATION

	MAINLINE	I-29 NB OFF-RAMP	I-29 NB ON-RAMP	I-29 SB OFF-RAMP	I-29 SB ON-RAMP
AADT (2021)	48,900	6,400	10,200	15,600	5,600
AADT (2045)	60,600	7,800	13,400	20,000	6,700
DHV (2045)	6,915	960	800	1,600	585
D (P.M. Peak)	51%	100%	100%	100%	100%
T DHV	11%	1%	1%	1%	1%
T ADT	16%	1%	1%	1%	1%
V	70	50	50	50	50

	41ST ST W OF I-29	41ST ST E OF I-29	MARION RD N OF 41ST	MARION RD S OF 41ST	CAROLYN AVENUE	SHIRLEY AVENUE
AADT (2021)	32,300	42,500	20,200	19,900	2,300	5,400
AADT (2045)	42,900	48,700	27,900	31,800	2,400	5,600
DHV (2045)	1,960	2,555	2,050	2,920	220	505
D (P.M. Peak)	60%	61%	61%	56%	52%	53%
T DHV	2%	2%	2%	2%	1%	1%
T ADT	2%	2%	2%	2%	1%	1%
V	40 (1)	40 (1)	40	40	35	35



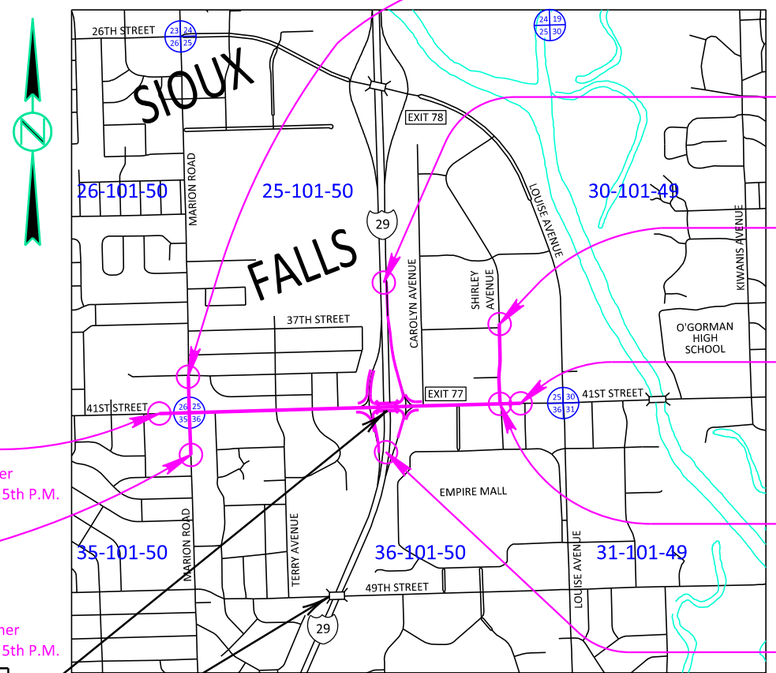
STORM WATER PERMIT
Major Stream: Big Sioux River
Area Disturbed: 27.97 Acres
Total Project Area: 30.77 Acres
Approx. Begin Lat/Long: 43.5292, -96.6987

BEGIN P 1400(16)
41st Street
Station 12+00.00
Approx. 416.07' west and 0.10' north of the SE corner
of Section 26 - Township 101 N - Range 50 W of the 5th P.M.

BEGIN P 1423(07)
Marion Road
Station 70+80.00
Approx. 609.85' south and 0.03' east of the NW corner
of Section 36 - Township 101 N - Range 50 W of the 5th P.M.

41st Street
Sta. 42+77.69 1.375 Rt. to Sta. 45+19.69 1.375 Rt
Modify Str. No. 50-175-230
242'-0" Cont. Comp. Girder Bridge

I-29 MRM 76.72
Str. No. 50-173-235
328'-2 1/2" Prestr. Conc. Girder Bridge



I-29 Ramps Gross Length	2,778.12	Feet	0.526 Miles
41st Street Road Gross Length	5,074.97	Feet	0.961 Miles
Marion Road Gross Length	1,096.07	Feet	0.208 Miles
Shirley Avenue Gross Length	538.29	Feet	0.102 Miles
Length of Exceptions	0.00	Feet	0.000 Miles
Total Net Length	9,487.45	Feet	1.797 Miles

END P 1423(07)
Marion Road
Station 81+96.07
Approx. 506.17' north and 5.24' east of the SW corner
of Section 25 - Township 101 N - Range 50 W of the 5th P.M.

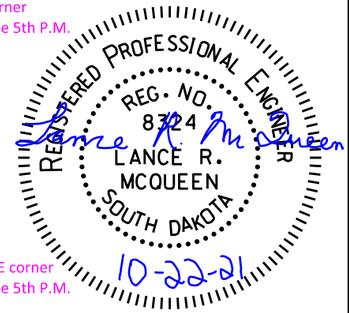
IM 0293(106)76
Ramp "A" Sta. 100+00.00 to Sta. 113+71.18
Ramp "D" Sta. 150+00.00 to Sta. 155+48.93
Ramp "E" Sta. 200+00.00 to Sta. 202+80.56
Ramp "H" Sta. 230+00.00 to Sta. 235+42.76

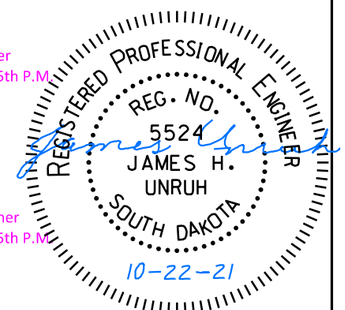
END P 8050(81)
Shirley Avenue
Station 517+76.20
Approx. 879.34' west and 1,126.01' north of the SE corner
of Section 25 - Township 101 N - Range 50 W of the 5th P.M.

END P 1400(16)
41st Street
Station 62+74.97
Approx. 617.99' west and 5.98' south of the NE corner
of Section 36 - Township 101 N - Range 50 W of the 5th P.M.

BEGIN P 8050(81)
Shirley Avenue
Station 505+56.87
Approx. 886.95' west and 89.97' south of the NE corner
of Section 36 - Township 101 N - Range 50 W of the 5th P.M.

IM 0293(106)76
Ramp "B" Sta. 120+50.00 to Sta. 125+29.16
Ramp "C" Sta. 133+68.86 to Sta. 140+20.20
Ramp "F" Sta. 210+00.00 to Sta. 212+44.14
Ramp "G" Sta. 220+00.00 to Sta. 224+28.25





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December 15, 2021

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0293(106)76 & P 1400(16) P 1423(07) & P 8050(81)	A1	A8

Plotting Date: 11/10/2021

REV DATE: 11/10/2021
INITIAL: JHU

INDEX OF SHEETS

A1 to A5	Estimate of Quantities for Sections B, C, D, E, F, H, L, M, and S
A6 to A8	Environmental Commitments

Section B – Grading

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	60	30	20	10	120	Each
009E3225	Reestablish Public Land Survey System Corner	10	5	5	2	22	Each
009E3230	Grade Staking	5.194	3.117	1.264	0.373	9.948	Mile
009E3250	Miscellaneous Staking	0.726	0.959	0.215	0.077	1.977	Mile
009E3280	Slope Staking	0.726	0.959	0.215	0.077	1.977	Mile
009E3290	Structure Staking	6	6	2	-	14	Each
009E3301	Engineer Directed Surveying/Staking	30.0	30.0	20.0	10.0	90.0	Hour
009E4300	Construction Schedule, Category III	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
009E4330	Project Management, Category III	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
100E0100	Clearing	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
110E0100	Remove Concrete Footing(s)	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	1,690	493	1,055	568	3,806	Ft
110E0400	Remove Drop Inlet	36	6	-	-	42	Each
110E0605	Remove Chain Link Fence	-	184	64	-	248	Ft
110E0700	Remove 3-Cable Guardrail	-	1,450	-	-	1,450	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	-	10	-	-	10	Each
110E1010	Remove Asphalt Concrete Pavement	6,816.8	614.3	2,166.0	2,032.6	11,629.7	SqYd
110E1100	Remove Concrete Pavement	31,192.0	20,723.1	4,508.9	56.5	56,480.5	SqYd
110E1120	Remove Concrete Median Pavement	-	86.8	-	-	86.8	SqYd
110E1130	Remove Concrete Driveway Pavement	1,045.8	-	471.0	257.2	1,774.0	SqYd
110E1140	Remove Concrete Sidewalk	4,227.0	1,193.4	1,202.1	303.0	6,925.5	SqYd
110E7800	Remove Chain Link Fence for Reset	-	572	54	-	626	Ft
120E0010	Unclassified Excavation	38,147	29,256	7,215	2,005	76,623	CuYd
120E0600	Contractor Furnished Borrow Excavation	1,807	1,338	-	-	3,145	CuYd
120E0900	Contaminated Material Excavation	100	-	-	-	100	CuYd
120E1000	Muck Excavation	-	701	-	-	701	CuYd
120E2000	Undercutting	10,547	7,166	2,259	672	20,644	CuYd
120E6100	Water for Embankment	242.4	222.9	31.8	8.4	505.5	MGal
250E0020	Incidental Work, Grading	Lump Sum	Lump Sum	Lump Sum	-	Lump Sum	LS
260E1010	Base Course	450.0	450.0	70.0	50.0	1,020.0	Ton
380E2566	6" Barrier Type Colored Median PCC Pavement	3,127.1	-	28.6	-	3,155.7	SqYd
380E4010	6" PCC Fillet Section	16.0	-	-	-	16.0	SqYd
380E4050	8" PCC Fillet Section	-	-	-	116.0	116.0	SqYd
380E4110	11" PCC Fillet Section	267.0	-	-	-	267.0	SqYd
450E0102	12" RCP Class 2, Furnish	22	16	-	-	38	Ft
450E0110	12" RCP, Install	22	16	-	-	38	Ft
450E0114	15" RCP Class 4, Furnish	16	-	-	-	16	Ft
450E0120	15" RCP, Install	16	-	-	-	16	Ft
450E0122	18" RCP Class 2, Furnish	1,088	1,558	940	424	4,010	Ft
450E0124	18" RCP Class 4, Furnish	138	-	-	-	138	Ft
450E0130	18" RCP, Install	1,226	1,558	940	424	4,148	Ft
450E0142	24" RCP Class 2, Furnish	114	-	368	-	482	Ft
450E0150	24" RCP, Install	114	-	368	-	482	Ft
450E0162	30" RCP Class 2, Furnish	1,446	-	-	-	1,446	Ft
450E0170	30" RCP, Install	1,446	-	-	-	1,446	Ft
450E0182	36" RCP Class 2, Furnish	744	-	-	-	744	Ft
450E0190	36" RCP, Install	744	-	-	-	744	Ft
450E0192	42" RCP Class 2, Furnish	2,610	200	-	-	2,810	Ft
450E0193	42" RCP Class 3, Furnish	-	158	-	-	158	Ft
450E0200	42" RCP, Install	2,610	358	-	-	2,968	Ft
450E0212	54" RCP Class 2, Furnish	146	-	-	-	146	Ft
450E0220	54" RCP, Install	146	-	-	-	146	Ft
450E0404	15" RCP Bend, Furnish	1	-	-	-	1	Each
450E0405	15" RCP Bend, Install	1	-	-	-	1	Each
450E0408	18" RCP Bend, Furnish	11	-	-	-	11	Each
450E0409	18" RCP Bend, Install	11	-	-	-	11	Each
450E0424	30" RCP Bend, Furnish	1	-	-	-	1	Each
450E0425	30" RCP Bend, Install	1	-	-	-	1	Each
450E0700	RCP Tee, Furnish	19	3	3	-	25	Each
450E0701	RCP Tee, Install	19	3	3	-	25	Each
450E1000	RCP Wye, Furnish	1	-	-	-	1	Each
450E1001	RCP Wye, Install	1	-	-	-	1	Each

Section B – Grading (continued)

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchang	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
450E2008	18" RCP Flared End, Furnish	-	6	-	-	6	Each
450E2009	18" RCP Flared End, Install	-	6	-	-	6	Each
450E4512	36" RCP Arch Flared End, Install	-	2	-	-	2	Each
450E4513	36" RCP Arch Flared End, Install	-	2	-	-	2	Each
450E4759	18" CMP 16 Gauge, Furnish	-	660	-	-	660	Ft
450E4760	18" CMP, Install	-	660	-	-	660	Ft
450E5010	18" CMP Elbow, Furnish	-	22	-	-	22	Each
450E5011	18" CMP Elbow, Install	-	22	-	-	22	Each
450E5211	18" CMP Flared End, Furnish	-	11	-	-	11	Each
450E5212	18" CMP Flared End, Install	-	11	-	-	11	Each
450E7642	42" Steel Pipe, Furnish	-	126	-	-	126	Ft
450E8009	18" RCP to CMP Transition, Furnish	-	11	-	-	11	Each
450E8010	18" Pipe Transition, Install	-	11	-	-	11	Each
451E5142	Bore and Jack 42" Pipe	-	126	-	-	126	Ft
460E0100	Class A45 Concrete, Miscellaneous	-	51.6	-	-	51.6	CuYd
462E0100	Class M6 Concrete	207.8	82.9	31.5	6.8	329.0	CuYd
480E0100	Reinforcing Steel	35,546	23,447	5,031	1,218	65,242	Lb
530E0300	Type C Concrete Retaining Wall	2,187	-	331	-	2,518	SqFt
600E0300	Type III Field Laboratory	-	1	-	-	1	Each
621E0060	6' Chain Link Fence with Top Rail	-	177	-	-	177	Ft
621E0160	6' Chain Link Fence with Tension Wired Top	-	40	-	-	40	Ft
621E0244	Special 4' Fence	-	-	168	-	168	Ft
621E0520	Reset Chain Link Fence	-	572	54	-	626	Ft
628E1500	Concrete Barrier End Protection	-	4	-	-	4	Each
628E1510	Concrete Barrier End Protection Module Set or Repair Kit	-	2	-	-	2	Each
629E0110	High Tension Cable Guardrail	-	1,680	-	-	1,680	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	-	8	-	-	8	Each
629E1109	Furnish High Tension Cable Guardrail Post and Sleeve	-	50	-	-	50	Each
650E0060	Type B66 Concrete Curb and Gutter	1,368	-	326	58	1,752	Ft
650E0080	Type B68 Concrete Curb and Gutter	63	-	-	573	636	Ft
650E0095	Type B63.5 Concrete Curb and Gutter	-	-	1,456	-	1,456	Ft
650E0110	Type B611 Concrete Curb and Gutter	11,515	4,991	-	-	16,506	Ft
650E4660	Type P6 Concrete Gutter	189	90	-	-	279	Ft
650E4680	Type P8 Concrete Gutter	-	-	-	113	113	Ft
650E4695	Type P9.5 Concrete Gutter	-	-	368	-	368	Ft
650E4710	Type P11 Concrete Gutter	723	-	-	-	723	Ft
650E6280	8" Concrete Valley Gutter	272.0	-	-	31.0	303.0	SqYd
651E0060	6" Concrete Sidewalk	29,201	10,567	8,917	4,254	52,939	SqFt
651E7000	Type 1 Detectable Warnings	358	176	20	92	646	SqFt
670E1200	Type B Frame and Grate Assembly	63	27	19	6	115	Each
670E2200	Type C Frame and Grate	-	20	-	-	20	Each
670E3300	Type E Frame and Grate	4	-	3	-	7	Each
670E5202	Special Frame and Grate	2	2	-	-	4	Each
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	3	-	-	-	3	Each
670E5342	4' x 6' Precast Concrete Type S Drop Inlet Lid	1	-	-	-	1	Each
670E5400	Precast Drop Inlet Collar	-	20	-	-	20	Each
671E4048	48" Manhole Riser Section	-	15.0	-	-	15.0	Ft
671E4548	48" Manhole Cone Section	-	10.0	-	-	10.0	Ft
671E6010	Type A10 Manhole Frame and Lid	14	4	-	-	18	Each
671E6035	Special Manhole Frame and Lid	1	-			1	Each
700E0210	Class B Riprap	-	527.1	-	-	527.1	Ton
831E0110	Type B Drainage Fabric	-	1,008	-	-	1,008	SqYd
831E0300	Reinforcement Fabric (MSE)	1,800	1,800	300	190	4,090	SqYd

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0293(106)76 & P 1400(16) P 1423(07) & P 8050(81)	A2	A8

Plotting Date: 10/25/2021

REV DATE: 10/22/2021
INITIAL: JHU

Section C – Traffic Control

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley Ave	Total	
260E6010	Granular Material	2,000.0	2,300.0	90.0	200.0	4,590.0	Ton
320E6000	Temporary Asphalt	1,800.0	2,100.0	70.0	150.0	4,120.0	Ton
628E1110	Movable F Shape Concrete Barrier, End Section	-	20	-	-	20	Each
634E0010	Flagging	300.0	200.0	100.0	100.0	700.0	Hour
634E0110	Traffic Control Signs	841.3	1,786.3	320.5	153.0	3,101.1	SqFt
634E0120	Traffic Control Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0135	Traffic Control Supervisor	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0275	Type 3 Barricade	37	15	26	17	95	Each
634E0330	Temporary Raised Pavement Markers	-	25000	-	-	25,000	Ft
634E0380	Tubular Marker	240	132	30	50	452	Each
634E0390	Replace Tubular Marker	40	25	25	15	105	Each
634E0420	Type C Advance Warning Arrow Board	3	9	1	1	14	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	-	500	-	-	500	Each
634E0560	Remove Pavement Marking, 4" or Equivalent	10,500	5,500	2,400	4,000	22,400	Ft
634E0565	Remove Pavement Marking, Arrow	20	10	3	3	36	Each
634E0640	Temporary Pavement Marking	42,000	33,800	14,000	5,000	94,800	Ft
634E0700	Traffic Control Movable Concrete Barrier	-	500	-	-	500	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	-	100	-	-	100	Each
634E0750	Temporary Concrete Barrier End Protection	-	8	-	-	8	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	-	2	-	-	2	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	-	2	-	-	2	Each
634E0900	Portable Temporary Traffic Control Signal	2	2	-	-	4	Unit
634E0915	Short Term Temporary Traffic Control Signal	4	2	-	1	7	Site
634E1002	Detour and Restriction Signing	700.3	2,050.3	1,462.5	147.0	4,360.1	SqFt
634E1020	Temporary Business Signing	1,716.7	506.7	265.0	176.7	2,665.1	SqFt
634E1150	Opposing Traffic Lane Divider	-	28	-	-	28	Each
634E1160	Replace Opposing Traffic Lane Divider	-	5	-	-	5	Each
634E1215	Contractor Furnished Portable Changeable Message Sign	1	1	1	1	4	Each
634E1235	Queue Detection System	-	18.0	-	-	18.0	Mth
634E1245	Maintenance of Queue Detection System	-	300	-	-	300	Hour
634E2000	Longitudinal Pedestrian Barricade	80	20	40	25	165	Ft
634E2020	Temporary Curb Ramp	8	2	2	4	16	Each
634E2025	Longitudinal Pedestrian Barrier	2,000	550	40	300	2,890	Ft
634E2050	Temporary Sidewalk	800	50	200	110	1,160	SqFt
635E5470	* Wireless Interconnect System	5	2	-	1	8	Each
635E7600	Maintenance of Traffic Signal(s)	460	200	-	100	760	Hour
900E1350	Temporary Surfacing	1,200.0	500.0	300.0	200.0	2,200.0	SqFt
* - Denotes Non-Participating							

Section D – Erosion & Sediment Control

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
110E1690	Remove Sediment	6.0	3.3	1.3	0.3	10.9	CuYd
110E1693	Remove Erosion Control Wattle	-	329	-	-	329	Ft
110E1695	Remove Sediment Filter Bag	2,600	1,442	560	144	4,746	Ft
110E1700	Remove Silt Fence	518	1,678	107	27	2,330	Ft
120E6300	Water for Vegetation	742.4	1,601.7	294.1	194.4	2,832.6	MGal
230E0010	Placing Topsoil	2,005	2,192	494	132	4,823	CuYd
730E0206	Type D Permanent Seed Mixture	721	1,657	132	14	2,524	Lb
731E0100	Fertilizing	669	1,404	279	193	2,545	Lb
732E0300	Bonded Fiber Matrix	6.2	11.8	3.0	2.4	23.4	Ton
733E0100	Sodding	50	-	-	-	50	SqYd
734E0044	Soil Stabilizer	2.0	4.5	0.5	-	7.0	Acre
734E0154	12" Diameter Erosion Control Wattle	-	1,315	-	-	1,315	Ft
734E0165	Remove and Reset Erosion Control Wattle	-	329	-	-	329	Ft
734E0180	Sediment Filter Bag	2,600	1,442	560	144	4,746	Ft
734E0325	Surfacing Roughening	0.7	3.8	-	-	4.5	Acre
734E0602	Low Flow Silt Fence	2,072	6,710	428	108	9,318	Ft
734E0610	Mucking Silt Fence	144	466	30	7	647	CuYd
734E0620	Repair Silt Fence	518	1,678	107	27	2,330	Ft
734E0680	Flocculent Housing Unit	1	1	-	-	2	Each
734E0683	500K Gallon Treatment Flocculent Bag	1	1	-	-	2	Each
734E0845	Sediment Control at Inlet with Frame and Grate	74	54	22	6	156	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	47	-	-	-	47	Ft
734E5010	Sweeping	60	20	10	10	100	Hour
900E1310	Concrete Washout Facility	1	1	-	-	2	Each
900E1320	Construction Entrance	4	2	2	1	9	Each
900E5149	Landscaping Rock	95.2	24.4	21.6	0.9	142.1	CuYd
900E5150	Landscape Edging	451	40	220	8	719	Ft
900E5152	Weed Barrier Fabric	7,708	1,974	1,752	72	11,506	SqYd

Section E – Structures (all PCN 03RA)

Str. No. 50-175-230

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
009E5000	Concrete Penetrating Sealer	2,542.0	SqYd
110E0010	Remove Concrete Bridge Approach Slab	895.7	SqYd
110E0020	Remove Bridge Railing	1,042	Ft
110E0040	Remove Concrete Bridge Slab	2,525.2	SqYd
120E0010	Unclassified Excavation	99	CuYd
120E0200	Unclassified Excavation, Structure	150	CuYd
410E0020	Structural Steel	Lump Sum	LS
410E0030	Structural Steel, Miscellaneous	Lump Sum	LS
410E0365	Remove and Replace Transverse Stiffener	10	Each
410E0410	Stud Shear Connector	66	Each
410E2600	Membrane Sealant Expansion Joint	232.3	Ft
411E0100	Bridge Painting	Lump Sum	LS
412E0120	Bridge Repainting, Class II	Lump Sum	LS
412E0400	Rust Penetrating Sealer	Lump Sum	LS
412E0500	Paint Residue Containment	Lump Sum	LS
420E0100	Structure Excavation, Bridge	7	CuYd
430E0200	Bridge End Embankment	348	CuYd
430E0300	Granular Bridge End Backfill	132.0	CuYd
430E0510	Approach Slab Underdrain Excavation	7.4	CuYd
460E0030	Class A45 Concrete, Bridge Deck	741.2	CuYd
460E0050	Class A45 Concrete, Bridge	180.9	CuYd
460E0150	Concrete Approach Slab for Bridge	458.2	SqYd
460E0160	Concrete Approach Sleeper Slab for Bridge	166.3	SqYd
460E0200	Special Surface Finish	2,683	SqFt
460E0300	Breakout Structural Concrete	49.9	CuYd
460E0380	Install Dowel in Concrete	386	Each
460E0650	Roadway Canopy	Lump Sum	LS
470E0220	Steel Pedestrian Railing on Concrete Barrier	772.0	Ft
480E0100	Reinforcing Steel	14,845	Lb
480E0200	Epoxy Coated Reinforcing Steel	500	Lb
480E0300	Stainless Reinforcing Steel	189,143	Lb
480E0504	No. 4 Rebar Splice	28	Each
480E0505	No. 5 Rebar Splice	80	Each
480E0506	No. 6 Rebar Splice	44	Each
480E0509	No. 9 Rebar Splice	4	Each
480E5000	Galvanic Anode	12	Each
510E0300	Preboring Pile	40	Ft
510E3401	HP 12x53 Steel Test Pile, Furnish and Drive	240	Ft
510E3405	HP 12x53 Steel Bearing Pile, Furnish and Drive	705	Ft
621E0040	4' Chain Link Fence with Top Rail	282	Ft
680E0040	4" Underdrain Pipe	229	Ft
680E0060	6" Underdrain Pipe	84	Ft

Str. No. 50-175-230 (continued)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
680E2500	Porous Backfill	20.6	Ton
734E2020	Bridge Berm Slope Protection, Coated Crushed Aggregate	1,067.2	SqYd

Str. No. 50-175-235

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0100	Structure Excavation, Bridge	20	CuYd
460E0070	Class A45 Concrete, Bridge Repair	53.5	CuYd
460E0200	Special Surface Finish	125	SqFt
480E0100	Reinforcing Steel	4,644	Lb

Str. Retaining Walls

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0300	Structure Excavation, Retaining Wall	4,634	CuYd
420E1000	Foundation Preparation, Retaining Wall	3,307	CuYd
430E0200	Bridge End Embankment	5,585	CuYd
460E0100	Class A45 Concrete, Miscellaneous	49.8	CuYd
470E0040	Steel Pedestrian Railing	307.5	Ft
480E0100	Reinforcing Steel	13,838	Lb
530E0420	MSE Large Panel Wall, Furnish	22,120	SqFt
530E0422	MSE Large Panel Wall, Install	22,120	SqFt
530E0702	Granular Backfill for MSE Large Panel Wall	9,679.0	CuYd
680E0040	4" Underdrain Pipe	2,336	Ft

Str. Reinforced Concrete Barriers

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
380E2400	Concrete Barrier with Concrete Reinforced Footing	858	Ft
380E2450	Concrete Barrier and 10' Continuously Reinforced Concrete Shoulder	3,665	Ft
420E0400	Structure Excavation, Miscellaneous	302	CuYd
460E0100	Class A45 Concrete, Miscellaneous	275.4	CuYd
470E0220	Steel Pedestrian Railing on Concrete Barrier	1,127.0	Ft
480E0200	Epoxy Coated Reinforcing Steel	25,190	Lb

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0293(106)76 & P 1400(16) P 1423(07) & P 8050(81)	A4	A8

FOR BIDDING PURPOSES ONLY

Plotting Date: 10/26/2021

REV DATE: 10/22/2021
INITIAL: JHU

Section F – Surfacing

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley Ave	Total	
120E6200	Water for Granular Material	218.7	122.5	38.4	17.5	397.1	MGal
260E1010	Base Course	915.0	648.3	289.9	55.3	1,908.5	Ton
260E2010	Gravel Cushion	15,088.0	9,485.0	3,067.0	1,037.0	28,677.0	Ton
320E1200	Asphalt Concrete Composite	545.4	345.1	178.1	35.3	1,103.9	Ton
380E0050	8" Nonreinforced PCC Pavement	-	-	-	2,326.0	2,326.0	SqYd
380E0080	9.5" Nonreinforced PCC Pavement	-	-	6,738.8	-	6,738.8	SqYd
380E0110	11" Nonreinforced PCC Pavement	34,866.5	17,671.2	-	-	52,537.7	SqYd
380E1000	6" Miscellaneous PCC Pavement	-	-	581.8	-	581.8	SqYd
380E1030	8" Miscellaneous PCC Pavement	-	-	-	24.4	24.4	SqYd
380E1090	11" Miscellaneous PCC Pavement	117.6	-	-	-	117.6	SqYd
380E1110	12" Miscellaneous PCC Pavement	186.0	-	278.2	-	464.2	SqYd
380E2240	11" Nonmetallic Fiber Reinforced PCC Pavement	-	1,392.2	-	-	1,392.2	SqYd
380E3040	8" PCC Driveway Pavement	316.1	-	79.9	79.1	475.1	SqYd
380E3042	8" Fast Track Concrete Driveway Pavement	79.0	-	20.0	19.8	118.8	SqYd
380E3540	8" PCC Approach Pavement	518.6	52.0	155.8	58.8	785.2	SqYd
380E3542	8" Fast Track Concrete Approach Pavement	129.6		39.0	14.7	183.3	SqYd
380E6000	Dowel Bar	21,338	11,668	4,419	1,643	39,068	Each
380E6110	Insert Steel Bar in PCC Pavement	98	401	75	-	574	Each
410E2600	Membrane Sealant Expansion Joint	-	232.3	-	-	232.3	Ft

Section H – Landscaping

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
120E6300	Water for Vegetation	1.3	6.5	-	-	7.8	Mgal
230E0020	Contractor Furnished Topsoil	587	1,269	-	-	1,856	CuYd
651E2020	Permeable Pavers	-	10,012			10,012	Sqft
680E0260	6" Corrugated Polyethylene Drainage Tubing	82	246			328	Ft
680E0660	6" Slotted Corrugated Polyethylene Drainage Tubing	425	564	-	-	989	Ft
680E2500	Porous Backfill	153.0	331.0	-	-	484.0	Ton
731E0100	Fertilizing	21	46	-	-	67	Lb
735E0110	1 Gallon Perennial Plant, Furnish and Plant	-	824	-	-	824	Each
735E2225	2.5" Caliper Deciduous Tree, Furnish and Plant	5	25	-	-	30	Each
735E5010	1 Gallon Ornamental Grass, Furnish and Plant	289	711	-	-	1,000	Each
900E5151	Ornamental Landscaping Boulders	8	13	-	-	21	Each
900E5152	Weed Barrier Fabric	470	968	-	-	1,438	SqYd
900E5157	4" Depth Shredded Bark Mulch	470.0	968.0	-	-	1,438.0	SqYd
900E5161	Planter	Lump Sum	Lump Sum	-	-	Lump Sum	LS
900E5163	Ornamental Landscape Feature	12	37			49	Each
900E5430	Irrigation System	Lump Sum	Lump Sum	-	-	Lump Sum	LS
900E6010	Precast Concrete Welcome Sign, Furnish	1	2	-	-	3	Each
900E6011	Precast Concrete Welcome Sign, Install	1	2	-	-	3	Each

Section L – Lighting

BID ITEM NUMBER	ITEM	Quantity					UNIT
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
110E1540	Remove Luminaire Pole Footing	24	22	4	7	57	Each
110E5100	Salvage Luminaire Pole	20	20	4	4	48	Each
635E0030	Breakaway Base Luminaire Pole with Arm, 30' Mounting Height	-	-	1	-	1	Each
635E0040	Breakaway Base Luminaire Pole with Arm, 40' Mounting Height	4	15	6	2	27	Each
635E0140	Breakaway Base Luminaire Pole with Twin Arms, 40' Mounting Height	17	9	-	-	26	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	45	45	7	9	106	Each
635E3810	* Decorative Luminaire, LED	-	45	-	-	45	Each
635E5020	2' Diameter Footing	189.0	144.0	48.0	41.0	422.0	Ft
635E5310	Special Electrical Junction Box	29	46	3	8	86	Each
635E5310	* Special Electrical Junction Box	1	2	-	-	3	Each
635E5360	Surface Mounted Junction Box	-	5	-	-	5	Each
635E5400	Electrical Service Cabinet	4	2	1	1	8	Each
635E5420	Circuit Control Center	-	2	-	-	2	Each
635E6200	Miscellaneous, Electrical	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
635E7500	Remove and Reset Luminaire Pole	4	2	-	3	9	Each
635E8015	1.5" Rigid Galvanized Steel Conduit	-	60	-	-	60	Ft
635E8020	2" Rigid Galvanized Steel Conduit	-	245	-	-	245	Ft
635E8040	4" Rigid Galvanized Steel Conduit	-	3,095	-	-	3,095	Ft
635E8120	2" Rigid Conduit, Schedule 40	3,775	3,890	1,280	520	9,465	Ft
635E8120	* 2" Rigid Conduit, Schedule 40	390	1,060	-	-	1,450	Ft
635E8220	2" Rigid Conduit, Schedule 80	3,290	3,135	355	770	7,550	Ft
635E8220	* 2" Rigid Conduit, Schedule 80	130	1,845	-	-	1,975	Ft
635E8830	2/2/2/4 Aluminum Wire	6,510	8,270	1,855	955	17,590	Ft
635E8830	* 2/2/2/4 Aluminum Wire	525	2,985	-	-	3,510	Ft
635E8900	3/C #0000 AWG Aluminum Wire	980	1,160	-	290	2,430	Ft
635E9010	1/C #0 AWG Copper Wire	-	280	-	-	280	Ft
635E9011	1/C #1 AWG Copper Wire	-	280	-	-	280	Ft
635E9014	1/C #4 AWG Copper Wire	690	455	-	150	1,295	Ft
635E9014	* 1/C #4 AWG Copper Wire	115	390	-	-	505	Ft
635E9016	1/C #6 AWG Copper Wire	515	365	-	605	1,485	Ft
635E9024	1/C #14 AWG Copper Wire	95	2,230	-	-	2,325	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	2,475	2,255	375	275	5,380	Ft
635E9710	* 2/C #10 AWG Copper Pole and Bracket Cable	-	450	-	-	450	Ft

* - Denotes Non-Participating

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0293(106)76 & P 1400(16) P 1423(07) & P 8050(81)	A5	A8

FOR BIDDING PURPOSES ONLY

Plotting Date: 11/9/2021

REV DATE: 11/9/2021
INITIAL: JHU

Section L – Signals

BID ITEM NUMBER	ITEM	Quantity					UNIT
		PCN 05NF 41st St	PCN 03RA Interchang	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
110E1530	Remove Signal Pole Footing	15	10	-	-	25	Each
110E5110	Salvage Signal Equipment	Lump Sum	Lump Sum	-	-	Lump Sum	LS
635E2000	Pedestal Signal Pole	3	8	-	-	11	Each
635E2040	Signal Pole with 40' Mast Arm	-	3	-	1	4	Each
635E2050	Signal Pole with 50' Mast Arm	1	-	-	-	1	Each
635E2055	Signal Pole with 55' Mast Arm	1	-	-	-	1	Each
635E2060	Signal Pole with 60' Mast Arm	2	-	-	1	3	Each
635E2065	Signal Pole with 65' Mast Arm	3	1	-	-	4	Each
635E2135	Signal Pole with 35' Mast Arm and Luminaire Arm	-	-	-	1	1	Each
635E2140	Signal Pole with 40' Mast Arm and Luminaire Arm	1	-	-	-	1	Each
635E2150	Signal Pole with 50' Mast Arm and Luminaire Arm	1	-	-	-	1	Each
635E2155	Signal Pole with 55' Mast Arm and Luminaire Arm	3	-	-	-	3	Each
635E2160	Signal Pole with 60' Mast Arm and Luminaire Arm	2	-	-	-	2	Each
635E2165	Signal Pole with 65' Mast Arm and Luminaire Arm	1	-	-	-	1	Each
635E2230	Signal Pole with 30' Mast Arm and Twin Luminaire Arms	-	-	-	1	1	Each
635E2255	Signal Pole with 55' Mast Arm and Twin Luminaire Arms	-	2	-	-	2	Each
635E2265	Signal Pole with 65' Mast Arm and Twin Luminaire Arms	-	2	-	-	2	Each
635E4030	3 Section Vehicle Signal Head	38	-	-	9	47	Each
635E4040	4 Section Vehicle Signal Head	26	-	-	8	34	Each
635E4050	5 Section Vehicle Signal Head	4	-	-	-	4	Each
635E4080	3 Section Directional Vehicle Signal Head	2	39	-	-	41	Each
635E5020	2' Diameter Footing	21.0	54.0	-	-	75.0	Ft
635E5030	3' Diameter Footing	90.0	111.0	-	43.0	244.0	Ft
635E5035	3.5' Diameter Footing	84.0	-	-	-	84.0	Ft
635E5040	4' Diameter Footing	14.0	-	-	-	14.0	Ft
635E5310	Special Electrical Junction Box	38	30	3	9	80	Each
635E5430	Traffic Signal Controller	4	2	-	1	7	Each
635E5450	Side Mounted Cabinet	8	4	-	2	14	Each
635E5515	Battery Backup System for Traffic Signal	4	2	-	1	7	Each
635E5560	Emergency Vehicle Preemption Unit	4	2	-	1	7	Each
635E5570	Optical Detector	15	8	-	4	27	Each
635E5580	LED Blankout Sign	2	-	-	-	2	Each
635E5600	Surveillance Camera	1	2	-	-	3	Each
635E5800	Miscellaneous Signal Parts	-	Lump Sum	-	-	Lump Sum	LS
635E5880	Accessible Pedestrian Signal	26	12	-	4	42	Each
635E5910	Pedestrian Push Button Pole	26	12	-	4	42	Each
635E5922	Pedestrian Signal Head with Countdown Timer	26	12	-	4	42	Each
635E5930	Pedestrian Crossing Sign	26	12	-	4	42	Each
635E7530	Relocate Signal Equipment	-	Lump Sum	-	-	Lump Sum	LS
635E8040	4" Rigid Galvanized Steel Conduit	-	1,090	-	-	1,090	Ft
635E8110	1" Rigid Conduit, Schedule 40	510	245	-	120	875	Ft
635E8120	2" Rigid Conduit, Schedule 40	450	460	-	75	985	Ft
635E8130	3" Rigid Conduit, Schedule 40	-	10	-	-	10	Ft
635E8140	4" Rigid Conduit, Schedule 40	165	240	-	55	460	Ft
635E8220	2" Rigid Conduit, Schedule 80	75	-	-	-	75	Ft
635E8230	3" Rigid Conduit, Schedule 80	1,305	480	-	270	2,055	Ft
635E8240	4" Rigid Conduit, Schedule 80	-	410	-	-	410	Ft
635E8410	1/2" Innerduct, SDR 13.5	2,995	-	-	-	2,995	Ft
635E8415	1" Innerduct, SDR 13.5	8,905	8,335	2,190	2,420	21,850	Ft
635E8420	1.5" Innerduct, SDR 13.5	195	95	-	40	330	Ft
635E9016	1/C #6 AWG Copper Wire	605	685	-	145	1,435	Ft
635E9022	1/C #12 AWG Copper Wire	8,850	8,335	2,230	1,930	21,345	Ft
635E9302	2/C #14 AWG IMSA Copper Cable, K1	955	420	-	120	1,495	Ft
635E9303	3/C #14 AWG IMSA Copper Cable, K1	390	180	-	60	630	Ft
635E9305	5/C #14 AWG IMSA Copper Cable, K1	2,055	1,605	-	355	4,015	Ft
635E9307	7/C #14 AWG IMSA Copper Cable, K1	1,790	-	-	330	2,120	Ft
635E9312	12/C #14 AWG IMSA Copper Cable, K1	540	685	-	-	1,225	Ft
635E9325	25/C #14 AWG IMSA Copper Cable, K1	2,885	2,315	-	690	5,890	Ft
635E9800	Preemption Cable	8,160	4,380	-	1,880	14,420	Ft
635E9924	24 Strand Fiber Optic Cable	10,850	2,650	-	1,450	14,950	Ft
635E9950	Install Fiber Optic Cable	155	685	-	-	840	Ft

Section M – Pavement Markings

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
633E0010	Cold Applied Plastic Pavement Marking, 4"	1,743	-	2,776	4,079	8,598	Ft
633E0019	Cold Applied Plastic Pavement Marking, 4" with Contrast Border	7,596	-	1,686	446	9,728	Ft
633E0020	Cold Applied Plastic Pavement Marking, 8"	366	-	-	-	366	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	2,174	671	-	181	3,026	Ft
633E0035	Cold Applied Plastic Pavement Marking, Area	178	-	-	-	178	SqFt
633E0040	Cold Applied Plastic Pavement Marking, Arrow	47	18	13	16	94	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	1	1	Each
633E0046	Cold Applied Plastic Pavement Marking, Lane Reduction Arrow	-	4	2	-	6	Each
633E0210	Preformed Thermoplastic Pavement Marking, 4"	-	674	-	-	674	Ft
633E0211	Preformed Thermoplastic Pavement Marking, 4" with Contrast Border	232	4,824	-	-	5,056	Ft
633E0245	Preformed Thermoplastic Pavement Marking, Message	1	7	-	-	8	Word
633E0255	Preformed Thermoplastic Pavement Marking, Symbol	-	-	1	-	1	Each
633E1100	Epoxy Pavement Marking Paint, 4" White	-	577	335	-	912	Ft
633E3000	Durable Pavement Marking, 4" White	-	5,131	-	-	5,131	Ft
633E3005	Durable Pavement Marking, 4" Yellow	-	2,561	-	-	2,561	Ft
633E3020	Durable Pavement Marking, 12" White	-	952	-	-	952	Ft
633E3045	Durable Pavement Marking, Arrow	-	22	-	-	22	Word
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	6,551	1,158	4,092	4,435	16,236	Ft
633E5004	Grooving for Cold Applied Plastic Pavement Marking, 4" with Contrast Border	2,788	4,100	370	90	7,348	Ft
633E5005	Grooving for Cold Applied Plastic Pavement Marking, 8"	366	-	-	-	366	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	2,174	671	-	181	3,026	Ft
633E5020	Grooving for Cold Applied Plastic Pavement Marking, Area	178	-	-	-	178	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	47	18	13	16	94	Ft
633E5030	Grooving for Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	1	1	Ft
633E5031	Grooving for Cold Applied Plastic Pavement Marking, Lane Reduction Arrow	-	4	2	-	6	Ft
633E5035	Grooving for Cold Applied Plastic Pavement Marking, Message	1	7	-	-	8	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	-	7,692	-	-	7,692	Ft
633E5110	Grooving for Durable Pavement Marking, 12"	-	952	-	-	952	Ft
633E5125	Grooving for Durable Pavement Marking, Arrow	-	22	-	-	22	Each

Section S – Permanent Signing

Bid Item Number	Item	Quantity					Unit
		PCN 05NF 41st St	PCN 03RA Interchange	PCN 06Y0 Marion Rd	PCN 06XY Shirley	Total	
110E0100	Remove Concrete Footing(s)	-	Lump Sum	-	-	Lump Sum	LS
110E0120	Remove Sign Bridge	-	1	-	-	1	Each
110E0130	Remove Traffic Sign	-	35	-	-	35	Each
110E0135	Remove Delineator	-	45	-	-	45	Each
110E0140	Remove Extruded Panel Sign	-	4	-	-	4	Each
110E5020	* Salvage Traffic Sign	39	-	11	5	55	Each
110E7150	Remove Sign for Reset	12	3	5	9	29	Each
632E0058	2.25' Diameter Fixed Support Concrete Footing	-	32.0	-	-	32.0	Ft
632E0064	3' Diameter Fixed Support Concrete Footing	-	18.0	-	-	18.0	Ft
632E0072	4' Diameter Fixed Support Concrete Footing	-	130.0	-	-	130.0	Ft
632E1250	W8x24 Steel Post	-	76.3	-	-	76.3	Ft
632E1320	2.0"x2.0" Perforated Tube Post	733.0	667.7	52.8	113.8	1,567.3	Ft
632E2000	4"x4" Amber Delineator with 1.12 Lb/Ft Post	-	5	-	-	5	Each
632E2004	4"x8" Amber Delineator with 1.12 Lb/Ft Post	-	4	-	-	4	Each
632E2008	4" Tubular Amber Delineator with 1.12 Lb/Ft Post	-	12	-	-	12	Each
632E2020	4"x4" White Delineator with 1.12 Lb/Ft Post	-	3	-	-	3	Each
632E2028	4" Tubular White Delineator with 1.12 Lb/Ft Post	-	8	-	-	8	Each
632E2510	Type 2 Object Marker Back to Back	-	21	-	-	21	Each
632E3115	Extruded Aluminum Sign, Nonremovable Copy Super/Very High Intensity	-	905.8	-	-	905.8	SqFt
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	418.8	260.8	41.3	38.8	759.7	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	411.8	606.5	9.0	69.8	1,097.1	SqFt
632E3500	Reset Sign	12	3	5	9	29	Each
632E5010	Double Beam Sign Bridge	-	3	-	-	3	Each
632E5055	Mast Arm Sign Support	-	1	-	-	1	Each

* Denotes Non-Participating

SPECIFICATIONS

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

The most current edition of the City of Sioux Falls General Conditions for Public Improvements and Supplemental Standard Specifications, City Standard Plates and required provisions, supplemental specifications, and/or special provisions as included in the Special Provisions.

The City of Sioux Falls Engineer's Office will provide a copy of the City of Sioux Falls General Conditions for Public Improvements and the City of Sioux Falls Supplemental Standard Specifications free of charge to all prospective bidders upon request. The Supplemental Standard Specifications can also be downloaded from the City of Sioux Falls website at address http://www.siouxfalls.org/publicworks under Engineering Documents.

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 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.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Environment and Natural Resources (DENR) 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:
< http://sdleastwanted.com/maps/default.aspx >

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

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D1: SURFACE WATER QUALITY

The Big Sioux River is classified as a warm water permanent fishery with a Surface Water Discharge standard of 90 milligrams/liter total suspended solids.

COMMITMENT D2: SURFACE WATER DISCHARGE

The DENR 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 SDDENR using the following form:
< http://denr.sd.gov/des/sw/eforms/AddTempInfoFillable.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 DENR monthly. Additional information can be found at:
http://denr.sd.gov/des/sw/WhatisaDMR.aspx

COMMITMENT E: STORM WATER

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

Action Taken/Required:

The DENR 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 DENR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DENR 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 DENR 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 DENR.

The form can be found at:
< https://denr.sd.gov/des/sw/eforms/CGPAppendixCCA2018Fillable.pdf >

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

COMMITMENT E: STORM WATER, Continued

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 >

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

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

COMMITMENT G: DEWATERING AND SEDIMENT COLLECTION

The purpose of a dewatering and sediment collection system is to collect turbid stormwater on the project, treat it with flocculants as needed, and capture the sediment that falls out of suspension before the water is discharged into “Waters of the US” or “Waters of the State”. Refer to Commitment D1: Surface Water Quality for stream classification.

Action Taken/Required:

The Contractor will meet the terms of the Temporary Discharge Permit and the Storm Water Permit for Construction Activities.

The Contractor will create a Pollution Prevention Plan (PPP) for dewatering and sediment collection if the Contractor chooses to discharge the water into “Waters of the US” or “Waters of the State”. Refer to the detail sheet OPTIONS FOR DEWATERING AND SEDIMENT COLLECTION in the plans. The PPP must be kept on-site and updated as site conditions change.

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 Environment 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: HISTORICAL PRESERVATION OFFICE CLEARANCES

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

Action Taken/Required:

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

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

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

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

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

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

COMMITMENT L: CONTAMINATED MATERIAL

Although all sites with previous potential or known contamination (gas stations, underground storage tanks, etc.) have been cleaned up (according to the Phase 1 ESA report), contaminated soil may be encountered within the project limits at the following sites:

Description	Location
Clock Tower Strip Mall (former Buhl's Dry-cleaning)	South side of 41st Street approximately 400' west of Marion Road (5305 W. 41st Street)
Burger King restaurant (former c-store/ gas station)	Southeast quadrant of 41st Street/Marion Road intersection (5303 W. 41st Street)
Flowerama strip mall (former c-store/gas station & dry-cleaning business)	Southeast quadrant of 41st Street/Marion Road intersection (3400 Marion Road)
SF Fire Rescue Station #6 (former UST)	Northeast quadrant of 41st Street/Marion Road intersection (5200 W. 41st Street)
Holiday Gas Stop c-store/ gas station	North side of 41st Street approximately 600' west of I-29 SB off-ramp (4600 W. 41st Street)
Panda Express strip mall (former gas station)	South side of 41st Street approximately 500' east of I-29 NB off-ramp (4201 W. 41st Street)
King's Mart Convenience store/gas station	North side of 41st Street approximately 600' east of I-29 NB on-ramp (4200 W. 41st Street)
Super 8 Motel (former UST site)	North side of 41st Street approximately 900' east of I-29 NB on-ramp (4200 W. 41st Street)
Strip mall (former Dakota Aquastore) with previous fuel oil spill	South side of 41st Street approximately 400' west of Louise Avenue (3709 W. 41st Street)

Action Taken/Required:

The Contractor will give notice to the Engineer when contaminated soil is encountered on the project. The Engineer will contact the SDDOT Environmental Engineer, at 605-773-3180, so that contact with the Department of Environment and Natural Resources (DENR) 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 the Sioux Falls Regional Landfill (contact Dustin Hansen, Landfill Superintendent at 605-367-8162). 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".

An estimated quantity of "Contaminated Material Excavation" of 100 cubic yards is included in the plans. The quantity of "Contaminated Material Excavation" may vary from the plans. No adjustment will be made to the contract unit price for variations in the quantity of "Contaminated Material Excavation". The estimated quantity of "Contaminated Material Excavation" is provided in Section B – Grading plans.