

Planning & Engineering Office of Project Development

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April 12, 2024

ADDENDUM NO. 2

RE: Item #4, April 17, 2024 Letting - NH-P 0040(355), PCN 097D, Butte, Custer, Fall River, Lawrence, Pennington County - Pavement Restoration

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

SPECIAL PROVISIONS: NO CHANGE

SDEBS BID PROPOSAL: The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.

Bid Items were removed:

Bid Item 380E6550 "Grind 16" Rumble Strip in PCC Pavement"

- **PLANS:** Please destroy sheets 3 and 6 and replace with the enclosed sheets, dated 4/12/24.
 - **Sheet 3**: Bid Item 380E6550 "Grind 16" Rumble Strip in PCC Pavement" was removed.
 - **Sheet 6:** GRIND 16" RUMBLE STRIP OR STRIPE IN PCC PAVEMENT note was removed.

Sincerely,

Sam Weisgram Engineering Supervisor

SW/cj

CC: Todd Seaman, Rapid City Region Engineer Mike Carlson, Rapid City Area Engineer

ESTIMATE OF QUANTITIES

BID ITEM	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement 435		SqYd
110E1100	Remove Concrete Pavement	3,093.3	SqYd
260E2010	Gravel Cushion	548.0	Ton
320E1200	Asphalt Concrete Composite	105.9	Ton
332E0010	Cold Milling Asphalt Concrete	93	SqYd
380E0060	8.5" Nonreinforced PCC Pavement	3,093.3	SqYd
380E5030	Nonreinforced PCC Pavement Repair	914.2	SqYd
380E6000	Dowel Bar	1,984	Each
380E6010	Dowel Bar Retrofit	396	Each
380E6110	Insert Steel Bar in PCC Pavement	1,401	Each
380E6302	Reseal PCC Pavement Joint - Hot Pour	139,532	Ft
380E6310	Seal Random Cracks in PCC Pavement	2,791	Ft
380E6505	NGCS Grinding PCC Pavement	17,050.9	SqYd
390E0212	Repair Type B Spall	24,911	Lb
633E0010	Cold Applied Plastic Pavement Marking, 4" 17		Ft
633E0025	Cold Applied Plastic Pavement Marking, 12"	48	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	129	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	4	Each
633E1220	High Build Waterborne Pavement Marking Paint, 4" White 10,829		Ft
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"		Ft
633E5010	Grooving for Cold Applied Plastic Pavement Marking, 12"		Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	129	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	4	Each
633E5100	Grooving for Durable Pavement Marking, 4"	10,829	Ft
634E0010	Flagging	6,000.0	Hour
634E0020	Pilot Car	3,000.0	Hour
634E0110	Traffic Control Signs 2,13		SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	5	Each
634E0420	Type C Advance Warning Arrow Board	7	Each
634E0600	4" Temporary Pavement Marking Tape Type I	144	Ft
634E0900	Portable Temporary Traffic Control Signal	2	Unit
634E1215	Contractor Furnished Portable Changeable Message Sign	8	Each

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 (≥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>

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.

STATE	STATE OF	PROJECT	SHEET	TOTAL
SOUTH DAKOTA	NH-P 0040(355)	3	45	

Revised 4/12/24 GDS

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

NONREINFORCED PCC PAVEMENT REPAIR (CONTINUED)

At US US18, MRM 43 + 0.674 to MRM 43 + 0.904 the Project Engineer will determine the existing grade of the highway at each end of the repair. The grade change will not exceed 0.2% at the ends and at form joints. A 10' straightedge will be used to ensure these criteria are met.

All costs associated with this work will be incidental to the contract unit price per square vard for Nonreinforced PCC Pavement Repair.

DETAILS FOR REBAR INSTALLATION AT MANHOLES

REBAR LAYOUT IN PCC PAVEMENT WITHOUT BOX-OUT



The rebar will not cross any joint in the concrete pavement. If manhole is next to a joint in the concrete pavement the Engineer will approve a revised layout of the rebar.



* Rebar will be placed at the midpoint depth of the PCC Pavement. Cost for furnishing & installing rebar and constructing box-outs will be incidental to the contract unit price per square yard for Nonreinforced PCC Pavement Repair and/or Fast Track Concrete for PCC Pavement Repair.

STEEL BAR INSERTION

The Contractor will insert the Steel Bars (No. 8 x 18 inch epoxy coated deformed tie bars transverse, No. 9 x 18 inch epoxy coated deformed tie bars transverse, No. 5 x 30 inch epoxy coated deformed tie bars longitudinally, 1" Bars transverse, and 1 1/4" Bars transverse) into drilled holes in the existing concrete pavement. An epoxy resin adhesive must be used to anchor the steel bar in the drilled hole.

The steel bars will be cut to the specified length by sawing or shearing and will be free from burring or other deformations.

Epoxy coated plain round steel bars will be inserted on 12-inch centers in the transverse joint. The first steel bar will be placed a minimum of 3 inches and a maximum of 6 inches from the outside edge of the slab.

Epoxy coated deformed steel bars will be inserted on 18-inch centers in the transverse joint. The first steel bar will be placed a minimum of 3 inches and a maximum of 9 inches from the outside edge of the slab.

Epoxy coated deformed steel bars will be inserted on 30-inch centers in the longitudinal joint and will be placed a minimum of 15 inches from the existing transverse contraction joint.

DOWEL BAR RETROFIT

The contractor shall Dowel Bar Retrofit the existing PCC Pavement lane from MRM 12.37 to MRM 12.57 on US Highway 18 as noted in the Table of Dowel Bar Retrofit.

This work consists of installing epoxy coated 1-1/2 inch diameter by 18 inch long plain round dowels into existing concrete pavement joints.

The existing Portland Cement Concrete Pavement shall be removed and the dowel bars shall be retrofit across the pavement joints.

This work shall meet the requirements of the "Special Provision for PCCP Dowel Bar Retrofit" included as part of this contract.

NGCS GRINDING OF PCC PAVEMENT

NGCS Grinding of PCC Pavement will be applied to the pavement on US 18 at Edgemont upon the completion of the dowel bar retrofit at this location.

NGCS Grinding PCCP Pavement can be performed with a single-pass or two-passes to produce longitudinal grooves on the concrete surface in accordance with the Special Provision.

NGCS grinding of PCC pavement will be accomplished according to the Special Provision for NGCS Grinding PCC Pavement. All costs to grind mainline will be incidental to the contract unit price per square yard for NGCS Grinding PCC Pavement.

Shoulder grinding will transition from the edge of the mainline and other lanes requiring NGCS grinding as required to provide drainage and an acceptable riding surface. Adequate cross slope drainage will be maintained. The Contractor will use conventional diamond grinding in accordance with section 380.3 O to feather PCC Pavement adjacent to NGCS grinding areas.

Costs to feather grind shoulder areas adjacent to NGCS grinding will be incidental to the contract unit price per square yard of Grinding PCC Pavement.

8.5" NONREINFORCED PCC PAVEMENT

The contract item 8.5" Nonreinforced PCC Pavement will be used for repair of US 18, MRM 43+0.674 through MRM 43+0.904. The PCC pavement will be placed in accordance with the original typical section provided and to the satisfaction of the Engineer.

The aggregate may require screening as determined by the Engineer.

The concrete used in the Portland Cement Concrete Pavement will conform to Section 380, contain a minimum of 600 lbs of cement, and 20% fly ash. The concrete will contain at least 55% coarse aggregate. The use of a water reducer at manufacturers recommendations will be required. The concrete will obtain a minimum 4,000 psi at 28 days. The contractor is responsible for the mix design used. The contractor will submit a mix design for approval at least 2 weeks prior to use.

There will be no direct payment for trimming of the gravel cushion for PCC pavement. The trimming will be considered incidental to the related items required for PCC Pavement. Trimming will be performed as required by Section 380.3 C of the Specifications.

A construction joint will be sawed whenever new concrete pavement is placed adjacent to existing concrete pavement.

The Contractor will note the locations of the in-place transverse construction joints and will be place the new joints at the existing locations.

The base material on the shoulders will be shaped in accordance with the original typical section provided and to the satisfaction of the Engineer. The asphalt shoulders will be replaced with a 3" lift of Asphalt Concrete Composite in accordance with the original typical section provided and to the satisfaction of the Engineer.

COLD APPLIED PLASTIC PAVEMENT MARKING

All materials will be applied as per the manufacturer's recommendations.

Cold Applied Plastic Pavement Markings will be 3M Series 380 IES or an approved equal.

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

specifications for Section 980.1 B.

Reflective media will consist of glass beads.

	STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL
		NH-P 0040(355)	6	45

Revised 4/12/24 GDS

All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to the supplemental