

STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

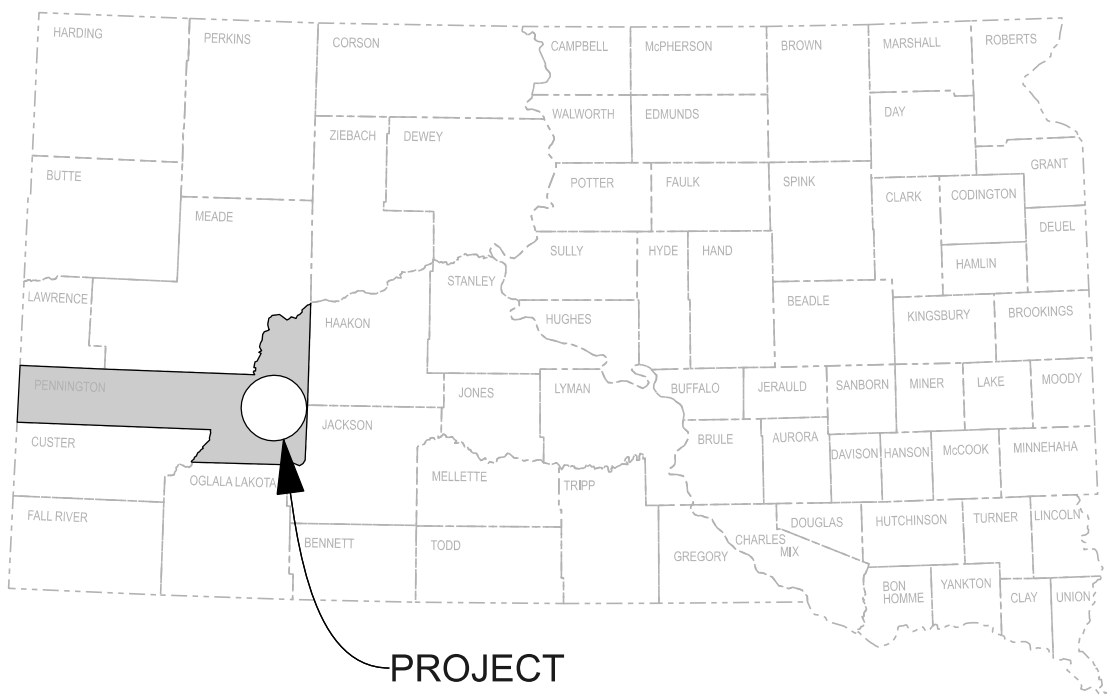
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0902(186)101	1	91

**PROJECT IM 0902(186)101  
 INTERSTATE 90  
 PENNINGTON COUNTY**

**INDEX OF SECTIONS**

- Section A: Estimate of Quantities and Environmental Commitments
- Section B: Grading Plans
- Section C: Traffic Control Plans
- Section E: Structure Plans

LOW SLUMP DENSE CONCRETE OVERLAY, CHIP SEAL,  
 APPROACH REPLACEMENT, APPROACH SURFACING,  
 JOINT REPLACEMENT, AND GUARDRAIL  
 PCN 091L



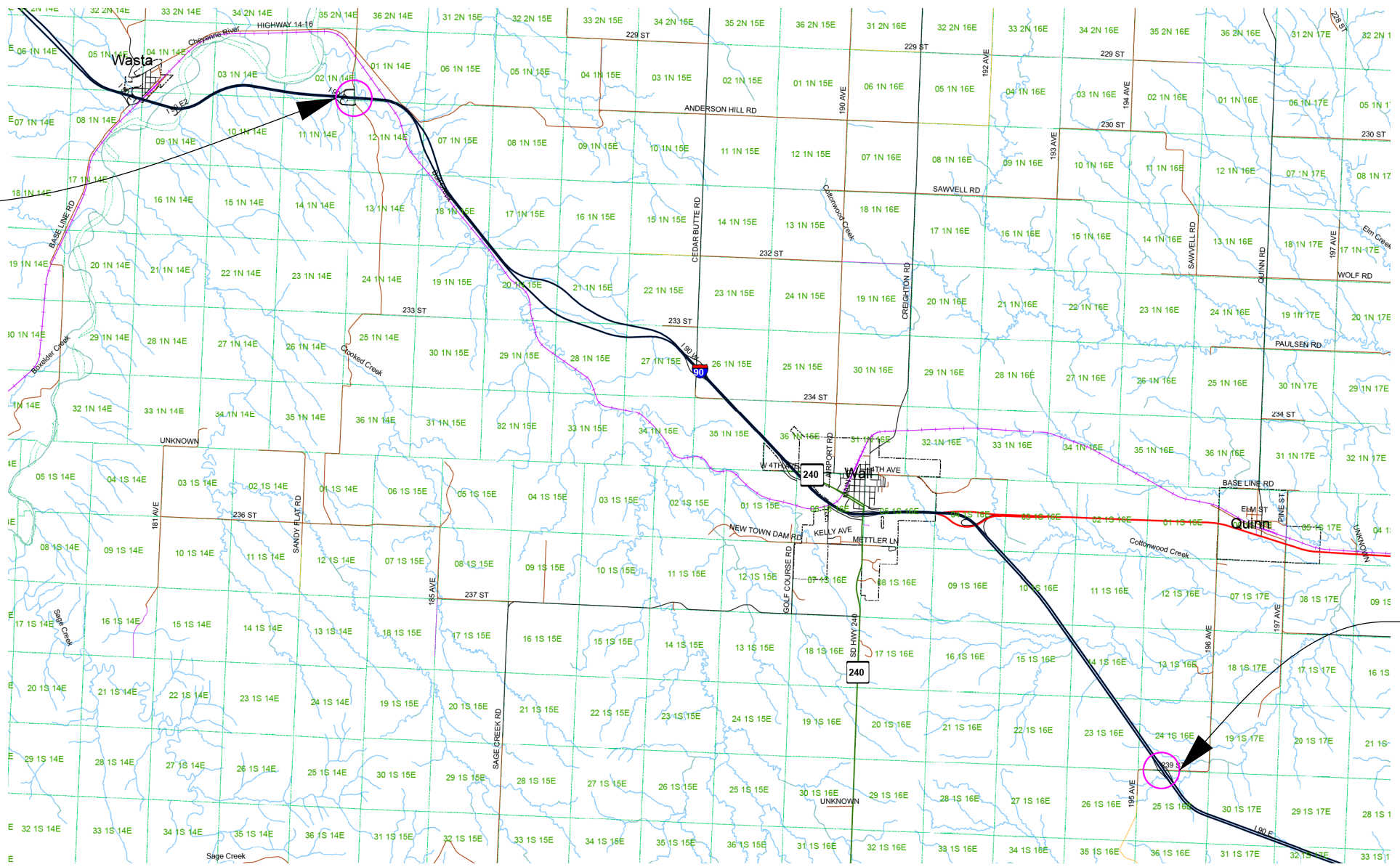
Str. No. 52-830-310  
 I90, MRM 101.23

Str. No. 52-953-400 (I90E)  
 Str. No. 52-954-400 (I90W)  
 MRM 116.94

**DESIGN DESIGNATION**  
 Str. No. 52-830-310 &  
 Str. No. 52-954-400

ADT (2022)	3525
ADT (2042)	4946
DHV	914
D	51%
T DHV	14%
T ADT	30.8%
V	80 mph

**STORM WATER PERMIT**  
 (None Required)



**3**

April 16, 2025

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 0902(186)101	A1	A3

## Section B - Grading

## Section C - Traffic Control

Revised 2/21/25 GDS

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E0400	Remove Drop Inlet	2	Each
110E0420	Remove Drop Inlet Frame and Grate Assembly	2	Each
110E0500	Remove Pipe Culvert	20	Ft
110E0700	Remove 3 Cable Guardrail	760	Ft
110E0730	Remove Beam Guardrail	1,062.5	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	8	Each
110E0810	Remove Rubrail	48.0	Ft
110E1010	Remove Asphalt Concrete Pavement	12.0	SqYd
120E0100	Unclassified Excavation, Digouts	18	CuYd
120E0600	Contractor Furnished Borrow Excavation	6	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
260E1010	Base Course	24.0	Ton
320E1200	Asphalt Concrete Composite	332.0	Ton
332E0010	Cold Milling Asphalt Concrete	2,640	SqYd
380E1000	6" Miscellaneous PCC Pavement	7.0	SqYd
450E4739	12" CMP 16 Gauge, Furnish	140	Ft
450E4740	12" CMP, Install	140	Ft
450E5000	12" CMP Elbow, Furnish	2	Each
450E5001	12" CMP Elbow, Install	2	Each
450E5203	12" CMP Flared End, Furnish	4	Each
450E5204	12" CMP Flared End, Install	4	Each
464E0100	Controlled Density Fill	14.0	CuYd
630E0500	Type 1 MGS	1,325.0	Ft
630E1500	Type 1 Guardrail Transition	4	Each
630E1501	Type 1 Retrofit Guardrail Transition	4	Each
630E2018	MGS MASH Tangent End Terminal	8	Each
632E2220	Guardrail Delineator	50	Each
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	1,484	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	1,408	Ft
650E4360	Type D46 Concrete Curb and Gutter	38	Ft
650E4689	Modified Type P9 Concrete Gutter	18	Ft
734E0010	Erosion Control	Lump Sum	LS
734E0133	Type 3 Turf Reinforcement Mat	32.4	SqYd

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0110	Traffic Control Signs	604.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	3	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	50	Each
634E0640	Temporary Pavement Marking	8,960	Ft
634E0700	Traffic Control Movable Concrete Barrier	100	Each
634E0750	Temporary Concrete Barrier End Protection	1	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	1	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1002	Detour and Restriction Signing	242.4	SqFt

## Section E - Structure

### Structure No. 52-830-310

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
110E0010	Remove Concrete Bridge Approach Slab	176.8	SqYd
410E2600	Membrane Sealant Expansion Joint	63.6	Ft
430E0300	Granular Bridge End Backfill	9.0	CuYd
460E0070	Class A45 Concrete, Bridge Repair	3.2	CuYd
460E0150	Concrete Approach Slab for Bridge	145.0	SqYd
460E0160	Concrete Approach Sleeper Slab for Bridge	31.8	SqYd
460E0174	Concrete Patching Material, Miscellaneous	1.1	CuFt
460E0300	Breakout Structural Concrete	2.5	CuYd
460E0380	Install Dowel in Concrete	48	Each
480E0200	Epoxy Coated Reinforcing Steel	342	Lb
480E0504	No. 4 Rebar Splice	28	Each
480E0505	No. 5 Rebar Splice	32	Each
480E0506	No. 6 Rebar Splice	44	Each
480E5000	Galvanic Anode	36	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	62	CuYd
550E0100	Concrete Removal Type 1A	759.2	SqYd
550E0110	Concrete Removal Type 1B	193.3	SqYd
550E0120	Concrete Removal Type 1C	96.6	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	16.7	CuYd
550E0500	Finishing and Curing	759.2	SqYd

### INDEX OF SHEETS

A1 Estimate of Quantities for Sections B, C, and E  
A2 to A3 Environmental Commitments

### Structure No. 52-953-400

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
491E0005	Two Coat Bridge Deck Polymer Chip Seal	670.6	SqYd
491E0110	Abrasive Blasting of Bridge Deck	670.6	SqYd
491E0120	Bridge Deck Grinding	670.6	SqYd
491E0130	Concrete Removal, Class A	7.8	SqYd
491E0140	Concrete Removal, Class B	7.8	SqYd
491E0172	Concrete Patching Material, Bridge Deck	49.6	CuFt

### Structure No. 52-954-400

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	46	CuYd
550E0100	Concrete Removal Type 1A	670.6	SqYd
550E0105	Concrete Removal Type 2A	167.6	SqYd
550E0110	Concrete Removal Type 1B	86.9	SqYd
550E0120	Concrete Removal Type 1C	43.4	SqYd
550E0130	Concrete Removal Type 1D	43.4	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	6.1	CuYd
550E0500	Finishing and Curing	670.6	SqYd

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

#### 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 pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

#### COMMITMENT B4: BALD EAGLE

Bald eagles are known to occur in this area.

#### Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

## 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 ( $\geq 140$  °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.

#### 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](https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04) >

### COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

#### Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

### 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.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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**COMMITMENT I: HISTORIC 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/The Contractor is responsible 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.