

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0085(72)23	1	229
FILE: 00-Cover Sheet.dgn PLOTTING DATE: 11/19/2013		REV DATE: INITIAL:	

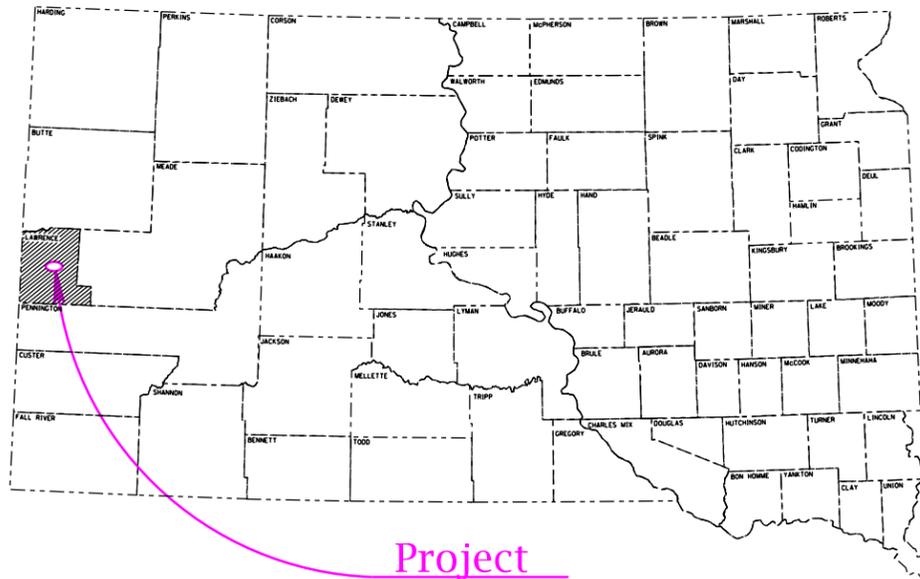
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT P 0085(72)23
US HIGHWAY 85
LAWRENCE COUNTY

Grading, Structures, Curb & Gutter, Storm Sewer, PCC Pavement,
Pavement Markings, Lighting, Permanent Signing, Joint and Spall Repair
PCN 028L

INDEX OF SECTIONS

- Section A: Estimate of Quantities
- Section B: Grading Plans
- Section C: Traffic Control Plans
- Section D: Erosion And Sediment Control Plans
- Section E: Retaining Wall and Vault Layout Plans
- Section F: Surfacing Plans
- Section L: Lighting Plans
- Section M: Pavement Marking Plans
- Section S: Permanent Signing Plans
- Section X: Cross Sections and Pipe Sections



Project

US 85/MAIN STREET

MRM = 24.14
STATION = 12+26.68
END JOINT & SPALL REPAIR
START RECONSTRUCTION
APPROXIMATELY 971.38 FEET WEST
AND 2277.98 FEET NORTH OF THE
SOUTH EAST CORNER OF SECTION 32
TOWNSHIP 5 NORTH RANGE 3 EAST OF
THE BHM.

BEGIN P 0085(72)23

US 85
MRM = 23.93+0.037
START JOINT & SPALL REPAIR
APPROXIMATELY 1715.78 FEET WEST
AND 1578.75 FEET NORTH OF THE
SOUTH EAST CORNER OF SECTION 32
TOWNSHIP 5 NORTH RANGE 3 EAST OF
THE BHM.

DESIGN DESIGNATION
US HWY 85

ADT (2010)	4,790
ADT (2030)	5,115
DHV	765
D	50%
T DHV	2.0%
T ADT	4.5%
V	25 MPH

STORM WATER PERMIT

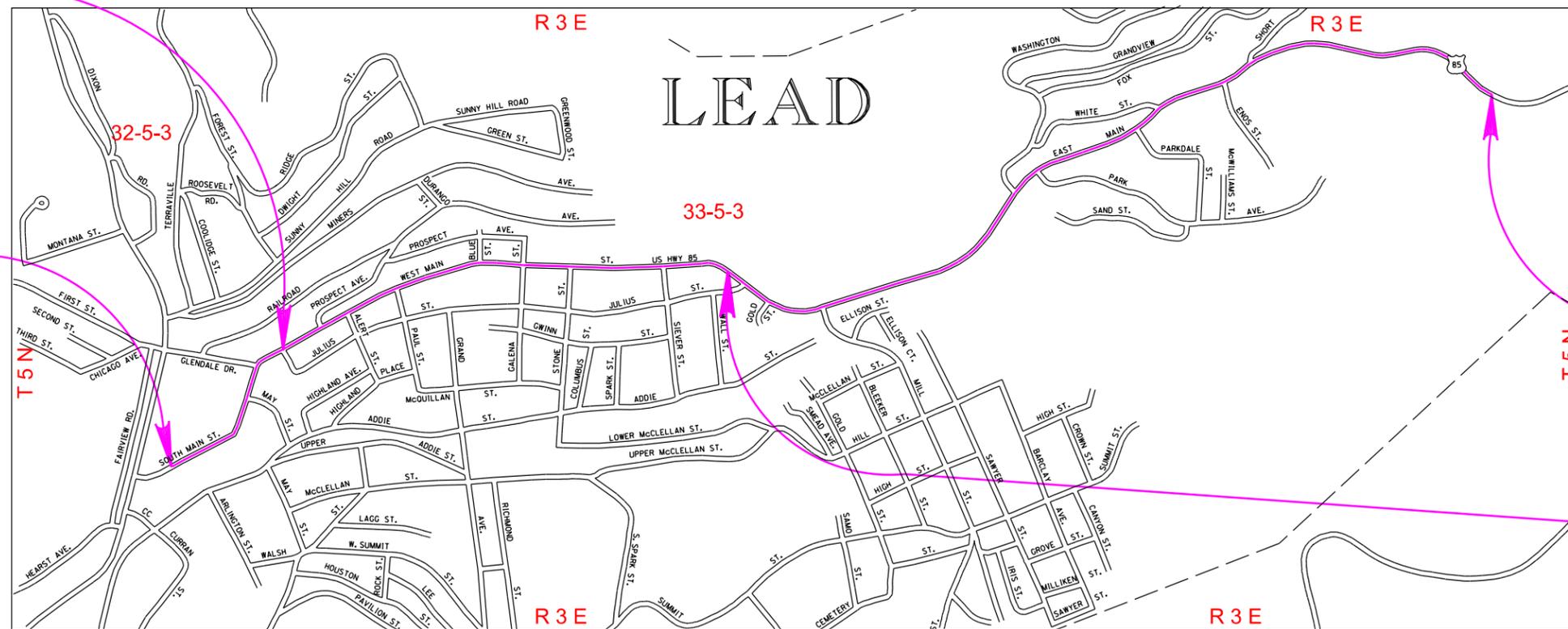
Major Stream: Whitetail Creek
Area Disturbed: 3.43 Acres
Total Project Area: 3.97 Acres
Approx. Begin Lat/Long: 44.3486, -103.7761

SCALES

PLAN	1" = 40' Urban
PROFILE	{ Horizontal: 1" = 40' Urban Vertical: 1" = 10'
CROSS SECTIONS	{ Horizontal: 1" = 20' Vertical: 1" = 10'

US HIGHWAY 85 / MAIN ST.

Gross Length	6,931.34 Feet	1.313 Miles
Joint / Spall Repair	4,356.32 Feet	0.825 Miles
Grading / Reconstruction	2,575.02 Feet	0.488 Miles
Length of Exceptions	None Feet	None Miles
Net Length	6,931.34 Feet	1.313 Miles



END P 0085(72)23

US 85
MRM = 25.22+0.261
END JOINT & SPALL REPAIR
APPROXIMATELY 4493.86 FEET EAST
AND 3912.57 FEET NORTH OF THE
SOUTH EAST CORNER OF SECTION 32
TOWNSHIP 5 NORTH RANGE 3 EAST OF
THE BHM.

US 85/MAIN STREET

MRM = 24.53
STATION = 38+01.70
END RECONSTRUCTION
START JOINT & SPALL REPAIR
APPROXIMATELY 1361.02 FEET EAST AND
2688.87 FEET NORTH OF THE SOUTH EAST
CORNER OF SECTION 32 TOWNSHIP 5 NORTH
RANGE 3 EAST OF THE BHM.



ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

Traffic Control – Section C

Grading – Section B

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0085(72)23	A1	A4
FILE:	Section A Notes.docx	REV DATE:	12/13/13
PLOTTING DATE:	12/17/2013	INITIAL:	RL

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	1.595	Mile
009E3250	Miscellaneous Staking	0.471	Mile
009E3280	Slope Staking	0.471	Mile
009E3290	Structure Staking	23	Each
009E3300	Three Man Survey Crew	100.0	Hour
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and Gutter	25	Ft
110E0400	Remove Drop Inlet	22	Each
110E0460	Remove Manhole	4	Each
110E0500	Remove Pipe Culvert	697	Ft
110E0600	Remove Fence	434	Ft
110E1010	Remove Asphalt Concrete Pavement	127.9	SqYd
110E1100	Remove Concrete Pavement	11,102.2	SqYd
110E1110	Remove Concrete Approach Pavement	308.9	SqYd
110E1140	Remove Concrete Sidewalk	2,970.0	SqYd
110E7802	Remove Fence for Reset	90	Ft
120E0010	Unclassified Excavation	3,965	CuYd
120E0900	Contaminated Material Excavation	100	CuYd
250E0020	Incidental Work, Grading	Lump Sum	LS
380E3540	8" PCC Approach Pavement	411.1	SqYd
380E4050	8" PCC Fillet Section	85.3	SqYd
450E0104	12" RCP Class 4, Furnish	4	Ft
450E0110	12" RCP, Install	4	Ft
450E0123	18" RCP Class 3, Furnish	724	Ft
450E0130	18" RCP, Install	724	Ft
450E0143	24" RCP Class 3, Furnish	410	Ft
450E0150	24" RCP, Install	410	Ft
450E1400	RCP Reducer, Furnish	1	Each
450E1401	RCP Reducer, Install	1	Each
451E3458	18" Pipe Plug	1	Each
462E0100	Class M6 Concrete	101.3	CuYd
470E0020	Pipe Handrail	514.0	Ft
480E0100	Reinforcing Steel	19,733	Lb
600E0200	Type II Field Laboratory	1	Each
620E0300	Special Right-of-Way Fence	273	Ft
620E4100	Reset Fence	90	Ft
650E0080	Type B68 Concrete Curb and Gutter	4,363	Ft
650E2100	Special Concrete Curb and Gutter	498	Ft
650E4680	Type P8 Concrete Gutter	404	Ft
650E6080	8" Concrete Valley Gutter	138	Ft
651E0060	6" Concrete Sidewalk	30,789	SqFt
651E5000	Sidewalk Drain	20.5	Ft
651E7000	Type 1 Detectable Warnings	430	SqFt
670E1200	Type B Frame and Grate Assembly	7	Each
670E5200	Special Frame and Grate Assembly	19	Each
671E6008	Type A8 Manhole Frame and Lid	7	Each
831E1010	Geogrid Reinforcement	2,897	SqYd

Bid Item Number	Item	Quantity	Unit
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
260E6010	Granular Material	500.0	Ton
632E3600	Temporary Signing	360.0	SqFt
634E0010	Flagging	300	Hour
634E0020	Pilot Car	600	Hour
634E0100	Traffic Control	1,942	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Arrow Panel	2	Each
634E0640	Temporary Pavement Marking	13,200	Ft
634E1002	Detour Signing	971.0	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each
634E2010	Temporary Pedestrian Facility(s)	Lump Sum	LS

Erosion and Sediment Control – Section D

Bid Item Number	Item	Quantity	Unit
110E1690	Remove Sediment	5.0	CuYd
110E1693	Remove Erosion Control Wattle	178	Ft
110E1695	Remove Sediment Filter Bag	532	Ft
110E1700	Remove Silt Fence	418	Ft
120E6300	Water for Vegetation	18.0	MGal
230E0020	Placing Contractor Furnished Topsoil	150	CuYd
730E0210	Type F Permanent Seed Mixture	10	Lb
731E0100	Fertilizing	12	Lb
732E0100	Mulching	5.0	Ton
733E0100	Sodding	422	SqYd
734E0154	12" Diameter Erosion Control Wattle	702	Ft
734E0165	Remove and Reset Erosion Control Wattle	178	Ft
734E0180	Sediment Filter Bag	532	Ft
734E0604	High Flow Silt Fence	418	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	27	Each
734E3100	Portable Sediment Containment System	1	Each
734E5010	Sweeping	100	Hour
831E0300	MSE Geotextile Fabric	276	SqYd
900E1300	Granular Material for Construction Entrance	170.0	Ton

Structure – Section E

Bid Item Number	Item	Quantity	Unit
110E1300	Remove Concrete Retaining Wall	780.0	Ft
260E6010	Granular Material	74.1	Ton
420E0300	Structure Excavation, Retaining Wall	1,549	CuYd
420E0400	Structure Excavation, Miscellaneous	83	CuYd
421E1000	Footing Undercut	158	CuYd
460E0100	Class A45 Concrete, Miscellaneous	332.6	CuYd
460E0205	Architectural Surface Finish	464.0	SqFt
460E0206	Architectural Surface Finish Test Panel	2	Each
462E0100	Class M6 Concrete	35.5	CuYd
462E0200	Controlled Density Fill	187.2	CuYd
470E0020	Pipe Handrail	319.0	Ft
480E0100	Reinforcing Steel	24,419	Lb
480E0200	Epoxy Coated Reinforcing Steel	18,419	Lb
530E0300	Type C Concrete Retaining Wall	798	SqFt
530E0470	Gravity Large Concrete Block Wall	1,429	SqFt
530E0810	Repair Retaining Wall	95	SqFt
530E0820	Reconstruct Stone and Masonry Retaining Wall	92	SqFt
680E0240	4" Corrugated Polyethylene Drainage Tubing	283	Ft

Surfacing – Section F

Bid Item Number	Item	Quantity	Unit
120E6200	Water for Granular Material	132.1	MGal
260E0010	Subbase	8,440.0	Ton
260E2060	Gravel Cushion, Modified	3,691.4	Ton
320E1200	Asphalt Concrete Composite	49.2	Ton
380E0050	8" Nonreinforced PCC Pavement	8,723.9	SqYd
380E5010	Fast Track Concrete	300.0	SqYd
380E5030	Nonreinforced PCC Pavement Repair	138.0	SqYd
380E6000	Dowel Bar	3,645	Each
380E6110	Insert Steel Bar in PCC Pavement	224	Each
380E6302	Reseal PCC Pavement Joint - Hot Pour	2,416	Ft
390E0200	Repair Type A Spall	41.0	SqFt

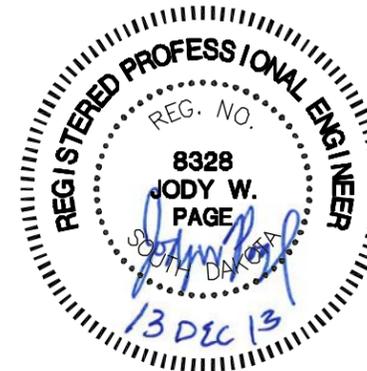
INDEX OF SHEETS

A1 and A2 Estimate of Quantities for Sections B, C, D,E, F, L, M, and S
 A3 to A4 Environmental Commitments

SPECIFICATIONS

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

PLANS BY: **HR**
 RAPID CITY, SD



ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0085(72)23	A2	A4
FILE:	Section A Notes.docx	REV. DATE:	12/13/13
PLOTTING DATE:	12/17/2013	INITIAL:	RL

Lighting and Signals – Section L

Bid Item Number	Item	Quantity	Unit
110E1510	Remove Luminaire Pole	13	Each
110E1540	Remove Luminaire Pole Footing	36	Each
110E5100	Salvage Luminaire Pole	15	Each
250E0010	Incidental Work	Lump Sum	LS
635E0035	Breakaway Base Luminaire Pole with Arm, 35' Mounting Height	5	Each
635E0902	Decorative Luminaire Pole with Twin Arms	21	Each
635E3330	Roadway Luminaire, 250 Watt with Photoelectric Cell	5	Each
635E3397	Decorative Luminaire, 100 Watt	42	Each
635E5020	2' Diameter Footing	156.0	Ft
* 635E5301	Type 1 Electrical Junction Box	8	Each
635E5301	Type 1 Electrical Junction Box	23	Each
635E5303	Type 3 Electrical Junction Box	16	Each
635E5400	Electrical Service Cabinet	1	Each
635E5420	Circuit Control Center	1	Each
635E5500	Meter Socket	1	Each
* 635E7500	Remove and Reset Luminaire Pole	8	Each
635E8020	2" Rigid Galvanized Steel Conduit	70	Ft
* 635E8120	2" Rigid Conduit, Schedule 40	2,500	Ft
635E8120	2" Rigid Conduit, Schedule 40	5,882	Ft
635E8140	4" Rigid Conduit, Schedule 40	1,200	Ft
635E9013	1/C #3 AWG Copper Wire	15,856	Ft
635E9014	1/C #4 AWG Copper Wire	10,074	Ft
635E9016	1/C #6 AWG Copper Wire	4,449	Ft
635E9020	1/C #10 AWG Copper Wire	1,372	Ft
635E9023	3/C #12 AWG Copper Wire	900	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	1,372	Ft

* - Denotes Non-Participating

Pavement Markings – Section M

Bid Item Number	Item	Quantity	Unit
633E0010	Cold Applied Plastic Pavement Marking, 4"	7,790	Ft
633E0062	Cold Applied Plastic Pavement Marking, Symbol	9	Each
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	7,790	Ft
633E5037	Grooving for Cold Applied Plastic Pavement Marking, Symbol	9	Each

Permanent Signing Notes – Section S

Bid Item Number	Item	Quantity	Unit
632E1330	2.25"x2.25" Perforated Tube Post	211.0	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	13.5	SqFt
632E3520	Remove, Salvage, Relocate, and Reset Traffic Sign	72	Each



PLANS BY: **HDR**
RAPID CITY, SD

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0085 (72) 23	A3	A4
FILE :	Section A Notes.docx	REV DATE :	
PLOTTING DATE :	11/18/2013	INITIAL :	

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

SPECIFICATIONS

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

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 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 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

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 State 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".

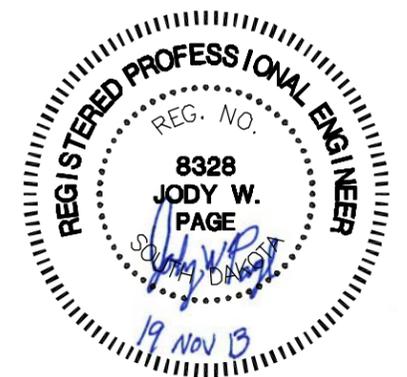
2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project.

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.



ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0085 (72) 23	A4	A4
FILE :	Section A Notes.docx	REV. DATE :	
PLOTTING DATE :	11/21/2013	INITIAL :	

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 contact SARC & arrange to have an archaeologist on site before any stripping of pavement begins so that any buried cultural resources that might be exposed can be documented.

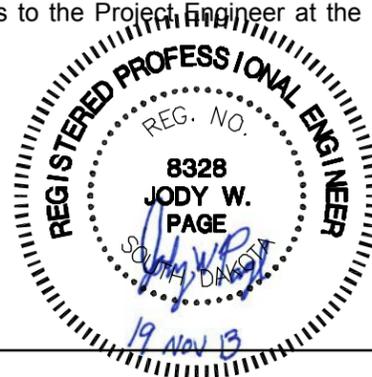
The Contractor shall arrange and pay for a cultural resource survey and/or records search. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record 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 L: CONTAMINATED MATERIAL

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

Description	Material	Status	Station	L / R
Abandoned Tank Project – Lead City Hall, 801 West Main Street (Hwy 85 & Alert)	Clean	Closed	16+00	R
ATP – Lead City Hall, 801 West Main	Diesel	No Further Action	16+00	R
Former Terra Industries, 322 West Main	Petroleum	No Further Action	28+80	L
Transformer Fire – Black Hills Power, Behind West Main	PCB Oil	Closed	30+55	L

Action Taken/Required:

The Contractor shall give written notice, with a copy to the Area Engineer and the Department of Environment and Natural Resources (DENR), 30 days prior to the start of work. In addition, the Contractor shall give written notice to the Engineer 7 days prior to the commencement of the work so the Engineer may notify DENR of the day work will start.

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

Petroleum contaminated soil may be disposed of at the Rapid City Landfill (phone 605-355-3496). Measurement of "Contaminated Material Excavation" shall be in accordance with Section 120.4 of the Standard 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 shall be incidental to the contract unit price per cubic yard for "Contaminated Material Excavation".

The estimated quantity of "Contaminated Material Excavation" is 100 cubic yards. 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.

COMMITMENT M1: SECTION 4(f) PROPERTY

A Section 4(f) Evaluation has concluded that no feasible and prudent alternative to the use of Section 4(f) land occurs with the project.

Approximate Station	Section 4(f) Property
13+29L to 13+64L	Stone Retaining Wall N4
13+68L to 13+78L	Stone Retaining Wall N5
19+09L to 19+31L	Stone Retaining Wall N8
19+35L to 19+47L	Stone Retaining Wall N9
20+61L to 20+75L	Stone Retaining Wall N12
20+75L to 20+97L	Stone Retaining Wall N13
21+02L to 21+21L	Stone Retaining Wall N14
21+27L to 21+43L	Stone Retaining Wall N15

Action Taken/Required:

The following measures are required to minimize harm to the above Section 4(f) property:

Walls N4 & N5 will be replaced with Concrete Type C walls with form liners and stain to look similar to existing walls.

Walls N8 & N9 will be replaced with Large Concrete Block Walls and stained.

Walls N12 & N13 will not be disturbed.

The east half of wall N14 & the longitudinal portion of wall N15 will be replaced with Type C walls and the masonry and stone walls will be reconstructed in front of the Type C walls as they exist today and the existing capstone will be salvaged and reset.

The Contractor shall notify the Project Engineer if additional easement is needed to complete the work adjacent to any Section 4(f) property. The Project Engineer shall obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any Section 4(f) property.