DEPARTMENT OF TRANSPORTATION

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July 10, 2024

ADDENDUM NO. 1

RE: Item 4 – 07/16/2025 Letting – PT 0905(117)261, PCN 080A, Lyman County – Pipe Culvert Improvements

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

PLANS: Please destroy sheet 9 and replace with the enclosed sheet 9, dated 07/09/2025.

Sheet #9: PIPE MATERIALS note and Steel Pipe (Open Cut) note were revised.

Sincerely,

Sam Weisgram
Engineering Supervisor

CC: Travis Dressen, Mitchell Region Engineer
Jay Peppel, Mitchell Area Engineer

PIPE SCHEDULE

	108” Diameter		132” Diameter	
	Open Cut [1]	Trenchless Rehab (Slip line) [2]	Open Cut [1]	Trenchless Installation [2]
Pipe Length	170 LF	516 LF	160 LF	526 LF
Allowable Pipe Material	Steel			

Notes:

1. All Open Cut pipe work to be performed through the I-90 Business Loop only
2. All Trenchless work (slip line rehab & boring/tunneling) to be performed through (beneath) I-90

PIPE MATERIALS

Pipe wall thickness will be determined by pipe manufacturer based on installation loadings and final buried conditions loadings. The pipe design must be signed and sealed by a SD registered professional engineer and require an independent check design. The design and check design must conform to the AASHTO LRFD Bridge Design Specifications and any requirements for jacking. The calculations must be submitted to the SDDOT Office of Bridge Design prior to construction.

Steel Pipe (Open Cut)

Steel pipe will meet the same requirements, including pipe specifications, welding and coal tar epoxy coating as the steel pipe used in the trenchless installation.

Steel Pipe (Trenchless)

Steel pipe for trenchless installation will meet the requirements of AWWA C200, ASTM A252 Grade 3, or ASTM A1097. Hydrostatic testing will not be required for this application.

The exterior of the steel pipe will be coated with a fusion bonded epoxy coating and an abrasion resistant overcoat or a two-component coal tar epoxy. The coal tar will meet the requirements of Sherwin-Williams Targuard, Tnemec Hi-Build Tnemec-Tar, or an approved equal. Applications of the coatings will be in conformance with the manufacturer’s recommendations.

The pipe joints may be mechanically connected with watertight seal such as Tri-Loc, Permalok, or Engineer approved equal, or must be welded by a certified welder in accordance with Section 410.3 D of the Specifications and shall be qualified in Position 5G . After the welding has been completed, the exposed area will be coated with 3M Scotchkote Liquid Epoxy 328 or a two-component coal tar epoxy meeting the requirements of Sherwin-Williams Targuard, Tnemec Hi-Build Tnemec-Tar, or an approved equal.

SPECIAL PROVISIONS

The following requirements are provided in the Special Provisions:

- Settlement Instrumentation and Monitoring
- Shaft Excavation and Support
- Contact Grouting
- Microtunneling
- Internal Inspection of Pipelines and Pipe Cleaning

PIPELINE UNDERCROSSINGS

Work will be conducted during dry weather period. The Contractor is responsible for providing conveyance capacity equal to the existing culvert for the duration of the construction period. Contractor may phase work as required to maintain drainage within work limits.

Observe work requirements stipulated in any permit condition.

Consult Contract Drawings for limitation of construction right-of-way.

The Contractor may be required to protect the downstream end of the crossing from flooding due to high river stage conditions through the use of cofferdams or other acceptable protective measures.

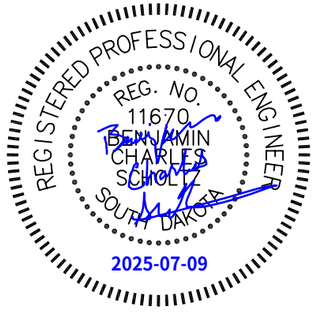
EXISTING PIPE REHABILITATION

Removal, replacement and rehabilitation of the existing pipe will be conducted as specified herein unless an alternate plan is submitted in writing and approved by the Engineer.

Slipline materials shall not be ordered until the existing pipe is cleaned, surveyed, and interior dimensions are verified.

Open cut extents will be limited to the I-90 business loop and must not impact the I-90 embankment.

The Contractor will provide pipe design signed and sealed by a SD registered professional engineer and require an independent check design. The design and check design must conform to the AASHTO LRFD Bridge Design Specifications and any requirements for jacking. The calculations must be submitted to the SDDOT Office of Bridge Design prior to construction.



SLIPLINE 108” PIPE

This work consists of installing a slip liner inside the existing pipe and grouting the void between the liner and the existing pipe.

The Contractor will slipline 516 feet of the existing 132” diameter CMP. The 132” in-place host pipe is fully deteriorated and the liner must be designed to take all pipe loading.

The Contractor will submit a proposed procedure for slip line installation, including the grouting procedure, to the Engineer at least two weeks prior to beginning this work.

The diameter specified in the bid item description is the minimum inside diameter of the new slip line pipe. The Contractor will provide the largest diameter slip line pipe that will fit into the existing pipe to maximize flow capacity.

Slipliner pipe will have a smooth interior surface.

Slipliner pipe will be joined into a continuous length with joints that are adequate to push or pull the liner pipe through the existing pipe that do not damage the slipliner pipe or the host pipe. The slipliner pipe will be clean and substantially dry before insertion. The joints will not allow seepage during pressure grouting. To allow for unrestricted insertion of the liner, the outside diameter of the liner pipe will not be increased at the joints.

Prior to sliplining, the Contractor will clean the existing pipe of all debris, silt, and obstructions to ensure that the slipliner pipe can be inserted. Refer to Special Provisions.

To minimize the change in flowline, slipliner pipe will be held down during the grouting operation. This may be accomplished by attaching fasteners or blocks at the top of the pipe, adding weight to the inside of the slipliner pipe, placing multiple grout lifts, or other means as approved by the Engineer.

Bulkheads will be constructed at each end of the pipe. Each bulkhead will be constructed to withstand the pressure of the grouting operation. The bulkhead will extend from the end of the existing pipe inward a minimum depth of 18 inches. The bulkhead will be free from leaks and the exterior surface will be given a smooth trowel finish.

Pressure grouting will be done to ensure all the voids are filled between the slipliner pipe and the existing pipe including all breaks or holes in and around the existing pipe. Grouting pressures used will ensure all voids are filled, but do not collapse or deform the slipliner pipe more than 5 percent of the diameter. Multiple grout lifts may be necessary to minimize pipe deflection in accordance with the pipe manufacturer’s recommendations.