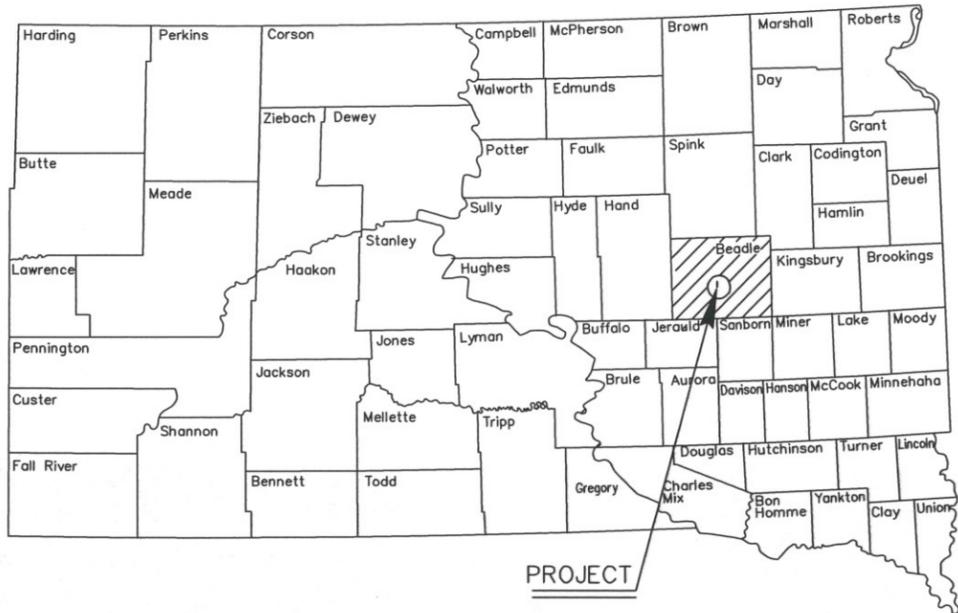


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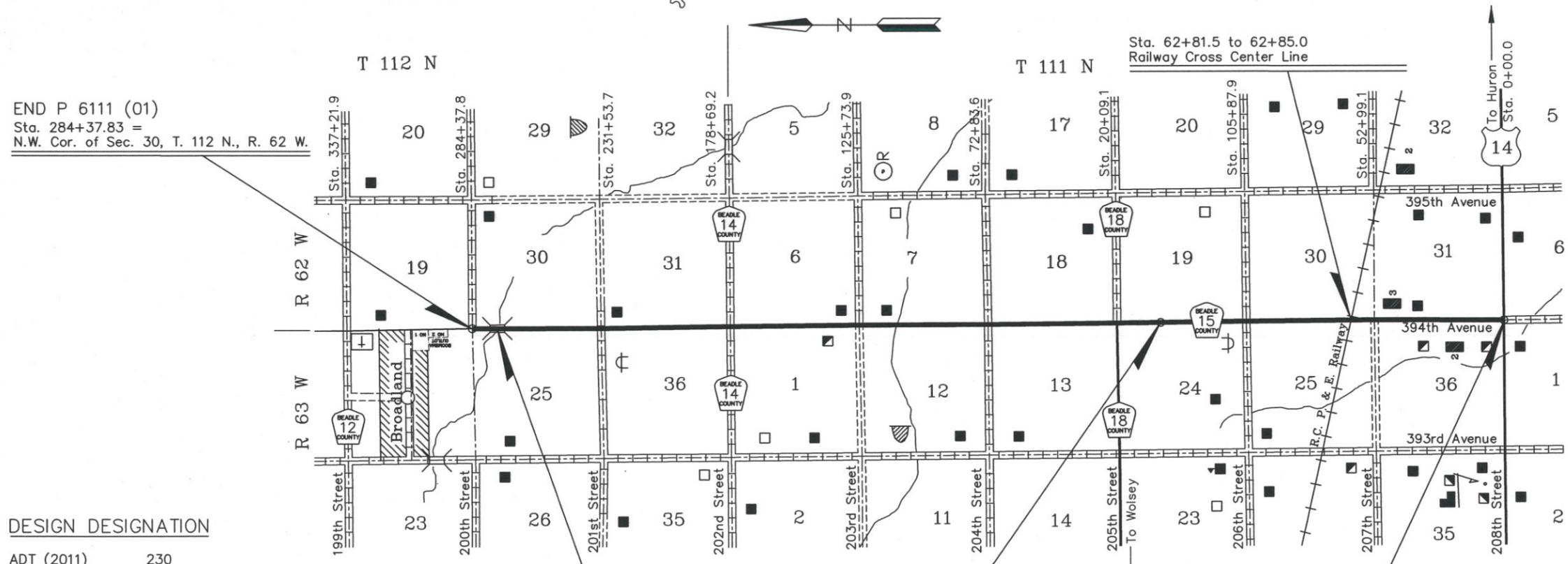
STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	P 6111(01)	1	135



# PLANS FOR PROPOSED PROJECT P 6111 (01) COUNTY ROAD #15 BEADLE COUNTY GRADING & BASE COURSE PCN 5732

### INDEX OF SECTIONS

- Section A: Estimate of Quantities And Environmental Comments
- Section B: Grading Plans
- Section C: Traffic Control Plans
- Section D: Erosion Control
- Section F: Surfacing Plans
- Section S: Permanent Signing
- Section X: Cross Section Sheets
- Section Z: Pipe Cross Section Sheets



END P 6111 (01)  
Sta. 284+37.83 =  
N.W. Cor. of Sec. 30, T. 112 N., R. 62 W.

#### DESIGN DESIGNATION

ADT (2011)	230
ADT (2031)	305
DHV	45
D	50%
T DHV	4.6%
T ADT	10.2%
Design Speed 50 mph	

Sta. 273+77.5 to 274+30.5  
Inplace 53' 3-Span Continuous Concrete  
Slab Bridge with 24' Rdwy.

EQUATION:  
Sta. 138+61.64 Back =  
Sta. 0+00 Ahead 2nd

BEGIN P 6111 (01)  
Sta. 0+00 =  
S.E. Cor. of Sec. 36, T. 111 N., R.63 W.

#### STORM WATER PERMIT DATA

Disturbed Area = 65.58 Acres  
Project Area = 80.60 Acres  
Major Stream = Broadland Creek  
Lat. 44.490742, Long. -98.356809

GROSS LENGTH 42,299.47 FEET 8.011 MILES  
LENGTH OF EXCEPTIONS 56.50 FEET 0.011 MILES  
NET LENGTH 42,242.97 FEET 8.000 MILES



# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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Revised 1-21-2015  
Revised 3-5-2015

## Grading – Section B

## Traffic Control – Section C

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	8.011	Mile
009E3250	Miscellaneous Staking	8.011	Mile
009E3280	Slope Staking	8.011	Mile
009E3300	Three Man Survey Crew	150	Hour
100E0020	Clear And Grub Tree	43	Each
100E0100	Clearing	Lump Sum	LS
110E0600	Remove Fence	8,272	Ft
110E5800	Salvage Fence	180	Ft
110E7802	Remove Fence for Reset	22	Ft
120E0010	Unclassified Excavation	219,923	CuYd
120E0600	Contractor Furnished Borrow	87,170	CuYd
120E1000	Muck Excavation	35,727	CuYd
120E2000	Undercutting	65,232	CuYd
120E6100	Water for Embankment	4685	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	59,219	Ton
450E4759	18" CMP 16 Gauge, Furnish	2,452	Ft
450E4760	18" CMP, Install	2,452	Ft
450E4769	24" CMP 16 Gauge, Furnish	886	Ft
450E4770	24" CMP, Install	886	Ft
450E4779	30" CMP 16 Gauge, Furnish	44	Ft
450E4780	30" CMP, Install	44	Ft
450E4809	48" CMP 16 Gauge, Furnish	150	Ft
450E4810	48" CMP, Install	150	Ft
450E5310	24" CMP Sloped End, Furnish	28	Each
450E5311	24" CMP Sloped End, Install	28	Each
450E5314	30" CMP Sloped End, Furnish	2	Each
450E5315	30" CMP Sloped End, Install	2	Each
450E5326	48" CMP Sloped End, Furnish	6	Each
450E5327	48" CMP Sloped End, Install	6	Each
450E5406	18" CMP Safety End, Furnish	78	Each
450E5407	18" CMP Safety End, Install	78	Each
450E5409	24" CMP Safety End, Furnish	6	Each
450E5410	24" CMP Safety End, Install	6	Each
600E0200	Type II Field Laboratory	1	Each
620E0010	Type 1 Right of Way Fence	2,210	Ft
620E0020	Type 2 Right of Way Fence	2,925	Ft
620E0040	Type 4 Right of Way Fence	1,243	Ft
620E0510	Type 1 Temporary Fence	3,577	Ft
620E1020	2 Post Panel	38	Each
620E1030	3 Post Panel	5	Each
620E4100	Reset Fence	22	Ft
900E0010	Refurbish Single Mailbox	7	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	160	Hour
634E0100	Traffic Control	3,067	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

## Erosion and Sediment Control – Section D

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1700	Remove Silt fence	861	Ft
230E0010	Placing Topsoil	27,306	CuYd
730E0251	Special Permanent Seed Mixture 1	753	Lb
732E0100	Mulching	84	Ton
734E0602	Low Flow Silt Fence	150	Ft
734E0604	High Flow Silt Fence	3,305	Ft
734E0610	Mucking Silt Fence	239	CuYd
734E0620	Repair Silt Fence	861	Ft

## Surfacing – Section F

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	2,008.5	MGal
260E1010	Base Course	45,385.2	Ton
260E1030	Base Course, Salvaged	59,219.3	Ton

## Permanent Signing – Section S

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E5020	Salvage Traffic Sign	20	Each
632E3520	Remove, Salvage, Relocate and Reset Traffic Sign	45	Each

### INDEX OF SHEETS

A1	Estimate of Quantities for Sections B,C,D, F, and S
A2 to A6	Environmental Commitments

### SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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## ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

### COMMITMENT A: WETLANDS

Approximately 6.78 acres of wetlands will be impacted by the project. Refer to the Tables for locations and boundaries of the impacted wetlands. These unavoidable impacts to wetlands shall be mitigated off-site of the project, with the US Fish and Wildlife Service at the time of construction. 2.10 acres are Self-Mitigating, 2.53 acres of jurisdictional wetlands and 2.15 acres have been identified as non-jurisdictional wetlands. Wetlands will be mitigated at a 1.5:1 ratio.

Table 1: Total Wetlands Along Project Corridor

Wetland No.	Station	Location		Permanent (acres)		Temporary (acres)		Total Impact (acres)	Floristic Quality Index
		Left (acres)	Right (acres)	JD Impacts	Non-JD	JD Impacts	Non-JD		
1	29+16 - 37+3		0.123	0.123				0.123	1
1	29+95 - 37+43	0.176		0.176				0.176	1
2	42+66 - 43+34		0.017			0.017		0.017	2
2	42+70 - 44+87	0.034				0.034		0.034	2
3	54+24 - 56+86		0.033		0.033			0.033	2.9
4	63+28 - 67+38		0.103		0.103			0.103	2.9
5	69+54 - 74+46		0.1				0.1	0.1	1.15
5	69+57 - 75+00	0.06					0.06	0.06	1.15
6	80+02 - 89+33	0.142			0.142			0.142	2
6	80+10 - 89+33		0.168		0.168			0.168	2
7	89+33 - 93+59		0.085		0.085			0.085	1.15
8	89+33 - 93+90	0.087			0.087			0.087	1.15
9	99+70 - 105+30		0.073		0.073			0.073	1
10	100+20 - 105+23	0.092			0.092			0.092	1
11	106+13 - 110+50		0.079		0.079			0.079	1
11	106+48 - 110+61	0.079			0.079			0.079	1
12	114+52 - 119+56	0.052			0.052			0.052	1
12	114+77 - 121+05		0.081		0.081			0.081	1
13.E	123+13 - 128+23		0.024		0.024			0.024	1
13.W	123+21 - 128+32	0.068			0.068			0.068	2.31
14	0+41 - 4+79	0.056			0.056			0.056	1.41
14	0+46 - 2+50		0.021				0.021	0.021	1.41
101	3+55 - 5+13		0.029				0.029	0.029	4
102	7+20 - 11+66		0.092		0.092			0.092	2.3
102	8+24 - 11+48	0.077			0.077			0.077	2.3
16	17+94 - 19+79		0.042		0.042			0.042	2.31
17	17+90 - 19+59	0.043			0.043			0.043	2
18	20+33 - 25+70	0.114			0.114			0.114	1.15

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

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**Table 1: Total Wetlands Along Project Corridor(Cont.)**

Wetland No.	Station	Location		Permanent (acres)		Temporary (acres)		Total Impact (acres)	Floristic Quality Index
		Left (acres)	Right (acres)	JD Impacts	Non- JD	JD Impacts	Non- JD		
19	20+36 - 25+65							0	1.15
20	39+44 - 52+25		0.391				0.391	0.391	1.15
20	39+53 - 52+69	0.305					0.305	0.305	1.15
21	56+44 - 67+35		0.17				0.17	0.17	2
22	56+23 - 68+35	0.199					0.199	0.199	1.15
23	73+13 - 81+10		0.097				0.097	0.097	2
24	74+10 - 80+40	0.101					0.101	0.101	2
25	91+85 - 96+82	0.105			0.105			0.105	1.41
26	92+90 - 95+80		0.064		0.064			0.064	1.41
27	103+00		0		0			0	0
28	103+00	0			0			0	0
29	108+33-114+52		0.202	0.202				0.202	1.73
29	109+33-113+80	0.112		0.112				0.112	1.73
30	125+00	0	0		0			0	0
31.E	132+44-135+31		0.053				0.053	0.053	0
31.W	132+64-135+56	0.03					0.03	0.03	0
32	150+86-156+45		0.163				0.163	0.163	1.15
32	150+90-156+73	0.162					0.162	0.162	1.15
33	161+00	0			0			0	1.41
34	176+23-177+30	0.009					0.009	0.009	1.41
35	179+00-179+10	0.001					0.001	0.001	1.41
36	193+70-214+56		0.187	0.166			0.021	0.187	1.41
37	196+47-216+00	0.38		0.254			0.126	0.38	1.41
38	219+48-220+54		0.016		0.016			0.016	3.53
39	221+87-231+33	0.182			0.182			0.182	2.8
40	231+72-239+93		0.108		0.108			0.108	2
41	231+72-237+90	0.101			0.101			0.101	3.5
43	248+24-273+47		0.848	0.848				0.848	1
44	263+90-269+88	0.239		0.239				0.239	1.15
44	271+20-272+77	0.029		0.029				0.029	1.15
43	274+60-287+86		0.19	0.19				0.19	1
44	274+53-276+78	0.061		0.061				0.061	1.15
44	277+25-282+57	0.129		0.129				0.129	1.15
<b>Totals</b>				<b>2.53</b>	<b>2.17</b>	<b>0.05</b>	<b>2.04</b>	<b>6.78</b>	

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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**Table 2: Wetland Summary Table**

		Total Impacts		Replacement Ratio	Mitigation Acres	Mitigation	Mitigation Location
		JD / Non-JD Total (Acres)	Permanent / Temporary Totals				
				(Acres)			
Permanent	JD	2.53	4.70	1.5:1	3.79	7.04	Maga-TaHopi Site (5.2 acres) Other USFWS Selected Sites (3.0+ acres)
	Non-JD	2.17		1.5:1	3.25		
Temporary	JD	0.05	2.09	1:1	0.05	2.09	On-Site
	Non-JD	2.04		1:1	2.04		
Total Impacts			<b>6.78</b>	Total Mitigation		<b>9.13</b>	

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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## Wetland Topsoil

Wetland topsoil shall be stripped from all wetland areas which will be impacted by the project. The wetland topsoil shall be stripped to a depth that sufficiently allows 6 inches of the wetland topsoil to be re-utilized as the upper stratum of wetland mitigation site(s).

The wetland topsoil shall be stockpiled separately from other topsoil in a location approved by the Project Engineer. Locate wetland stockpile a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and inlets. All wetland topsoil that is stripped shall be spread in the mitigation site(s) so that it is evenly distributed to a minimum depth of 6 inches. Surplus wetland topsoil shall be used to flatten embankment slopes or placed in other locations as approved by the Project Engineer.

Refer to Section D – Erosion and Sediment Control Plans for Placing Topsoil quantities. Remove and stockpile the wetland topsoil is incidental to the contract unit price per cubic yard for Unclassified Excavation. Cost to place the wetland topsoil shall be incidental to the contract unit price per cubic yard for “Placing Topsoil”.

## COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

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

The US Fish and Wildlife Service (USFWS) have designated the following as Topeka Shiner streams associated with this project.

#### Table of Topeka Shiner Streams

Station	Stream Name	Ordinary High Water Elevation
274+04	Unnamed	Vegetation Line

#### Action Taken/Required:

The Contractor shall 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 should be taken in conjunction with normal storm water inspections.

The Contractor shall produce a comprehensive Construction Plan that includes all products, materials, and methods of construction and removal for temporary water barriers, cofferdams, and diversion channels including dewatering, handling, storage, and disposal of excavated material and pumped effluent throughout all phases of construction, including post-construction stabilization. This plan shall be approved by the SDDOT Environmental office prior to any work occurring in the above streams. Upon plan approval the Construction Plan shall be amended to the SWPPP document located in Section D – Erosion and Sediment Control Plans.

## COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

#### Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

## COMMITMENT C: WATER SOURCE

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

The Contractor shall 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 shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources

(DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

## COMMITMENT D: WATER QUALITY STANDARDS

### COMMITMENT D1: SURFACE WATER QUALITY

The waterways are classified as fish and wildlife propagation, recreation, irrigation, and stock watering waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that this water body is not impacted.

#### Action Taken/Required:

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

## COMMITMENT D2: SURFACE WATER DISCHARGE

The waterways are classified as fish and wildlife propagation, recreation, irrigation and stock watering waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that this water body is not impacted.

#### Action Taken/Required:

If construction dewatering is required, the Contractor shall obtain a Temporary Discharge Permit from the DENR and provide a copy to the Project Engineer. Contact the DENR Surface Water Program at 605-773-3351 to apply for a permit.

## COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance.

#### Action Taken/Required:

The DENR and the US Environmental Protection Agency (EPA) have issued separate general permits for the discharge of storm water runoff. The DENR permit applies to discharges on state land and the EPA permit applies to discharges on federal or reservation land. The Contractor is advised this project is regulated under the Phase II Storm Water Regulations and must receive coverage under the General Permit for Construction Activities. A Notice of Intent (NOI) will be submitted to DENR a minimum of 15 days prior to project start by the DOT Environmental Office. A letter must be received from DENR that acknowledges project coverage under this general permit before project start. The Contractor is advised that permit coverage may also be required by off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

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

A major component of the storm water construction permits is development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which is a joint effort and responsibility of the SDDOT and the Contractor. Erosion control measures and best management practices will be implemented in accordance with the SWPPP. The SWPPP is a dynamic document and is to be available on-site at all times.

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

SDDOT: <http://sddot.com/transportation/highways/environmental/stormwater/Default.aspx>

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

EPA: [http://cfpub.epa.gov/npdes/home.cfm?program\\_id=6](http://cfpub.epa.gov/npdes/home.cfm?program_id=6)

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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## Contractor Certification Form:

The "Department of Environmental and Natural Resources – Contractor Certification Form" (SD EForm – 2110LDV1-ContractorCertification.pdf) shall be completed by the Contractor or their certified Erosion Control Supervisor after the award of the contract. Work may not begin on the project until this form is signed.

The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the Surface Water Discharge General Permit for Storm Water Discharges Associated with Construction Activities for the Project.

The online form can be found at:

<http://denr.sd.gov/des/sw/eforms/E2110LDV1-ContractorCertification.pdf>

## COMMITMENT H: WASTE DISPOSAL SITE

The Contractor shall 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 County ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway 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) shall 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 Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

## COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all designated option borrow sites provided within the plans.

### Action Taken/Required:

All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or

historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 staging areas, borrow

sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall 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 have to be taken to ensure that the waterways of the U.S. are not impacted.

### Action Taken/Required:

No excavation shall be made below the ordinary high water elevation in waterways outside of caissons, cribs, cofferdams, steel piling, or sheeting; and the natural streambed shall 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.

All dredged or excavated materials shall 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 provided that 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 shall be removed with minimal disturbance to the streambed. Proper construction practices shall be used to minimize increases in suspended solids and turbidity in the waterway.

Bridge berms, wing dams, traffic diversions, channel reconstruction, grading, etc. shall 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 Contractors construction operations shall 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.

## COMMITMENT N: SECTION 404 PERMIT

The SDDOT has obtained a Section 404 Permit from the US Army Corps of Engineers for the permanent actions associated with this project.

### Action Taken/Required:

The Contractor shall comply with all requirements contained in the Section 404 permit.

The Contractor shall also be responsible for obtaining a Section 404 permit for any dredge, excavation, or fill activities associated with staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands or waters of the United States.