

September 13, 2024

ADDENDUM NO. 1

**RE: Item #2, September 18, 2024 Letting - 2211 01441(), PCN X06L, Oglala Lakota County -
Replace Water Line**

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 added:

Bid Item 260E1030 "Base Course, Salvaged"
Bid Item 260E2030 "Gravel Cushion, Salvaged"

Quantities for Bid Items were changed:

Bid Item 120E6200 "Water for Granular Material" changed from 1.8 to 2.6 MGal

Bid Items were removed:

Bid Item 260E2010 "Gravel Cushion"

PLANS: Please destroy sheets 1.03 and 1.04 and replace with the enclosed sheets, dated 9/12/24. Sheets 1.04A, 1.04B & 1.04C were added.

Sheet 1.03: **Bid Items were added:**

Bid Item 260E1030 "Base Course, Salvaged"
Bid Item 260E2030 "Gravel Cushion, Salvaged"

Quantities for Bid Items were changed:

Bid Item 120E6200 "Water for Granular Material" changed from 1.8 to 2.6 MGal

Bid Items were removed:

Bid Item 260E2010 "Gravel Cushion"

Sheet 1.04: FIRE HYDRANT COATINGS and CATHODIC PROTECTION notes were removed.

Sheets 1.04A – 1.04C: Sheets were added to address surfacing needs.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Todd Seaman, Rapid City Region Engineer
Bruce Schroeder, Custer Area Engineer



Non-Section Method

Table with 4 columns: BID ITEM NUMBER, ITEM, QUANTITY, UNIT. Lists various construction items like Mobilization, Staking, and Pipe installation.

Non-Section Method

Table with 4 columns: BID ITEM NUMBER, ITEM, QUANTITY, UNIT. Lists items like Temporary Water Service, Reconnect Water Service, and various concrete and landscaping work.

* - Denotes Non-Participating

Abandon Water Main Summary Table. Columns: Item Description, Quantity, Unit. Rows include 451E6103 - Abandon Water Main with sub-items for 4, 6, and 8 inch mains.

Pipe Bend Summary Table. Columns: Item Description, Quantity, Unit. Rows include 451E3004 - 4" Pipe Bend, 451E3006 - 6" Pipe Bend, and 451E3008 - 8" Pipe Bend with various bend types.



Revision table with columns: NO., DATE, REVISION.

DRAFTED MJK, REVIEWED JRW, PROJECT NUMBER 2211-01441, ISSUE DATE 6/25/2024

PINE RIDGE WATER IMPROVEMENTS, OGLALA SIOUX TRIBE, PINE RIDGE, SOUTH DAKOTA, SUMMARY OF QUANTITIES



GENERAL NOTES:

ALL WORK REQUIREMENTS SHOWN ON THESE DRAWINGS AND NOT OTHERWISE DETAILED MUST BE ACCOMPLISHED AS SPECIFIED IN THE LATEST SPECIFICATIONS FROM THE STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION (SDDOT).

CONTRACTOR WILL CONDUCT HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, DEPT OF LABOR.

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL UTILITIES AND PROTECT THEM FROM DAMAGE. THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND SOME ITEMS MAY NOT BE INDICATED IN THE PLANS. UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT, WILL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. THE CONTRACTOR MUST NOT BEGIN EXCAVATION IN THE AREA OF UNDERGROUND UTILITIES UNTIL ALL SUCH UTILITIES HAVE BEEN LOCATED AND IDENTIFIED AND THEN ONLY WITH EXTREME CARE TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY. THE CONTRACTOR MUST BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF SAID UTILITIES DAMAGED BY OPERATION IN CONNECTION WITH EXECUTION OF THE WORK. THE CONTRACTOR MUST COORDINATE CONSTRUCTION EFFORTS WITH ALL LOCAL UTILITY COMPANIES PERTINENT TO THE WORK.

2. THE INFORMATION ON THESE DRAWINGS CONCERNING THE TYPE, SIZE AND LOCATION OF UTILITIES HAS BEEN BASED UPON THE INFORMATION AVAILABLE DURING TOPOGRAPHIC SURVEYS. SIZE AND TYPE OF UTILITIES WAS PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR MUST BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES IN PLACE UNLESS THEY ARE SCHEDULED FOR RELOCATION. THE CONTRACTOR MUST COORDINATE ALL WORK WITH THE UTILITY COMPANIES. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.

3. THE CONTRACTOR MUST UTILIZE THE SOUTH DAKOTA ONE CALL NOTIFICATION PROCESS TO PROVIDE ADVANCE NOTICE OF AT LEAST 48 HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, TO INFORM ALL SOUTH DAKOTA UNDERGROUND FACILITY OPERATORS OF INTENDED EXCAVATION. THE CONTRACTOR MUST CONTACT ALL UTILITY COMPANIES BEFORE WORK IS COMMENCED.

4. ALL WATER IMPROVEMENT PROJECT MATERIAL TO BE REMOVED FOR DISPOSAL MUST BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS NOTED OTHERWISE, AND MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL & STATE REGULATIONS.

9. ALL BARRICADES, WARNING SIGNS, LIGHTS, DEVICES, ETC. FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SHOP DRAWINGS

THE CONTRACTOR MUST SUBMIT ELECTRONIC PDF COPIES OF ALL WATER IMPROVEMENT PROJECT SUBMITTALS FOR REVIEW TO:

james.ainslie@ths.gov

AFTER REVIEW, COPIES WILL BE RETURNED TO THE CONTRACTOR WITH ANY REVISIONS NOTED.

CONTRACTOR FURNISHED PROGRESS SCHEDULES

AT LEAST TWO WEEKS PRIOR TO THE START OF THE WATER IMPROVEMENT WORK, THE CONTRACTOR MUST FURNISH TWO COPIES OF A BAR CHART METHOD PROGRESS SCHEDULE. THE SCHEDULE MUST CONSIST OF A CONSTRUCTION SCHEDULE AND A BRIEF WRITTEN NARRATIVE. THE SCHEDULE MUST CONTAIN THE FOLLOWING INFORMATION:

1. USE A TIME SCALE TO GRAPHICALLY SHOW PERCENTAGE OF WORK SCHEDULED FOR COMPLETION WITHIN THE CONTRACT COMPLETION REQUIREMENTS.
2. DEFINE AND RELATE WORK ACTIVITIES TO CONTRACT PAY ITEMS.
3. SHOW WORK ACTIVITIES (PRIME CONTRACTOR AND ALL SUBCONTRACTOR ACTIVITIES) IN THE ORDER THE WORK WILL BE PERFORMED INCLUDING SUBMITTALS, APPROVALS, DELIVERIES, TEMPORARY TRAFFIC CONTROL, AND PERMANENT SIGNING/STRIPING.
4. SHOW ALL MAJOR WORK ACTIVITIES THAT ARE CONTROLLING FACTORS IN THE COMPLETION OF THE WORK.
5. SHOW THE TIME REQUIRED FOR EACH ACTIVITY AND ITS RELATIONSHIP IN TIME TO OTHER ACTIVITIES.
6. SHOW THE TOTAL EXPECTED TIME TO COMPLETE ALL WORK.
7. SHOW THE EXPECTED WORK SHIFTS IN DAYS PER WEEK AND HOURS PER DAY AND THE DAYS WHEN WORK IS NOT EXPECTED TO BE PERFORMED. THE SCHEDULE MUST BE UPDATED, REVISED AND RESUBMITTED ON A MONTHLY INTERVAL UNTIL THE PROJECT IS SUBSTANTIALLY COMPLETE. THERE WILL BE NO DIRECT PAYMENT FOR THE CONTRACTOR-FURNISHED SCHEDULE. ALL COSTS ASSOCIATED WITH THE SCHEDULE MUST BE INCLUDED IN RELATED ITEMS. FAILURE TO PROPERLY SUBMIT THE REQUIRED CONSTRUCTION SCHEDULES WILL RESULT IN HOLDING OF PROGRESS PAYMENTS UNTIL AN APPROVED SCHEDULE IS RECEIVED.

EXPLORATORY EXCAVATION

PLANS REFLECT BEST AVAILABLE DATA AND ANY EXPLORATORY EXCAVATION TO IDENTIFY EXISTING SERVICE LINES, MAINS, PRIVATE UTILITIES, ETC. MUST BE CONSIDERED INCIDENTAL TO THE PROJECT. PLANS NOTE EXISTING SERVICES THAT WILL REQUIRE VERIFICATION OF LOCATION AND SIZE.

CERTIFICATION AND TESTING

SUBMITTALS AND CERTIFICATION DOCUMENTS RELATED TO THE WATER IMPROVEMENT PROJECT MUST BE PROVIDED TO THE ENGINEER FOR ALL MATERIALS DELIVERED TO THE SITE.

TRENCH EXCAVATION AND BACKFILL

THE CONTRACTOR MUST BE RESPONSIBLE FOR MAINTAINING A SAFE EXCAVATION COMPLYING WITH APPLICABLE STATE AND FEDERAL REGULATIONS. IT IS POSSIBLE THAT IN SOME AREAS SPECIAL FOUNDATIONS MAY BE REQUIRED TO PROVIDE ADEQUATE SUPPORT FOR THE PIPE. SUCH FOUNDATIONS WILL CONSIST OF SUB-EXCAVATION TO A DEPTH AS REQUIRED BY THE ENGINEER AND PLACEMENT OF FOUNDATION MATERIAL.

OPEN TRENCHES WILL NOT BE PERMITTED OVERNIGHT. DROP OFF AND SLOPE RESTRICTIONS LISTED IN THE SDDOT PLANS WILL APPLY TO ALL WATER AND SANITARY SEWER WORK AREAS. IF EXTRAORDINARY CIRCUMSTANCES REQUIRE OPEN TRENCHES OVER NIGHT, THE CONTRACTOR WILL FURNISH AND INSTALL CONCRETE BARRIERS AS APPROVED BY THE ENGINEER. THE COST FOR FURNISHING AND INSTALLING AND ANY INCIDENTALS TO THIS WORK WILL BE INCIDENTAL TO THE VARIOUS BID ITEMS. NO EXTRA PAYMENT WILL BE MADE.

TRENCH CHECK DAM

CONTRACTOR MUST PLACE WITHIN THE TRENCH A COMPACTED COHESIVE CLAY CHECK DAM. DURING CONSTRUCTION, CHECK DAM LOCATIONS MAY BE MOVED DUE TO FIELD CONDITIONS. THE CHECK DAM MUST EXTEND FROM THE BOTTOM OF THE EXCAVATION THROUGH THE BEDDING MATERIAL TO THE BACKFILL AND MUST EXTEND COMPLETELY TO EACH TRENCH SIDEWALL. THE CHECK DAM IS USED AS A MEANS TO

PREVENT THE CONVEYANCE OF WATER THROUGH THE TRENCH BEDDING. COMPACTED COHESIVE CLAY MUST CONSIST OF MATERIAL THAT CONTAINS A MINIMUM OF 25% MINUS NO. 200 SIEVE MATERIAL WITH 70% PASSING A 3/4" SIEVE AND A PI OF 10%. THE MATERIAL MUST CONSIST OF CLAY, SILTY SAND OR SILTY CLAY. IF THE NORMAL EXCAVATED MATTER IS NOT SUITABLE FOR CONSTRUCTION OF THE CHECK DAM, THEN THE CONTRACTOR MUST OBTAIN MATERIAL FROM OUTSIDE SOURCES. CHECK DAM INSTALLATION AND MATERIAL MUST BE CONSIDERED AS INCIDENTAL TO THE PIPE INSTALLATION.

PVC WATER MAIN PIPE

PIPE FOR WATER MAINS MUST BE PVC PRESSURE PIPE AND MUST CONFORM TO AWWA SPECIFICATIONS C-900, DR18. THE PIPE MUST MEET ALL OTHER REQUIREMENTS SPECIFIED IN THE STANDARD SPECIFICATIONS.

BOLTS FOR FITTING AND JOINT RESTRAINING DEVICES

BOLTS AND NUTS FOR WATER MAIN FITTING AND JOINT RESTRAINING DEVICES MUST BE SERIES 300 STAINLESS STEEL.

TEMPORARY WATER SERVICE

CONTRACTOR MUST PROVIDE TEMPORARY WATER SERVICE TO ALL HOMES ALONG PROJECT DURING PROJECT DURATION. ALL PIPING, FITTINGS, MAINTENANCE AND HOOKUPS MUST BE INCLUDED.

WATER SHUTOFF

MAXIMUM WATER SHUTOFF MUST BE 4 HOURS.

CONNECT TO EXISTING WATER MAIN

PAYMENT INCLUDED CONNECTING NEW WATER MAIN TO EXISTING WATER MAIN PER EACH, COMPLETE AND MUST CONSIDERED FULL COMPENSATION FOR ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, FITTINGS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

WARRANTY PERIOD

THE WARRANTY PERIOD FOR THIS PROJECT MUST START WHEN THE PROJECT IS COMPLETE. WARRANTY PERIOD 1 YEAR.

AS-BUILT PLANS

THE CONTRACTOR MUST MEASURE AND RECORD ANY HORIZONTAL OR VERTICAL DEVIATIONS FROM THE WATER IMPROVEMENT CONTRACT DRAWINGS. THE CHANGES MUST BE RECORDED IN AN ACCURATE, NEAT FASHION ON THE DRAWINGS AND FURNISHED TO THE ENGINEER UPON COMPLETION OF THE PROJECT. SPECIFICALLY, ALL CONNECTIONS, ANODES AND BURIED FITTINGS MUST BE RECORDED FOR THE WORK. THE AS-BUILT DRAWINGS MUST BE ON-SITE AND AVAILABLE FOR REVIEW BY THE ENGINEER UPON REQUEST.

EXISTING UTILITY CROSSINGS

REFER TO PLANS AND SPECIFICATIONS FOR CROSSINGS OF EXISTING STORM SEWERS, SANITARY SEWERS, WATER MAINS AND LOWERINGS. AT ALL LOCATIONS WHERE THE PROPOSED UTILITY IMPROVEMENT CROSSES OR IS ADJACENT TO EXISTING STORM SEWERS, SANITARY SEWERS, OR WATER MAINS, THE CONTRACTOR MUST BE RESPONSIBLE FOR SAFEGUARDING THE EXISTING UTILITIES TO ENSURE THAT THEY ARE NOT DISTURBED DURING THE WORK. TEMPORARY STRUCTURAL SUPPORT FOR THE UTILITIES MAY BE REQUIRED. NO SEPARATE PAYMENT MUST BE MADE FOR CROSSED UTILITY PROTECTION. ANY REPAIR WORK NECESSARY TO A CROSSED UTILITY RESULTING FROM THE CONTRACTOR'S ACTIVITY MUST BE AT THE CONTRACTOR'S EXPENSE.

REMOVALS AND SURFACE RESTORATION

REFER TO THE DOT CONSTRUCTION DOCUMENTS FOR REMOVALS AND SURFACE RESTORATION PER PROJECT EM-NH-CR 0018(195)103 US HIGHWAY 18 & P 0407(00)01 SD HIGHWAY 407.

DEWATERING

DEWATERING IS CONSIDERED INCIDENTAL.

CONSTRUCTION LIMITS

CONTRACTOR MUST CONFINE CONSTRUCTION WORK WITHIN THE CONSTRUCTION LIMITS DEFINED AS SHOWN. THE CONTRACTOR MUST NOT OPERATE OR PLACE EQUIPMENT, MATERIALS OR STOCKPILES ON PRIVATE PROPERTY WITHOUT THE PROPERTY OWNER'S WRITTEN CONSENT. THE CONTRACTOR MUST FURNISH A COPY OF OWNER'S WRITTEN CONSENT TO THE ENGINEER AND THE OWNER.

WASTE DISPOSAL

WASTE DISPOSAL SITE CONSTRUCTION AND/OR DEMOLITION DEBRIS MAY NOT BE DISPOSED OF WITHIN THE ROW. THE WASTE DISPOSAL SITE(S) MUST NOT BE LOCATED IN A WETLAND, WITHIN 200 FEET OF SURFACE WATER OR IN AN AREA THAT ADVERSELY AFFECTS WILDLIFE, RECREATION, THE AESTHETIC VALUE OF AN AREA, OR ANY THREATENED OR ENDANGERED SPECIES, AS APPROVED BY THE PROJECT ENGINEER. ALL COSTA ASSOCIATED WITH DISPOSING OF WASTE, MAINTAINING CONTROL OF ACCESS (FENCE, GATES AND SIGNS), AND RECLAMATION OF THE WASTE DISPOSAL SITES(S) MUST BE INCIDENTAL TO THE VARIOUS CONTRACT

RESIDENTS NOTIFICATION

CONTRACTOR MUST COORDINATE WITH IHS AND OST. WATER AND SEWER FOR RESIDENTIAL NOTIFICATIONS. OST SEWER AND WATER WILL PREPARE FLIERS AND RADIO ANNOUNCEMENTS TO BE RELEASED 2 WEEKS PRIOR TO ANY PLANNED WATER SERVICE OUTAGES.

COORDINATION

CONTRACTOR SHALL COORDINATE ALL WORK ON THE WATER MAIN PROJECT (PCN #X06L) WITH THE DOT ROAD PROJECT (PCN 04FC AND PCN 06N3).

BUILD AMERICA, BUY AMERICA PREFERENCE

THE BUILD AMERICA, BUY AMERICA REQUIREMENTS WILL APPLY TO THIS UTILITY PROJECT.

REVISION	
DATE	
NO.	

DRAFTED	MJK
REVIEWED	JRW
PROJECT NUMBER	2211-01441
ISSUE DATE	6/25/2024

PINE RIDGE WATER IMPROVEMENTS
OGLALA SIOUX TRIBE
PINE RIDGE, SOUTH DAKOTA
GENERAL NOTES





ESTIMATE OF QUANTITIES – PCN X06L

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	2.6	MGal
260E1030	Base Course, Salvaged	89.1	Ton
260E2030	Gravel Cushion, Salvaged	120.0	Ton
320E1200	Asphalt Concrete Composite	34.0	Ton
380E0050	8" Nonreinforced PCC Pavement	456.4	SqYd
380E6000	Dowel Bar	246	Each
380E6110	Insert Steel Bar in PCC Pavement	221	Each

SURFACING THICKNESS DIMENSIONS

Plans tonnage will be applied even though the thickness may vary from that shown on the plans.

At those locations where material must be placed to achieve a required elevation, plans tonnage may be varied to achieve the required elevation.

EXISTING PCC PAVEMENT

The existing concrete is Plain Jointed PCC Pavement. The existing transverse joints are perpendicular and are spaced at 20 feet. The aggregate in the existing Plain Jointed PCC Pavement is limestone.

GRAVEL CUSHION, SALVAGED

Gravel Cushion, Salvaged will be obtained from the stockpile site(s) provided by the Contractor and may be used without further gradation testing.

The Contractor will ensure the Gravel Cushion, Salvaged material contains no more than 40% salvaged asphalt mix material and at least 60% granular material (salvaged or virgin). Blended material will be to the satisfaction of the Engineer.

All other requirements for Gravel Cushion, Salvaged will apply.

ASPHALT CONCRETE COMPOSITE

Asphalt Concrete Composite will include MC-70 Asphalt for Prime placed at the rate of 0.30 gallons per square yard. The Asphalt for Prime will be applied to the Base Course, Salvaged for the full width of the bottom layer of Asphalt Concrete Composite plus one foot additional on the outside shoulder for a rural section or to match the width of the gutter.

Asphalt for tack SS-1h or CSS-1h will be applied prior to each lift of Asphalt Concrete Composite. Asphalt for tack will be applied at a rate of 0.09 gallons per square yard on existing pavement or milled asphalt concrete surfaces and at a rate of 0.06 gallons per square yard on primed base course or new asphalt concrete pavement. The Asphalt for tack will be applied for the full width of the bottom layer of Asphalt Concrete Composite plus one-half foot additional on the outside shoulder.

8" NONREINFORCED PCC PAVEMENT

The aggregate may require screening as determined by the Engineer.

The concrete mix will conform to the special provision for Contractor Furnished Mix Design for PCC Pavement.

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

In lieu of an automatic subgrader operating from a preset line, a motor grader or other suitable equipment may be used to trim the gravel cushion to final grade prior to placement of concrete. 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.

The surface of the mainline paving will be a heavy carpet drag. All other areas will be textured as directed by the Engineer. The surface of the mainline paving will receive a heavy carpet drag to within 2 or 3 feet of the face of the curb.

Unless specified otherwise in the PCC Pavement Joint Layout Sheets or elsewhere in the plans, the typical joint spacing for 8" Nonreinforced PCC Pavement will be 15'.

The transverse construction joints will be handled in accordance with the Special Details for PCC Pavement Transverse Construction Joints.

The transverse contraction joints will be perpendicular to the centerline. In multilane areas the transverse contraction joints will be perpendicular to the centerline and be in a straight line across the entire width of the pavement. In special situations the Engineer may pre-approve transverse contraction joints that do not meet these requirements. All nonconforming transverse contraction joints will be removed at the Contractor's expense. Any method of placement that cannot produce these requirements will not be allowed.

The location of joints, as shown and designated on the PCC Pavement Joint Layout(s) are only approximate locations to be used as a guide and to afford bidders a basis for estimating the construction cost of the joints. The final locations of the joints are to be designated by the Engineer during construction.

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.

CURING OF CONCRETE

Revised: 11Sep24, RML

Portland Cement Concrete Pavement, Concrete Curb & Gutter, Concrete Gutter, and Concrete Fillet will be cured with Linseed Oil Base Emulsion Compound. All costs for Curing of Concrete will be incidental to the contract unit price per various Portland Cement Concrete bid items.

TABLE OF 8" NONREINFORCED PCC PAVEMENT – PCN X06L

Location			8" NONREINFORCED PCC PAVEMENT
Sta	to	Sta.	(SqYd)
Mainline US Hwy 18 - South-North			
220+16.57	to	220+36.58	88.9
224+16.68	to	224+36.68	88.9
SD Hwy 407 - South-North			
212+97.20	to	214+50.11	278.6
Total:			456.4

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PINE RIDGE WATER IMPROVEMENTS
 OGLALA SIOUX TRIBE
 PINE RIDGE, SOUTH DAKOTA
GENERAL NOTES



ALKALI SILICA REACTIVITY

Fine aggregate will conform to Section 800.2 D Alkali Silica Reactivity (ASR) Requirements.

Below is a list of known fine aggregate sources and the average corresponding 14-day expansion values (as of 8-30-2023):

Source	Location	Expansion Value
Bachman	Winner, SD	0.335*
Bitterman	Delmont, SD	0.316*
Concrete Materials	Corson, SD	0.146
Concrete Materials - Vellek Pit	Yankton, SD	0.411**
Croell	Hot Springs, SD	0.089
Croell	Wasta, SD	0.212
Emme Sand & Gravel	Oneil, NE	0.217
Fisher S&G – Blair Pit	W of Vale, SD	0.171
Fisher S&G - Mickelson Pit	E of Nisland, SD	0.129
Fisher S&G - Vallery Pit	Nisland, SD	0.110
Fisher S&G	Rapid City, SD	0.092
Fisher S&G	Spearfish, SD	0.053
Fisher S&G	Wasta, SD	0.159
Fuchs	Pickstown, SD	0.275*
Henning – Tilstra Pit	Ash Creek, MN	0.199
Higman	Hudson, SD	0.187
Jensen	Herried, SD	0.276*
L.G. Everist	Akron, IA	0.257*
L.G. Everist	Brookings, SD	0.297*
L.G. Everist – Ode Pit	E Sioux Falls, SD	0.215
L.G. Everist – Nelson Pit	NE Sioux Falls, SD	0.156
L.G. Everist	Hawarden, IA	0.176
L.G. Everist	Summit, SD	0.184
Mark's S&G – Moerke Pit	Underwood, MN	0.165
Morris – Birdsall	Blunt, SD	0.229
Morris - Leesman	Blunt, SD	0.231
Morris - Richards Pit	Onida, SD	0.188
Morris - Shawn's Pit	E of Sturgis, SD	0.186
Northern Concrete Agg.	Rauville, SD	0.113
Northern Concrete Agg.	Luverne, MN	0.133
Opperman - Gunvordahl Pit	Burke, SD	0.363*
Opperman - Cahoy Pit	Herrick, SD	0.307*
Opperman - Jones Pit	Burke, SD	0.321*
Opperman - Randall Pit	Pickstown, SD	0.230
Pete Lien & Sons	Creston, SD	0.158
Pete Lien & Sons	Oral, SD	0.157
Pete Lien & Sons	Wasta, SD	0.226
Simon Materials - Beltline Pit	Scottsbluff, NE	0.277*
Thorpe Pit	Britton, SD	0.098
Wagner Building Supplies	Pickstown (Wagner), SD	0.251*
Winter Brothers- Whitehead Pit	Brookings, SD	0.197

* These sources will require Type II cement with a fly ash content of 25% in the concrete mix.
 ** These sources will not be used.

The Department will use the running average of the last three or fewer known expansion test results for determining acceptability of the source. These expansion results are reported in the preceding table. Additional testing, when requested by the Contractor, will be performed by the Department at the Contractor's expense.

The values listed in the table are intended for use in bidding. If a previously tested pit by SDDOT with a test value less than 0.250 is discovered after letting to be 0.250 or greater, then the Department will accept financial responsibility if higher costs are incurred due to higher percent of fly ash requirement.

STEEL BAR INSERTION

The Contractor will insert the Steel Bars (1 1/4 inch x 18 inch epoxy coated plain round dowel bars) 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 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.

TABLE OF STEEL BAR INSERTION – PCN X06L

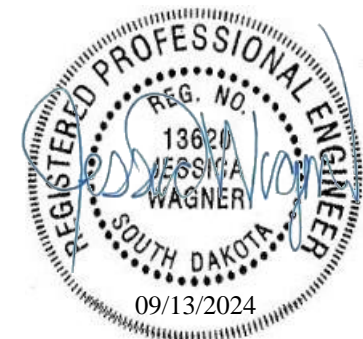
LOCATION	1-1/4" x 18" Plain Round Dowel Bars
US Hwy 18 North - South	
Sta. 220+16.58	40
Sta. 220+36.58	40
Sta. 224+16.68	40
Sta. 224+36.68	40
SD Hwy 407 North - South	
Sta. 212+97.20 to 214+50.11	61
Total:	221

TABLE OF DOWEL BARS – PCN X06L

Location	1 1/4" Bars
US Hwy 18	
Bars in Mainline - 12 bar	82
SD Hwy 407	
Bars in Mainline - 12 bar	164
Total Dowel Bars:	246

MANHOLE BOX-OUT DETAILS

The Contractor will construct box-outs for all manholes in the 8" Concrete Pavement according to the Box-Out Detail. Locations of Proposed Manholes and water valve boxes are shown on the Pavement Joint Layout Sheets.



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 PINE RIDGE, SOUTH DAKOTA
GENERAL NOTES



TABLE OF MATERIALS – PCN X06L

LOCATION Station to Station	WATER FOR GRANULAR MATERIAL (MGal)	GRAVEL CUSHION, SALVAGED (Ton)	BASE COURSE, SALVAGED (Ton)	ASPHALT CONCRETE COMPOSITE	
				1st Lift (Ton)	Top Lift (Ton)
Mainline US Hwy 18					
Sta. 220+16.58 to Sta. 220+36.57	0.3	23.4			
Sta. 224+16.68 to Sta. 224+36.68	0.3	23.4			
Mainline SD 407					
Sta. 212+03.39 to Sta. 212+97.2	1.1		89.1		
Sta. 212+97.20 to Sta. 214+50.11	0.9	73.2		17.0	17.0
Totals	2.6	120.0	89.1	34.0	

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