

September 30, 2009

NOTICE TO CONTRACTORS

Sealed bids will be received by the **South Dakota Department of Transportation, P.O. Box 1970, Rapid City, SD, 57709-1970** or may be hand delivered to the Rapid City Regional Office located at **2300 Eglin Street in Rapid City** until 1:00 pm, MT, Wednesday, October 14, 2009 for the following project:

<u>Proj. No.</u>	<u>County</u>	<u>Type of Work</u>	<u>Area Office</u>
P 7701(03)	Meade	Ground Anchor Retaining Wall	Rapid City

AVAILABILITY OF PLANS AND PROPOSALS:

Specifications and proposal forms are available at the Rapid City Regional Office and at the following website:
http://www.sddot.com/pe/projdev/bidlet_lettings_regional.asp

Contractors are encouraged to notify the Rapid City Regional Office at 394-2244 when they print plans. Their names will be added to a plan holders list and made available to the public.

Addendums, if any, will be made available on-line at the above website, no later than 48 hours prior to opening bids. It will be the Contractor's responsibility to check for addendums prior to submitting bids.

CONTENT OF PROPOSALS:

Returned Proposals shall include the following items all signed in ink:

1. A notarized Contract Proposal (DOT-123). Non-signature items shall be typed or completed in ink.
2. Participation by Minority Contractors Form
3. Contractor's Affidavit/Declaration.
4. Fuel Adjustment Affidavit

Proposals shall be in sealed envelopes and clearly marked on the outside as to the content when delivered to the Regional Office by the time indicated for Opening. Proposals faxed to the office will not be accepted.

Bidders will be required to fill out the blank spaces in the proposal form correctly. The bidder must fill in a unit price for each bid item shown on the proposal form. Bidders will also be required to carry out extensions and determine the "Total or Gross Sum Bid" as indicated in the proposal. The total of any proposal, as determined by the bidder, will be used only for a comparison when bids are publicly opened and read, and any errors noted in extensions or totals will be corrected to determine the "Total or Gross Sum Bid" of any proposal.

Failure to properly carry out any of the above requirements is deemed as sufficient reason to reject any proposal.

BONDING & INSURANCE:

A **bid bond** will not be required.

BONDING & INSURANCE (continued):

The successful bidder must provide a performance bond in the total amount of the contract prior to beginning work on the project as per section 3.5 of the Standard Specifications.

NOTE: A cashiers check, money order or other monetary instrument in the total amount of the contract, made out to and under the full control of the Department is acceptable in lieu of a performance bond. Such bond shall remain in effect for not less than one year after date of acceptance of the completed contract by the Department.

Unless the successful bidder already has a **Certificate of Insurance** on file in the Bid Letting Engineer's Office in Pierre, one must be furnished to the Region Office in Rapid City before work may begin.

PREQUALIFICATION:

Pursuant to South Dakota Administrative Rules 70:07:02; Classification and Bidding Capacity Rating for Highway Contracts, and Section 2.1 of the SDDOT Standard Specifications For Roads and Bridges, all bidders on highway construction projects over \$99,999.99 shall be prequalified. Maintenance stockpile projects are excluded from this requirement. A bidder who is not prequalified may submit an experience questionnaire prior to or with the bid letting. Copies of the experience questionnaire may be obtained from the Region DOT Office.

MISCELLANEOUS:

Bidders on projects let through the informal process (being let using a DOT 123 contract form) are excluded from having to submit a request for Plans and Bid Proposal form as required in Standard Specification Section 2.3, showing the bidders status at the time as to their ability to handle the work for which they are submitting a bid. All other portions of Section 2.3 are to remain in effect.

Any person engaged in highway construction work in the State of South Dakota must obtain a motor fuel highway contractor tax license.

The Department of Transportation in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, religion, national origin, sex, age or disability in consideration for an award.

The Contractor, by signing and submitting a bid or proposal, agrees to provide services in compliance with the Americans with Disabilities Act of 1990.

The Department of Transportation reserves the right to reject any and all bids.

DEPARTMENT OF TRANSPORTATION
Todd A. Seaman
Region Engineer

John Rehorst
Region Design Engineer

cc: S. Parmely	J. Humphrey	J. Hansen	M. Malone
M. Carlson	P. Knofczynski	D. Kinniburgh	S. Weisgram
M. Stone	R. Zacher	G. Engel	File
M. Leiferman	M. Reiss	T. Keller	

**SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
CONTRACT PROPOSAL**

DOT-123

(5/05)

CODE	PRE	PROJECT ROUTE	AGR	MAINT UNIT	CONTROL REFERENCE	AFE	FUNCTION	BEGIN MRM	END MRM
	P	7701	03			02JE			

CITY AND /OR COUNTY Meade BUDGET SOURCE FY10 Local Urban Systems
 FINALS ENGINEER REVIEW REQUIRED YES NO
 REGION MATERIALS CERTIFICATION REQUIRED YES NO
 CERTIFIED INSPECTORS/TESTERS REQUIRED YES NO
 TO BE INSTALLED ON THE CM&P YES NO
 TYPE, PURPOSE AND LOCATION OF WORK Ground Anchor Retaining Wall in Sturgis at Sly Hill Road

ESTIMATE OF QUANTITIES AND COST

BID ITEM NUMBER	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
009E0010	Mobilization	Lump Sum	LS		
120E0010	Unclassified Excavation	1,500	CuYd		
120E7000	Select Granular Backfill	1,200	Ton		
230E0020	Placing Contractor Furnished Topsoil	400	CuYd		
260E3010	Gravel Surfacing	140	Ton		
462E0200	Controlled Density Fill	85	CuYd		
630E1010	Straight Class A W Beam Guardrail w/ Wood Posts	300	Ft		
634E0100	Traffic Control	736	Unit		
634E0120	Traffic Control Miscellaneous	Lump Sum	LS		
730E0100	Cover Crop Seeding	1.0	Bu		
730E0210	Type F Permanent Seed Mixture	26	Lb		
732E0200	Fiber Mulching	1.0	Ton		
734E0102	Type 2 Erosion Control Blanket	1,000	SqYd		
734E0154	12" Diameter Erosion Control Wattle	350	Ft		
831E0300	MSE Geotextile Fabric	94	SqYd		
900E4750	C15x40 Steel Channel	182	Ft		
900E7050	4" Wood Lagging	2,670	SqFt		
900E7070	HP12x53 Soldier Pile	910	Ft		
900E8950	Ground Anchors	11	Each		
				TOTAL	

CONTRACTORS PROPOSAL STATEMENT

The undersigned does hereby agree to furnish the labor and/or material in the quantities, at the unit price, for the purpose and in the place all in accordance with attached provisions upon approval of this Proposal by the State Transportation Commission. This document becomes the contract when signed by the Contractor and a Department of Transportation Representative. The Contractor agrees to provide services in compliance with the Americans with Disabilities Act of 1990. The Contractor agrees to provide a certificate of insurance prior to commencing work, for liability coverage for the duration of the work as per the current edition of the SDDOT Standard Specifications for Roads and Bridges.

PROPOSED START DATE _____ **OVERALL COMPLETION DATE** 30 Working Days

SUBSCRIBED AND SWORN TO BEFORE ME THE
_____ **DAY OF** _____, 20_____

SIGNATURE _____
COMPANY _____
ADDRESS _____

NOTARY – My Commission Expires _____ **FED. TAX ID NUMBER** _____

RECOMMENDED FOR APPROVAL:

_____ **CONSTRUCTION/MAINTENANCE ENGR. DATE**

_____ **REGION ENGINEER DATE**

_____ **DIRECTOR OF OPERATIONS DATE**

APPROVED FOR THE TRANSPORTATION COMMISSION

NAME _____ **TITLE** _____ **DATE** _____

APPROVED as per Federal Highway Stewardship Provisions this _____ **day of** _____, 20____

_____ **PROJECT DEVELOPMENT ENGINEER**

NOTICE TO ALL BIDDERS

TO REPORT BID RIGGING ACTIVITIES, CALL: 1-800-424-9071

THE U.S. DEPARTMENT OF TRANSPORTATION (DOT) OPERATES THE ABOVE TOLL-FREE "HOTLINE" MONDAY THROUGH FRIDAY, 8:00 A.M. TO 5:00 P.M., EASTERN TIME. ANYONE WITH KNOWLEDGE OF POSSIBLE BID RIGGING, BIDDER COLLUSION, OR OTHER FRAUDULENT ACTIVITIES SHOULD USE THE "HOTLINE" TO REPORT SUCH ACTIVITIES.

THE "HOTLINE" IS PART OF THE DOT'S CONTINUING EFFORT TO IDENTIFY AND INVESTIGATE HIGHWAY CONSTRUCTION CONTRACT FRAUD AND ABUSE AND IS OPERATED UNDER THE DIRECTION OF THE DOT INSPECTOR GENERAL.

ALL INFORMATION WILL BE TREATED CONFIDENTIALLY AND CALLER ANONYMITY WILL BE RESPECTED.

REV. 3/30/09

PROJECT(S): P 7701(03)

PCN 02JE

COUNTY(IES): Meade

TYPE OF WORK: GROUND ANCHOR RETAINING WALL

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Special Provision for Contract Time, dated 9/17/09
Special Provision for Ground Anchor Retaining Wall, dated 9/09
Excerpts from Administrative Rules Regarding Differing Site Conditions, Provided for Informational Purposes,
dated June 10, 1997.
Special Provision for Subletting of Contract, dated 1/14/09.
Special Provision for Fuel Cost Adjustment, dated 9/12/08.
Special Provision for Suspension of Work, dated 2/13/04.
Standard Title VI Assurance, dated 7/14/08.
Special Provision For Disadvantaged Business Enterprise, dated 9/5/08.
Special Provision For EEO Affirmative Action Requirements on Federal and Federal-aid Construction
Contracts, dated 9/1/97.
Special Provision for Required Contract Provisions Federal-Aid Construction Contracts FHWA 1273
(March 10, 1994) dated 1/6/09.
Required Contract Provisions - Federal-aid Construction Contracts, Form FHWA 1273 (Rev. 3/10/94).
Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 7/24/08.
Wage and Hour Division US Department of Labor Washington DC.
- US Dept. of Labor Decision Number SD080009, dated 8/1/08.
Supplemental Specification for Errata, dated 11/15/06.
Supplemental Specification to Standard Specifications for Roads and Bridges, dated 11/19/08.
Special Provision for Price Schedule for Miscellaneous Items, dated 4/1/09.

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**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
CONTRACT TIME**

**PROJECT P 7701(03), PCN 02JE
LAWRENCE COUNTY**

SEPTEMBER 17, 2009

All work in the contract shall be completed within 30 working days.

The day count for the working day period shall begin when work begins or 14 calendar days after the date of the Notice to Proceed, whichever date is earlier. Working days shall be counted until the project has been completed. Working days will be counted in accordance with Section 8.6 of the Standard Specifications except that days will be charged until all work is completed including the period between December 1 and March 31 (inclusive).

Time extensions shall not be given unless extraordinary circumstances occur which substantially affect the controlling items of work. Time extensions shall not be allowed on a monetary basis for overruns or added work. Time extensions shall only be given if the Contractor can document a delay and justify the time extension request.

If the Contractor fails to complete the work by the overall completion date, within the working day completion requirements, or as amended by formally approved time extensions, the Department shall assess liquidated damages in accordance with Section 8.7 of the Standard Specifications.

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**PROJECT NO. 7701 (03), PCN 02JE
SLY HILL ROAD RETAINING WALL**

**STURGIS, SOUTH DAKOTA
SEPTEMBER 2009**

**GROUND ANCHOR
RETAINING WALL SPECIAL PROVISIONS**

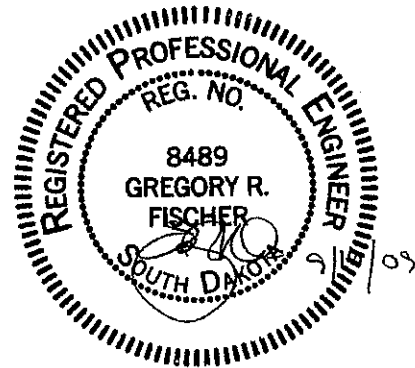
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SECTION 120

SELECT GRANULAR BACKFILL AND (MSE) GEOTEXTILE FABRIC

PART 1 - GENERAL

1.1 GENERAL

- A. This work shall consist of placing and compacting select granular backfill material behind the timber lagging facing of the wall, installing (MSE) geotextile fabric between the lagging and select granular backfill, and placing gravel road surfacing as shown in the Plans and as specified herein. The Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor and supervision, and manufacturing techniques required for this project.

1.2 CONSTRUCTION QUALITY ASSURANCE

- A. All aspects of wall construction will be monitored by the Construction Quality Assurance (CQA) Inspector. The CQA Inspector will perform material conformance testing as required. The Contractor shall be aware of the activities required by the CQA Inspector and shall account for these activities in the construction schedule. The Contractor shall correct all deficiencies and nonconformities identified by the CQA Inspector at no additional cost to the Owner.

PART 2 - MATERIALS

2.1 GENERAL

- A. The Contractor shall furnish the following materials utilized for the wall backfill according to these requirements:
1. Select Granular Backfill: All backfill material used in the structure shall be reasonably free from organic or otherwise deleterious materials and shall conform to the following gradation limits as determined by AASHTO T27:

<u>U.S. Sieve Size</u>	<u>Percent Passing</u>
1 ½ inch	100
1 inch	70-90
¾ inch	30-60
No. 4	0-15
No. 8	0-5

The backfill shall conform to the following additional requirements:

- (1) The plasticity index (P.I.) determined by AASHTO T90 shall not exceed 6.
- (2) Soundness – The materials shall be substantially free of shale or other soft, poor-durability particles.
2. (MSE) Geotextile Fabric: Geotextile fabric shall conform to specifications for woven or non-woven geotextile separator as specified in SDDOT Standard Specifications, Section 831.
3. Gravel Road Surfacing: Gravel road surfacing shall conform to specifications for gravel surfacing set forth in SDDOT Standard Specifications, Section 882.

PART 3 - EXECUTION

3.1 PLACEMENT AND COMPACTION OF SELECT GRANULAR BACKFILL AND GRAVEL ROAD SURFACING

- A. The zone of soil to be backfilled behind the wall shall be excavated behind the toe of the wall (at the backfill interface) at a 1H:1V (horizontal:vertical) slope. Timber lagging and geotextile fabric shall be installed to an elevation approximately 2 feet above the row of anchors prior to drilling and installing any production anchors. Backfill shall then be placed up to the wood lagging elevation (2 feet above the anchors) in such a manner as to avoid any damage to wall materials. Backfill should be dumped onto or parallel to the rear and middle of the backfill zone and bladed toward the front face of the wall.
- B. Backfill shall be compacted to 90 percent of the maximum relative density as determined by AASHTO T99 Method C or D (with oversize correction as outlined in Note 7 of that test) except the upper 2 feet. The upper 2 feet of backfill and the gravel road surfacing shall be compacted to 95 percent of the maximum relative density. The maximum lift thickness after compaction should not exceed one foot.
- C. With the exception of the 5-foot wide zone directly behind the lagging, smooth-drum, vibratory rollers should be used to obtain the specified compaction. Within 5 feet of the wall, a small, single- or double-drum, walk-behind vibratory roller or vibratory plate compactor should be used to obtain the specified compaction.
- D. At the end of each day's operation, the Contractor shall slope the level of the backfill away from the lagging to rapidly direct runoff away from the wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

3.2 (MSE) GEOTEXTILE FABRIC INSTALLATION

- A. Geotextile fabric shall be installed in rows running parallel to timber lagging. Subsequent panels shall be installed in shingle fashion with a minimum of six inches of overlap.
- B. Geotextile fabric shall be attached to timber lagging using nails in a manner that prevents tearing of the geotextile during construction activities.

END OF SECTION

SECTION 630

STRAIGHT CLASS A W BEAM GUARDRAIL WITH WOOD POSTS

PART 1 - GENERAL

1.1 GENERAL

- A. This work shall consist of furnishing and installing Straight Class A W Beam Guardrail with Wood Posts (guardrail). The Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor and supervision, and manufacturing techniques required for this project.
- B. Guardrail materials and installation procedures were taken from SDDOT Standard Specification 630.

1.2 EXISTING SITE CONDITIONS, UTILITIES, AND UNDERGROUND OBSTRUCTIONS

- A. The Contractor shall verify all existing dimensions and site conditions. The Contractor is responsible for field locating and verifying the locations and depths of all utilities and underground obstructions prior to starting the work. The Contractor shall notify the Engineer of utility conflicts and seek approval to shift guardrail post locations.
- B. The contractor is responsible for removing underground obstructions that may interfere with the installation of guardrail posts.

1.3 CONSTRUCTION QUALITY ASSURANCE

- A. All aspects of guardrail installation will be monitored by the Construction Quality Assurance (CQA) Inspector. The Contractor shall correct all deficiencies and nonconformities identified by the CQA Inspector at no additional cost to the Owner.

PART 2 - MATERIALS

2.1 GENERAL

- A. The Contractor shall furnish the following materials utilized for the guardrail installation according to these requirements:
 - 1. Wood Posts and Offset Blocks: Wood posts and offset blocks shall be made of a timber with a stress grade of at least 1200 psi. Stress grading shall be in

accordance with the rules of the West Coast Lumber Inspection Bureau, Southern Pine Inspection Bureau or other appropriate timber association. Timber for posts shall either be rough sawn or S4S with nominal dimensions indicated. The size tolerance of the posts in the direction parallel to the axis of the bolt holes shall not be more than $\pm 1/4$ inch. Posts and blocks with checks or cracks more than 1/4 inch wide and deeper than 3 inches will not be acceptable. Posts and blocks shall be treated as set forth in SDDOT Standard Specifications, Section 950, after all end cuts are made and holes are drilled.

2. Beam Guardrail: Beam guardrail shall conform to AASHTO M180, Type I.
3. Bolts, Nuts, and Washers: Bolts, nuts, and washers shall conform to AASHTO M180.
4. Concrete: Concrete shall conform to Class M6 (I28) as specified in SDDOT Standard Specifications, Section 462.

PART 3 - EXECUTION

3.1 EXISTING GUARDRAIL REMOVAL

- A. Beam guardrail removed, including steel beam rail, posts, blocks, and hardware shall become the property of the Contractor. Any holes after removal of the guardrail shall be backfilled with material furnished by the Contractor.
- B. The Contractor shall place a continuous line of concrete barrier wall at each location where guardrail is removed. The Contractor shall also place drums or Type II Barricades at 25-foot intervals where the guardrail is removed. These devices shall extend 175 feet beyond the item of concern for each direction of traffic. Drums or Barricades shall remain in place until new guardrail has been installed.

3.2 GUARDRAIL ALIGNMENT

- A. Posts and rail shall be set to the plan shown alignment using a string line or other approved methods.

3.3 POST INSTALLATION

- A. Posts shall be set plumb. When posts are installed in augered or dug holes, the holes shall be backfilled with material approved by the Engineer. The backfill shall be placed and compacted in 4 inch lifts, using a mechanical tamper with an appropriate sized tamping head without displacing the post alignment. Surplus excavated material will be disposed of at location approved by the Owner.
- B. The posts may be set by driving. Driving shall be accomplished by mechanical means, which will give the necessary accuracy of placement without any damage. Damaged posts shall be replaced at the Contractor's expense.

- C. Regardless of the method of setting posts, the posts shall be firm, and at the locations, spacing, and height shown on the plans.
- D. Field cuts in treated wood shall be given two applications of a compatible preservative material, meeting AWWA Standard MW, with a minimum time lapse of 2 hours between application. Field bored holes may be left untreated.

3.4 RAIL INSTALLATION

- A. The rail elements shall be ready for assembly when delivered to the project site. Welding of rail elements will not be allowed. Field cutting of rail elements shall be accomplished with a plasma cutter or other method approved by the Engineer. All field made cuts or holes shall be neat line. Rail elements that have been altered in the field or have been damaged in transporting, handling, or installing shall be repaired at the Contractor's expense. The altered or damaged surface of rail element shall be thoroughly cleaned and painted with two coats of matching zinc-rich paint.

END OF SECTION

SECTION 900

HP12x53 SOLDIER PILES

PART 1 - GENERAL

1.1 GENERAL

- A. This work shall consist of creating and maintaining shaft excavations, setting and bracing HP12x53 soldier piles into position, backfilling the shaft excavation and installing the timber lagging as shown in the Plans and as specified herein. The Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor and supervision, and manufacturing techniques required for this project.

1.2 SYSTEM DESCRIPTION

- A. The following conditions will require special attention:
 - 1. Cobbles, boulders, and hard shale may be encountered during drilling.
 - 2. Caving soil may be encountered during drilling. Use appropriate installation methods to stabilize the holes.

1.3 EXISTING SITE CONDITIONS, UTILITIES, AND UNDERGROUND OBSTRUCTIONS

- A. The Contractor shall verify all existing dimensions and site conditions. The Contractor is responsible for field locating and verifying the locations and depths of all utilities and underground obstructions prior to starting the work. The Contractor shall notify the Engineer of utility conflicts and seek approval to shift soldier pile locations.
- B. The Contractor is responsible for removing underground obstructions that may interfere with the installation of soldier piles.

1.4 CONSTRUCTION QUALITY ASSURANCE

- A. All aspects of wall construction will be monitored by the Construction Quality Assurance (CQA) Inspector. The CQA Inspector will perform material conformance testing as required. The Contractor shall be aware of the activities required by the CQA Inspector and shall account for these activities in the construction schedule. The Contractor shall correct all deficiencies and nonconformities identified by the CQA Inspector at no additional cost to the Owner.

PART 2 - MATERIALS

2.1 GENERAL

A. The Contractor shall furnish the following materials utilized for the soldier pile wall installation according to these requirements:

1. HP12x53 Steel Piling: The steel piling and any pile splicing materials shall conform to ASTM A572, Grade 50.
2. Cement: All cement shall be Portland cement Type II conforming to ASTM C150/AASHTO M85.
3. Controlled Density Fill: Controlled density fill shall be a flowable mortar material. Materials shall be in accordance with SDDOT Standard Specifications, except as modified below. The mix design shall be:

<u>Material</u>	<u>Rate per Cubic Yard</u>
Portland Cement, Type I	200 pounds
Fine Aggregate	2600 pounds
Coarse Aggregate	None
Water	35 Gallons
"W.R. Grace - Darafill" or approved equal	1 (3 ounce) capsule or equivalent*

*Shall be one 3 ounce capsule or equivalent CLSM performance additive (foaming admixture).

The fine aggregate shall be natural sand consisting of mineral aggregate particles conforming to the following gradation requirements:

<u>U.S. Sieve Size</u>	<u>Percent Passing</u>
3/8 inch	100
No. 200	0-10

The mix design shown above is designed to produce a minimum compressive strength of 100 psi. The Engineer may allow adjustments to the proportion of water at the site to provide the necessary consistency of the mix.

4. Lagging: Lagging shall be Douglas Fir Larch Grade 1 with a minimum tabulated unit stress in bending (Fb) of 1000 psi. Lagging shall be treated with water-borne preservatives conforming to AWWA Preservative Standard P-5 ACZA. Apply the preservative in a closed cylinder by pressure process - full cell method in accordance with AWWA Product Standard C2.
5. Temporary Casing: Temporary casing shall be produced by electric seam, butt or spiral welding to produce a smooth wall surface, fabricated from steel satisfying ASTM A252 Grade 2. The minimum wall thickness shall be as required to resist the anticipated installation stresses, as determined by the Contractor, but in no case less than 1/4 inch.

PART 3 - EXECUTION

3.1 EXCAVATION

- A. The Contractor shall coordinate the work and the excavation so that the soldier piles are safely constructed. Perform the soldier pile construction and related excavation in accordance with the Plans.

3.2 SOLDIER PILE ALLOWABLE CONSTRUCTION TOLERANCES

- A. Centerline of piling shall not be more than 3 inches from indicated plan location.
- B. Axial alignment of the piles shall be within 2 percent of total-length plan alignment.
- C. Top elevation of pile shall be plus 1 inch or minus 2 inch maximum from vertical elevation indicated.

3.3 SOLDIER PILE INSTALLATION

- A. The Contractor shall select the installation procedures necessary to complete the soldier piles. The Contractor shall also determine the final drilled shaft diameter. The minimum outside shaft diameter is shown on the Plans. If replacement soldier piles are needed because installed soldier piles are unacceptable, location of the replacement soldier piles shall be approved by the Engineer.

3.4 DRILLING

- A. The drilling equipment shall have adequate capacity, including power, torque, and down thrust to create a shaft excavation sufficient to install the soldier piles. The equipment shall be capable of drilling through the conditions to be encountered, without causing damage to any overlying or adjacent structures or services.
- B. The shaft must be open along its full length prior to placing the steel piling and controlled density fill. Temporary casing or other approved method of support will be required in caving or unstable ground to permit the pile shaft to be formed. The Contractor's proposed method(s) to provide shaft support shall prevent detrimental ground movement; detrimental ground movement is defined as movement that requires remedial repair measures.
- C. Drill so that the soldier pile is not moved out of horizontal alignment or out of specified inclination.

3.5 SOLDIER PILE PLACEMENT AND BACKFILLING

- A. The bottom of the drilled shaft shall have no more than 2 inches of loose or disturbed material prior to placing the soldier pile inside the shaft.
- B. The soldier pile shall be lowered into the drilled shaft and secured into the plan position in accordance with the tolerances specified.
- C. Placement of the controlled density fill within the shaft shall commence immediately after installation of the soldier piling. The controlled density fill shall be placed such that the free-fall is vertical down the shaft without disturbing the positioning of the soldier pile.
- D. Placement of the controlled density fill within the shaft shall occur prior to tensioning the ground anchors.

3.6 LAGGING INSTALLATION

- A. Lagging shall be installed from the top of the pile proceeding downward.
- B. Lagging shall make direct contact with the soil. Overexcavation required to place the lagging shall be kept to a minimum necessary to complete installation. Voids should be filled with coarse aggregate.
- C. In areas that do not require backfill behind the wall, the bottom of excavation for lagging installation shall not be more than 2 feet below tieback anchor level.

3.7 MONITORING

- A. The Contractor shall perform survey monitoring of the walls. Surveys shall be performed to determine the plan location and elevation of monitoring points before the start of construction and periodically throughout construction to evaluate movements resulting from construction activity.
- B. Monitoring points shall consist of bolts welded onto the soldier piles or cross-hairs scribed onto the face of the soldier piles. Survey accuracy shall be +/- 0.005 feet. Monitoring points shall be established at the top of soldier piles, at the midpoint between the ground anchor and bottom of excavation, and at the bottom of excavation.
- C. Monitoring points shall be surveyed and reported to the engineer. If any movements exceed 1-inch, the engineer shall be notified immediately, all activities shall be halted, and remedial measures implemented.
- D. Following construction, the Owner shall monitor the exposed face of the wall for ground loss below the bottom of lagging.

END OF SECTION

1.4 CONSTRUCTION QUALITY ASSURANCE

- A. All aspects of ground anchor installation will be monitored by the City of Sturgis Construction Quality Assurance (CQA) Inspector. The City of Sturgis CQA Inspector will perform material conformance testing as required. The City of Sturgis CQA Inspector will review ground anchor verification, performance, and proof testing results to verify compliance with acceptance criteria (See Section 3.7). The Contractor shall be aware of the activities required by the City of Sturgis CQA Inspector and shall account for these activities in the construction schedule. The Contractor shall correct all deficiencies and nonconformities identified by the City of Sturgis CQA Inspector at no additional cost to the Owner.

PART 2 - MATERIALS

2.1 GENERAL

- A. The Contractor shall furnish materials new and without defects. Defective materials shall be replaced at no additional cost. Materials for ground anchors shall consist of the following:
1. Admixture for Grout: Admixtures shall conform to the requirements of ASTM C494 or AASHTO M194. Admixtures that control bleed, improve flowability, reduce water content and retard set may be used in the grout, subject to the review and acceptance of the Engineer. Admixtures shall be compatible with the grout and mixed in accordance with the manufacturer's recommendations. Expansive admixtures shall only be added to the grout used for filling sealed encapsulations and anchorage covers. Accelerators are not permitted. Admixtures containing chlorides are not permitted.
 2. C15x40 Steel Channel: The steel channel (for ground anchor waler construction) shall conform to ASTM A572, Grade 50.
 3. C10x15.3 Steel Channel: The steel channel (connected to wood lagging, where holes are cut out in wood lagging for ground anchors) shall conform to ASTM A36/AASHTO M183.
 4. Cement: All cement shall be Portland cement conforming to ASTM C150/AASHTO M85, Type II.
 5. Centralizers and Spacers: Centralizers shall be placed at 10-foot intervals along the length starting at the end so that no less than 0.5 inches of grout cover is achieved along the anchor. Centralizers and spacers may be made of any material, except wood, not deleterious to the tendon steel.
 6. Corrosion Protection: Corrosion protection shall be in accordance with a Class I encapsulated tendon, as recommended by the Federal Highway Administration (FHWA), Ground Anchors and Anchored Systems Manual, Publication No. FHWA-IF-99-015.
 7. End Cap (Anchorage Cover): End caps shall be fabricated from steel with a minimum thickness of 0.09 inches. The joint between the end cap and the bearing plate shall be watertight.

8. Fine Aggregate: If sand-cement grout is used, sand shall conform to ASTM C144/AASHTO M45.
9. Grout: Neat cement or sand/cement mixture with a minimum 3-day compression strength of 2,500 psi and a minimum 28-day compressive strength of 4,000 psi per AASHTO T106/ASTM C109. Limit water-soluble chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
10. HP8x36 Steel Piling: The steel piling section (to connect the waler to the soldier pile) shall conform to ASTM A572, Grade 50.
11. Plates and Shapes: Steel bearing plates and other connection hardware shall conform to ASTM A36/AASHTO M183.
12. Sheaths: The unbonded length of a tendon is created by sheathing. The sheath must be resistant to chemical attack from aggressive environments, grout, or grease. It must be fabricated from material nondetrimental to the tendon and shall be capable of withstanding abrasion, impact, and bending during handling, installation, and testing. The material shall be fabricated from one of the following:
 - a. A polyethylene tube pulled or pushed over the prestressing steel. The polyethylene shall be Type II, III, or IV as defined by ASTM D1248 (or approved equal). The tubing shall have a minimum wall thickness of 0.06 inches.
 - b. A hot-melt extruded polypropylene tube. The polypropylene shall be cell classification B5542-11, as defined by ASTM D4101 (or approved equal). The tubing shall have a minimum wall thickness of 0.06 inches.
 - c. A hot-melt extruded polyethylene tube. The polyethylene shall be high density Type III, as defined by ASTM D1248 (or approved equal). The tubing shall have a minimum wall thickness of 0.06 inches.
13. Strand Anchors: Strand shall be in accordance with ASTM A416 and the Post-Tensioning Institute's Recommendations for Prestressed Rock and Soil Anchors. The tendon shall be sized so the design load does not exceed 60 percent of the minimum guaranteed ultimate tensile strength. In addition, the tendon shall be sized so the maximum test load does not exceed 80 percent of the minimum guaranteed ultimate tensile strength.
14. Tendon Bond Length Encapsulations: The tendon bond length encapsulation shall be fabricated from one of the following:
 - a. High density corrugated polyethylene tubing conforming to the requirements of AASHTO M252 and having a minimum wall thickness of 0.06 inches except pregrouted tendons which may have a minimum wall thickness of 0.04 inches.
 - b. Corrugated, polyvinyl chloride tubes manufactured from rigid PVC compounds conforming to ASTM D1784, Class 13464-B.
 - c. Fusion-bonded epoxy conforming to the requirements of AASHTO M 284.
15. Trumpet: The trumpet shall be fabricated from steel pipe conforming to the requirements of ASTM A53. The trumpet shall have a minimum wall thickness of 0.125 inches for diameters up to 4 inches and 0.20 inches for larger diameters. The trumpet shall be sealed to the bearing plate and shall overlap the unbonded length corrosion protection by at least 4 inches. The trumpet shall be completely

filled with grout or corrosion inhibiting compounds. Compounds may be placed at any time during construction. Compound filled trumpets shall have a permanent seal between the trumpet and the unbonded length corrosion protection. Grout must be placed after the ground anchor has been tested and stressed to the lock-off load. Trumpets filled with grout shall have either a temporary seal between the trumpet and the unbonded length corrosion protection or the trumpet shall fit tightly over the unbonded length corrosion protection for a minimum of 4 inches.

16. Water: Water used in the grout mix shall conform to AASHTO T 26 and shall be potable, clean, and free from substances that may be injurious to cement and steel.

PART 3 - EXECUTION

3.1 EXCAVATION

- A. The Contractor shall coordinate the work and the excavation so the ground anchors are safely constructed. Perform the ground anchor installation and related excavation in accordance with the Plans and approved submittals.

3.2 GROUND ANCHOR ALLOWABLE CONSTRUCTION TOLERANCES

- A. A tolerance of plus or minus 3 degrees will be permitted on the angle of inclination of the ground anchor.

3.3 GROUND ANCHOR INSTALLATION

- A. The Contractor shall select the drilling method and the grouting procedures used for the installation of the ground anchors. The Contractor shall also determine the drillhole diameter. The minimum outside drillhole diameter shall be 7 inches. If replacement ground anchors are needed because installed ground anchors are unacceptable, location of the replacement ground anchor(s) shall be approved by the Engineer.

3.4 DRILLING

- A. The drilling equipment and methods shall be suitable for drilling through the conditions to be encountered, without causing damage to any overlying or adjacent structures or services.
- B. The drillhole must be open or cased along its full length to at least the design minimum drillhole diameter prior to placing the tendon and grout. The Contractor's proposed method(s) to provide drillhole support shall prevent detrimental ground movement; detrimental ground movement is defined as movement that requires remedial repair measures.

- C. Drill so that the ground anchor is not moved out of vertical and horizontal alignment or out of specified inclination.

3.5 STRAND ANCHOR PLACEMENT

- A. The strand anchor shall be placed prior to tremie grouting. The anchor surface shall be free of deleterious substances such as soil, mud, grease or oil that might contaminate the grout or coat the strand and impair bond.
- B. The Contractor shall check horizontal positioning, vertical elevation, and inclination of the drill hole to ensure compliance with the specified tolerances.
- C. Centralizers and spacers shall be provided at 10 feet center-to-center maximum spacing. The upper centralizer shall be located a maximum of five feet from the top of the anchor bond length and the lower centralizer shall be located a maximum of one foot from the bottom of the anchor bond length. Centralizers and spacers shall permit the free flow of grout without misalignment of the strand anchor. The anchor with centralizers shall be lowered into the drill hole to the desired depth without difficulty. Partially inserted anchors shall not be driven or forced into the hole. Contractor shall redrill and reinsert anchor when necessary to facilitate insertion.

3.6 GROUTING

- A. Ground anchors shall be grouted the same day the load transfer bond length is drilled.
- B. Prior to grouting, the drillhole shall be flushed with air to remove drill cuttings.
- C. The Contractor shall use a stable neat cement grout or a sand cement grout with a minimum 28-day unconfined compressive strength of 4,000 psi. Admixtures, if used, shall be mixed in accordance with manufacturer's recommendations. The grouting equipment used shall produce a grout free of lumps and undispersed cement.
- D. Contractor shall have means and methods of measuring the grout quantity and pumping pressure during the grouting operations. The grout pump shall be equipped with a pressure gauge to monitor grout pressures. The pressure gauges shall be capable of measuring pressures of at least 150 psi or twice the actual grout pressures used, whichever is greater. The grout shall be kept in agitation prior to mixing. Grout shall be placed within one hour of mixing and shall be installed without significant interruption. The grouting equipment shall be sized to enable each anchor to be grouted in one continuous operation.
- E. The grout shall be injected from the lowest point of the drillhole and injection shall continue until uncontaminated grout flows from the top of the drillhole. The grout may be pumped through grout tubes, casing, or drill rods.

- F. The grout pressures and grout takes shall be controlled to prevent excessive heave or fracturing of rock or soil formations. Upon completion of grouting, the grout tube may remain in the hole, but must be filled with grout.
- G. Once grouting is complete, the anchor shall not be loaded for a minimum of 3 days.

3.7 GROUND ANCHOR LOAD TESTS

- A. Provide testing equipment with a movement-measuring device with a sensitivity of 0.001 inches of displacement. Provide a movement-measuring device with a minimum travel equal to the theoretical elastic elongation of the total anchor length plus 1-inch. Align the dial gauge so that its axis is within 5 degrees of the axis of the ground anchor being tested. Use a hydraulic jack and pump to apply the test load. Use a jack and pressure gauge calibrated by an independent testing laboratory as a unit with the pressure gauge graded to allow 100 psi increments. Use the pressure gauge to measure the applied load. Use a jack with ram travel not less than the theoretical elastic elongation of the total anchor length plus 1-inch. The jack shall be independently supported and centered over the tendon so that the tendon does not carry the weight of the jack. The Contractor shall have a second calibrated jack pressure gauge at the site. Calibration data shall provide a specific reference to the jack and the pressure gauge.
- B. One verification test shall be performed prior to installation of production anchors to confirm the appropriateness of the Contractor's drilling and installation methods, and verify the required nail pullout resistance.
- C. The Design Test Load (DTL) for the verification test shall be 92 kips. A 5-strand anchor with a minimum unbonded length of 7 feet and bond length of 10 feet shall be used.
- D. The verification test for the ground anchor shall be conducted in accordance with the following schedule:

AL = Alignment Load		HOLD TIME
	LOAD	
1	AL (0.05 DTL)	1 minute
2	0.25 DTL	10 minutes
3	0.50 DTL	10 minutes
4	0.75 DTL	10 minutes
5	1.00 DTL	10 minutes
6	1.25 DTL	10 minutes
7	1.50 DTL (Creep Test)	60 minutes
8	1.75 DTL	10 minutes
9	2.00 DTL	10 minutes
10	2.50 DTL or Failure	10 minutes max.
11	AL (0.05 DTL)	1 minute (record permanent set)

- E. The Alignment Load should be the minimum load required to align the testing apparatus and should not exceed 5 percent of the DTL. Dial gauges should be set to

zero after the alignment load has been applied. Following application of the maximum load (2.5 DTL) reduce the load to the Alignment Load and record the permanent set.

- F. Hold each load increment for at least 10 minutes. Monitor the verification test anchor for creep at the 1.50 DTL load increment. Measure and record movement during the creep portion of the test in increments of 1 minute, 2, 3, 5, 6, 10, 20, 30, 50, and 60 minutes. Maintain the load during the creep test within 2 percent of the intended load by use of the load cell.
- G. Performance tests shall be done in accordance with the following procedures. A minimum of two production ground anchors shall be performance tested. The first production anchor shall be performance tested.
- H. The performance test for the ground anchor shall be conducted in accordance with the following schedule:

AL = Alignment Load	
	LOAD
1	AL (0.05 DL)
2	0.25 DL
3	AL
4	0.25 DL
5	0.50 DL
6	AL
7	0.25 DL
8	0.50 DL
9	0.75 DL
10	AL
11	0.25 DL
12	0.50 DL
13	0.75 DL
14	1.00 DL
15	AL
16	0.25 DL
17	0.50 DL
18	0.75 DL
19	1.00 DL
20	1.25 DL
21	AL
22	0.25 DL
23	0.50 DL
24	0.75 DL
25	1.00 DL
26	1.25 DL
27	1.33 DL
Jack to lock-off load*	

*Lock-off load is 0.75 DL

The Alignment Load shall not exceed 5 percent of the Design Load. Dial gages shall be reset to zero after initial Alignment Load is applied. The maximum test load in a

performance test shall be held for ten minutes. The load-hold period shall start as soon as the maximum test load is applied and the anchor movement, with respect to the fixed reference, shall be measured and recorded at 1 minute, 2, 3, 4, 5, 6, and 10 minutes. If the anchor movement between one minute and ten minutes exceeds 0.04-inches, the maximum test load shall be held for an additional 50 minutes. If the load hold is extended, the anchor movement shall be recorded at 15 minutes, 20, 25, 30, 45, and 60 minutes. If an anchor fails in creep, retesting will not be allowed. All anchors not performance tested shall be proof tested.

- I. Proof tests shall be performed on the remaining production ground anchors by incrementally loading the ground anchor in accordance with the following schedule.

	LOAD
1	AL (0.05 DL)
2	0.25 DL
3	0.50 DL
4	0.75 DL
5	1.00 DL
6	1.25 DL
7	1.33 DL
Jack to lock-off load*	

*Lock-off load is 0.75 DL

The maximum test load in a proof test shall be held for ten minutes. The load-hold period shall start as soon as the maximum test load is applied and the anchor movement with respect to a fixed reference shall be measured and recorded at 1 minute, 2, 3, 4, 5, 6, and 10 minutes. If the anchor movement between one minute and ten minutes exceeds 0.04-inches, the maximum test load shall be held an additional 50 minutes. If the load hold is extended, the anchor movements shall be recorded at 15 minutes, 20, 25, 30, 45, and 60 minutes. If an anchor fails in creep, retesting will not be allowed.

- E. A verification tested ground anchor shall be considered acceptable when all of the following criteria are met:
1. The total creep movement is less than 0.08 inches between the 6- and 60-minute readings and the creep rate is linear or decreasing throughout the creep test load hold period.
 2. Total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the tendon unbonded length.
 3. A pullout failure does not occur at 2.5 DTL. Pullout failure is defined as the inability to further increase the test load while there is continued pullout movement of the test anchor. Record the pullout failure load as part of the test data.
- F. The acceptance criteria for a performance or proof tested ground anchor with a ten minute load hold is acceptable if the:
4. Ground anchor carries the maximum test load with less than 0.04-inches of movement between one minute and ten minutes; and

5. Total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the tendon unbonded length.
- G. The acceptance criteria for a performance or proof tested ground anchor with a 60 minute load hold is acceptable if the:
1. Ground anchor carries the maximum test load with a creep rate that does not exceed 0.08 inches/log cycle of time and is a linear or decreasing creep rate.
 2. Total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the tendon unbonded length.
- H. If a ground anchor fails to meet the acceptance criteria, the Contractor shall modify the design, the construction procedure, or both. These modifications may include installing replacement ground anchors, modifying the installation methods, increasing the bond length, or changing the ground anchor type. Any modification that necessitates changes to the structure shall require the Engineer's prior review and acceptance. At the completion of the test, the load shall be adjusted to the lock-off load indicated and transferred to the anchorage device. The ground anchor may be completely unloaded prior to lock-off. After transferring the load and prior to removing the jack a lift-off reading shall be made. The lift-off reading shall be within 10 percent of the specified lock-off load. If the load is not within 10 percent of the specified lock-off load, the anchorage shall be reset and another lift-off reading shall be made. This process shall be repeated until the desired lock-off load is obtained.

END OF SECTION

SECTION 910
GROUND ANCHORS

PART 1 - GENERAL

1.1 GENERAL

- A. This work shall consist of installing ground anchors as shown in the Plans and as specified herein. The Contractor is responsible for furnishing all materials, products, accessories, tools, equipment, services, transportation, labor and supervision, and manufacturing techniques required for installation and testing of ground anchors for the project.
- B. The Contractor shall select the ground anchor installation means and methods, and confirm the estimated soil-grout bond value by testing. The minimum drillhole diameter shall be 7 inches. The ground anchor load capacities shall be verified by testing and must meet the test acceptance criteria specified herein.

1.2 SYSTEM DESCRIPTION

- A. The following conditions will require special attention:
 - 1. Cobbles, boulders, and hard shale may be encountered during drilling.
 - 2. Caving soil may be encountered during drilling. Use appropriate installation methods to stabilize the holes.
 - 3. Water bearing layers may be encountered. Use appropriate installation methods to stabilize the holes.

1.3 EXISTING SITE CONDITIONS, UTILITIES, AND UNDERGROUND OBSTRUCTIONS

- A. The Contractor shall verify all existing dimensions and site conditions. The Contractor is responsible for field locating and verifying the locations and depths of all utilities and underground obstructions prior to starting the work. The Contractor shall notify the Engineer of utility conflicts and seek approval to shift ground anchor locations.
- B. The Contractor is responsible for removing underground obstructions that may interfere with the installation of ground anchors.

BIDDERS MUST COMPLETE & EXECUTE THE FOLLOWING

**DOT-289R/N
7/27/06**

**SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
Disadvantaged Business Enterprise (DBE) Assurance and
Intended DBE Participation**

PROJECT(S): P 7701(03)

PCN 02JE

COUNTY(IES): Meade

Policy: It is the policy of the USDOT and the South Dakota Department of Transportation that disadvantaged businesses, as defined in 49 CFR 26, shall have equal opportunity to participate in the performance of contracts financed in whole or part with federal funds. Consequently, the DBE requirements of 49 CFR Part 26 apply to this agreement.

Annual Goal: The Department's overall DBE goal is set annually. Individual contract goals will be assigned, as needed, to cumulatively result in meeting any portion of the overall goal by the end of the contract year that cannot be met through race-neutral means.

Contractor DBE Obligation: Though no race-conscious DBE goal is assigned this contract, each bidder shall affirmatively solicit DBE interest, capabilities and prices. Solicitation efforts (initial solicitation, follow-up contacts, sign-in at the DBE room and a letter summarizing your efforts) must be provided to the Department upon request. See Section I-D of the DBE Special Provisions for additional guidance. The contractor is obligated to consider DBE firms as potential subcontractors throughout the life of the contract, and if a quote is received from a DBE firm, the contractor may use all or part of their quote. Prime contractors bidding on projects of the Department agree to ensure that DBEs, as defined in 49 CFR Part 26, have equal opportunity to participate in the performance of contracts or subcontracts financed in whole or in part with federal funds. The prime contractor and its subcontractors shall not discriminate on the basis of race, color, religion, sex, national origin, age or disability in the award and administration or performance of contracts.

THE FOLLOWING SECTION IS TO BE USED TO LIST ALL INTENDED DBE PARTICIPATION FOR THIS CONTRACT:

List DBE firms by name. Provide the bid item numbers and a general description of the work performed, or materials to be furnished. The contractor must use the DBEs listed and for the intended work as indicated on the form. The low bidder must submit a "DBE Notification of Intent to Subcontract" Form 289B signed by each DBE listed on this form, and "Quoters on DOT Federal-Aid Contracts" Form 289C to the Bid Letting Office within 7 days of the bid opening.

For DBE trucking companies, list only the amount of hauling to be performed with each DBE's own trucks. DBE prime contractors list the work you will perform with your own forces, and any worked subcontracted or materials purchased from other DBEs.

DBE _____
Bid Item(s) _____
Work Description _____
\$ value = \$ _____
If regular dealer x 60% \$ _____

DBE _____
Bid Item(s) _____
Work Description _____
\$ value = \$ _____
If regular dealer x 60% \$ _____

BIDDER MUST EXECUTE THE FOLLOWING:

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

CONTRACTOR'S AFFIDAVIT / DECLARATION

PROJECT(S): P 7701(03) PCN 02JE

COUNTY(IES): Meade

(an individual)
(a partnership)
(a corporation)

do hereby certify that I, We or any owner or partner holding a controlling interest, director or officer of the bidder; principal investigator, project director or other position involved in management of the project for which this bid is submitted, have not directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for the project, and that within the last 3 years none of the above have been suspended, debarred, voluntarily excluded or determined ineligible by any federal or state agency, been indicted, convicted, or had a civil judgment rendered against any of the above or the business entity described herein by a court of competent jurisdiction in any matter involving fraud or official misconduct for which we are currently under suspension or debarment. Nor is a proposed suspension or debarment pending against any of the above for any of the above listed reasons.

* * * *

COMPLETE SIGNATURE BLOCK **A. or B.** BELOW:

A. Signed _____ (an individual)
(a partnership)
(a corporation)
By _____
Title _____
County of _____)
State of _____):SS

Subscribed and sworn to before me this _____ day of _____, 20_____.

(SEAL) _____
Notary Public My Commission Expires _____.

* * * *

B. Under the penalty of perjury under the laws of the United States, I hereby certify that the above statement is true and correct.

Signed _____ (an individual)
(a partnership)
(a corporation)
By _____
Title _____

CERTIFICATION REGARDING LOBBYING

I certify, to the best of my knowledge and belief, that: No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement. If any funds other than Federal appropriated funds have been paid or will be paid to any of the above mentioned parties, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty or not less than \$10,000 and not more than \$100,000 for each such failure.

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**EXCERPTS FROM ADMINISTRATIVE RULES REGARDING
DIFFERING SITE CONDITIONS PROVIDED FOR INFORMATIONAL PURPOSES**

June 10, 1997

70:01:05.01:01. Definitions. Words used in this chapter have the following meaning.

(6) "Differing site condition," a subsurface or latent physical condition encountered on the project which differs materially from that indicated in the contract or an unknown physical condition of an unusual nature which differs materially from that ordinarily encountered and generally recognized as inherent in the work provided for in the contract.

70:01:05.01:02. Examination of plans, specifications, special provisions, and site of work. The bidder shall examine the project site, proposal, plans, specifications, supplemental specifications, special provisions, and contract form for the work contemplated. The submission of a proposal is considered conclusive evidence that the bidder has investigated the conditions to be encountered, the character, quality, and quantities of work to be performed, and the materials to be furnished, according to all contract documents.

The Department is not contractually bound by any statement or representation concerning conditions made by any of its employees or agents prior to the execution of the contract, unless they are included in the proposal form, plans, specifications, supplemental specifications, special provisions, or related contract documents.

Boring logs and other records of subsurface investigations are available for inspection by bidders. Such information was obtained for and is intended for state design and estimating purposes. The Department does not guarantee the accuracy of the information. It is made available in order that all bidders may have access to identical subsurface information available to the Department. It is not intended as a substitute for personal investigation, interpretations or judgment of the bidders.

A bidder shall request any explanation he desires regarding the meaning or interpretation of the proposal form, plans, and specifications in sufficient time to allow a reply to reach all bidders before submission of their bid proposal. The Department shall make an interpretation in the form of an addendum to the proposal form and shall furnish it to all prospective bidders by certified letter, or return receipt by FAX, before the time set for opening of proposals. Oral explanations or instructions given before the award of the contract are not binding on the Department.

70:01:05.01:02.01. Differing site conditions. If a differing site condition is encountered at the project by the Department during the progress of the work, the engineer shall immediately notify the contractor in writing of the specific differing condition before it is disturbed and before affected work is performed. If a differing site condition is encountered at the project by the contractor, the contractor shall immediately notify the engineer in writing of the specific differing condition before it is disturbed and before affected work is performed.

After discovering a differing site condition and notifying the contractor or after being notified by the contractor of a differing site condition, the engineer shall investigate the condition. If the engineer determines that the condition materially differs and causes an increase or decrease in the cost or time required for the performance of any work under the contract, the engineer shall make an adjustment, excluding loss of anticipated profits, and modify the contract in writing accordingly. The engineer shall notify the contractor of his determination whether or not an adjustment of the contract is warranted.

A contract adjustment which results in a benefit to the contractor may not be allowed unless the contractor has provided the required written notice.

A contract adjustment may not be allowed under this section for any effects caused on unchanged work.

This section does not apply to material sources shown on the plans and as defined in Section 6 of the Standard Specifications for Roads and Bridges, most recent edition.

* * * *

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
SUBLETTING OF CONTRACT**

JANUARY 14, 2009

Delete Section 8.1 of the Standard Specifications for Roads and Bridges and replace with the following:

8.1 SUBLETTING OF CONTRACT - The Contractor shall not sublet, sell, transfer, assign, or dispose of the contract or contracts or any portion of them, without written consent of the Engineer. Each request to sublet shall be submitted on the form provided by the Engineer. The Contractor shall submit a request to sublet for any contracting firms a subcontractor proposes to use as a lower tier subcontractor. The Contractor shall obtain approval of each subcontractor before the start of the work performed by the subcontractor.

The Contractor will be permitted to sublet up to 50 percent of the contract amount, based on the contract unit prices, but shall perform work amounting to not less than 50 percent of the total contract amount with his own organization.

The Department will consider the Contractor's own organization to include only workers employed and paid directly by the Contractor, equipment owned or rented by the Contractor, and materials purchased by the Contractor for its use in performing Contract work. This does not include employees, equipment, or materials purchased by or incorporated into work of any subcontractor, assignee, or agent of the Contractor.

The Department will not consider as subcontracting the following; 1) any material produced outside the project limits including but not limited to the production of sand, gravel, crushed stone, batched concrete aggregates, ready mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any materials delivered by established and recognized commercial plants; or 2) delivery of these materials to the work site from an off-site location in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies. Project limits is defined as being within a 1/2 mile radius of the project proper.

Any items designated in the contract as "specialty items" may be performed by subcontract and the cost of designated specialty items performed by subcontract will be deducted from the total contract amount before computing

the amount of work required to be performed by the Contractor's own organization.

The Contractor shall give assurance to the Engineer that all pertinent provisions of the prime contract including minimum wage for labor shall apply to the work sublet. Subcontract, or transfer of contract, shall not relieve the Contractor of his responsibilities and liability under the contract and bonds.

* * * * *

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
FUEL COST ADJUSTMENT ON INFORMAL CONTRACTS
SEPTEMBER 12, 2008

Delete Section 9.12 of the Standard Specifications for Roads and Bridges and replace with the following:

General

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the contract shall be determined by the Engineer in accordance with the provisions set forth herein.

Compensation adjustments will be assessed for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the range of 85 percent to 115 percent of the Base Fuel Index (BFI). Compensation adjustments for burner fuel will only be made when asphalt concrete bid items are paid for on the estimate.

Bidders are required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Bidder shall submit the Fuel Adjustment Affidavit - Form DOT-208 to the Department when he submits a bid.

Determination of whether to participate in the Fuel Adjustment program is the decision of the Prime Contractor. If the Prime Contractor decides not to participate, or if he has a fixed fuel cost for any of the fuel types, no compensation adjustments will be made for the subcontractors by the Department. The Fuel Adjustment Affidavit shall include the anticipated fuel cost of subcontractors, if the Prime Contractor chooses to participate in the fuel cost adjustment program. If compensation adjustments are made, the prime contractor shall ensure that all subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Each week the Department will record the average wholesale price for No. 2 fuel oil (diesel), regular unleaded gasoline, and propane (LPG), Freight On Board (FOB) South Dakota terminals, as listed in the "Oil Price Information Service" (OPIS) publication.

The BFI price for motor fuels and burner fuel to be used in the contract will be the average of the recorded wholesale fuel prices for the four most recent weekly reporting periods prior to the week of the bid letting.

The CFI price for motor fuels and burner fuel to be used for each progress payment will be the average for the recorded wholesale fuel prices for the four most recent weekly reporting periods available at the time when the progress payment is prepared.

Burner fuel adjustment will use the BFI and CFI as determined for No. 2 fuel oil (diesel), except when the contractor lists the burner fuel as propane (LPG) on Form DOT-208, Fuel Adjustment Affidavit. In that case, the BFI and CFI will be as determined for propane (LPG).

Compensation adjustments will not be assessed for fuel items which the contractor has obtained a fixed fuel cost, or if the contractor elects not to participate in fuel adjustments on Form DOT-208, Fuel Adjustment Affidavit. Fixed fuel costs are defined as a fuel cost that has been set and will remain the same for the entire length of the contract.

Compensation adjustments made in accordance with these provisions may be made on progress payments without a prior approved Construction Change Order.

Fuel Cost Percentage Change

The biweekly change in fuel cost percentage will be determined by Equation 1 as follows:

Equation 1

$$Change_{(x, y, z)} = \left(\frac{CFI_{(x, y, z)} - BFI_{(x, y, z)}}{BFI_{(x, y, z)}} \right)$$

- (x) = Motor Fuel (Diesel)
- (y) = Motor Fuel (Unleaded)
- (z) = Burner Fuel

Change_(x, y, z) = Percent change in the respective fuel price compared to the Base Fuel Index Price set for the contract.

CFI_(x, y, z) = Current Fuel Index Price for the respective fuel type (\$\$).

BFI_(x, y, z) = Base Fuel Index Price for the respective fuel type (\$\$).

Contract Fuel Percentage

For the purpose of determining fuel cost adjustment, a percent of contract will be determined for Motor Fuel (Diesel), and Motor Fuel (Unleaded) based on the original

contract prices. Burner Fuel will be adjusted based on the original contract prices of the plant mix asphalt concrete pavement bid items.

The percent of the contract will remain the same throughout the length of the contract. No changes to this percentage will be allowed for any reason. The sum of the individual fuel costs shall not exceed 15% of the Original Contract Cost. The percent of the contract will be determined by Equation 2 as follows:

Equation 2

$$\% \text{ Contract}_{(x, y, z)} = \left(\frac{\text{Affidavit Cost}_{(x, y, z)}}{\text{Original Contract Cost}_{(x, y, z)}} \right) \times 100$$

- (x) = Motor Fuel (Diesel)
- (y) = Motor Fuel (Unleaded)
- (z) = Burner Fuel

- % Contract_(x,y,z) = Percent of contract for each respective fuel item.

- Affidavit Cost_(x,y,z) = Cost from Fuel Adjustment Affidavit (Form DOT-208)

- Original Contract Cost_(x,y) = Total of the original contract bid cost excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable (\$\$).

- Original Contract Cost_(z) = Total original contract cost for all plant mix asphalt concrete pavement bid items combined, excluding bid items for asphalt binder, hydrated lime, sawing and sealing joints, compaction samples, etc. Only bid items measured by the Ton will be included in the calculation.

Compensation Adjustment

The compensation adjustments will be determined for Motor Fuel (diesel), Motor Fuel (Unleaded), and Burner Fuel separately. The calculation will be based on the current Engineer’s pay estimate, the percent of the contract for each of the respective fuel items, and the portion of the Current Fuel Index price that falls outside the 85 to 115 percent range of the Base Fuel Index price.

When the “Change_(x, y, z)” from Equation 1 is greater than 15%, Equation 3 will be used to determine the compensation adjustment for each item as follows:

Equation 3

$$FCA_{(x,y,z)} = \frac{\% \text{ Contract}_{(x,y,z)}}{100} \times \text{Estimate Cost}_{(x,y,z)} \times (\text{Change}_{(x,y,z)} - 0.15)$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,y,z)}$	=	Fuel Cost Adjustment for the respective fuel item for the current Engineer's estimate (\$\$).
$\% \text{ Contract}_{(x,y,z)}$	=	Percent of contract for each respective fuel item (from Equation 2).
$\text{Estimate Cost}_{(x,y)}$	=	Amount to be paid on the biweekly pay estimate excluding all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages, and royalties.
$\text{Estimate Cost}_{(z)}$	=	Amount to be paid on the biweekly pay estimate for all plant mix asphalt concrete pavement bid items combined, excluding bid items for asphalt binder, hydrated lime, sawing and sealing joints, compaction samples, all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages, and royalties. Only asphalt concrete bid items measured by the Ton will be included in the calculation.
$\text{Change}_{(x,y,z)}$	=	Change in the respective fuel price compared to the Base Fuel Index price (from Equation 1).

When the “ $\text{Change}_{(x,y,z)}$ ” from Equation 1 is less than -15%, the Equation 4 will be used to determine the compensation adjustment for each item.

Equation 4

$$FCA_{(x,y,z)} = \frac{\% \text{ Contract}_{(x,y,z)}}{100} \times \text{Estimate Cost}_{(x,y,z)} \times (\text{Change}_{(x,y,z)} + 0.15)$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel

$FCA_{(x,y,z)}$	=	Fuel Cost Adjustment for the respective fuel item for the current Engineer's estimate (\$\$).
% Contract $_{(x,y,z)}$	=	Percent of contract for each respective fuel item (from Equation 2).
Estimate Cost $_{(x,y)}$	=	Amount to be paid on the biweekly pay estimate excluding all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages, and royalties.
Estimate Cost $_{(z)}$	=	Amount to be paid on the biweekly pay estimate for all plant mix asphalt concrete pavement bid items combined, excluding bid items for asphalt binder, hydrated lime, sawing and sealing joints, compaction samples, all pay adjustments made for incentive, disincentive, price adjustments, pay factor adjustments, liquidated damages and royalties. Only asphalt concrete bid items measured by the Ton will be included in the calculation.
Change $_{(x,y,z)}$	=	Change in the respective fuel price compared to the Base Fuel Index price (from Equation1).

Payment

Adjustments will be determined by the Engineer on biweekly progress payments based on when the completed work is paid for, not when the work is completed. Adjustments will be made by utilizing the following lump sum line items: Motor Fuel Cost Adjustment, Diesel; Motor Fuel Cost Adjustment, Unleaded; Burner Fuel Cost Adjustment, Propane; and Burner Fuel Cost Adjustment, Diesel.

* * * * *

For informational purposes, Form DOT-208 follows in Attachment A.

Attachment A

DOT-208
(09/08)

FUEL ADJUSTMENT AFFIDAVIT

Project Number _____
PCN _____
County _____

For formally let projects (projects let through the South Dakota Electronic Bid System), the Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Fuel Adjustment Affidavit shall include the anticipated fuel cost of subcontractors.

Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price? No adjustments in fuel prices will be made if "No" is checked.

Yes No

If yes, provide the total dollars for each of the applicable fuels. No adjustments in fuel price will be made for the fuel types that are left blank or completed with a \$0.00 value.

Diesel (x) \$ _____

Unleaded (y) \$ _____

Burner Fuel (z) \$ _____ Type of Burner Fuel Used: _____

Sum (x + y + z) = \$ _____

Note: The sum of the x, y, and z may not exceed 15% of the original contract amount.

The following must be completed regardless of whether the Contractor elects to participate in the fuel adjustment affidavit

Under the penalty of law for perjury or falsification, the undersigned, _____,
(Printed Name)
_____ of _____,
(Title) (Contractor)

hereby certifies that the documentation is submitted in good faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.

I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets, and other data pertinent to the justification of the fuel costs shown above.

Dated _____ Signature _____

Notarization is required only when the Contractor elects to participate in the fuel adjustment affidavit

Subscribed and sworn before me this _____ day of _____, 20____.

Notary Public

My Commission Expires

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
SUSPENSION OF WORK**

FEBRUARY 13, 2004

The following shall apply when suspension of the work is ordered by the Engineer.

If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/ or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the contractor's request in accordance with Section 5.17 and/or Section 8.6 of the Standard Specifications. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.

No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.

No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

**STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
TITLE VI AND NONDISCRIMINATION ASSURANCE
JULY 14, 2008**

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- (1) Compliance with Regulations: The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended (hereinafter referred to as the "Regulations"), incorporated by reference and made a part of this contract.
- (2) Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, religion, national origin, sex, age or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, religion, national original, sex, age or disability.
- (4) Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the South Dakota Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the South Dakota Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain this information.
- (5) Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the South Dakota Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including but not limited to:
 - (a) withholding of payments to the contractor under the contract until the contractor complies, and/or
 - (b) cancellation, termination or suspension of the contract, in whole or in part.
- (6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives pursuant thereto.

The contractor shall take such action with respect to any subcontract or procurement as the South Dakota Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that, in the event of a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the South Dakota Department of Transportation to enter into such litigation to protect the interest of the State, and, in addition, the contractor may request the United States to enter such litigation to protect the interests of the United States.

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
DISADVANTAGED BUSINESS ENTERPRISE**

SEPTEMBER 5, 2008

The South Dakota Department of Transportation (Department) shall not discriminate on the basis of race, color, religion, sex, national origin, age, or disability in the award and performance of any Federal-aid contract or in the administration of the Department's Disadvantaged Business Enterprise (DBE) program pursuant to the requirements of 49 CFR Part 26. The Department shall take all necessary and reasonable steps under 49 CFR Part 26 to prevent discrimination in the award and administration of Federal-aid contracts.

Upon notification to the Department of its failure to carry out its approved program the USDOT may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 USC 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 USC 3801 et seq.). Implementation of the DBE program is a legal obligation and a bidder's/Contractor's failure to carry out the terms of the DBE program shall be treated as a non-responsive bid or as a violation of the construction contract.

I. Definitions

- A. Specified Goal:** A DBE participation goal for a contract as indicated by a specific numerical percentage of the total dollar amount of the contract in the bidding documents.
- B. Not Specified Goal:** A DBE participation goal where the bidding documents do not list a specific numerical percentage but instead state 'Not Specified'. The contract participation goal will be determined by the amount of DBE participation, as committed to by the bidders for that contract, as required by Section II of this provision.
- C. Disadvantaged Business Enterprise (DBE):** A for-profit small business that has been certified by the Department and is listed in the DBE Directory available on the Department's web site.
- D. Good Faith Effort (GFE):** Efforts to achieve a DBE goal which, by their scope, intensity, and appropriateness to the objective, can reasonably be

expected to meet the objective of the Department's DBE program pursuant to 49 CFR 26.1.

- E. Positive Contact:** Communication between the bidder and the DBE in which an oral or written response is received from the DBE stating the DBE's intention to quote or not quote a project.
- F. Commitment:** The dollar amount of work to be subcontracted to DBEs, according to the bidder's bid. The commitment may be compared to the dollar amount of all contract items in the bidder's bid and expressed as a percentage of the total bid amount.

II. Bidding Requirements

Bidders shall not discriminate on the basis of race, color, religion, sex, national origin, age or disability in the solicitation and/or award to subcontractors and material suppliers. Bidders who demonstrate a pattern of possible discrimination through consistent and repeated under-utilization of DBEs may be subject to investigation and/or sanctions allowed by regulation, administrative rule or law. If a complaint is made that a low bidder has failed to solicit participation from or discriminated against a DBE in the solicitation or award to a subcontractor or supplier, the Department may, at its discretion, request the low bidder to submit documentation of the low bidder's solicitation efforts.

All bidders must include their DBE commitment for the contract in the bidding files provided by the Department, regardless of whether the contract includes a specified DBE contract goal, or is shown as 'Not Specified'.

For each contract, the low bidder must submit, with the low bidder's bid files, a bidder list of all subcontractors and suppliers (DBEs and non-DBEs) the bidder received quotes from for that contract.

Bidders shall make reasonable efforts to provide opportunities for DBEs to participate on Federal-aid contracts throughout the life of the contract.

On contracts let with a specified DBE contract participation goal, where the low bidder has not met or exceeded that goal, the bidder must provide GFE documentation as indicated in Section III.

On contracts let with a 'Not Specified' DBE contract participation goal, the low bidder's commitment will be compared to the average commitment for all eligible bidders to determine whether the low bidder's commitment is at least eighty percent (80%) of the average commitment.

If the low bidder's commitment is less than eighty percent (80%) of the average commitment, the bidder must submit GFE documentation for the project as specified in Section III of this Provision.

The low bidder must submit GFE documentation, when requested by the Department, within two (2) calendar days from the date the low bidder is contacted by the Department, not including Saturdays, Sundays, or official State holidays. Section III provides information on the types of action bidders should take as part of their GFE to obtain DBE participation. The low bidder may submit documentation with the bidding files provided all pertinent information is included. The low bidder must submit any missing documentation within two (2) calendar days from the date the Department contacts the low bidder.

If the low bidder does not provide documentation showing GFE as specified by this special provision, the Department will consider that bid nonresponsive and may either award the contract to the next lowest responsible bidder with a responsive bid, or reject all bids. Subsequent to the DBE committee's decision that the low bidder's efforts do not establish GFE the low bidder will be notified that the bid is not responsive. The low bidder will have two (2) working days from the date of notification to contact the Bid Letting Engineer to arrange a meeting with the Department Secretary, or the Secretary's designee, to present documentation and arguments about why the bid should not be rejected. The Department Secretary or the Secretary's designee will make a written decision on award of the contract within two (2) working days after the meeting.

If the low bid is rejected for failure to meet the GFE or other requirements, the next low responsible bidder shall be notified, unless all bids are rejected. The next low responsible bidder's DBE solicitation will also be reviewed, and GFE documentation may be requested. Unless all bids are rejected, award of the contract will be made to the lowest bidder with a responsive bid.

The lowest responsible bidder will be required to complete Form 289B, as included in the contract documents, when the contract is sent for signature. This form requires a signature from each DBE identified in the low bidder's bid. A separate form will be supplied for each DBE, and will be included in the contract documents.

Bidders are encouraged to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, materials, or other related services.

III. Good Faith Efforts

A. Contracts let with a 'Not Specified' goal

If a GFE package is requested on a contract with a 'Not Specified' goal (shown in the bidding documents as 'Not Specified'), the low bidder must submit documentation of the low bidder's efforts to the Bid Letting Engineer.

1. The low bidder shall submit a contact log of all solicitation efforts including:
 - Name of the DBE firm
 - Name and phone number of the individual with whom contact was made
 - Date, time, and manner of each and every contact (by phone, in person, fax, mail, e-mail, etc.)
 - The DBE's response to the solicitation
 - Result of the solicitation effort

An example of a solicitation log is available on the Department's Bid Letting website. When bidding utilizing the South Dakota Electronic Bidding System (SDEBS) software, the software may be used to document the log of solicitation efforts for the project.

2. The low bidder shall also submit documentation that shows GFE in relation to the following requirements:
 - a. The bidder must select contract work items to encourage DBE participation. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the bidder might otherwise prefer to perform these work items with its own forces.
 - b. The bidder must solicit all certified DBEs in the appropriate work classifications that are in the DBE directory and have indicated they are willing to work in the project's geographic area. If any DBE meeting these requirements has not been solicited, the bidder shall provide a detailed written explanation showing why the DBE was not solicited. Without exception, all DBEs listed on the plan holders list shall be solicited. Initial solicitation must be made at least seven (7) calendar days by mail, and five (5) calendar days by phone, fax or e-mail prior to the letting date to provide adequate time for the DBE to respond with a quote in the normal course of business.
 - c. If positive contact is not received, the bidder shall follow up the initial solicitation with a second solicitation to determine whether the DBE is interested in quoting. The second solicitation shall be made in sufficient time for the DBE to provide a reasonable quote. If positive contact is

not made after the second solicitation, at least one more contact by phone is required at least two (2) business days prior to the letting.

- d. The bidder shall provide interested DBEs with adequate and timely information about plans, specifications, and requirements of the contract to assist DBEs in responding to a solicitation.
- e. If a bidder rejects a DBE quote because of previous problems with a particular DBE, the bidder must prepare a detailed written explanation of the problem. Additional cost involved in finding and using DBEs is not, in itself, sufficient reason for a bidder to fail to meet the obligation of considering DBEs, as long as those costs are reasonable. Bidders must not reject DBEs as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities.
- f. Any additional information requested by the Department.

B. Contracts let with a specified goal

If a GFE package is requested on a contract with a specified goal, the low bidder must submit documentation of the low bidder's efforts to the Bid Letting Engineer.

Documentation in the GFE package shall comply with all of the requirements of Section III.A. In addition, the low bidder shall submit documentation that shows compliance with the following requirements:

1. The bidder must consider qualified DBEs whose quotes are reasonably competitive. If the bidder rejects any quote because it is considered not to be "reasonably competitive," the bidder must provide copies of all DBE and non-DBE quotes, and a work item price spreadsheet comparing DBE quotes to non-DBE quotes. The spreadsheet must show which quote was included in the bid for the work items being compared. The ability or desire of a bidder to perform the work with its own forces does not relieve the bidder of the responsibility to make GFE. In the event a bidder elects to use its own forces over a DBE, the bidder must include, on the spreadsheet, documentation of the costs of using its own forces. This can be shown in a number of ways, which may include submitting portions of the bidder's work sheets used to prepare the bid.
2. The bidder must explain why the specified goal could not be met.
3. The bidder must identify any additional efforts the bidder made to secure DBE participation.

IV. Counting DBE Participation

The contract commitment, as submitted with the bid, shall be included on Form 289R/N or 289R/C as included in the contract documents.

Only the portion of a contract that is performed by the DBE's own forces will count toward DBE participation. Included is the cost of supplies and materials obtained by the DBE for the contract, including supplies purchased or equipment leased by the DBE. Including supplies and equipment the DBE subcontractor purchased or leased from the Contractor or its affiliate is not allowed.

When a DBE performs as a participant in an approved joint venture, only the portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces will count toward DBE participation.

A bidder may count toward its DBE participation only that percentage of expenditures to DBEs that perform a commercially useful function (CUF) in the performance of a contract. A DBE performs a CUF when it is responsible for execution of the work of a contract and is carrying out its responsibilities by actually performing, managing and supervising the work involved. To perform a CUF, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating prices, determining quality and quantity, ordering and installing (where applicable) the materials, and paying for the material itself. To determine whether a DBE is performing a CUF, the Department will evaluate the amount of work subcontracted, industry practice, whether the amount the DBE is to be paid is commensurate with the work it is actually performing, DBE credit claimed for performance of the work, and other relevant factors.

A DBE is not performing a CUF if it performs less than 30% of the total cost of its contract with its own work force, or if its role is limited to that of an extra participant in a transaction, project, or contract through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is simply an extra participant, the Department will examine similar transactions, particularly those in which DBEs do not participate.

DBE participation will be counted for trucking services as follows:

The bidder/Contractor will receive credit toward DBE participation for the total value of the transportation services the DBE provides on the contract using trucks the DBE owns, insures, and operates which are driven by drivers the DBE employs.

A DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. When a DBE leases trucks from another DBE, the

bidder/Contractor can count the total value of the transportation services the lessee DBE provides on the contract toward DBE participation.

The DBE may also lease trucks from a non-DBE firm, including an owner-operator. When a DBE leases trucks from a non-DBE, the bidder/Contractor can count toward DBE participation only the fee or commission the DBE receives as a result of the lease arrangement. The bidder/Contractor does not receive credit toward DBE participation for the total value of the transportation services, since all services are not provided by a DBE.

The bidder may count toward DBE participation expenditures to DBE firms for materials, supplies, or services as follows:

If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE participation. A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of general character described by the specifications.

If the materials or supplies are purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE participation. A regular dealer is a firm that owns, operates, or maintains a store, warehouse or other establishment in which the materials, supplies, articles, or equipment are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

If the materials or supplies are purchased from a DBE which is neither a manufacturer nor a regular dealer, count only the amount of fee or commission charged for assistance in the procurement of the materials or supplies or fee or transportation charges for the delivery of materials or supplies required at the job site toward DBE participation. In order to be counted, the Department must determine the fee to be reasonable and not excessive as compared to fees customarily allowed for similar services. The cost of the materials and supplies themselves will not count toward DBE goals.

The Department will not count toward DBE participation materials or services provided by a DBE who is not currently certified.

Any intended or actual subcontracting arrangement which is contrived to artificially inflate DBE participation is not allowed. This includes, but is not limited to, DBE middlemen which serve no commercially useful function, or arrangements where a DBE is acting essentially as a broker of goods or services, but has been counted as a manufacturer, regular dealer, or subcontractor.

The Department will review and monitor projects for compliance with the bidder's intended DBE participation. Failure by the Contractor to fulfill the contract commitment constitutes a breach of contract. The Department may also investigate the form and substance of particular business arrangements between and among DBE and Contractors with regard to specific contracts. If, as a result of an investigation, the Department determines that a particular business arrangement is not allowable, the dollar amount of the unallowable DBE participation shall be subtracted from the Contractor's DBE participation on that project. The Contractor will be notified if the apparent DBE participation is not adequate to meet the DBE participation stated on the 289R/C or 289R/N Form. The Contractor will be directed to seek additional participation from other DBEs to meet the unallowable portion on that contract.

In cases where it is determined that a Contractor was a knowing and willing participant in a business arrangement determined by the Department to be unallowable, or in the event of repeated violations, falsification or misrepresentation, the Department shall provide for imposition of sanctions. Sanctions may include, but are not limited to one or more of the following:

- Assessment of liquidated damages as stated in Section V below

- Suspension of bidding privileges or debarment

- Withholding progress payments

- Securing additional DBE participation on future Federal-aid contracts sufficient to make up for the DBE participation found to be unallowable

- Referral of the matter for criminal prosecution

The Contractor shall maintain a running tally of payments to DBEs to make available to the Department. Within thirty (30) calendar days of physical completion of the project the Contractor shall submit a DOT-289 (Certification of DBE Participation) listing all DBE firms that participated in this contract, and report the total dollar amount paid (and anticipated to be paid) to each. The Contractor's final payment will not be released until receipt of the DOT-289.

V. Liquidated Damages

A. If the Contractor has failed to meet its contract commitment, the Department shall assess liquidated damages according to the following schedule:

1. For the first \$1,000 DBE deficiency, one hundred percent (100%) of the deficiency.

2. For the next \$9,000 DBE deficiency, fifty percent (50%) of the deficiency.
3. For the next \$10,000 DBE deficiency, twenty five percent (25%) of the deficiency.
4. For any remaining DBE deficiency, ten percent (10%) of the deficiency.

This liquidated damage provision shall not be applicable where actual payment to a DBE is within ninety percent (90%) of the commitment, or where there are good and sufficient reasons, properly documented, for the deficiency such as quantity under-runs, project changes, or other unexpected occurrences.

- B.** If a Contractor finds it impossible, for reasons beyond his control, to meet the contract commitment on Form 289R/C or 289R/N, the Contractor may, at any time prior to completion of the project, provide a written request to the DBE Compliance Officer for a complete or partial waiver of liquidated damages. Any request for a waiver will not be accepted after Acceptance of Field Work has been made.

VI. Contractor Utilization of Subcontractors and Suppliers

Except as otherwise provided in this provision, each DBE firm listed on Form 289R/C or 289R/N will perform the work specified (or provide materials or services as indicated), and at the dollar levels specified.

Substitutions of DBEs reported on Form 289R/C or 289R/N are not allowed, except for performance or scheduling problems on the part of the DBE, or if the DBE has requested to be removed from that particular contract. Substitution shall not take place without written approval by the DBE Compliance Officer.

The Contractor must provide timely notification to the DBE Compliance Officer of the reason(s) for the substitution. Prior to approval by the DBE Compliance Officer, the Contractor must also provide documentation showing reasonable efforts to replace the designated DBE with another DBE.

In instances where time is critical to project progress, this process may be handled verbally, with written confirmation to follow.

If the Contractor fails to make payments to DBEs as required, liquidated damages shall be assessed as specified in Section V. In addition, if the Contractor is found to have knowingly and willingly attempted to circumvent the DBE contract provisions, sanctions referred to in Section IV will be imposed.

All Contractors and DBEs participating in Federal-aid contracts are expected to cooperate fully and promptly with the Department in compliance reviews,

investigations, and other requests for information. Failure to do so shall be grounds for appropriate sanctions or action against the party as indicated in Section IV. The DBE Compliance Officer will enforce compliance with contract requirements regarding the use of DBE subcontractors and suppliers. The DBE Compliance Officer, or said officer's designee, may conduct compliance reviews on selected projects each year to verify compliance by Contractors. Violations will be handled in accordance with contract provisions and statutory or regulatory requirements.

* * * * *

**SPECIAL PROVISION FOR
EEO AFFIRMATIVE ACTION REQUIREMENTS ON
FEDERAL AND FEDERAL-AID CONSTRUCTION CONTRACTS**

SEPTEMBER 1, 1997

APPENDIX A

Notice or Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE

Aurora	0.8%	Fall River	7.9%	Marshall	1.3%
Beadle	0.8%	Faulk	1.3%	Meade	3.4%
Bennett	7.9%	Grant	1.3%	Mellette	7.9%
Bon Homme	1.2%	Gregory	0.8%	Miner	0.8%
Brookings	0.8%	Haakon	7.9%	Minnehaha	1.2%
Brown	1.3%	Hamlin	1.3%	Moody	0.8%
Brule	0.8%	Hand	0.8%	Pennington	3.4%
Buffalo	7.9%	Hanson	0.8%	Perkins	7.9%
Butte	7.9%	Harding	7.9%	Potter	7.9%
Campbell	7.9%	Hughes	7.9%	Roberts	1.3%
Charles Mix	0.8%	Hutchinson	0.8%	Sanborn	0.8%
Clark	1.3%	Hyde	7.9%	Shannon	7.9%
Clay	1.2%	Jackson	7.9%	Spink	1.3%
Codington	1.3%	Jerauld	0.8%	Stanley	7.9%
Corson	7.9%	Jones	7.9%	Sully	7.9%
Custer	7.9%	Kingsbury	0.8%	Todd	7.9%
Davison	0.8%	Lake	0.8%	Tripp	7.9%
Day	1.3%	Lawrence	7.9%	Turner	0.8%
Deuel	1.3%	Lincoln	0.8%	Union	1.2%
Dewey	7.9%	Lyman	7.9%	Walworth	7.9%
Douglas	0.8%	McCook	0.8%	Yankton	1.2%
Edmunds	1.3%	McPherson	1.3%	Ziebach	7.9%

GOALS FOR FEMALE PARTICIPATION IN EACH TRADE

Statewide - - - - - 6.9%

These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project

for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor when requesting permission to sublet shall provide written notification to the Department of Transportation as specified in Section 8.1 of the Standard Specifications for Roads and Bridges. When the subcontract is in excess of \$10,000, the request for permission to sublet shall list the name, address and telephone number of subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed. The Department of Transportation will then provide written notification to the Director of the Office of Federal Contract Compliance Programs through proper channels.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is as shown by county designation on the Title Sheet of the plans.

APPENDIX B

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (I) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (II) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (III) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (IV) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed

as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office, from Federal procurement contracting officers or from the South Dakota Department of Transportation. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and maintain a record of the organization's responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or if referred, not employed by the Contractor, this shall be documented in the file with the reason thereof, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc., by specific review of the policy

with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligation.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group, has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goal and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply,

however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

* * * *

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION FOR
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA 1273 (MARCH 10, 1994)**

JANUARY 6, 2009

The following are amendments to the above contract provisions.

Section IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

Delete the first paragraph and replace with the following:

Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts.

Section IV.4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

Remove the words "and Helpers" from this title.

Section IV.4.c. Helpers:

Delete this paragraph in its entirety.

Section IV.6 & 7 & Section V.2.a., c. & d. (2)

Delete all reference to the word "helper" or "helpers" from these paragraphs.

Section V. STATEMENTS AND PAYROLLS

Delete the first paragraph and replace with the following:

Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts.

Section V.2.b.

Delete the first sentence and replace with the following:

The payroll records shall contain the name, individual identification number (e.g. the last four digits of the employee's social security number), social security number, and address of each such employee; his or her current classification; hourly rates of wages paid (including rates of contributions or cost anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid.

Section V.2.c.

Delete this paragraph in its entirety and replace with the following:

- c. Each contractor and subcontractor shall submit weekly, for each week in which any contract work is performed, to the Labor Compliance Officer, a payroll of wages paid each of its employees. The

address of the Labor Compliance Officer is: South Dakota Department of Transportation, Office of Labor Compliance, 700 East Broadway Avenue, Pierre, SD 57501-2586. The payroll submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), [paragraph 2b of this Section V], except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individual identification number for each employee. The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the State Highway Agency if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

Section V.2.d.(1)

Delete this paragraph in its entirety and replace with the following:

- (1) that the payroll for the payroll period contains the information required to be provided under Section 5.5(a)(3)(i) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Section 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

Section V.2.f.

Delete this paragraph in its entirety and replace with the following:

- f. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

Section VI RECORD OF MATERIALS, SUPPLIES, AND LABOR

Delete this section in its entirety.

Section VIII - (Regarding Engineer Authority for Safety)

“Under the required contract provisions for federal-aid construction contracts, Section VIII, first paragraph, the State highway department contracting officer, his representatives and agents shall not determine what safeguards, safety devices, protection equipment or other needed actions are reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the work covered by the contract unless the contrary is specifically indicated in writing in the plans, construction change orders or in the proposal.”

* * * * *

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4, and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full

efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wagedetermination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

* * * *

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION REGARDING
MINIMUM WAGE ON FEDERAL-AID PROJECTS**

JULY 24, 2008

This proposal contains the most recent Davis-Bacon prevailing wage rates established by the United States Department of Labor (copy enclosed).

The Contractor and related subcontractors on this project shall pay their employees at least the highest wage listed for each job classification according to the county(ies) in which the work is actually performed.

* * * * *

**Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210**

Davis-Bacon Act Wage Decisions

State: South Dakota

Construction Types: Heavy and Highway

CONTRACTORS MUST PAY AT LEAST THE **HIGHEST WAGE** FOR THE JOB CLASS ATTENDING THE COUNTY IN WHICH THE WORK IS PERFORMED.

Agency: U.S. DOL
Decision Number: SD080009
Counties: All except: Minn, Penn. & Lincoln Co's
Date: 08/01/2008

* SUSD2008-001			
U.S. DOL <u>SD080009</u>		U.S. DOL <u>SD080009</u>	
<u>Rates</u>	<u>Fringes</u>	<u>Rates</u>	<u>Fringes</u>
14.12	0.00	14.19	0.00
15.75	0.00	15.79	0.00
17.50	0.00	17.47	0.00
20.53	0.00	20.44	0.00
19.58	0.00	19.41	0.00
14.98	0.00	15.19	0.00
16.57	0.00	16.58	0.00
18.18	0.00	18.09	0.00
18.63	0.00	18.62	0.00
20.92	0.00	20.88	0.00
14.57	0.00	14.75	0.00
17.15	0.00	17.22	0.00
20.25	0.00	20.29	0.00

LABORERS

GROUP GL1

Air Tool Operator; Common Laborer; Landscape Worker; Flagger; Pilot Car Driver; Trucks under 26,000 GVW; Blue-top Checker; Materials Checker

GROUP GL2

Mechanic Tender (Helper); Pipe Layer (except culvert); Form Builder Tender; Special Surface Finish Applicator; Striping

GROUP GL3

Asphalt Plant Tender; Pile Driver Leadsman; Form Setter; Oiler/Greaser

GROUP GL5

Carpenter; Form Builder

GROUP GL6

Concrete Finisher; Painter; Grade Checker

POWER EQUIPMENT OPERATORS

GROUP G01

Concrete Paving Cure Machine; Concrete Paving Joint Sealer; Conveyor; Tractor (farm type with attachments); Self Propelled Broom; Concrete Routing Machine; Paver Feeder; Pugmill

GROUP G02

Bull Dozer 80 HP or less; Front End Loader 1.25 CY or less; Self Propelled Roller (except Hot Mix); Sheepsfoot/50Ton Pneumatic Roller; Pneumatic Tired Tractor or Crawler (includes Water Wagon and Power Spray units); Wagon Drill; Air Trac; Truck Type Auger; Concrete Paving Saw

GROUP G03

Asphalt Distributor; Bull Dozer over 80 HP; Concrete Paving Finishing Machine; Backhoes/Excavators 20 tons or less; Crusher (may include internal screening plant); Front End Loader over 1.25 CY; Rough Motor Grader; Self Propelled Hot Mix Roller; Push Tractor; Euclid or Dumpster; Material Spreader

GROUP G04

Asphalt Paving Machine Screed; Asphalt Paving Machine; Cranes/Derricks/Dragnines/Pile Drivers/Shovels 30 to 50 tons; Backhoes/Excavators 21 to 40 tons; Maintenance Mechanic; Scrapers

GROUP G05

Asphalt Plant; Concrete Batch Plant; Backhoes/Excavators over 40 Tons; Cranes/Derricks/Dragnines/Pile Drivers/Shovels over 50 tons; Heavy Duty Mechanic; Finish Motor Grader; Automatic Fine Grader; Milling Machine; Certified Welder

TRUCK DRIVERS

GROUP GT1

Tandem Truck without trailer or pup; Single Axle Truck over 26,000 GVW with Trailer

GROUP GT2

Semi-Tractor and Trailer; Tandem Truck with Pup

ELECTRICIANS

GROUP E01

Electrician

* In the listing above, the "SU" means that rates listed do not reflect collectively bargained wage and fringe benefit rates.

A COPY OF THIS DOCUMENT, COLORED NEON GREEN, MUST BE CONSPICUOUSLY POSTED AT THE PROJECT SITE

**Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210**

**Davis-Bacon Act Wage Decisions
State: South Dakota
Construction Types: Heavy and Highway**

WELDERS – Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award, pursuant to 29 CFR 5.5(a)(1)(ii); contractors are responsible for requesting SDDOT to secure necessary additional classifications.

For SDDOT Defined Work Classifications, please visit: http://www.sddot.com/labor_dwc.asp

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate)
- ruling on survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and our Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, Project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION FOR
ERRATA**

NOVEMBER 15, 2006

MAKE THE INDICATED CORRECTIONS TO THE FOLLOWING SPECIFIED SECTIONS:

Section 9.12 – Page 66 – Delete the third paragraph and replace with the following:

The Current Fuel Price Index price shall be the average of the recorded wholesale fuel prices for the four most recent weekly reporting periods.

The Base Fuel Index price for motor fuels and for heating and drying fuels to be used on the project shall be the average of the four most recent weekly reporting periods prior to the week of the letting.

Section 491.5 A, B, C, D, E – Page 290 – Add the following to the end of the first sentence of each of these sections:

“(square meter).”

Section 629.4 C – Page 351 – Replace the first sentence with the following:

“Remove Three Cable Guardrail will be measured to the nearest foot (0.1 meter) along the centerline of the cable.”

Section 629.4 D – Page 351 – Replace the first sentence with the following:

“Removal of Anchor Assembly will be measured by the each.”

Section 630.3 D – Page 354 – Replace the fourth sentence with the following:

“The drawings shall contain all components of the W beam end terminal.”

Section 634.2 – Page 371 – Replace the second paragraph with the following:

“Traffic control devices shall meet the crashworthy requirements of the National Cooperative Highway Research Program Report 350 (NCHRP 350) for Category I, II and III devices.”

Section 635.3 L – Page 383 – Delete and replace with the following:

L. Luminaires: Luminaires shall be adjusted on the support so the laminar sets level as indicated by a small bubble level. Bolts shall be firmly tightened.

Section 635.4 K – Page 385 – Delete and replace with the following:

K. Luminaires: Measurement will be by the actual count of the various types and sizes of luminaires furnished and installed.

Section 635.5 K – Page 387 – Delete and replace with the following:

K. Luminaires: Payment for luminaires of the various types and sizes will be at their respective contract unit prices per each. Payment will be full compensation for furnishing and installing luminaires.

Section 984.3 H – Page 504 – Replace the first paragraph with the following:

“Temporary road markers shall consist of a yellow or white plastic body providing a horizontal width and length of approximately 3 ½ inches (90 mm) in both dimensions and approximately ¾ inches (20 mm) high. If flexible vertical markers are used they shall be approximately 4 inches (100 mm) wide and approximately 2 inches (50 mm) high.”

Index – Page 532 – Under Portland Cement Concrete Pavement – Delete “Dowel and Tie Bars...517” and replace with the following:

Dowel and Tie Bars..... 519

* * * * *

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENTAL SPECIFICATION TO
STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES**

NOVEMBER 19, 2008

All items included in this supplemental specification will govern over the Errata.

MAKE THE INDICATED CHANGES TO THE FOLLOWING SPECIFIED SECTIONS:

Section 2.6 D – Page 11 – Delete and replace with the following:

D. PCN

Section 3.6 – Page 15 – Delete and replace with the following:

3.6 EXECUTION AND APPROVAL OF CONTRACT - The contract shall be signed and returned by the successful bidder, together with the contract bond, within 20 calendar days after the receipt of the Notice of Award. If the contract is not executed by the Department within 15 calendar days following the receipt from the bidder of the signed contract and related documents, the bidder shall have the right to withdraw the bid without penalty. A contract will not be considered in effect until it has been executed by all parties to the contract.

Section 3.7 – Page 15 – Delete the first sentence and replace with the following:

Failure to execute the contract and file acceptable bonds within 20 calendar days after bidder's receipt of the Notice of Award shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of the Department, for liquidation of damages sustained.

Section 4.6 – Page 19 – Delete and replace with the following:

4.6 FINAL CLEANING UP - Before Acceptance of Field Work is made by the Area Office, the highway and areas occupied by the Contractor in connection with the work shall be cleaned of rubbish, excess materials, temporary structures, and equipment; and the work left in an acceptable condition, unless otherwise approved by the Engineer.

Section 5.6 – Page 24 – Delete the last sentence of the seventh paragraph and replace with the following:

The depth applies to the existing grade or ditch flowline within the right-of-way.

Section 5.6 – Page 24 – Delete the last two sentences of the eighth paragraph and replace with the following:

Contractors shall give at least 48 hour notice prior to commencement of excavation, excluding Saturdays, Sundays, and legal holidays of the state. South Dakota One Call phone number is **1-800-781-7474** or **811** within the State of South Dakota.

Section 5.6 – Page 24 – Add the following to the list of items on page 25:

Tunneling or Boring
Duration of Excavation
Nearest Cross Street

Section 5.6 – Page 24 – Delete the third sentence of the last paragraph on page 25 and replace with the following:

The utility shall as soon as possible but not longer than two hours from the notification time during the business day and not longer than four hours from the notification time outside of the business day or by the start time on the ticket, whichever is later provide all reasonably available practical information to the Contractor.

Section 5.10 – Page 27 – Add the following sentence to this section:

Neither the Department’s authority to inspect all work nor any actual inspections performed by the Department during the course of construction shall constitute an acceptance of work performed, or operate to relieve the Contractor of its obligation to construct the project in compliance with the plans and specifications.

Section 5.14 – Page 28 – Delete the first sentence of the first paragraph and replace with the following:

The Contractor shall maintain the work during construction and until the Area Office issues the Acceptance of Field Work.

Section 5.14 – Page 28 – Delete the last paragraph and replace with the following:

Cost of maintenance work during construction and before the Area Office issues the Acceptance of Field Work shall be included in the unit price bid on the various pay items and the Contractor will not be paid an additional amount for such work.

Section 5.16 – Page 29 – Delete and replace with the following:

5.16 ACCEPTANCE OF FIELD WORK - When the contract work, including authorized modifications and final cleanup has been completed, the Area Engineer or his designee will, within fourteen days, make a final inspection of the work. When provided in the Contract, the Area Engineer or his designee may make inspections following completion of portions of the contract. If the work is found to conform with the requirements of the Contract, the Area Engineer or his designee will issue written notification to the Contractor of Acceptance of Field Work. Such notice is not to be construed as an acceptance by the Area Engineer or his designee of previously noted defective or unauthorized work, or of unauthorized work subsequently determined during the final computations of field measurements. Should the work fail to conform with requirements of the Contract, a written statement of the features to be remedied will be given the Contractor. Final Acceptance will not be made until the Contractor advises the Engineer that the corrections have been made and the requirements have been met.

Section 5.17 – Page 29 – Delete the first paragraph and replace with the following:

5.17 CLAIMS FOR ADJUSTMENT AND DISPUTES - If the Contractor deems that additional compensation is warranted for work or materials not covered in the Contract and not ordered as extra work as defined herein, the Contractor shall give the Area Engineer written notice of the claim for additional compensation.

Section 5.17 – Page 29 – Delete the fourth paragraph and replace with the following:

Under no circumstances will a claim be considered if written notification is made more than 30 days after the final payment is made.

Section 5.17 – Page 30 – Delete the sixth and seventh paragraphs and replace with the following two paragraphs:

The Contractor hereby agrees to waive any claim for additional compensation if timely written notification is not furnished and the Area Engineer is not provided the opportunity to keep account of or determine costs, to incorporate alternate methods of accomplishing the disputed work or to otherwise resolve the claim.

A Claims Documentation Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer after completion of the work on which the claim is based. The Claims Documentation Form shall be completed within 120 calendar days after completion of the work unless an extension is granted, in writing, by the Area Engineer.

Section 5.17 – Page 30 – Delete the last three paragraphs of this section and replace with the following five paragraphs:

Claims which are properly submitted, but which are not approved, will be automatically escalated to the next higher authority level within the Department for review. The Secretary of Transportation has final resolution authority on all submitted claims.

Claims may be submitted by the Department to a third-party claim investigator for further review and investigation. The report prepared by the claim investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party

investigator may result in denial of the claim. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the claim.

If the claim is determined completely or partially valid, those portions determined valid, plus interest computed at the rate of 6% per annum for the time period between the date shown on the Region Engineer's letter of Final Acceptance and the date the claim was resolved, will be paid.

If a claim is determined completely or partially valid in a subsequent proceeding in circuit court and pre-judgment interest is awarded by the court on all or a portion of the judgment, that interest shall be computed at the rate of 6% per annum.

Nothing in this section shall be construed as establishing any claim contrary to the terms of Section 4.2.

Section 7.6 – Page 37 – Add the following paragraph to this section:

All workers within the right of way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel intended to provide conspicuity during both daytime and nighttime usage, and meeting the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled "American National Standard for High-Visibility Safety Apparel and Headwear".

Section 7.12 – Page 39 – Delete the last sentence of the second paragraph and replace with the following:

The Contractor's responsibility will not be released until completion of the project and Final Acceptance is made, as noted by the date shown on the Region Engineer's letter of Final Acceptance.

Section 7.14 – Page 39 – Delete this section and replace with the following:

7.14 RESPONSIBILITY FOR DAMAGE CLAIMS - The Contractor shall hold harmless and indemnify the Department, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person, persons or property arising from the operations of the said Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act", or any other law, ordinance, order, or decree; and so much of the money due the said Contractor under and by virtue of his contract as may be considered necessary by the Department for such purpose may be retained for the use of the State; or in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Department; money due the Contractor will not be withheld when the Contractor produces satisfactory written confirmation from its insurer that adequate public liability insurance and property damage insurance providing coverage for such particular claims as may be made is in force; a copy of a certificate of insurance, without further confirmation of coverage for the particular claim being made, will not be sufficient to satisfy the requirement of written confirmation.

Section 7.15 – Page 40 – Delete the first sentence and replace with the following:

7.15 LIABILITY INSURANCE - The Contractor shall procure and maintain at the Contractor's expense, during duration of the Contract, liability insurance with an insurance company authorized to do business in the state of South Dakota, for damages imposed by law.

Section 7.16 – Page 40 – Delete the second sentence of the last paragraph and replace with the following:

In such event, the Contractor shall not be relieved of liability or responsibility during the period the work is so opened and prior to Acceptance of Field Work.

Section 7.17 – Page 40 – Delete the first paragraph and replace with the following two paragraphs:

7.17 CONTRACTOR'S RESPONSIBILITY FOR WORK - The Contractor is responsible for the work until the Acceptance of Field Work is made by the Area Office, except as set forth in Section 4.4 B.1. The Contractor shall protect the work against injury or damage from all causes, whether arising from the execution or from the

non-execution of the work. The Contractor shall rebuild, repair, restore, and replace all work that is injured or damaged prior to the Acceptance of Field Work, at no additional cost to the Department. Damage to work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, acts of the public enemy, or acts of governmental authorities shall be restored by the Contractor at the Department's expense according to subsection 4.2 or 4.3, as applicable.

Following the Acceptance of Field Work, but prior to Final Acceptance as described in Section 9.9, the Contractor shall be responsible for damage to work resulting from an act, omission, neglect, or misconduct in the Contractor's manner or method of executing the work, or due to defective work or materials at no additional cost to the Department.

Section 8.2 – Page 45 – Delete and replace with the following:

8.2 NOTICE TO PROCEED - The Notice to Proceed shall consist of written notification to the Contractor to proceed with the work. Such notification will be issued within 15 calendar days following the receipt from the bidder of the signed contract and related documents. The contract time will start on the date the Contractor actually starts construction work or 30 calendar days after the date of the Notice to Proceed, whichever date is earlier. The Contractor shall not begin work prior to the date of the Notice to Proceed.

Section 8.6 A – Page 48 – Delete the first paragraph on page 48 and replace with the following:

If for reasons beyond the Contractor's control the work cannot be completed within the contract time as specified or as extended according to the provisions of this section, the Contractor may make a written request for an extension of contract time. The written request shall be made at any time prior to the expiration of the contract time as extended. The Contractor's time extension request shall set forth the reasons which will justify an extension of time.

A Time Extension Request Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer. If the written request was properly filed in accordance with the requirements of this section, the time extension request will be forwarded through the proper channels, to the Secretary of Transportation for final resolution.

The Time Extension Request Form shall be fully completed and will contain the following:

1. A narrative justification citing the basis for the time extension.
2. A statement of the amount of extra compensation, including liquidated damages, incentive, or disincentive associated with the time extension.
3. A signed and notarized statement that the information furnished is true and fully documented.
4. Permission for the Department or its authorized representative to examine all Contractor records concerning this time extension request.

The Secretary of Transportation may submit the time extension request to a third-party investigator for further review and investigation. The report prepared by the investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party investigator may result in denial of the time extension request. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the time extension request.

Section 8.6 A – Page 48 – Delete the first sentence of the second to last paragraph and replace with the following:

If the Secretary of Transportation finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Secretary may extend the time for completion in such amount as the conditions justify.

Section 8.6 A – Page 48 – Delete the last paragraph and replace with the following:

When Acceptance of Field Work has been duly made as prescribed in Section 5.16, the daily time count/assessment will cease. The daily time count/assessment may resume if the Contractor fails to provide, in a timely manner, required project documentation as ordered by the Area Engineer. The daily time count/assessment

may also resume when in accordance with Section 7.17, repairs, rework, or other activities are ordered for work that the Contractor is responsible for.

Section 8.6 B – Page 50 – Delete the second paragraph on page 50 and replace with the following:

If for reasons beyond the Contractor's control the work cannot be completed within the contract time as specified or as extended according to the provisions of this section, the Contractor may make a written request for an extension of contract time. The written request shall be made at any time prior to the expiration of the contract time as extended. The Contractor's time extension request shall set forth the reasons which will justify an extension of time.

A Time Extension Request Form, furnished by the Department, shall be completed by the Contractor and submitted to the Area Engineer. If the written request was properly filed in accordance with the requirements of this section, the time extension request will be forwarded through the proper channels, to the Secretary of Transportation for final resolution.

The Time Extension Request Form shall be fully completed and will contain the following:

1. A narrative justification citing the basis for the time extension.
2. A statement of the amount of extra compensation, including liquidated damages, incentive, or disincentive associated with the time extension.
3. A signed and notarized statement that the information furnished is true and fully documented.
4. Permission for the Department or its authorized representative to examine all Contractor records concerning this time extension request.

The Secretary of Transportation may submit the time extension request to a third-party investigator for further review and investigation. The report prepared by the investigator shall not be shared with the Contractor, nor shall the report be used in subsequent administrative or legal proceedings. Failure to fully cooperate with the third-party investigator may result in denial of the time extension request. After the Secretary of Transportation receives the report, the parties, by mutual agreement, may initiate a non-binding mediation to attempt to resolve the time extension request.

Section 8.6 B – Page 51 – Delete the last sentence of the second to last paragraph and replace with the following:

If the Secretary of Transportation finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Secretary may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

Section 8.6 B – Page 51 – Delete the last paragraph and replace with the following:

When Acceptance of Field Work has been duly made as prescribed in Section 5.16, the daily time count/assessment will cease. The daily time count/assessment may resume if the Contractor fails to provide, in a timely manner, required project documentation as ordered by the Area Engineer. The daily time count/assessment may also resume when in accordance with Section 7.17, repairs, rework, or other activities are ordered for work that the Contractor is responsible for.

Section 9.4 – Page 61 – Delete and replace with the following:

- 9.4 COMPENSATION FOR ALTERED QUANTITIES** - When the accepted quantities of work vary from the estimated quantities in the Contract, the Contractor shall accept as payment in full, payment at the original contract unit prices for the accepted quantities of work. Allowance will not be made for increased expense, except as provided in Section 4.2. Allowance will also not be made for loss of expected reimbursement or loss of anticipated profits.

Section 9.5 D – Page 62 – Delete the first paragraph of this section and replace with the following:

- D. Equipment:** For machinery or special equipment including fuel and lubricants, plus transportation costs, authorized by the Engineer, the Contractor shall be paid in accordance with the provisions and rates set forth in the South Dakota Equipment Rental Rates Book which is currently established as the “Rental Rate Blue Book” published by EquipmentWatch, a division of Penton Media, Inc. For purposes of determining an hourly rate, the monthly rate divided by 176 shall be used. This rate will be adjusted for regional factors, age and operating expenses as set forth in the “Rental Rate Blue Book”.

Section 9.7 – Page 64 – Add the following sentence to the end of the second to last paragraph:

Progress payments shall not constitute acceptance of the work.

Section 9.9 - Page 65 - Delete and replace with the following:

FINAL ACCEPTANCE AND FINAL PAYMENT - When Acceptance of Field Work has been made as prescribed in Section 5.16, and all project documentation has been provided, the Engineer will prepare the final estimate of the quantities of the various classes of work performed. After the Engineer determines the final estimate, the Contractor will be paid the entire sum found to be due after deducting previous payments and amounts to be retained or deducted under the provisions of the contract.

Prior partial estimates and payments shall be subject to correction in the final estimate of payment. Final payment will be due 120 days after the date shown on the Region Engineer’s letter of Final Acceptance.

Interest will be added to payments in excess of \$2000 which are due the Contractor and remain unpaid 120 days after the date shown on the Region Engineer’s letter of Final Acceptance. Interest will accrue at a rate of 6% per annum for the time period after the noted 120 days until final payment is made.

Section 9.12 – Page 66 – Delete and replace with the following:

9.12 THIS SECTION INTENTIONALLY LEFT BLANK

Section 120.2 A – Page 73 – Delete and replace with the following:

- A. Unclassified Excavation:** All materials except those classified as rock excavation, unclassified/rock excavation, muck excavation, option borrow excavation, contractor furnished borrow, or borrow unclassified excavation encountered during the construction of the work, regardless of their nature or manner in which they are removed, will be considered unclassified excavation.

Section 120.2 – Page 73 – Add the following to the end of this Section:

- I. Option Borrow Excavation:** Material, furnished by the State, from a pit or other source. The Contractor may use this material at his option.
- J. Contractor Furnished Borrow:** Material, furnished by the Contractor, from a pit or other source.
- K. Borrow Unclassified Excavation:** Material, furnished by the State, from a pit or other source. The Contractor must use this material.

Section 120.3 – Page 74 – Delete the fifth paragraph and replace with the following:

The subgrade shall be finished to within minus 0.04 feet (13 mm) to plus 0.08 feet (25 mm) from the design grade and typical section shown in the plans and to within ± 0.5 percent of the typical section cross slope. The quarter crown within any 12 foot (3.6 m) transverse length shall not exceed 0.04 feet (13 mm) when measured with a straight edge, stringline, or by other suitable equipment.

Section 120.3 B.3.a – Page 77 – Delete the fifth paragraph and replace with the following:

Density shall be determined in accordance with SD 105 (AASHTO T 191), SD 106, or SD 114 (AASHTO T 310).

Section 120.3 B.3.a – Page 78 – Add the following sentence to the end of the second to last paragraph:

If the material does not contain enough fines to allow for conventional density testing (SD 105 or SD 106), the material shall be compacted as specified for A-2-4(0) and A-3 soils.

Section 120.4 – Page 79 – Add the following to the end of this Section:

- I. Borrow Unclassified Excavation:** Borrow unclassified excavation will be measured in its original position by cross sectioning. Volumes will be computed in cubic yards (cubic meters) by the average end area method.

Original cross sections will be taken prior to removal of any material and final sections will be taken following replacement of topsoil. Salvaged topsoil which is stockpiled from the borrow sources will be included as borrow unclassified excavation.

The quantity of topsoil stockpiled and respread on borrow sources will be determined by measuring the stockpiles prior to removal of the material from the stockpiles.

Section 120.5 – Page 81 – Add the following to the end of this Section:

- I. Borrow Unclassified Excavation:** Borrow unclassified excavation will be paid for at the contract unit price per cubic yard (cubic meter). Payment will be full compensation for excavation and furnishing the material on the project, construction and compaction of embankments, shaping of slopes, finishing of surface, completion of subgrade, shoulders, and roadway, and maintenance, and for furnishing materials (except topsoil), labor, and incidentals required for restoration of the pit.

Topsoil which is stockpiled from the borrow source will be respread and paid for at the contract unit price per cubic yard (cubic meter) of borrow unclassified excavation and placing topsoil.

Section 120.5 F – Page 82 – Delete the last sentence and replace with the following:

Topsoil, seed, fertilizer and mulch for the restoration of the pit shall be incidental to the unit price per cubic yard (cubic meter) of contractor furnished borrow.

Section 210.3 – Page 85 – Delete the second to last paragraph and replace with the following:

The subgrade shall be finished to within minus 0.04 feet (13 mm) to plus 0.08 feet (25 mm) from the design grade and typical section shown in the plans and to within ± 0.5 percent of the typical section cross slope. The quarter crown within any 12 foot (3.6 m) transverse length shall not exceed 0.04 feet (13 mm) when measured with a straight edge, stringline, or by other suitable equipment.

Section 260.3 A – Page 93 - Delete the first paragraph and replace with the following:

- A. Subbase and Base Course:** Roadway shaping shall be performed in accordance with Section 210.3 B prior to placement of the material.

Section 260.3 A – Page 94 - Delete the last paragraph and replace with the following:

Recycled Portland cement concrete pavement used as a granular base material shall not be used for Base Course, Salvaged Base Course, or in areas where drainage fabric, edge drains, or other similar drainage systems are present.

Section 270.1 – Page 97 – Delete and replace with the following:

270.1 DESCRIPTION

This work consists of salvaging, processing, and stockpiling salvaged material from the existing roadway. Salvaged material shall consist of granular material, asphalt concrete mix material, or asphalt mix and granular base material.

Section 270.2 – Page 97 – Delete this section and replace with the following:

Salvaged material shall be processed to provide material meeting the following gradation.

<u>Sieve Size</u>	<u>% Passing</u>
1 ½ inch (37.5 mm)	100
1 inch (25.0 mm)	95-100

Section 270.3 A – Page 97 – Delete and replace with the following:

A. Processing: The salvage material shall be moved and loaded in a manner that minimizes waste and avoids contamination of the salvage material with underlying subgrade soil. Scrapers shall not be used for the removing or loading operations, but may be used to haul the material. Processing and blending may be accomplished in place, provided the Contractor's method meets the blending and gradation requirements and has positive depth control. Salvaging of material shall not exceed two miles (3.2 kilometers) in advance of the grading operation, unless otherwise directed.

Asphalt concrete mix and granular material shall be processed and stockpiled together so that a uniform blend is obtained. The material shall be moved toward the center of the road, to the extent necessary to ensure that salvage material is not lost down inslopes.

Section 270.4 – Page 97 – Delete the first paragraph of this section and replace with the following:

Salvage and stockpile asphalt mix material, salvage and stockpile asphalt mix and granular base material, and salvage and stockpile granular material will be measured to the nearest 0.1 ton (0.1 metric ton) or 0.1 cubic yard (0.1 cubic meter) at the time it is hauled to the road.

When less than 5000 tons (4500 metric tons) of salvaged material is required on a project, the material may be measured in a stockpile and converted to tons (metric tons) using a factor of 1.5 tons per Cu. Yd. (1.78 metric tons per cubic meter), in lieu of weighing the material. Alternate measurement techniques may be allowed if agreed upon by the Contractor and Engineer prior to salvaging operations commencing.

Section 270.5 – Page 97 – Delete the first paragraph of this section and replace with the following:

Salvage and stockpile asphalt mix material, salvage and stockpile asphalt mix and granular base material, and salvage and stockpile granular material will be paid for at the contract unit price per ton (metric ton) or cubic yard (cubic meter). Payment will be full compensation for work required to salvage, process, haul, and stockpile the material.

Section 280.2 – Page 99 – Delete this section and replace with the following:

The asphalt mix and granular material shall be processed to provide material meeting the following gradation.

<u>Sieve Size</u>	<u>% Passing</u>
1 ½ inch (37.5 mm)	100
1 inch (25.0 mm)	95-100

Section 320.3 B.1 – Page 103 – Delete the first sentence of the fourth paragraph and replace with the following:

Burner fuel used for production of asphalt concrete shall be propane, butane, natural gas, Grade 1 fuel oil, Grade 2 fuel oil, Grade 4 fuel oil, Grade 4 (light) fuel oil, Grade 5 (light or heavy) fuel oil, or Grade 6 fuel oil.

Section 320.3 B.1 – Page 103 – Add the following to the end of the seventh paragraph:

An accurate thermometer must be installed in the tank so the temperature can be monitored.

Section 320.3 B.4 – Page 104 – Delete the third sentence of the first paragraph.

Section 320.3 B.4 – Page 105 – Delete the last sentence of the third paragraph and replace with the following:

The system shall be capable of manually controlling the transverse slope and the screed height.

Section 320.3 B.5 – Page 105 – Delete the last sentence of the first paragraph and replace with the following:

The rollers shall be capable of being reversed smoothly, without shoving or tearing the asphalt concrete.

Section 320.3 C.3.d – Page 106 – Delete and replace with the following:

- d. A one-gallon (four liter) sample of asphalt binder intended for use shall be obtained from the designated supplier for the project.

Section 320.3 D – Page 107 – Delete the last sentence of the fifth paragraph and replace with the following:

A water spray system must be installed at the discharge end of the pug mill. This water system must be used when directed by the Engineer to prevent fugitive lime dust from being released into the air.

Section 320.3 E – Page 107 – Add the following after the fourth sentence in the first paragraph:

No material shall be used which could adversely affect the asphalt concrete.

Section 320.3 F – Page 107 – Add the following new paragraph after the first paragraph:

Surfaces which have been primed with cutback asphalt shall be allowed to cure for a minimum of 72 hours prior to being overlaid with asphalt concrete.

Section 320.3 F – Page 107 – Add the following to the end of the third paragraph:

In lieu of a self-propelled paver, asphalt concrete may be placed by a shouldering machine on shoulders less than 6 feet (2 m) in width.

Section 320.3 F – Page 110 – Delete the first paragraph at the top of Page 110 and replace with the following:

Irregularities shall be corrected before the temperature of the asphalt mix drops below 175° F (80° C). The longitudinal profile can only be improved by using a grinder with diamond blades mounted on a horizontal shaft and when approved by the Engineer. Areas that have been ground shall not be left smooth or polished, but shall have a uniform texture equal in roughness to the surrounding unground asphalt concrete. Grinding shall be daylighted to the outside edge of the pavement. Ground surfaces shall be flushed sealed. Under no circumstances shall operations continue when it becomes evident final rolling is not producing a smooth, uniform, compacted surface free from roller marks and other irregularities.

Section 320.4 A – Page 111 – Add the following after the first sentence:

Quantities of asphalt binder in excess of the asphalt content listed on the job mix formula plus 0.3% tolerance will not be accepted for payment.

Section 320.4 B – Page 111 – Delete the last two sentences of the first paragraph and replace with the following:

The mixture of mineral aggregate, asphalt binder, and hydrated lime, when required, will be weighed after mixing. No deduction will be made for the weight of the asphalt binder or hydrated lime, when required, included in the mixture.

Section 320.4 E – Page 112 – Add the following after the first sentence:

Quantities of hydrated lime in excess of the lime content listed on the job mix formula plus 0.1% tolerance will not be accepted for payment.

Section 320.5 C – Page 112 – Add the following sentence to the end of the paragraph:

Payment will be full compensation for all labor, equipment, materials, and all other items incidental to sampling and repair of the sample locations to the satisfaction of the Engineer.

Section 321.3 B – Page 113 – Delete and replace with the following:

B. Density: The minimum density requirement shall be 92 percent of the maximum specific gravity of the test specimens prepared in the field in accordance with SD 312. The compacted density of asphalt concrete shall be determined according to SD 311.

Section 324.5 – Page 115 and 116 – Delete the last sentence and replace with the following:

When required, the following shall also be included in the contract unit price per ton (metric ton) for Asphalt Concrete Composite: Asphalt for Prime MC-70, Blotting Sand for Prime, Asphalt for Flush Seal SS-1h or CSS-1h, Sand for Flush seal, Hydrated Lime, equipment, labor and incidentals necessary.

Section 330.2 – Page 121 – Add the following to the end of this section:

D. Sand for Fog Seal: Section 879

Section 330.3 A.2.b – Page 121 – Add the following paragraph after the second paragraph:

Surfaces primed with cutback asphalt shall be allowed to cure for a minimum of 72 hours prior to being overlaid with asphalt concrete.

Section 332.2 – Page 125 – Delete this section and replace with the following:

Cold milled asphalt concrete material shall be milled to provide material meeting the following gradation.

<u>Sieve Size</u>	<u>% Passing</u>
1 ½ inch (37.5 mm)	100
1 inch (25.0 mm)	95-100

Section 350.2 – Page 127 – Delete this section and replace with the following:

The sealant shall conform to the requirements of ASTM D-6690 Type IV.

The sealant material shall have a unit weight no greater than 9.35 lbs./gal (1124 kilograms per cubic meter).

Only products that meet the above requirements and have performed satisfactorily based on Department analysis may be used. A listing of acceptable products meeting ASTM D-6690 Type IV requirements may be obtained from the Department's Approved Products List. Products on the Approved Products list for Joint Sealant for Asphalt Over Long Jointed Concrete Pavement may also be used.

The blocking medium shall be an inert, compressible material, which is compatible with the sealant.

Section 360.3 B.3 – Page 131 – Delete the last sentence of this section:

Section 370.2 – Page 135 – Delete the first paragraph of this section and replace with the following:

The RAP material, after processing, shall meet the following gradation.

<u>Sieve Size</u>	<u>% Passing</u>
1 ¼ inch (31.5 mm)	100
1 inch (25.0 mm)	95-100

Section 380.2 – Page 139 – Add the following to the end of this section:

- L. Epoxy Resin Adhesive:** Epoxy resin adhesive shall be of the type intended for horizontal applications, and shall conform to the requirements of ASTM C 881, Type IV, Grade 3 (equivalent to AASHTO M235, Type IV, Grade 3).

Section 380.3 B.1 – Page 140 – Delete the first paragraph on page 141 and replace with the following:

When automatic moisture sensing equipment is used for an aggregate component, the batch ticket shall show the percent of moisture for the aggregate component with moisture sensing equipment. The results of the most recent two hour moisture test shall be shown for aggregate components without moisture sensing equipment.

The W/C ratio shall be calculated using the following formula and rounded to the nearest 0.01:

$$W / C \text{ ratio} = \left[\frac{\text{weight of free water} + \text{weight of batch water}}{\text{weight of cement} + \text{weight of supplementary cementitious material}} \right]$$

weight of free water = (% total moisture in aggregate - % absorption of aggregate) x weight of aggregate
weight of batch water = total weight of water added to the batch of concrete either at the plant or in the truck

The weight of free water shall be calculated for both the fine aggregate and the coarse aggregate.

Section 380.3 D – Page 146 – Add the following paragraph to the end of this section:

The amount of batch water and aggregates added to the mix shall be adjusted accordingly using the results of the most recent two hour moisture tests. If automatic moisture sensing equipment is used, the Engineer may allow the use of the automatic moisture sensing results to make adjustments.

Section 380.3 E – Page 146 – Delete the second sentence and replace with the following:

Truck mixing will be permitted only when approved by the Engineer.

Section 380.3 E – Page 146 – Delete the fifth paragraph and replace with the following:

When a concrete batch is transported in a truck mixer or agitator and the batch is smaller than 60 percent of the rated capacity of the truck mixer or agitator, the following percentage of additional cementitious material at the same proportions as listed on the mix design shall be added to the batch:

Section 380.3 E – Page 146 – Delete the paragraph below the table at the top of page 147 and replace with the following:

The above provisions regarding additional cementitious material shall also apply to the mixing of small batches in central plants. Additional cementitious material will not be required when the small batch is mixed in a drum that is sufficiently coated with mortar to withstand the loss of cementitious material. Sufficient mortar coating, as determined by the Engineer, may include mortar coating the drum from a previously mixed batch during continuous mixing operations. Additional cementitious material will be required if more than 30 minutes has passed from the mixing of the previous batch, if the drum has been cleaned following the previous batch, or if the mortar coating the drum has been disturbed following the previous batch.

Section 380.3 E.2 – Page 147 – Delete the second sentence of the second paragraph and replace with the following:

When approved by the Engineer, additional water or cement may be added to the batch after completion of the original mixing, in which case the batch shall be mixed an additional 30 revolutions at mixing speed.

Section 380.3 L – Page 149 – Add the following sentence to the end of this section:

Epoxy coated dowel bars and tie bars shall meet the requirements of Section 480.3 A.

Section 380.3 M.2 – Page 151 – Delete the first sentence of the last paragraph and replace with the following:

The Contractor shall load test five percent of the first 500 tie bars that are drilled and epoxied in place.

Section 380.3 M.3 – Page 151 – Add the following paragraph to this section:

If a soft cut style saw is used, the soft cut shall remain approximately 1” (25mm) from the edges of the concrete slab to control spalling at the edge. Additionally if a soft cut is used, the Contractor shall complete the initial saw cut for the entire width and to the required depth before the end of the 72 hour curing period.

Section 380.3 M.4 – Page 151 – Delete the first sentence of the fourth paragraph and replace with the following:

If an uncontrolled crack develops within six feet (1.8 m) of the contraction joint, a minimum of six feet (1.8 m) of pavement removal and replacement will be required.

Section 380.3 N.6 – Page 153 – Delete this section and replace with the following:

6. Final Finish: Before the concrete has attained its initial set, the surface shall be given a final finish with a carpet drag drawn over the surface in a longitudinal direction. The drag shall be mounted on a bridge and shall be sized so that a strip of the carpet at approximately two feet (600 mm) wide is in contact with the pavement surface while the drag is operated.

The condition of the drag shall be maintained so the resultant surface is of uniform appearance with corrugations approximately 1/16 inch (2 mm) in depth. Drags shall be maintained clean and free of encrusted mortar. Drags that cannot be cleaned shall be discarded and replaced.

The carpet shall meet the following requirements:

- Facing Material - Molded polyethylene pile face
- Blade Length - 7/8", ±1/8" (22 mm, ±3 mm)
- Total Fabric Weight - 70 oz. per square yard min.
(2.37 kg per square meter min.)

The backing shall be of a strong, durable material, not subject to rot, which is adequately bonded to the facing.

Plain Jointed concrete pavement shall be either longitudinally or transversely tined as specified in the plans.

Continuously reinforced concrete pavement shall be longitudinally tined.

a. Transverse Tining: Immediately following the carpet drag, the surface of the concrete pavement shall be given a transverse metal-tine finish with a separate self-propelled mechanical device. The metal-tine finish shall provide a groove width of 1/8" and a groove depth of 3/16 inch (5 mm) ± 1/16 inch (2 mm). The spacing between the individual tines shall meet the following:

Inches (ten foot tining rake)

- 2-5/16, 2-15/16, 1-1/4, 2-7/16, 2-1/16, 1-1/4, 13/16, 1, 1-5/16, 1-1/8, 2-5/16
- 2-1/2, 2-7/8, 2-3/4, 1-1/8, 2-3/4, 2-1/8, 1-15/16, 13/16, 7/8, 2-5/8, 3-1/16
- 3-1/16, 7/8, 9/16, 9/16, 1-5/8, 2-3/8, 1, 1-1/4, 1-9/16, 2-15/16, 1-1/8
- 1-15/16, 2-3/16, 2, 2-13/16, 1, 2-11/16, 13/16, 1-7/8, 9/16, 2-5/16, 1-7/8
- 2-1/2, 1-5/16, 3-3/16, 1-3/8, 15/16, 7/8, 1-5/8, 9/16, 1-3/4, 2-7/8, 3
- 1-5/8, 1-5/8, 7/8, 9/16, 5/8, 2-13/16, 1-5/8, 2-7/16, 13/16, 1-1/4, 11/16
- 2-3/4, 2-5/16, 1-1/8

Millimeters (3 meter tining rake)

- 58, 74, 31, 62, 53, 32, 21, 26, 33, 28, 59
- 64, 73, 70, 29, 70, 54, 49, 20, 22, 67, 78
- 77, 23, 15, 15, 41, 60, 25, 32, 39, 75, 28
- 50, 55, 51, 72, 25, 69, 21, 47, 15, 59, 47
- 64, 34, 55, 35, 24, 22, 42, 14, 45, 73, 76

41, 41, 22, 15, 16, 71, 41, 62, 21, 31, 17
70, 58, 29

Successive passes of the tining shall not overlap.

Each location, where transverse joint saw cuts are to be made, shall be protected from tining by covering with a metal strip from four inches (100 mm) to six inches (150 mm) or by other methods that produce acceptable results.

Brooming may be used on irregular areas in lieu of the carpet drag and tine finish. The broom shall be drawn transversely across the pavement with adjacent strokes slightly overlapping.

Brooming shall be uniform in appearance and shall produce grooves 1/16 inch (2 mm) deep. Texturing shall be completed while the concrete surface can be broomed without being torn or unduly roughened by the operation.

The finished surface shall be free from rough and porous areas, irregularities, and depressions resulting from improper handling of the broom.

- b. Longitudinal Tining:** Immediately following the carpet drag, the surface of the concrete pavement shall be given a longitudinal metal-tine finish with a wire broom or comb attached to a separate self-propelled mechanical device.

Transverse joints shall not be protected from longitudinal tining, the tining shall be continuous across the joints.

The slab shall not be tined within 3 inches of the edge of the slab, centerline, or rumblestrip.

The longitudinal tining equipment shall have the ability to be raised and lowered, and shall have vertical and horizontal string line controls to ensure straight grooves that are parallel to the longitudinal joint.

The curing unit shall be separate from the tining unit when longitudinal tining is used unless the tining and curing can be accomplished simultaneously with the same piece of equipment at the specified rate to the satisfaction of the Engineer.

The tine bar shall have a single row of tines and shall provide a groove width of 1/8 inch (3 mm) $\pm 1/64$ inch (0.4 mm) and a groove depth of 3/16 inch (5 mm) $\pm 1/16$ inch (2 mm). The spacing between the individual tines shall be uniformly spaced at 3/4 inch (20 mm) intervals.

Section 380.3 N.7 – Page 155 – Delete the first sentence of the first paragraph and replace with the following:

After the final finish, and while the concrete is still plastic, the edges of the pavement along each side of the slab, and on each side of transverse construction joints, shall be worked with an approved tool and rounded to the specified radius.

Section 380.3 O – Page 155 – Add the following two sentences to the beginning of this section:

The pavement surface shall be checked for deviations using either a ten foot (3 meter) straightedge or a profilograph (when specified). When the use of a profilograph is specified, the ten foot (3 meter) straightedge check may also be required in locations determined by the Engineer.

Section 380.3 O.2.c.2 – Page 157 – Delete the first paragraph and replace with the following:

Areas excluded from profilograph testing shall be shoulders, transitions, area within 50 feet (15 m) of existing pavement and bridges, existing curb and gutter sections, ramps, pavements on horizontal curves having a centerline radius less than 1,000 feet (300 m) and the superelevation transitions. Pavement sections not subject to profilograph testing shall meet the 10 foot (3 m) straight edge test requirements in Section 380.3 O.1.

Section 380.3 O.2.f.1 – Page 158 – Delete this section and replace with the following:

- 1) Satisfactorily correct deficient area by grinding with equipment meeting the requirements of Section 380.3 O.2.c.2.

Section 380.3 O.2.h – Page 158 – Delete the last paragraph of this section.

Section 380.3 R.2 – Page 161 – Delete the first sentence of the third paragraph and replace with the following:

The sealant surface shall be tooled to produce a slightly concave surface below the pavement surface.

Section 380.3 T – Page 162 – Add the following sentence after the first sentence in the second paragraph:

Equipment operated on a previously constructed pavement that has attained a compressive strength of at least 3000 psi (21 Mpa) but less than 4000 psi (28 Mpa) shall be tracked type equipment.

Section 390.2 B – Page 167 – Delete and replace with the following:

B. Concrete Patches: Concrete patching material shall be one of the following:

1. A packaged, dry, rapid-hardening cementitious mortar conforming to the requirements of ASTM C 928, Type R-3 containing no chloride ions.
2. A packaged, dry, rapid-hardening concrete materials conforming to the requirements of ASTM C 928, Type R-3 containing no chloride ions.
3. A patching material meeting the following requirements:
 - a. **Cement:** Cement shall be Type III conforming to Section 750.
 - b. **Air Entraining Admixtures:** Air entraining admixtures shall conform to Section 751.
 - c. **Water:** Water shall conform to Section 790.
 - d. **Fine Aggregate:** Fine aggregate shall conform to Section 800.
 - e. **Coarse Aggregate:** Coarse aggregate shall be crushed quarry stone, size five, conforming to Section 820.
 - f. **Curing Compound:** Curing compound shall conform to Section 821.
 - g. **Proportioning:** Materials for concrete patches shall be mixed at the following proportions:

Fine Aggregate.....	165 lbs./bag (75 kg/bag) cement
Coarse Aggregate.....	165 lbs./bag (75 kg/bag) cement
Cement (min).....	8.0 bags/c. y.(10.5 bags/cubic meter) concrete
Water (maximum).....	5.0 gallon/bag (19 L/bag) cement

h. Air and Slump: The slump and air shall conform to the following:

Air.....	7% ± 2%
Slump.....	1-1/2" (40 mm) maximum

Section 391.2 A – Page 171 – Add the following paragraph to the end of this Section:

Alternate design mixes for the grout may be submitted to the Engineer for approval.

Section 392.2 A – Page 177 – Add the following paragraph to the end of this section:

Alternate jacking slurry design mixes may be submitted to the Engineer for approval.

Section 410.3 G.6 – Page 195 – Add the following section to the end of this section:

- g. The turn-of-nut method for bolt tightening may be used when specified in the plans. When the turn-of-nut installation method is specified, hardened washers are not required except as specified in Section 410.3 G.6.d.

A sufficient number of bolts shall first be placed in the joint and snugged to insure that all faying surfaces are in firm contact, prior to tightening. Snug tight is defined as the tightness attained by a few impacts of an impact wrench or the full effort of a man using an ordinary wrench. Bolts shall be placed in any remaining holes and snugged tight as erection bolts or pins are removed. All bolts in the joint shall then be tightened the amount shown in Table 2 progressing systematically from the center most rigid part of the joint to its free edges. When tightening, the element not turned shall be held with a hand wrench to prevent rotation.

Table 2 Nut Rotation from Snugged Condition^{a,b}			
Geometry of Outer Faces of Bolted Parts			
Bolt Length Measured From Underside of Head to End of Bolt	Both Faces Normal to Bolt Axis	One Face Normal to Bolt Axis and Other Face Sloped Not More Than 1:20, Bevel Washer Not Used	Both Faces Sloped Not More Than 1:20 From Normal to Bolt Axis, Bevel Washers Not Used
Up to and including 4 diameters	1/3 turn	1/2 turn	2/3 turn
Over 4 diameters but not exceeding 8 diameters	1/2 turn	2/3 turn	5/6 turn
Over 8 diameters but not exceeding 12 diameters ^c	2/3 turn	5/6 turn	1 turn

- ^a Nut rotation is relative to bolt, regardless of the element (nut or bolt) being turned. For bolts installed by 1/2 turn and less, the tolerance should be plus or minus 30 degrees; for bolts installed by 2/3 turn and more, the tolerance should be plus or minus 45 degrees.
- ^b Applicable only to connections in which all material within grip of the bolt is steel.
- ^c No research work has been performed by the Research Council Riveted and Bolted Structural Joints to establish the turn-of-nut procedure when bolt lengths exceed 12 diameters. Therefore, the required rotation must be determined by actual tests in a suitable tension device simulating the actual conditions.

Section 421.3 A – Page 213 – Delete the second sentence of the second paragraph and replace with the following:

Backfill shall be compacted to 95% or greater of Maximum Dry Density in horizontal layers not to exceed six inches (150 mm) loose depth.

Section 423.1 – Page 219 – Delete this section and replace with the following:

423.1 DESCRIPTION

This work consists of the design, construction, and subsequent removal of all temporary works including, but not limited to; falsework, formwork, cofferdams, work berms and platforms, temporary traffic and stream diversions, and temporary retaining structures.

Section 421.3 – Page 213 – Add the following to this section:

- D. Extruded Insulation Board (Polystyrene):** No equipment will be allowed on the uncovered insulation board. The backfill covering the insulation board shall be spread and compacted in such a manner that the equipment used shall be operated on a minimum of 6 inches (150 mm) of backfill material at all times.

Section 421.4 – Page 214 – Add the following to this section:

- C. Extruded Insulation Board (Polystyrene):** Extruded insulation board (polystyrene) will be measured to the nearest square yard (square meter).

Section 421.5 – Page 214 – Add the following to this section:

- C. Extruded Insulation Board (Polystyrene):** Extruded insulation board (polystyrene) will be paid for at the contract unit price per square yard (square meter). Payment shall be full compensation for labor, equipment, and incidentals to furnish and install the extruded insulation board (polystyrene).

Section 423.3 A – Page 219 – Add the following to the end of this section:

All temporary works in streams or wetlands are required to be covered in the Corp of Engineers 404 Permit. At the time of the preconstruction meeting, the Contractor shall submit documentation for all temporary works for the purpose of complying with the 404 Permit requirements. The documentation shall include at a minimum:

1. A written description of the proposed temporary works including types of materials to be used, how the temporary works will be installed, removed, and what portion, if any, will remain in place after construction.
2. Details showing approximate size and location of the temporary works. Details shall include at a minimum, a Plan View and a Cross-Section View of the temporary works. Details shall provide sufficient dimensions such that the approximate size of the temporary works and location of the temporary works from a known point is shown.
3. Estimated quantities of all temporary fill material below the ordinary high water elevation. If the temporary fill is to be placed in a wetland, the estimated quantity shall be the amount of wetland loss, (in acres).

If during the course of construction there is a need for additional temporary works, the documentation shall be submitted to the Engineer at that time.

The Engineer will submit the documentation to the Corp of Engineers for approval. No construction of temporary works below the ordinary high water mark or in wetlands may begin until Corp of Engineer approval is attained by the Engineer.

Section 423.3 B – Page 219 – Delete the first sentence and replace with the following two sentences:

Falsework plans and design calculations for bridges shall be prepared by an Engineer registered in the State of South Dakota. Three (3) copies of the falsework plans and design calculations shall be submitted to the Bridge Construction Engineer for review at least 30 days prior to construction of falsework.

Section 423.5 – Page 221 – Delete this section and replace with the following:

423.5 BASIS OF PAYMENT

No payment will be made for temporary works. All costs involved in designing, constructing, and removing temporary works shall be incidental to the other contract items.

Section 430.2 B – Page 223 – Delete this section and replace with the following:

- B. Granular Bridge End Backfill:** The granular bridge end backfill material shall conform to Section 882.

Section 430.3 C – Page 225 – Delete the second and third paragraphs and replace with the following:

Granular bridge end backfill shall not be placed until at least 24 hours after completion of the deck pour. In addition, granular bridge end backfill shall not be placed until the abutments and sills, including wingwalls, have attained full design strength.

Granular bridge end backfill shall be placed in loose lifts not to exceed eight inches (200 mm) and compacted to 97% of maximum dry density. The moisture at the time of compaction shall be within $\pm 4\%$ of optimum moisture. Maximum dry density and optimum moisture will be determined in accordance with SD 104.

Section 430.3 C.1 through 6 – Page 225 and 226 – Delete and replace with the following:

1. Each layer of granular bridge end backfill shall be placed in loose lifts not to exceed eight inches (200 mm). The placement and compaction of each layer must be inspected and approved by the Engineer prior to placement of the next layer.
2. Any equipment used to install the bridge end backfill over the geotextile fabric shall be operated in such a manner that the geotextile fabric is not damaged. To avoid damage to the geotextile fabric, the equipment used to place, spread, and compact the granular bridge end backfill over the geotextile fabric shall not be operated on less than six inches (150 mm) of material.
3. The geotextile fabric may be oriented in any direction. To minimize the horizontal deflection of the mechanically stabilized vertical face, it is extremely important to make sure that the geotextile fabric is taut and free of wrinkles during placement of the granular bridge end backfill.
4. Any geotextile fabric that is torn or punctured shall be repaired or replaced by the Contractor at no additional cost to the Department. The repair shall consist of a patch of the same type of geotextile fabric being placed over the ruptured area such that it overlaps the damaged area a minimum of 3 ft. (1 m) from any damaged edge. A sewn patch meeting the same requirements for seam strength as that of the fabric being repaired is allowed.
5. Seams that are perpendicular to face of the mechanically stabilized backfill may be constructed by overlapping the fabric a minimum of two feet (0.6 m). All other seams, as well as those in which the two foot (0.6 m) minimum overlap cannot be accomplished, shall be sewn. All seams shall be inspected by the Engineer and any deficient seams repaired by the Contractor prior to placement of the next layer of granular bridge end backfill. Geotextile fabric that is joined by sewn seams shall have strength properties at the seam equal to the specified strength requirements of the geotextile fabric. High strength polyester, polypropylene, or kevlar thread shall be used for sewn seams. Nylon threads shall not be used. The edges of the fabric shall be even and shall be completely penetrated by the stitch.
6. During periods of shipment and storage, the geotextile fabric shall be enclosed in a heavy duty opaque wrapping such that the fabric is protected from direct sunlight, ultraviolet rays, dirt or debris. The fabric shall not be subjected to temperatures greater than 140°F (60°C).

Section 430.5 B – Page 227 – Delete the second sentence and replace with the following:

Payment will be full compensation for all labor, equipment, materials, water, and all other items incidental to scarifying, reshaping and recompacting the area to be backfilled, furnishing and installing the polyethylene sheeting, drainage fabric, geotextile fabric, and furnishing, placing, and compacting the porous backfill and granular bridge end backfill to the limits shown on the plans.

Section 450.2 – Page 231 – Add the following to this section:

F. High Density Polyethylene Pipe: Section 990.

Section 450.3 C – Page 231 – Delete and replace with the following:

C. Polyethylene Pipe Culverts: Corrugated polyethylene pipe culverts and high density polyethylene pipe culverts shall be installed according to manufacturer instructions.

Section 450.3 G – Page 232 – Delete and replace with the following:

G. Backfill Above Bedding Grade: Moisture and density requirements for backfill shall be as specified in the plans and shall meet the requirements of Section 120. The backfill material shall be pre-moistened if necessary to obtain uniform moisture.

Selected embankment material shall be placed along the pipe in layers not exceeding six inches (150 mm) in depth and thoroughly compacted by mechanical compactors to the specified density before successive layers are placed. The width of the berms on each side of the pipe shall be twice as wide as the external diameter of the pipe or 12 feet (four meters), whichever is less. This method of backfilling shall be continued until the embankment is at least two feet (600 mm) over the top of the pipe.

In trench installations, backfill width shall be equal to trench width. The backfill shall be brought up evenly on both sides of the pipe for its full length. This method of backfilling shall be continued until the embankment is at least two feet (600 mm) over the top of the pipe.

Section 460.3 A – Page 235 – Delete the first paragraph of this section and replace with the following:

Concrete Quality and Proportion: The Contractor shall design and be responsible for the performance of all concrete mixes used in structures.

All mix designs and any modifications thereto, including changes in admixtures, shall be approved by the Concrete Engineer prior to use. Mix design data and test results shall be recorded on a DOT-24 and submitted to the Engineer.

The mix proportioning selected shall conform to the following requirements:

Section 460.3 A – Page 236 – Delete the second sentence in Note 1 under Table 1.

Section 460.3 A – Page 235 – Delete the second sentence of the first paragraph on page 236 and replace with the following:

The mix design shall be based upon obtaining an average concrete compressive strength 1200 psi above the specified minimum 28 day compressive strength.

Section 460.3 A – Page 235 – Delete the last sentence of the second paragraph on page 236 and replace with the following:

Trial batches shall be conducted in accordance with the American Concrete Institute Publication ACI 211.1, ACI 318, ASTM C192 and the following:

Section 460.3 A – Page 235 – Delete the first paragraph on page 237 and replace with the following:

Concrete mix designs previously used will be considered in compliance with the mix design requirements provided all of the following conditions are met:

Section 460.3 A – Page 235 – Delete the second sentence of item 3 on page 237 and replace with the following:

These test results and associated batch tickets shall be submitted to the Engineer.

Section 460.3 A – Page 235 – Add the following to the list of items on page 237:

4. All supporting information for the mix design including but not limited to, fresh concrete tests and material properties.

Section 460.3 A – Page 235 – Delete the last two paragraphs of this section on page 237:

Section 460.3 B.2 – Page 237 – Delete the last paragraph of this section on page 238 and replace with the following:

If the average compressive strength of the 28 day and the backup cylinder compressive strength is more than 500 psi (3.5 Mpa) below the specified 28 day compressive strength, the concrete represented by the cylinders shall be removed and replaced.

Section 460.3 B.3 – Page 238 – Delete the last paragraph of this section and replace with the following:

If the average core compressive strength is more than 500 psi (3.5 Mpa) below the specified 28 day compressive strength, the concrete represented by the cylinders shall be removed and replaced.

Section 460.3 B.4 – Page 238 – Delete the last paragraph of this section on page 239 and replace with the following:

If the average core compressive strength is more than 500 psi (3.5 Mpa) below the specified 28 day compressive strength, the concrete represented by the cylinders shall be removed and replaced.

Section 460.3 B.5 – Page 239 – Delete the first sentence and replace with the following:

If the Contractor utilizes the option to core as specified in Section 460.3 B.4, the Contractor shall arrange for an independent testing laboratory to perform the coring and compressive testing within 14 calendar days of notification of the failing compressive strength of the backup cylinder.

Section 460.3 B.5 – Page 239 – Delete the last sentence of the second paragraph.

Section 460.3 B.5.a – Page 239 – Delete this section and replace with the following.

- a. Include DOT project number, county, & PCN.

Section 460.3 C.1 – Page 240 – Add the following to the list of items to be included on the printed ticket on page 241:

W/C ratio
Aggregate Moistures (total moisture & absorption)

Section 460.3 C.1 – Page 240 – Add the following after the last paragraph of this section on page 241:

The W/C ratio shall be calculated using the following formula and rounded to the nearest 0.01:

$$W / C \text{ ratio} = \left[\frac{\text{weight of free water} + \text{weight of batch water}}{\text{weight of cement} + \text{weight of supplementary cementitious material}} \right]$$

weight of free water = (% total moisture in aggregate - % absorption of aggregate) x weight of aggregate
weight of batch water = total weight of water added to the batch of concrete either at the plant or in the truck

The weight of free water shall be calculated for both the fine aggregate and the coarse aggregate.

Section 460.3 D – Page 242 – Add the following to this section:

6. The amount of batch water and aggregates added to the mix shall be adjusted accordingly using the results of the most recent two hour moisture tests. If automatic moisture sensing equipment is used, the Engineer may allow the use of the automatic moisture sensing results to make adjustments.

Section 460.3 E – Page 243 – Delete the third paragraph and replace with the following:

When a concrete batch is transported in a truck mixer or agitator and the batch is smaller than 60 percent of the rated capacity of the truck mixer or agitator, the following percentage of additional cementitious material at the same proportions as listed on the mix design shall be added to the batch:

Section 460.3 E – Page 243 – Delete the paragraph below the table on the middle of page 243 and replace with the following:

The above provisions regarding additional cementitious material shall also apply to the mixing of small batches in central plants. Additional cementitious material will not be required when the small batch is mixed in a drum that is sufficiently coated with mortar to withstand the loss of cementitious material. Sufficient mortar coating, as determined by the Engineer, may include mortar coating the drum from a previously mixed batch during continuous mixing operations. Additional cementitious material will be required if more than 30 minutes has passed from the mixing of the previous batch, if the drum has been cleaned following the previous batch, or if the mortar coating the drum has been disturbed following the previous batch.

Section 460.3 K.1 – Page 247 – Delete and replace with the following:

1. The coarse aggregate piles must be flushed with water for a minimum of 24 hours.

Section 460.3 K – Page 248 – Delete the twelfth paragraph and replace with the following:

Barrier curbs will not be allowed to be placed with slipform paving equipment.

Section 465.2 A.3 – Page 265 – Add the following sentence to the end of the paragraph:

Slump loss shall be tested in accordance with SD 423.

Section 465.2 A.6 – Page 265 – Delete this section and replace with the following:

- 6. The mix design shall establish a maximum water cementitious material ratio for the concrete mix (never to exceed 0.44)

The use of a water reducer will be required to achieve the above properties. Water reducers conforming to AASHTO M194 Type C (Accelerating) and Type E (Water-Reducing and Accelerating) will not be permitted.

Section 480.3 C.1 – Page 280 – Delete the fifth paragraph and replace with the following:

Welding of reinforcing steel shall not be allowed without written approval of the Bridge Construction Engineer. The request for approval shall list the bars to be welded, welding procedure, type of electrode, joint detail, and mill certificate of the reinforcing steel to be welded.

Section 480.4 – Page 281 and 282 – Delete the English and Metric Bar Designation tables and replace with the following:

Bar Designation

Size (English)	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 14	No. 18
Weight (lb/ft)	0.376	0.668	1.043	1.502	2.044	2.670	3.400	4.303	5.313	7.65	13.60
Size (Metric)	10	13	16	19	22	25	29	32	36	43	57
Weight (kg/m)	0.560	0.994	1.552	2.235	3.042	3.973	5.060	6.404	7.907	11.38	20.24

Section 550.3 A.2 – Page 303 – Delete the second sentence of the last paragraph and replace with the following:

When backfilling extra depth holes in accordance with Section 550.3 C.1.f.2, a grout admixture shall be added to the grout mixture in accordance with the manufacturer’s recommendations.

Section 550.3 C.1.b – Page 305 – Delete the third sentence of the first paragraph and replace with the following:

After completion of the Type 1A removal, the Engineer will inspect the deck and mark remaining areas of unsound existing overlay.

Section 550.3 C.1.c – Page 306 – Delete and replace with the following:

- c. Type 1B Removal areas will be determined after Type 1A Removal (or Type 2A Removal if specified) has been accomplished. Type 1B Removal shall consist of removing delaminated or unsound concrete by chipping below the Type 1A Removal (or Type 2A Removal if specified) and extending down to the top of the top bar in the top mat of reinforcing steel. Concrete removed below the top of the top bar incidental to Type 1B Removal will be considered a part of the Type 1B Removal.

Section 550.3 C.1.f.2 – Page 306 – Delete the first sentence and replace with the following:

Backfill of Extra Depth Holes: When Type 1D removal is necessary, or when holes deeper than 4” (100mm) below the top of the scarified surface are encountered, they shall be backfilled as follows:

Section 550.3 D.2 – Page 309 – Delete the fourth paragraph and replace with the following:

Concrete placement will not be permitted after October 1 or before May 1 or when the air temperature is above 85°F (29°C) in the shade. It may be necessary to place concrete during evening or early morning hours and not during periods of low humidity and high wind to comply with this requirement.

Section 550.3 E – Page 310 – Delete and replace with the following:

- E. Proportioning and Mixing Concrete Materials:** Proportioning and mixing shall conform to Section 460.3 F.

Section 560.2 A – Page 317 – Add the following:

6. **Cement:** Section 750. Type II cement shall be used, unless otherwise specified.

Section 560.3 A – Page 317 – Add the following paragraph after the first paragraph:

Precast concrete drop inlets shall conform to the requirements of Section 670.

Section 560.3 A.1 – Page 317 – Delete and replace with the following:

1. **Fabrication:** The Fabricator shall notify the Area Engineer prior to the fabrication of precast and prestressed concrete items.

Section 560.3 A.2 – Page 317 – Delete the last sentence of the first paragraph and replace with the following:

When a plant has been in operation and satisfactorily producing material, the Contractor will not be required to submit a concrete mix design for precast concrete, unless changes have been made to the pre-approved mix design or the material used in the mix design. Concrete mix designs shall be submitted for each project on all prestressed concrete products.

Section 560.3 B.1 – Page 319 – Delete the second sentence of the fifth paragraph and replace with the following:

A checked design includes the design calculations and check design calculations performed by an independent Engineer registered in the State of South Dakota.

Section 560.3 B.2.b – Page 321 – Delete the second paragraph and replace with the following:

Acceptance of the precast units shall be in accordance with Section 460.3 B except that the fabricator shall be responsible for the sampling, preparing, and properly curing of all concrete cylinders for concrete compressive strength in accordance with the Materials Manual. The precast units will be accepted when the minimum design concrete compressive strength requirements have been met. Accepted precast units represented by that test group of cylinders may be delivered to the project and will not require the 28 day cylinder test.

Section 600.2 A.17 – Page 333 – Add the following sentence at the end of the paragraph:

The concrete pad must be securely mounted and solidly supported under the laboratory to minimize vibration while operating the Marshall compactor.

Section 600.3 – Page 336 – Delete the fourth and fifth sentence and replace with the following:

On projects that a Type III lab is required, the Engineer may allow a Type I or II lab to be supplied until such a time the Engineer determines the Type III lab is required. If the Engineer allows a temporary Type I or II lab to be furnished, no additional payment for that lab will be made.

Section 605.3 C – Page 339 – Delete the third sentence of the first paragraph and replace with the following:

If fly ash is used, the minimum amount of cement to be replaced is 15 percent and the maximum amount is 20 percent at a 1:1 ratio by weight.

Section 630.4 A – Page 355 – Delete this section and replace with the following:

- A. **Beam Guardrail:** Each class and type will be measured to the nearest 0.1 foot (0.1 meter) along the centerline of the rail. The length in feet (meters) shall be the overall length center to center of end posts or to connections with bridges.

Section 630.4 C – Page 355 – Delete this section and replace with the following:

- C. **Remove Beam Guardrail:** Remove Beam Guardrail will be measured to the nearest 0.1 foot (0.1 meter) along the centerline of the rail.

Section 630.5 A – Page 355 – Delete this section and replace with the following:

- A. Beam Guardrail:** Beam guardrail will be paid for at the contract unit price per 0.1 foot (0.1 meter) for each class and type installed. Payment will be full compensation for labor, materials, equipment, and incidentals required.

Section 630.5 C – Page 356 – Delete this section and replace with the following:

- C. Remove Beam Guardrail:** Remove Beam Guardrail will be paid for at the contract unit price per 0.1 foot (0.1 meter). Payment will be full compensation for the backfill of holes and the removal of the guardrail including end terminals, beam guardrail, posts, blocks, and hardware from the project limits.

Section 632.3 H.2.c – Page 361 – Delete and replace with the following:

- c.** Anchor bolts shall be provided with leveling nuts, top nuts, and jam nuts. Anchor bolts shall be tightened in accordance with Section 635.3 F.

Section 633.3 D – Page 368 – In the grooving tolerance tables, replace “Depth of Groove” with the following:

	(English)	
Depth of Groove	80 mils	+ 10 mils
	(Metric)	
Depth of Groove	2.032 mm	+ 0.25 mm

Section 634.3 A – Page 372 – Delete the first sentence of the fourth paragraph and replace with the following:

All workers within the right of way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel intended to provide conspicuity during both daytime and nighttime usage, and meeting the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled “American National Standard for High-Visibility Safety Apparel and Headwear”.

Section 634.3 A – Page 372 – Delete the first sentence of the fifth paragraph.

Section 634.3 C – Page 374 – Add the following paragraph after the first paragraph:

For 2 lane roadways with average daily traffic volumes of 2500 or less, no passing zones may be identified using DO NOT PASS, PASS WITH CARE, and NO PASSING ZONE signs rather than pavement markings. The DO NOT PASS and NO PASSING ZONE signs shall be used to mark the beginning of each no passing zone, and the PASS WITH CARE signs to mark the end of each zone. These may be utilized in place of the pavement markings normally used to identify no passing zones for no longer than 2 weeks. The placement of the dashed centerline marking and these signs shall be required prior to nightfall.

Section 635.3 C.3 – Page 380 – Add the following sentence at the end of the first paragraph:

The contractor shall not use a machine requiring flowing water for installation of conduit under streets or roadways unless approved by the Engineer.

Section 635.3 F – Page 381 – Delete and replace with the following:

- F. Anchor Bolts:** Anchor bolts shall be installed in accordance with the following requirements.
 - 1. General:** Anchor bolts shall be provided with leveling nuts and top nuts. Anchor bolts for light towers shall be provided with leveling nuts, top nuts, and jam nuts.
 - 2. Anchor Bolt Installation:** A steel template shall be used to accurately locate and hold the anchor bolts plumb and in proper alignment. This template shall be in place during placement of the concrete base and shall remain in place a minimum of 24 hours after the concrete placement has been completed. Out of position anchor bolts and anchor bolts greater than 1:40 out-of-plumb are cause for rejection of the

base. Bending of the anchor bolts to straighten or move into position, or alterations of the pole base plate will not be permitted.

3. Anchor Bolt Tightening:

- a. All leveling nuts (bottom nuts) shall be brought to full bearing on the bottom of the base plate. The bottom of the leveling nuts must be kept as close to the concrete base as practical, and shall not be more than one inch above the top of the concrete base. Leveling nuts must be threaded onto the anchor bolt to provide at least ¼ inch (6 mm) projection of the bolt above the top nut or jam nut if required when in its tightened position.
- b. A softened beeswax or equivalent shall be applied to the top nut bearing face and top nut internal threads prior to placement on the anchor bolt. All top nuts shall be tightened to a snug tight condition. Snug tight is defined as the tightness attained by the full effort of a person using a wrench with a length equal to 14 times the diameter of the anchor bolt, except the minimum length shall be 18 inches. The use of adjustable wrenches will not be allowed. The full effort required to achieve a snug tight condition, shall be applied as close to the end of the wrench as possible. Pull firmly by leaning back and using full body weight (brace feet to prevent slipping) on the end of the wrench until the nut stops rotating. This snug tightening shall be accomplished in a minimum of two separate passes of tightening. The sequence of tightening in each pass shall be such that the opposite side nut, to the extent possible, shall be subsequently tightened until all the nuts in that pass have been snugged.

Snug tightness of both the top and leveling nuts shall be checked in the presence of Department personnel after the Contractor has completed nut snugging as described above, but prior to final tightening. Snug tightness of the nuts (top and leveling) shall be checked by applying a torque in a range from 20% to 30% of the verification torque. See Table 1 for verification and snug tight torque values.

Table 1

Anchor Bolt Tightening

Anchor Bolt Diameter (in)	Anchor Bolt Stress Area (sq in)	Yield Strength (ksi)	Minimum Tensile Strength (ksi)	Verification Torque (ft-lbs)	30% Snug Tight Torque (ft-lbs)	20% Snug Tight Torque (ft-lbs)
1.00	0.61	36.0	58.0	177	53	35
1.25	0.97	36.0	58.0	351	105	70
1.50	1.41	36.0	58.0	613	184	123
1.75	1.90	36.0	58.0	964	289	193
2.00	2.50	36.0	58.0	1449	435	290
2.25	3.25	36.0	58.0	2120	636	424
2.50	4.00	36.0	58.0	2899	870	580
2.75	4.93	36.0	58.0	3930	1179	786
3.00	5.97	36.0	58.0	5192	1558	1038
1.00	0.61	55.0	75.0	274	82	55
1.25	0.97	55.0	75.0	545	163	109
1.50	1.41	55.0	75.0	951	285	190
1.75	1.90	55.0	75.0	1496	449	299
2.00	2.50	55.0	75.0	2249	675	450
2.25	3.25	55.0	75.0	3289	987	658
2.50	4.00	55.0	75.0	4498	1349	900
2.75	4.93	55.0	75.0	6098	1830	1220
3.00	5.97	55.0	75.0	8056	2417	1611
1.00	0.61	75.0	100.0	366	110	73
1.25	0.97	75.0	100.0	726	218	145
1.50	1.41	75.0	100.0	1268	381	254

1.75	1.90	75.0	100.0	1994	598	399
2.00	2.50	75.0	100.0	2999	900	600
2.25	3.25	75.0	100.0	4386	1316	877
2.50	4.00	75.0	100.0	5998	1799	1200
2.75	4.93	75.0	100.0	8131	2439	1626
3.00	5.97	75.0	100.0	10742	3223	2148
1.00	0.61	105.0	125.0	457	137	91
1.25	0.97	105.0	125.0	908	272	182
1.50	1.41	105.0	125.0	1586	476	317
1.75	1.90	105.0	125.0	2493	748	499
2.00	2.50	105.0	125.0	3749	1125	750
2.25	3.25	105.0	125.0	5482	1645	1096
2.50	4.00	105.0	125.0	7497	2249	1499
2.75	4.93	105.0	125.0	10164	3049	2033
3.00	5.97	105.0	125.0	13427	4028	2685

- c. At this point, the top nut and leveling nut must be in full bearing on the base plate. If any gap exists between either nut (top or leveling) and the base plate, a beveled washer shall be added between the nut washer and the base plate to eliminate the gap. The beveled washer shall be stainless steel Type 304, the same diameter as the hardened washer, and beveled as required to eliminate the gap between the nut and the base plate. All nuts shall be retightened according to steps (a) and (b) above if beveled washers are added. All costs required to remove and re-erect the structure to install beveled stainless steel washers shall be at the Contractor's expense.
- d. Using a hydraulic wrench rotate all top nuts as indicated in Table 2. The additional turn of the nuts shall be accomplished by tightening all the nuts in two separate passes of equal incremental turns (i.e., for 1/3 turn use 1/6 turn each pass). The sequence of nut tightening in each pass shall be such that the opposite side nut, to the extent possible, shall be subsequently tightened until all the nuts in that pass have been turned. There shall be no rotation of the leveling nut during top nut tightening.

In lieu of a hydraulic wrench, torque wrenches and multipliers may be used to achieve the desired nut rotations and tightness.

- e. Tightness of the nuts shall be checked in the presence of Department personnel. Tightness of the nuts shall be checked within a minimum of 48 hours and a maximum of 96 hours after the nuts have been rotated as indicated in Section 635.3 F.3.d above. Tightness of the top nuts shall be checked by applying the verification torque to the nut. See Table 1 for verification torque.

Table 2

Nut Rotation for Turn-Of-Nut Pretensioning

Anchor Rod Diameter (in)*	Nut Rotation from Snug-Tight Condition a, b	
	F1554 Grade 36, A307	F1554 Grade 55 and 105, A449
< 1 ½	1/6 Turn	1/3 Turn
≥ 1 ½	1/12 Turn	1/6 Turn
a. Nut rotation is relative to anchor rod. The tolerance is plus 20 degrees		
b. Applicable only to double-nut-movement joints.		

Bottom leveling nuts shall be in contact with the base prior to applying the torque. An inability to achieve the verification torque indicates that the threads have stripped and the anchor bolt must be replaced. All costs for replacing anchor bolts shall be at the Contractor's expense.

- f. Install jam nut after verification torque has been applied to top nut. Lubricate threads of jam nut with beeswax or equivalent and tighten to a torque of 100 ft-lb (approximated without the use of a torque wrench).

Section 635.3 H – Page 382 – Delete the first paragraph and replace with the following:

Traffic signal conductors shall be continuous from the controller cabinets to the pole bases. Splicing of conductors will not be allowed in the junction boxes.

Section 635.3 R.3 – Page 384 – Delete the first sentence in the first paragraph and replace with the following:

All circular red, red arrow, circular yellow, yellow arrow, circular green, green arrow, and pedestrian indications shall be light emitting diode (LED) signal modules.

Section 635.5 E – Page 386 – Delete and replace with the following:

D. Anchor Bolts: Cost for anchor bolts shall be included in the contract unit price for the concrete for which they are incorporated with.

Section 670.3 – Page 393 – Delete and replace with the following:

A. General Requirements: Concrete for drop inlets shall be proportioned, mixed, hauled, and placed in accordance with Section 462.

When the foundation for a drop inlet is in new embankment, the embankment shall be constructed to an elevation at least one foot (300 mm) above the footing before the foundation for the drop inlet is prepared. The foundation shall be compacted as specified for the adjacent embankment.

Castings shall be set in full mortar beds or secured as specified. Castings shall be set accurately to the correct elevation so subsequent adjustment will not be necessary.

Inlet and outlet pipe connections shall be of the same size and kind and shall meet the same requirements as the pipe they connect. Pipe sections shall be flush on the inside of the structure wall and project outside sufficiently for proper connection with the next pipe section. Masonry shall fit neatly and tightly around the pipe. Grouting of the pipe connection may be required as directed by the Engineer if voids exist after form removal.

Drop inlets shall be either cast in place or precast. Precast drop inlets shall be defined as those drop inlets cast outside of the project limits. Drop inlets cast within the project limits will be considered cast in place.

B. Cast in Place Drop Inlets: The foundation excavated for drop inlets shall be thoroughly moistened immediately prior to placing concrete.

Steel reinforcement shall be placed in accordance with Section 480.

The finished surface of the concrete shall present a neat and smooth appearance. Concrete shall be protected and cured in accordance with Section 460.3, except the minimum curing time shall be 72 hours.

Upon completion and curing of the unit, the sheeting, bracing, forms, and falsework shall be removed and the excavation backfilled. The unit shall not be backfilled until the completion of the 72 hour curing period, or until the concrete reaches a minimum compressive strength of 3000 psi (21 MPa). Backfill shall be placed in layers not exceeding six inches (150 mm) thick and compacted to the same degree as specified for the adjacent embankment. Installations shall be finished completed and left in a neat appearing condition.

C. Precast Drop Inlets: Precast drop inlets shall conform to the following requirements:

1. Notification: The Contractor shall notify the Engineer 24 hours in advance of all concrete pours for inspection and observation of Contractor testing:

2. Design: Precast drop inlets shall conform to the configurations of the standard plates. Variations from the standard plates may be accepted provided the AASHTO materials, design, fabrication specifications, and the requirements of this section are complied with.

Precast drop inlets shall be designed to specified load conditions. The Design Engineer of the drop inlets must be registered in the State of South Dakota. The design shall conform to the AASHTO design requirements for the depth of fill, including surfacing, etc., as well as live load or specified loading.

The Contractor shall furnish a checked design with the shop drawings. A checked design shall include the design calculations, and check design calculations performed by an independent Engineer registered in the State of South Dakota.

3. **Shop Drawings:** Fifteen days prior to fabrication, the Contractor shall furnish shop drawings for Department review. The shop drawings shall consist of fabrication details including reinforcing steel and spacer placement and configurations, total quantities for the complete item, and all information for fabrication and erection.
4. **Forms:** The forms shall be designed to withstand the fluid pressure of the concrete and the added forces due to vibration and impact without distortion. The forms shall be mortar tight and free from warp.

The form surface area in contact with the concrete shall be treated with an approved form oil or wax before the form is set in position. The forms shall be thoroughly cleaned of all other substances.

5. **Concrete Cure:** The concrete shall be cured by low pressure steam, radiant heat, or as specified in Section 460.3 N. When curing in accordance with Section 460.3 N., the concrete temperature requirements of Section 460.3 O. shall apply.

Low pressure steam or radiant heat curing shall be done under an enclosure to contain the live steam or the heat and prevent heat and moisture loss. The concrete shall be allowed to attain initial set before application of the steam or heat. The initial application of the steam or heat shall be three hours after the final placement of concrete to allow the initial set to occur. When retarders are used, the waiting period before application of the steam or radiant heat shall be five hours. When the time of initial set is determined by ASTM C 403, the time limits described above may be waived.

During the waiting period, the minimum temperature within the curing chamber shall not be less than 50° F (10° C) and live steam or radiant heat may be used to maintain the curing chamber between 50° F (10° C) and 80° F (27° C). During the waiting period the concrete shall be kept moist.

Application of live steam shall not be directed on the concrete forms causing localized high temperatures. Radiant heat may be applied by pipes circulating steam, hot oil, hot water, or by electric heating elements. Moisture loss shall be minimized by covering exposed concrete surfaces with a plastic sheeting or by applying an approved liquid membrane curing compound to exposed concrete surfaces. The top surface of concrete members for use in composite construction shall be free of membrane curing compound residue unless suitable mechanical means for full bond development are provided.

During the initial application of live steam or radiant heat, the concrete temperature shall increase at an average rate not exceeding 40° F (22° C) per hour until the curing temperature is reached. The maximum concrete temperature shall not exceed 160° F (71° C). The maximum temperature shall be held until the concrete has reached the desired strength. After discontinuing the steam or radiant heat application, the temperature of the concrete shall decrease at a rate not to exceed 40° F (22° C) per hour until the concrete temperature is within 20° F (11° C) of the ambient air temperature. The Contractor will not be required to monitor this cool down temperature when the ambient air temperature is 20° F (11° C) or above.

The test cylinders shall be cured with the unit, or in a similar manner (similar curing method and concrete curing temperature, as approved by the Concrete Engineer) as the unit, until minimum compressive strength has been obtained.

6. **Surface Finish and Patching:** If a precast or prestressed item shows stone pockets, honeycomb, delamination or other defects which may be detrimental to the structural capacity of the item, it will be subject to rejection at the discretion of the Engineer. Minor surface irregularities or cavities, which do not impair the service of the item, and which are satisfactorily repaired will not constitute cause for rejection. Repairs shall not be made until the Engineer has inspected the extent of the irregularities and has determined whether the item can be satisfactorily repaired. If the item is deemed to be repairable, the

repair method and procedures shall be agreed upon by the Department and fabricator prior to the work commencing.

Depressions resulting from the removal of metal ties or other causes shall be carefully pointed with a mortar of sand and cement in the proportions, which are similar to the specific class of concrete in the unit. A sack rub finish is required on prestressed beams except for the bottom of the bottom flange and the top of the top flange. A sack rub finish is also required on sloped surfaces of box culvert end sections.

7. **Fresh Concrete Testing:** The Contractor shall be responsible for performing all fresh concrete testing in accordance with the materials manual Materials Manual. Tests shall be documented on a DOT-54 form and submitted to the Engineer.
8. **Concrete Compressive Strength:** The Contractor shall make a minimum of one group of test cylinders for each class of concrete for each day's production, not to exceed 150 cubic yard (125 cubic meters) per group of cylinders.

At a minimum, a group of test cylinders shall consist of the following:

- a. Two test cylinders are required for the 28 day compression test.
- b. Two additional cylinders will be required for determining concrete strength, when the Contractor desires to make delivery and obtain acceptance by the Department prior to the 28 day compression test.

Acceptance of the precast units shall be in accordance with Section 460.3 B. The precast units will be accepted when the minimum design concrete compressive strength requirements have been met. Accepted precast units represented by that test group of cylinders may be delivered to the project and will not require the 28 day cylinder test.

The Engineer will be responsible for breaking of all concrete cylinders for concrete compressive strength in accordance with the Materials Manual.

Section 670.5 – Page 394 – Add the following paragraph after the first paragraph:

Unless otherwise specified in the plans the cost for removal of existing pipe, if necessary, to facilitate the installation of new drop inlets shall be incidental to the associated drop inlet contract unit prices.

Section 671.5 – Page 397 – Add the following paragraph to this section:

Unless otherwise specified in the plans the cost for removal of existing pipe, if necessary, to facilitate the installation of new manholes shall be incidental to the associated manhole contract unit prices.

Section 720.4 – Page 405 – Delete this section and replace with the following:

- A. **Bank and Channel Protection Gabions:** Bank and channel protection gabions will be measured to the nearest 0.1 cubic yard (0.1 cubic meter). If a substitution is made, the dimensions of the bank and channel protection installed shall be equal to or greater than the dimensions specified. Payment will be based on plans quantity, unless changes are ordered in writing by the Engineer.
- B. **Drainage Fabric:** Drainage fabric will be measured to the nearest square yard (square meter). The lap at joints will not be included in the measurement.

Section 720.5 – Page 405 – Delete this section and replace with the following:

- A. **Bank and Channel Protection Gabions:** Bank and channel protection gabions will be paid for at the contract unit price per cubic yard (cubic meter). Payment will be full compensation for materials, equipment, labor, excavating, shaping and incidentals required.

B. Drainage Fabric: Drainage fabric will be paid for at the contract unit price per square yard (square meter). Payment will be full compensation for furnishing and installing the drainage fabric as specified. Payment will be for plan quantity unless changes are ordered in writing.

Section 730.2 C – Page 407 – Delete the fourth sentence and replace with the following:

If the seed is not planted within the 9 month period, the Contractor shall have the seed retested for germination, as described above, and a new certified test report shall be furnished prior to starting seeding operations.

Section 734.3 – Page 423 – Add the following paragraph before the first paragraph:

The Contractor shall designate an employee as Erosion Control Supervisor whose responsibility is the construction and maintenance of erosion and sediment control. This person shall be available to be reached by phone 24 hours a day, 7 days a week, and must be able to respond to emergency situations at the job site within 12 hours. The person so designated must have training and be certified by the South Dakota Department of Transportation in the area of erosion and sediment control. The name, phone number, and location of the person shall be provided to the Department at the preconstruction meeting.

Section 734.3 B.2 – Page 424 – Delete the second sentence and replace with the following:

The muck will be removed when the surface of the muck is at approximately one-third the height of the silt fence.

Section 750 – Page 431 – Add the following after the second paragraph:

In addition to the certification requirement specified in SD 416, when limestone is used, the manufacturer shall state in writing the amount thereof, the percentage of Calcium Carbonate in the limestone, and shall supply comparative test data on chemical and physical properties of the cement with and without the limestone. The comparative tests do not supersede the normal testing to confirm that the cement meets chemical and physical requirements.

Section 800.2 D – Page 436 – Add the following sentence to the end of the fourth paragraph:

Fine aggregate with a 14 day expansion value of 0.400 or greater shall not be used.

Section 800.2 D – Page 436 – Add the following sentence to the end of the last paragraph:

The expansion value of the blended sources will be used to determine the type of cement required.

Section 800.2 F – Page 437 – Delete the last three sentences of the first paragraph and replace with the following:

If the fineness modulus falls outside this limit the Concrete Engineer shall be notified. A new or adjusted mix design may be provided or approved. The uniformity of grading requirements do not apply to fine aggregate for Low slump Dense Concrete and Class M (I) concrete.

Section 800.2 F – Page 437 – Delete the first sentence of the second paragraph and replace with the following:

For determining the FM deviation from the design mix FM, the average of the five most recent FM test shall be used.

Section 800.2 F – Page 437 – Delete the first sentence of the last paragraph and replace with the following:

Additionally for Portland Cement Concrete Paving conforming to Section 380; the FM of the fine aggregate, as established by the mix design, will be from 2.40 to 3.10 (wide band).

Section 821.1 A – Page 444 – Delete and replace with the following:

A. Burlap Cloth made from Jute or Kenaf.....AASHTO M 182

White non-woven polypropylene geotextile conforming to the following requirements may be used in lieu of burlap for horizontal applications only. This material is not to be used for curing vertical surfaces.

Property	Test Method	Unit	Min. Ave. Roll Value
Weight	ASTM D 5261	Oz/Sq. Yd.	8.0

Section 821.1 B – Page 444 – Add the following sentence to this Section:

The compound shall be stored at temperatures above 35° F (2° C). Compound stored for a period in excess of six months will require resampling and testing for compliance prior to use.

Section 821.1 D.2 – Page 444 – Delete the second sentence and replace with the following:

Compound stored for a period in excess of six months will require resampling and testing for compliance prior to use.

Section 870.1 A – Page 452 – Delete this section and replace with the following:

- A. Hot Poured Elastic Joint Sealer:** The sealant shall conform to the requirements of ASTM D 6690 Type II or Type IV or be on the Departments approved products list for Joint Sealants for Asphalt Over Long Jointed Concrete Pavement.

Hot poured elastic joint sealer meeting the requirements of ASTM D 6690 Type IV shall not weigh more than 9.35 lbs/gal (1.12 kg/L).

Test methods shall conform to ASTM D 5329, except the fine aggregate used in preparing the concrete test blocks shall conform to Section 800. The Contractor shall furnish a certificate of compliance for hot poured elastic joint sealer not listed on the approved products list.

Section 880.2 A – Page 455 – Delete this section and replace with the following:

- A. Mineral Aggregate:** The mineral aggregate job mix formula, without the addition of hydrated lime, shall conform to the requirements shown in Table 1. The single percentage aggregate gradation established in the job mix formula for Class D, E, and G asphalt concrete mixes shall be within the limits in Table 1. The single percentage aggregate gradation established in the job mix formula for Class S asphalt concrete mixes will be the center of the gradation band in Table 1. The Class S gradation will include mineral fillers or other approved additives.

TABLE 1

REQUIREMENTS	CLASS D		CLASS E		CLASS G		CLASS S	
	TYPE 1	TYPE 2	TYPE 1	TYPE 2	TYPE 1	TYPE 2	TYPE 1	TYPE 2
SIEVE	PERCENT PASSING							
1" (25.0 mm)	100		100		100			
3/4" (19.0 mm)	97-100	100	97-100	100	97-100	100		
1/2" (12.5 mm)	75-95	97-100	75-95	97-100	75-95	97-100	86-100	100
3/8" (9.50 mm)							66-80	80-100
No. 4 (4.75 mm)	45-75	60-80	45-75	60-80	45-75	60-80	24-34	24-45
No. 8 (2.36 mm)	30-55	40-60	30-55	40-60	30-55	40-60	10-20	10-22
No. 16 (1.18 mm)	20-45	25-50	20-45	25-50	20-45	25-50		
No. 40 (425 µm)	10-30	15-35	10-30	15-35	10-30	15-35		
No. 200 (75 µm)	3.0-7.0	4.0-8.0	3.0-7.0	4.0-8.0	3.0-7.0	4.0-8.0	4.0-8.0	2.0-5.0
Processing Required	Crushed		Crushed		Crushed		Crushed	
Liquid Limit (max)	25		25		25		25	
Plasticity Index, (max)	3		Non-Plastic		Non-Plastic		Non-Plastic	
L.A. Abra. Loss, (max)	45%		40%		35%		40%	

Sodium Sulfate (Soundness) (Max.)				
+4 (4.75 mm) sieve	15%	15%	12%	12%
-4 (4.75 mm) sieve	15%	15%	12%	12%
Lightweight Particles (Max.)				
+4 (4.75 mm) sieve	4.5%	3.0%	1.0%	1.0%
-4 (4.75 mm) sieve	4.5%	3.0%	1.0%	1.0%
Crushed Particles (Min.)				
+4 (4.75 mm) sieve	50% 1-FF	70% 2-FF	90% 2-FF	90% 2-FF
* - 4 Manufactured Fines	NA	20% Min.	70% Min.	95% Min.

* - Manufactured fines shall be manufactured solely from material retained on the ¾ inch (19mm) sieve, unless the aggregate material is produced from a ledge rock source.

Section 882.2 – Page 459 – Delete Table 1 and replace with the following:

Table 1

REQUIREMENT	Subbase	Gravel Cushion	Granular Bridge End Backfill	Aggregate Base Course	Limestone Ledge Rock		Gravel Surfacing
					Base Course	Gravel Cushion	
SIEVE	PERCENT PASSING						
2" (50 mm)	100						
1" (25.0 mm)	70-100		100	100	100		
¾" (19.0 mm)		100	80-100	80-100	80-100	100	100
½" (12.5 mm)			68-91	68-91	68-90		
No. 4 (4.75 mm)	30-70	50-75	42-70	46-70	42-70	46-70	50-78
No. 8 (2.36 mm)	22-62	38-64	29-58	34-58	29-53	29-53	37-67
No. 40 (425 µm)	10-35	15-35	10-35	13-35	10-28	10-28	13-35
No. 200 (75 µm)	0.0-15.0	3.0-12.0	0.0-5.0	3.0-12.0	3.0-12.0	3.0-12.0	4.0-15.0
Liquid Limit Max		25	25	25	25	25	
Plasticity Index	0-6	0-6	0-6	0-6	0-3	0-3	4-12
L.A. Abra. Loss, max.	50	40	40	40	40	40	40
Foot Notes		2	1,2	1,2			
Processing Required	crushed	crushed	crushed	crushed	crushed	crushed	crushed

Section 890.2 G – Page 465 – In the table, under TESTS ON RESIDUE FROM DISTILLATION TESTS, add the following after Elastic Recovery @ 50°F (10°C):

(see Note 4)

Section 890.2 G – Page 465 – Add the following after Note 3:

Note 4: The Elastic Recovery test shall be in accordance with AASHTO T301, except that the residue will be obtained by distillation, not oven evaporation. The distillation temperature shall be as recommended by the emulsion manufacturer.

Section 972.2 B – Page 479 – Delete the second paragraph and replace with the following:

For bolts that are 1” (M24) (incl.) in diameter and less, the maximum hardness for AASHTO M164 (ASTM A325) bolts shall be 33 Rc.

Section 972.2 C – Page 483 – Add the following paragraph before the second to last paragraph:

Jam nuts shall conform to ASTM A563 Grade A.

Section 980.1 A.1 – Page 485 – Delete this section and replace with the following:

1. Quantitative Requirements: The finished paint shall meet the following quantitative requirements:

	<u>WHITE</u>	<u>YELLOW</u>
<u>Lead</u> , parts per million max. ASTM D 3335 or X-ray fluorescence	100	100
<u>Pigment</u> , percent by weight	60.0 - 62.5	58.5 – 61.0
<u>Pigment</u> , percent by weight; when tested in accordance with ASTM D 3723 (See Note 1)	60.0 - 62.5	56.1 - 58.6

Note 1: The residual extracted pigment upon analysis shall conform to the following quantitative compositional requirements when tested in accordance with ASTM D 1394 or ASTM D 4764.

Titanium Dioxide ASTM D 476 Type II Rutile 92% min. TiO ₂ tested in accordance with ASTM D 1394 or ASTM D 4764	1.00 lb/gal min.	0.20 lb/gal min.
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<u>Total Solids</u> , percent by weight; min. when tested in accordance with ASTM D 3723	77.0	76.1
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<u>Non-volatile Vehicle</u> , percent by weight vehicle; min. when tested in accordance with FTMS 141c (Method 4051.1)	42.5	42.5
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<u>Consistency</u> . Krebs-Stormer Shearing rate 200 r.p.m. Grams	190 to 300	190 to 300
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Equivalent K.U. when tested in accordance with ASTM D 562 (See Note 2)	80 to 95	80 to 95
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Note 2: The consistency of the paint shall be within the stated specification when determined a minimum 48 hours after packaging the material.

<u>Weight per Gallon</u> , pounds minimum when tested in accordance with ASTM D 1475 (See Note 3)	Rohm & Haas Dow DT 250NA	13.85 13.75	13.30 13.20
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Note 3: In addition to compliance with the minimum, the weight per gallon shall not vary more than ± 0.3 lbs / gal. between batches.

<u>Fineness of Dispersion</u> Hegman Scale, min. when tested in accordance	2 min. "B" Cleanliness"	2 min "B" Cleanliness
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with ASTM D 1210

Drying Time, No Pick-Up, Minutes, 12max. 12max.
 max. when tested in accordance with ASTM D711, except the wet film thickness shall be 12.5 ± 0.5 mils. The applied film shall be immediately placed in a laboratory drying chamber maintaining the relative humidity of $65 \pm 3\%$, the temperature $73.5 \pm 3.5^\circ\text{F}$ ($23 \pm 2^\circ\text{C}$), and air flow less than one foot (1') per minute.

Drying Time, Dry-through, Minutes 120max. 120max.
 max. when tested in accordance with ASTM 1640, except the wet film thickness shall be 12.5 ± 0.5 mils. The applied film shall be immediately placed in a laboratory drying chamber maintaining the relative humidity at $90 \pm 3\%$, and the temperature $23 \pm 2^\circ\text{C}$. The pressure exerted will be the minimum needed to maintain contact between the thumb and film. A reference-control paint will be run in conjunction with the candidate paint. Rohm and Haas formulation will be referenced-control paint.

Note 4: If either the candidate or reference-control paint exceeds the 120 minute maximum, then the candidate paint shall not exceed the dry time of the reference-control paint by more than 15 minutes.

Field Drying Time, Track-Free, minutes max. 2 2
 When applied under the following conditions, the line shall show no visual tracking when viewed from 50 feet after driving a passenger vehicle over the line at a speed of 25-35 mph:
 Fifteen mils wet film thickness
 Six lbs. of glass beads per gal. of paint
 Paint temperature at nozzle between 70 to 120°F
 Pavement dry, pavement temperature 50 to 120°F
 Relative humidity of 85% maximum

Directional Reflectance, minimum. 85 50
 when applied at a wet film thickness of 15 mils and when tested in accordance with ASTM E 1347 (Illuminate C 2°)

pH, minimum. 9.80 9.80
 when tested in accordance with ASTM E70

Dry Opacity, Contrast ratio, min. 0.955 0.880
 when applied at a wet film thickness of 6 to 7 mils and when tested in accordance with FTMS 141c (Method 4121 Illuminate C 2°)

Volatile Organic Content (VOC), max. 115 g/liter 115 g/liter
 in accordance with ASTM D 3960

Flash Point, closed cup, min. 115°F 115°F

Color: The paint shall meet the color specification limits and luminance factors listed in Tables 1 & 2 when tested in accordance with ASTM E1347 or ASTM E1349. The paint shall not discolor in sunlight and shall maintain the colors and luminance factors throughout the life of the paint. No Bayferrox 3950, iron oxides or other color enhancers will be permitted to achieve the color chromaticity coordinates.

Table 1*

Color	Chromaticity Coordinates (corner points)								Min. Luminance Factor (Y %)
	X	Y	X	Y	X	Y	X	Y	
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	35
Yellow	0.560	0.440	0.490	0.510	0.420	0.440	0.460	0.400	25

* Daytime Color Specification Limits and Luminance Factors for Pavement Markings Material with CIE 2° Standard Observer and 45/0 (0/45) Geometry and CIE Standard Illuminant D65

Table 2**

Color	Chromaticity Coordinates (corner points)							
	1		2		3		4	
	X	Y	X	Y	X	Y	X	Y
White	0.480	0.410	0.430	0.380	0.405	0.405	0.455	0.435
Yellow	0.575	0.425	0.508	0.415	0.473	0.453	0.510	0.490

** Nighttime Color Specification Limits for Pavement Marking Retroreflective Material With CIE 2° Standard Observer, Observation Angle = 1.05°, Entrance Angle + 88.76° and CIE Standard Illuminant A.

Section 981.1 – Page 489 – Delete this section and replace with the following:

Glass beads for use with pavement marking paint shall be moisture resistant and shall meet the requirements of AASHTO M 247, Type I. The glass beads shall be without floatation properties. The glass beads shall have dual surface treatment consisting of a moisture resistant silicone treatment, and silane adherence surface treatment. The glass beads shall have a minimum of 80% true spheres. Roundness shall be tested in accordance with SD 510.

Section 983.1 – Page 499 – Delete the third sentence of the first paragraph:

Section 983.1 B – Page 499 – Delete this section in it’s entirety.

Section 983.2 B – Page 500 – Delete this section in it’s entirety.

Section 985.1 D – Page 506 – Delete the last two sentences of the first paragraph and replace with the following:

Vertical reinforcement shall be deformed unless otherwise noted and shall conform to the requirements of ASTM A 615/AASHTO M 31 Grade 60 (400). Circular ties, stirrups, and spiral reinforcing may be fabricated from deformed bars conforming to the requirements of ASTM A 615/AASHTO M31 Grade 60 (400). Spiral reinforcing may also be fabricated from cold drawn wire conforming to ASTM A 82 or hot rolled plain bars conforming to ASTM A 615/AASHTO M 31 Grade 60 (400).

Section 985.1 G.4 – Page 508 – Delete the first sentence and replace with the following:

Conductor insulation shall be colored in accordance with ICEA S-95-658, Method 1, Table K-2.

Section 985.1 G.5 – Page 508 – Delete the first sentence and replace with the following:

Jackets shall be polyvinyl chloride meeting UL requirements for Class 12 jackets and ICEA S-95-658, Section 4.

Section 985.1 I.1.b – Page 508-509 – Delete the last sentence in the paragraph:

Section 985.1 N – Page 514 – Delete the second sentence in the fifth paragraph and replace with the following:

The flash control circuit shall ensure that remote transfer to flashing from normal stop and go operations occurs during the end of the mainline green interval in the cycle.

Section 985.1 N.1 and 2 – Page 515 – Delete these two sections and replace with the following sentence:

The controller furnished shall meet current NEMA TS2 standards for controllers.

Section 985.1 Q.7 – Page 516 – Delete and replace with the following:

7. Backplates for Signal Heads: Unless otherwise stated on the plans, backplates may be either 0.050 inch (1.27 mm) thick aluminum or 0.125 inch (3.18 mm) thick polycarbonate. The polycarbonate backplates must be made up from no more than two pieces.

Section 990.1 – Page 517 – Add the following to this section:

G. High Density Polyethylene Pipe: High Density Polyethylene pipe, couplings, and fittings shall conform to the requirements of AASHTO M 294.

Section 990.1 A.2.a – Page 517 – Delete and replace with the following:

- a. Portland cement shall conform to Section 750.

Section 990.1 A.2.h – Page 517 – Delete and replace with the following:

- h. Flexible watertight gaskets shall conform to AASHTO M 198.

Section 990.1 A.3 – Page 517 – Delete and replace with the following:

- 3. **Concrete:** The concrete in special sections shall have a minimum compressive strength of 4000 psi (28 MPa). Special sections are those sections of concrete pipe not covered by the class requirement of AASHTO M 170, M 206, or M 207. The strength shall be determined by test cylinders or by cores.

Section 1010.1 A – Page 519 – Add the following to the end of the first sentence:

Bar reinforcement shall be deformed, unless otherwise noted.

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**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS**

APRIL 1, 2009

The following unit bid prices have been established by the Transportation Commission. These prices will be pre-entered on the Bid Schedule sheets for each project or will establish a standard price to be used whenever no project contract unit price exists for that item.

Each unit price listed is considered full compensation for the cost of labor, material, and equipment to provide the item of work and/or material, complete in place, including (but not limited to) royalty, waste of unsuitable materials, equipment rental, overhead, profit, and incidentals.

Items specified in this document may be paid for on progressive estimates without the benefit of a prior approved Construction Change Order.

Use the equivalent metric unit prices that are listed in parenthesis below the item prices on metric projects.

Specification Section Number	Specification Section Name	Item Name	Price Per Item
5.8	Construction Stakes, Lines and Grades	Three-Man Survey Crew	\$160.00/hour
7.7	Public Convenience and Safety	Water	\$15.00/M.Gal (\$3.96/cubic meter)
9.3	Payment for extra haul of Materials	Extra Haul	\$0.15/ton mile (\$0.10/mton kilometer)
120.5 A.4.	Roadway and Drainage Exc. & Emb.	Unclassified Excavation Digouts	\$8.00/cu.yd. (\$10.46/cubic meter)
120.5 G.	Roadway and Drainage Exc. & Emb.	Extra Haul	\$0.05/cu.yd. station (\$ 2.14/cubic meter station)

120.5 H	Roadway and Drainage Exc. & Emb.	Water for Embankment	\$15.00/M.Gal (\$3.96/cubic meter)
421.5	Undercutting Pipe & Plate Pipe	Undercutting Culverts	\$12.00/cu. yd. (\$15.69/cubic meter)
510.5 D.	Timber, Prestressed, and Steel Piles	Timber Pile Splice	\$550.00/each
		Steel Pile Splices (* All Weights)	Splice made after one of the pieces has been driven.
		8 HP* (HP 200)	\$220.00/each
		10 HP* (HP 250)	\$300.00/each
		12 HP* (HP 300)	\$360.00/each
		14 HP* (HP 350)	\$420.00/each
			Splice made before either of the pieces has been driven.
		8 HP* (HP 200)	\$105.00/each
		10 HP* (HP 250)	\$125.00/each
		12 HP* (HP 300)	\$140.00/each
		14 HP* (HP 350)	\$160.00/each
510.5 E	Timber, Prestressed, and Steel Piles	Pile Shoes (Timber Pile)	\$110.00/each
510.5.H	Timber, Prestressed, and Steel Piles	Pile Tip Reinforcement (Steel Pile)	
		10" (250mm) HP Tip Reinforced	\$120.00/each
		12" (300 mm) HP Tip Reinforced	\$140.00/each
		14" (350 mm) HP Tip Reinforced	\$170.00/each
601.5	Haul Roads	Granular Material	\$12.00/ton (\$13.22/mton)

601.5	Haul Roads	Asphalt Concrete (including asphalt)	\$80.00/ton (\$88.18/mton)
601.5	Haul Roads	Cover Aggregate	\$25.00/ton (\$27.56/mton)
601.5	Haul Roads	Asphalt for Prime	\$700.00/ton (\$771.00/mton)
601.5	Haul Roads	Asphalt (Tack, Flush & Surface Treatment)	\$450.00/ton (\$496.00/mton)
601.5	Haul Roads	Water	\$15.00/M.Gal (\$3.96/cubic meter)
601.5	Haul Roads	Dust Control Chlorides	\$0.35/lb (\$.77/kg)
634.5	Traffic Control	Flagging	\$22.16/hour
634.5	Traffic Control	Pilot Car	\$37.77/hour

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