STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH 0028(36)355	1	451

Plotting Date: 12/12/2024 Rev 08/05/24 PCN

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

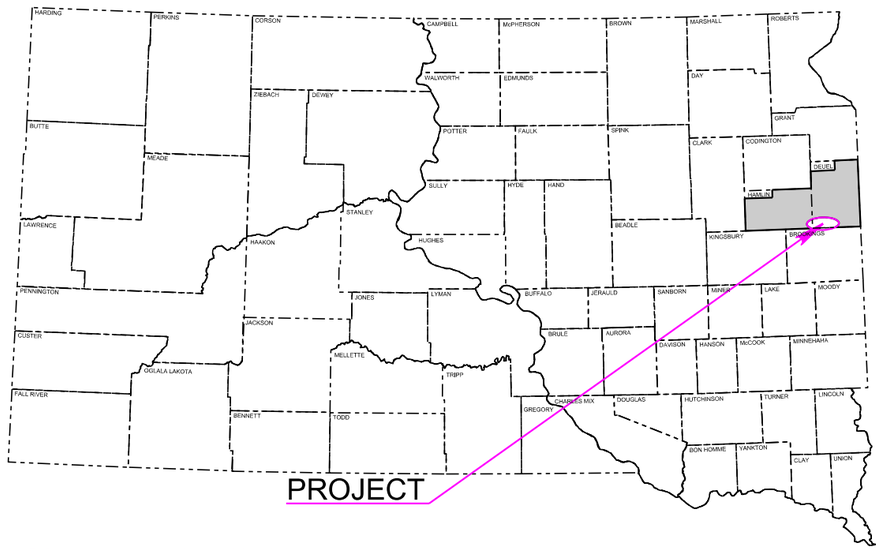
PLANS FOR PROPOSED

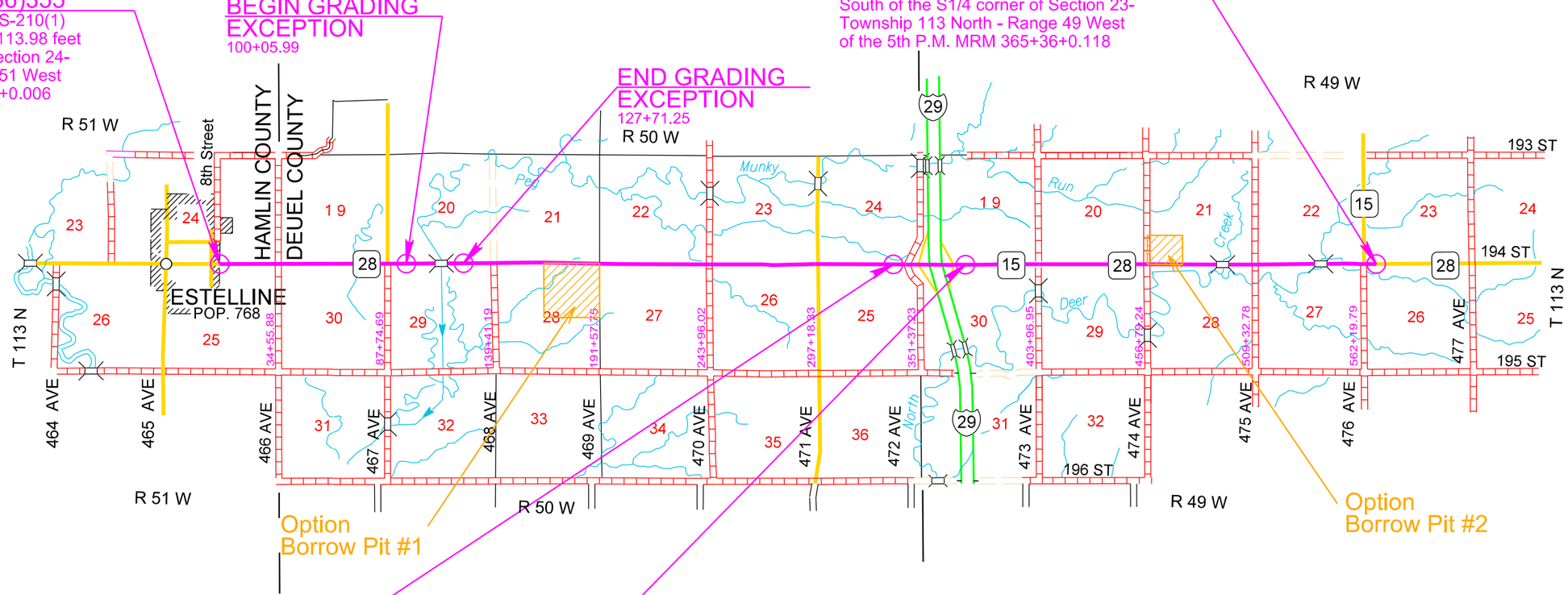
PROJECT P-PH 0028(36)355
SD HIGHWAY 28
HAMLIN & DEUEL COUNTIES

Grading, Interim Surfacing,
Replace RCBC's and Approach Slabs

PCN 04HM

INDEX OF SECTIONS





SD 28 From ESTELLINE to I29
DESIGN DESIGNATION

ADT (2020)	1246
ADT (2045)	1558
DHV	175
D	50%
T DHV	9.7%
T ADT	21.4%
V	65 mph

SD 28 From I29 to SD 15
DESIGN DESIGNATION

ADT (2020)	2060
ADT (2045)	2223
DHV	250
D	50%
T DHV	6.1%
T ADT	13.4%
V	65 mph

STORM WATER PERMIT

Major Receiving
Body of Water: Big Sioux River
Area Disturbed: 290 ac
Total Project Area: 292 ac
Approx. Begin Lat/Long: 44.5728,-96.8920

Gross Length	55730.02 Feet	10.549 Miles
Length of Exceptions	6244.40 Feet	1.183 Miles
Net Length	49485.62 Feet	9.372 Miles

3

February 12, 2025

Plot Scale - 1:200

Plotted From - TRSF12142

File - U:\rdr\prj\Deuel\04HM\Title.dgn

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH 0028(36)355	A1	A6

Plotting Date: 12/12/2024 Revised 12/12/24 PCN

Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	167	Each
009E3225	Reestablish Public Land Survey System Corner	22	Each
009E3230	Grade Staking	9.521	Mile
009E3245	Final Cross Section Survey	9.373	Mile
009E3250	Miscellaneous Staking	9.373	Mile
009E3280	Slope Staking	9.373	Mile
009E3290	Structure Staking	5	Each
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
009E4200	Construction Schedule, Category II	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E0200	Remove Building	1	Each
110E0600	Remove Fence	62,340	Ft
120E0010	Unclassified Excavation	582,945	CuYd
120E0500	Option Borrow Excavation	314,601	CuYd
120E1000	Muck Excavation	7,700	CuYd
120E2000	Undercutting	136,639	CuYd
120E6100	Water for Embankment	6,676.0	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
260E6010	Granular Material	69.2	Ton
270E0020	Salvage and Stockpile Asphalt Mix Material	12,400.0	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	153,889.5	Ton
380E4050	8" PCC Fillet Section	30.2	SqYd
421E0100	Pipe Culvert Undercut	871	CuYd
450E0142	24" RCP Class 2, Furnish	1,128	Ft
450E0144	24" RCP Class 4, Furnish	304	Ft
450E0150	24" RCP, Install	1,436	Ft
450E0162	30" RCP Class 2, Furnish	246	Ft
450E0164	30" RCP Class 4, Furnish	284	Ft
450E0170	30" RCP, Install	530	Ft
450E0182	36" RCP Class 2, Furnish	296	Ft
450E0183	36" RCP Class 3, Furnish	134	Ft
450E0184	36" RCP Class 4, Furnish	270	Ft
450E0190	36" RCP, Install	700	Ft
450E0192	42" RCP Class 2, Furnish	94	Ft
450E0200	42" RCP, Install	94	Ft
450E0204	48" RCP Class 4, Furnish	112	Ft
450E0210	48" RCP, Install	112	Ft
450E2028	36" RCP Flared End, Furnish	10	Each
450E2029	36" RCP Flared End, Install	10	Each
450E2032	42" RCP Flared End, Furnish	2	Each
450E2033	42" RCP Flared End, Install	2	Each
450E2036	48" RCP Flared End, Furnish	2	Each
450E2037	48" RCP Flared End, Install	2	Each
450E2200	24" RCP Sloped End, Furnish	28	Each
450E2201	24" RCP Sloped End, Install	28	Each
450E2204	30" RCP Sloped End, Furnish	6	Each
450E2205	30" RCP Sloped End, Install	6	Each
450E3022	30" RCP Arch Class 2, Furnish	268	Ft
450E3030	30" RCP Arch, Install	268	Ft
450E3032	36" RCP Arch Class 2, Furnish	312	Ft
450E3040	36" RCP Arch, Install	312	Ft
450E3042	42" RCP Arch Class 2, Furnish	390	Ft
450E3050	42" RCP Arch, Install	390	Ft
450E3052	48" RCP Arch Class 2, Furnish	234	Ft
450E3060	48" RCP Arch, Install	234	Ft
450E4512	36" RCP Arch Flared End, Furnish	8	Each
450E4513	36" RCP Arch Flared End, Install	8	Each
450E4516	42" RCP Arch Flared End, Furnish	16	Each
450E4517	42" RCP Arch Flared End, Install	16	Each
450E4604	30" RCP Arch Sloped End, Furnish	8	Each
450E4605	30" RCP Arch Sloped End, Install	8	Each
450E4758	18" CMP 14 Gauge, Furnish	140	Ft
450E4759	18" CMP 16 Gauge, Furnish	1,810	Ft
450E4760	18" CMP, Install	1,950	Ft
450E4769	24" CMP 16 Gauge, Furnish	376	Ft
450E4770	24" CMP, Install	376	Ft
450E4819	54" CMP 16 Gauge, Furnish	60	Ft
450E4820	54" CMP, Install	60	Ft
450E5235	54" CMP Flared End, Furnish	2	Each
450E5236	54" CMP Flared End, Install	2	Each
450E5406	18" CMP Safety End, Furnish	54	Each
450E5407	18" CMP Safety End, Install	54	Each
450E5410	24" CMP Safety End, Furnish	12	Each
450E5411	24" CMP Safety End, Install	12	Each
464E0100	Controlled Density Fill	85.2	CuYd
600E0200	Type II Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	49,765	Ft
620E0030	Type 3 Right-of-Way Fence	4,991	Ft
620E0060	Type 6 Right-of-Way Fence	1,902	Ft
620E0230	Modified Type 3 Right-of-Way Fence	4,316	Ft
620E0515	Type 1A Temporary Fence	4,609	Ft
620E0520	Type 2 Temporary Fence	4,316	Ft
620E1020	2 Post Panel	168	Each
620E1030	3 Post Panel	160	Each
650E0060	Type B66 Concrete Curb and Gutter	7	Ft
680E0260	6" Corrugated Polyethylene Drainage Tubing	100	Ft
680E0280	8" Corrugated Polyethylene Drainage Tubing	100	Ft
700E0210	Class B Riprap	3,484.6	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	91.0	CuYd
734E0900	Temporary Diversion Channel for Fish Passage	4	Each
831E0110	Type B Drainage Fabric	5,842	SqYd
900E0010	Refurbish Single Mailbox	12	Each

Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	318	Gal
634E0010	Flagging	150.0	Hour
634E0020	Pilot Car	75.0	Hour
634E0110	Traffic Control Signs	975.5	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	77	Each
634E1002	Detour and Restriction Signing	1,234.8	SqFt

Section D - Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	4.8	CuYd
110E1693	Remove Erosion Control Wattle	525	Ft
110E1700	Remove Silt Fence	3,536	Ft
230E0010	Placing Topsoil	128,137	CuYd
730E0100	Cover Crop Seeding	100.0	Bu
730E0212	Type G Permanent Seed Mixture	2,947	Lb
731E0200	Fertilizing	56.70	Ton
732E0100	Mulching	180.7	Ton
732E0500	Fiber Reinforced Matrix	35.1	Ton
734E0044	Soil Stabilizer	23.0	Acre
734E0103	Type 3 Erosion Control Blanket	20,078	SqYd
734E0132	Type 2 Turf Reinforcement Mat	792.0	SqYd
734E0154	12" Diameter Erosion Control Wattle	2,100	Ft
734E0165	Remove and Reset Erosion Control Wattle	525	Ft
734E0325	Surface Roughening	23.0	Acre
734E0510	Shaping for Erosion Control Blanket	11,061	Ft
734E0602	Low Flow Silt Fence	10,202	Ft
734E0604	High Flow Silt Fence	3,942	Ft
734E0610	Mucking Silt Fence	982	CuYd
734E0620	Repair Silt Fence	3,536	Ft
900E1320	Construction Entrance	2	Each

Section E – Structure
Structure No. 20-086-280

Str. No. 20-015-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
110E0010	Remove Concrete Bridge Approach Slab	212.4	SqYd
120E0600	Contractor Furnished Borrow	14	CuYd
260E1010	Base Course	19.4	Ton
410E2600	Membrane Sealant Expansion Joint	75.8	Ft
460E0150	Concrete Approach Slab for Bridge	172.4	SqYd
460E0160	Concrete Approach Sleeper Slab for Bridge	40.0	SqYd
464E0100	Controlled Density Fill	5.8	CuYd
480E0504	No. 4 Rebar Splice	28	Each
480E0505	No. 5 Rebar Splice	32	Each
480E0506	No. 6 Rebar Splice	44	Each

Str. No. 20-040-280 &20-098-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	112	CuYd
421E0200	Box Culvert Undercut	298	CuYd
460E0120	Class A45 Concrete, Box Culvert	253.7	CuYd
480E0100	Reinforcing Steel	57,911	Lb
700E0210	Class B Riprap	104.4	Ton
831E0110	Type B Drainage Fabric	130	SqYd

Str. No. 20-086-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	Lump Sum	LS

Site 1 – Alternate A
Str. No. 20-086-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	74	CuYd
421E0200	Box Culvert Undercut	256	CuYd
460E0120	Class A45 Concrete, Box Culvert	178.8	CuYd
480E0100	Reinforcing Steel	29,437	Lb
700E0210	Class B Riprap	56.5	Ton
831E0110	Type B Drainage Fabric	69	SqYd

Site 1 – Alternate B
Str. No. 20-086-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
420E0200	Structure Excavation, Box Culvert	62	CuYd
421E0200	Box Culvert Undercut	243	CuYd
560E2120	2-10'x8' Precast Concrete Box Culvert, Furnish	84.0	Ft
560E2121	2-10'x8' Precast Concrete Box Culvert, Install	84.0	Ft
560E3120	2-10'x8' Precast Concrete Box Culvert End Section, Furnish	2	Each
560E3121	2-10'x8' Precast Concrete Box Culvert End Section, Install	2	Each
700E0210	Class B Riprap	62.0	Ton
831E0110	Type B Drainage Fabric	74	SqYd

Str. No. 20-096-280

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	Lump Sum	LS
420E0200	Structure Excavation, Box Culvert	101	CuYd
421E0200	Box Culvert Undercut	158	CuYd
460E0120	Class A45 Concrete, Box Culvert	240.5	CuYd
480E0100	Reinforcing Steel	38,027	Lb
700E0210	Class B Riprap	263.4	Ton
831E0110	Type B Drainage Fabric	261	SqYd

Section M – Pavement Markings

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E1200	High Build Waterborne Pavement Marking Paint, White	473	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	170	Gal

Section S - Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0100	Remove Concrete Footing(s)	Lump Sum	LS
110E0130	Remove Traffic Sign	91	Each
110E0135	Remove Delineator	87	Each
110E5020	Salvage Traffic Sign	28	Each
110E7150	Remove Sign for Reset	30	Each
632E1320	2.0"x2.0" Perforated Tube Post	706.5	Ft
632E1340	2.5"x2.5" Perforated Tube Post	115.0	Ft
632E2022	4"x4" White Delineator Back to Back with 1.12 Lb/Ft Post	73	Each
632E2028	4" Tubular White Delineator with 1.12 Lb/Ft Post	6	Each
632E2510	Type 2 Object Marker Back to Back	155	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	582.3	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	104.4	SqFt
632E3500	Reset Sign	29	Each

Section F - Surfacing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0400	Remove Drop Inlet	2	Each
110E0500	Remove Pipe Culvert	66	Ft
110E0730	Remove Beam Guardrail	600.0	Ft
110E1000	Remove Asphalt Concrete Pavement	Lump Sum	LS
120E6200	Water for Granular Material	2,083.4	MGal
260E1010	Base Course	32,372.0	Ton
260E1030	Base Course, Salvaged	140,589.5	Ton
260E3500	Temporary Gravel Surfacing	900.0	Ton
320E1200	Asphalt Concrete Composite	86.2	Ton
320E5020	Saw Joint in Asphalt Concrete	1,220	Ft
330E0010	MC-70 Asphalt for Prime	302.3	Ton
330E0300	SS-1h or CSS-1h Asphalt for Fog Seal	43.7	Ton
330E1000	Blotting Sand for Prime	734.2	Ton
330E3000	Sand for Fog Seal	10.0	Ton
360E0020	AE150S Asphalt for Surface Treatment	238.8	Ton
360E1050	Type 3 Cover Aggregate	3,212.4	Ton
450E0122	18" RCP Class 2, Furnish	160	Ft
450E0130	18" RCP, Install	160	Ft
450E2008	18" RCP Flared End, Furnish	1	Each
450E2009	18" RCP Flared End, Install	1	Each
462E0100	Class M6 Concrete	2.2	CuYd
480E0100	Reinforcing Steel	380	Lb
630E0500	Type 1 MGS	350.0	Ft
630E1501	Type 1 Retrofit Guardrail Transition	4	Each
630E2017	MGS MASH Flared End Terminal	4	Each
632E2220	Guardrail Delineator	16	Each
670E0200	Type A Frame and Grate	2	Each
670E5400	Precast Drop Inlet Collar	2	Each

INDEX OF SHEETS

SPECIFICATIONS

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

ENVIRONMENTAL COMMITMENTS

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

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

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

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

COMMITMENT A: AQUATIC RESOURCES

COMMITMENT A1: WETLANDS

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 9.73 acres of wetlands (includes temporary and permanent) becoming impacted. Refer to Section B – Grading Plans for location and boundaries of the impacted wetlands.

Table of Impacted Wetlands

Wetland No.	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
1a/b/d/e/f	12+00-18+50 L&R	1.09	0.52	0.51	0.42	2.54
1c/g/h	24+00-28+25 R	0.00	0.25	0.00	0.00	0.25
2	34+75-49+75 L&R	1.04	0.00	0.00	0.00	1.04
3	133+00-135+50 L&R	0.05	0.06	0.08	0.05	0.24
4	153+00-153+50 L&R	0.00	0.01	0.02	0.03	0.06
5	166+75-179+50 L&R	0.15	0.47	0.08	0.39	1.09
6	200+50-202+50 L	0.04	0.00	0.06	0.00	0.10
7	215+25-216+50 L	0.04	0.00	0.05	0.00	0.09
8	240+00-241+50 L&R	0.55	0.32	0.49	0.11	1.47
9a	274+00-277+00 L	0.07	0.00	0.10	0.00	0.17
9b	276+50-284+75 L	0.14	0.00	0.08	0.00	.22
10	285+75-290+25 L&R	0.06	0.10	0.20	0.19	0.55
11	459+75-461+75 L&R	0.16	0.89	0.39	0.42	1.86
12	559+75-561+75 L	0.04	0.00	0.01	0.00	0.05

Action Taken/Required:

SDDOT will acquire 13.246 credits from a wetland mitigation bank site or In-Lieu Fee program within the Upper Big Sioux Geographic Service Area to mitigate permanent impacts.

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

COMMITMENT A2: STREAMS

All efforts to avoid and minimize stream impacts from the project have resulted in approximately 0.49 acres of stream (includes temporary and permanent) becoming impacted. Refer to Section B – Grading Plans for location and boundaries of the impacted streams.

Table of Impacted Streams

Stream Name	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
Intermittent Stream 3	493+25-494+00 L	0.02	0.02	0.01	0.01	0.06
Perennial Stream 1 (Peg Monkey Run)	113+22 5-113+75 L	0.00	0.00	0.00	0.00	0.00
Perennial Stream 2a (North Deer Creek)	458+25-471+00 R	0.00	0.41	0.00	0.06	0.47
Perennial Stream 2b (North Deer Creek)	488+50-499+50 R	0.00	0.00	0.00	0.00	0.00
Perennial Stream 2c (North Deer Creek)	537+00-555+00 L&R	0.02	0.02	0.07	0.00	0.11

Action Taken/Required:

SDDOT will acquire 2.695 credits or acres from a wetland/stream mitigation bank site or In-Lieu Fee program within the Upper Big Sioux Geographic Service Area to mitigate permanent impacts.

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

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B1: CONSTRUCTION PRACTICES FOR STREAMS INHABITED BY THE TOPEKA SHINER

The SDDOT Environmental Office has identified the following as Topeka Shiner streams.

Table of Topeka Shiner Streams

Station	Stream Name	Ordinary High-Water Elevation
245+75	Trib. to Peg Munky Run	1740.3'
493+53	Trib. to North Deer Creek	1840.9'
543+02	North Deer Creek	1863.3'
554+51	North Deer Creek	1875.8'

Action Taken/Required:

The Contractor will adhere to the "Special Provision for Construction Practices in Streams Inhabited by the Topeka Shiner".

Stream turbidity will be monitored during all stages of the project. Turbidity measurements are to be taken in conjunction with normal storm water inspections but can also be taken at the Project Engineer's discretion during construction activities that may result in increased turbidity (e.g., placing riprap or installing a coffer dam).

Prior to the pre-construction meeting the Contractor will produce and provide the SDDOT Environmental Office a comprehensive Construction Plan that includes all products, materials, and methods of installation and removal for temporary water barriers, cofferdams, and diversion channels including de-watering, handling, storage, and disposal of excavated material and pumped effluent throughout all phases of construction, including post-construction

COMMITMENT B1: Continued
stabilization. Work will not proceed on any of the streams identified in the Table of Topeka Shiner Streams without approval of the Construction Plan by the SDDOT Environmental Office. Upon plan approval, the Construction Plan will be amended to the SWPPP.

COMMITMENT B5: NORTHERN LONG-EARED BAT

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

Action Taken/Required:

Project activities that include tree removal, structure work, and/or work within one-quarter mile of a known hibernacula or 150 feet of a known maternity roost tree, or suitable habitat should not occur within the location(s) listed below during the NLEB seasonal work restriction timeframe without approval from the SDDOT Environmental Office.

Station	NLEB Seasonal Work Restriction
11+11.77 to 568+41.79L&R	April 1 to October 31

Tree removal will occur between November 1st and March 31st.

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 Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

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

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

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D1: SURFACE WATER QUALITY

North Deer Creek and Peg Munky Creek are classified as warm water, marginal fishery with a total suspended solids standard of less than 150 mg/L 30-day average, less than 263 mg/L daily maximum.

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

Action Taken/Required:

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

COMMITMENT D2: SURFACE WATER DISCHARGE

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

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

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

Action Taken/Required:

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

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_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 DANR monthly. Additional information can be found at:
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/Ereporting.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 DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

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

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

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

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

Storm Water Pollution Prevention Plan

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

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

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the
COMMITMENT E: STORM WATER-continued

SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

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

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

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

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

COMMITMENT H: WASTE DISPOSAL SITE

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

Action Taken/Required:

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

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

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

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

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

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

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

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

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

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

Action Taken/Required:

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

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

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

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

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

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

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

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

Action Taken/Required:

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

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

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

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

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

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

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

COMMITMENT J: Continued

Table of U.S. Waterways to Protect

Station	Waterway	Ordinary High-Water Elevation
245+75	Trib. to Peg Munky Run	1740.3’
493+53	Trib. to North Deer Creek	1840.9’
543+02	North Deer Creek	1863.3’
554+51	North Deer Creek	1875.8’

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

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

COMMITMENT N: SECTION 404 PERMIT

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

Action Taken/Required:

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

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