



**DEPARTMENT OF  
TRANSPORTATION**

**DEPARTMENT OF TRANSPORTATION**

**NOTICE TO CONTRACTORS,  
PROPOSAL, SPECIAL PROVISIONS,  
CONTRACT AND CONTRACT BOND  
FOR**

**PIPE WORK, CHANNEL CLEANOUT**

**FEDERAL**

**PROJECT NO.**

**PT 0905(117)261  
(PCN 080A)**

**INTERSTATE HIGHWAY 90**

**IN LYMAN COUNTY**

## **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.

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### **PLANS, PROPOSALS AND ADDENDA**

AFTER AWARD OF CONTRACT, THE LOW BIDDER WILL RECEIVE TEN (10) COMPLIMENTARY SETS OF PLANS, PROPOSALS, PROJECT Q & A FORUM, AND ADDENDA FOR FIELD AND OFFICE USE. AN ELECTRONIC COPY WILL ALSO BE PROVIDED. ANY ADDITIONAL COPIES REQUIRED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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## NOTICE TO CONTRACTORS

Bid proposals for this project will be prepared, transmitted, and received electronically by the South Dakota Department of Transportation (SDDOT) via the South Dakota Electronic Bid System until 10 A.M. Central time, on July 16, 2025, at which time the SDDOT will open bids. All bids will be checked for qualifications with results posted on the SDDOT website. The South Dakota Transportation Commission will consider all bids at a scheduled Commission meeting.

The work for which proposals are hereby requested is to be completed within the following requirement(s):

FIELD WORK COMPLETION: **JULY 3, 2026**

THE DBE GOAL FOR THIS PROJECT IS: **NOT SPECIFIED**

WORK TYPE FOR THIS PROJECT IS: **WORK TYPE 2 OR WORK TYPE 12**

Bidding package for the work may be obtained at:

<http://apps.sd.gov/hc65bidletting/ebslettings1.aspx#no-back-button>

An electronic version of the most recent version of the South Dakota Standard Specifications for Roads and Bridges may be obtained at <https://dot.sd.gov/doing-business/contractors/standard-specifications/2015-standard-specifications>

The electronic bid proposal must be submitted by a valid bidder as designated by their company's <https://apps.sd.gov/HC65C2C/EBS/BidAdminAuthorizationForm.pdf>. A bidding administrator will have privileges in the SDEBS to prepare bids, submit bids, and authorize additional company employees to prepare and submit bids. Additionally, a bidding administrator will be responsible for maintaining the list of authorized bidders for the company and will have the ability to add employees, remove employees, and set-up bidder identifications and passwords within the SDEBS. Bidding Administrator authorization will remain in full force and effect until written notice of termination of this authorization is sent by an Officer of the company and received by the Department.

A bidder identification and password, coupled with a company identification previously assigned by the Department, will serve as authentication that an individual is a valid bidder for the company.

Contact information to schedule a preconstruction meeting prior to commencing with the work on this project.

Jay Peppel  
PO Box 1206  
Mitchell, SD 57301-7206  
Phone: 605/995-8120



## PROPOSAL

Revised 8/10/11

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION, STATE OF SOUTH DAKOTA:

Ladies / Gentlemen:

The following proposal is made on behalf of the undersigned and no others. It is in all respects fair and is made without collusion on the part of any other person, firm or corporation not appearing in the signature to this proposal.

The undersigned certifies that she / he has carefully examined the plans listed herein, the Specifications hereinbefore referred to, the Special Provisions and the form of contract, both of which are attached hereto. The undersigned further certifies that she / he has personally inspected the actual location of the work, together with the local sources of supply and that she / he understands the conditions under which the work is to be performed, or, that if she / he has not so inspected the actual location of the work, that she / he waives all right to plea any misunderstanding regarding the location of the work or the conditions peculiar to the same.

On the basis of the plans, Specifications, Special Provisions and form of contract proposed for use, the undersigned proposes to furnish all necessary machinery, tools, apparatus and other means of construction, to do all the work and furnish all the materials in the manner specified, to finish the entire project **within the contract time specified** and to accept as full compensation therefore the amount of the summation of the products of the actual quantities, as finally determined, multiplied by the unit prices bid.

The undersigned understands that the quantities as shown in the Bid Schedule are subject to increase or decrease, and hereby proposes to perform all quantities of work, as increased or decreased, in accordance with the provisions of the specifications, and subject to any applicable special provisions, and at the unit prices bid.

The undersigned understands that the "Total or Gross Amount Bid" as immediately hereinbefore set forth is not the final amount which will be paid if this proposal is accepted and the work done, but that such amount is computed for the purpose of comparison of the bids submitted and the determination of the amount of the performance bond.

The undersigned further proposes to perform all extra work that may be required on the basis provided in the specifications, and to give such work personal attention in order to see that it is economically performed.

The undersigned further proposes to both execute the contract agreement and to furnish a satisfactory performance bond, in accordance with the terms of the specifications, within twenty (20) calendar days after the date of Notice of Award from the South Dakota Department of Transportation that this proposal has been accepted.



## 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 of not less than \$10,000 and not more than \$100,000 for each such failure.





REV 10/11/24

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): PT 0905(117)261 PCN: 080A

TYPE OF WORK: PIPE WORK, CHANNEL CLEANOUT

COUNTY: LYMAN

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Bobbie Country is the official in charge of the Pierre Career Center for Lyman County.

**THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:**

**Special Provision for Contract Time, dated 7/18/25.**

**Special Provision for Specialty Work, dated 6/18/25.**

**Special Provision Regarding Section 404 of the Clean Water Act, dated 1/27/25.**

**Fact Sheet #3.**

**List of Utilities**

**00 90 00 – APPENDIX A SUBSURFACE PROFILE**

**31 09 20 - SETTLEMENT INSTRUMENTATION AND MONITORING**

**31 23 50 - SHAFT EXCAVATION AND SUPPORT**

**33 05 03 - CONTACT GROUTING**

**33 05 24 - MICROTUNNELING**

**33 11 03 - INTERNAL INSPECTION OF PIPELINES AND PIPE CLEANING**

Special Provision for Steel Beam Guardrail AASHTO M 180 Designation, date 10/8/24.

Special Provision for Acknowledgment and Certification Regarding Article 3, Section 12 of the South Dakota Constitution, dated 8/24/23.

Special Provision for Buy America, dated 5/1/24.

Special Provision for Liability Insurance, dated 4/21/22.

Special Provision for Responsibility for Damage Claims, dated 4/21/22.

Special Provision for Restriction of Boycott of Israel, dated 1/31/20.

Special Provision for Contractor Administered Preconstruction Meeting, dated 12/18/19.

Fuel Adjustment Affidavit, DOT form 208 dated 7/15.

Standard Title VI Assurance, dated 3/1/16.

Special Provision For Disadvantaged Business Enterprise, dated 2/9/24.

Special Provision For EEO Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts, dated 2/5/24.

Special Provision For Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. October 23, 2023), dated 10/18/23.

Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. 10/23/23).

Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 10/24/19.

Wage and Hour Division US Department of Labor Washington DC. - US Dept. of Labor Decision Number SD20230032, dated 3/10/23.

Special Provision for Supplemental Specifications to 2015 Standard Specifications for Roads and Bridges, dated 9/7/22.

Special Provision for Price Schedule for Miscellaneous Items, dated 12/6/23.

Special Provision Regarding Storm Water Discharge, dated 5/8/18.

General Permit for Storm Water Discharges Associated with Construction Activities, dated 4/1/18

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx>

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
CONTRACT TIME**

**PROJECT PT 0905(117)261; PCN 080A  
LYMAN COUNTY**

**JULY 18, 2025**

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**I-90 L Work Restriction**

The Contractor will not begin any work on the I-90 business loop portion of the project that affects traffic prior to March 16, 2026, unless approved by the Engineer.

**I-90 L Interim Completion Requirement**

The Contractor will complete all work that affects traffic in the I-90 business loop portion of the project by the June 19, 2026 interim completion date.

The Contractor will complete all work required to place full traffic back on the I-90 business loop including the installation of the interim surfacing by the June 19, 2026 interim completion date.

If the Contractor does not complete the work by the interim completion requirement, the Department will make a disincentive assessment in the amount of \$4500 per calendar day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentive. The Department will use a negative quantity of days for assessing disincentives. The Department will count calendar days in accordance with Section 8.6 B.

**Field Work Completion**

The Contractor will complete the project by the July 3, 2026 field work completion date.

**Failure to Complete on Time**

The Contractor will complete all work on the project prior to the field work completion requirement. If the Contractor does not complete all work by the field work completion requirement, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all field work.

In the event the Contractor does not complete all field work on time, the Department will count working days in accordance with Section 8.6 C.

### **Expected Adverse Weather Days**

The Department has provided Attachment 1 for information purposes only as a guide to bidders. Table 1 depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a surfacing project in Zone 2.

The Department will consider expected adverse weather days cumulative in nature over the time period when the Contractor is actively pursuing completion of the work. The Department will not consider adverse weather days during an extended period of time when the Contractor is not pursuing completion of the work. When considering a time extension for interim completion or field work completion of the project, the Engineer will compare the total number of expected adverse weather days against the total number of actual adverse weather days for the time period during which the work was being completed.

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## ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

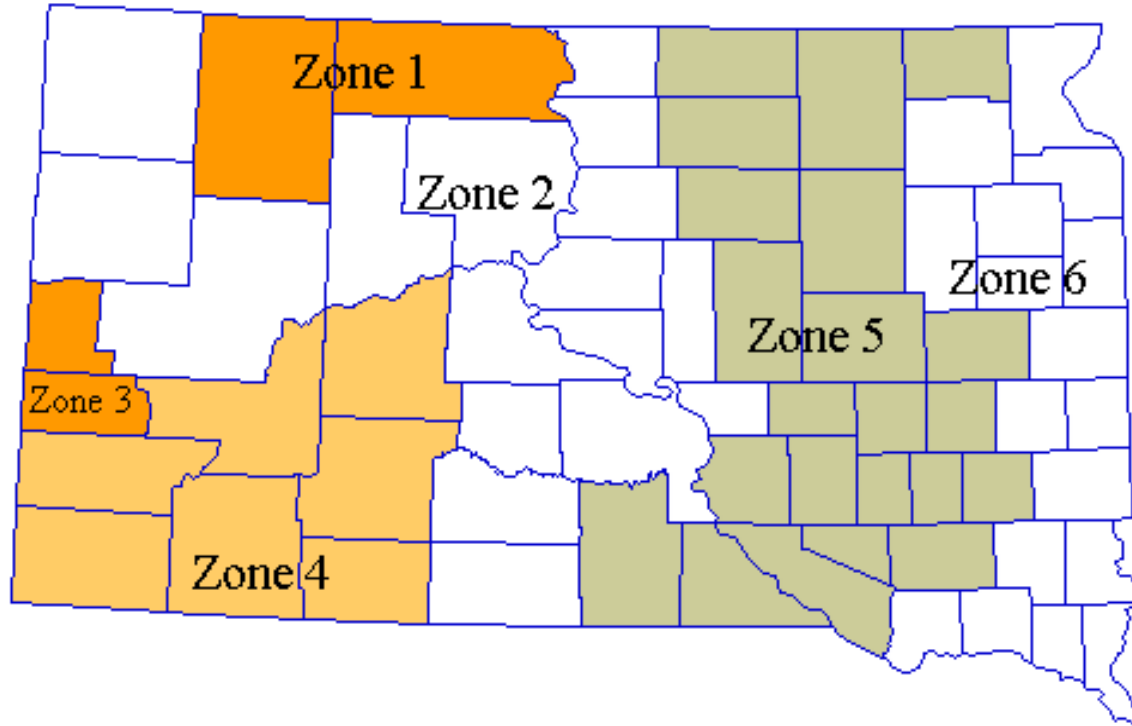


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

NOTE: Includes Holidays and Weekends.



**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
SPECIALTY WORK**

**PROJECT PT 0905(117)261; PCN 080A  
LYMAN COUNTY**

**JUNE 18, 2025**

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This contract contains “specialty items”.

The following bid items will be considered a “specialty item” as described in Section 8.1:

132” Steel Pipe, Furnish (bid item # 450E7732) (526 Ft.)  
Slipline 108” Pipe (bid item # 450E9250)  
132” Trenchless Pipe Installation (bid item # 450E9382)  
Cellular Grout (bid item # 462E0250)





**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION REGARDING  
SECTION 404 OF  
THE CLEAN WATER ACT**

**Project # PT 0905(117)261, PCN 080A  
Lyman County**

**JANUARY 27, 2025  
NATIONWIDE PERMIT NO 3**

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The above referenced project is authorized by the Department of the Army Nationwide Permit Section (3), found in the December 27, 2021 Federal Register (86 FR 73522), Reissuance and Modification of Nation Wide Permits.

Attached is a copy of the Corps' Nationwide 3 Permit conditions. The pipe work and channel cleanout to be completed on this project is authorized by the Nationwide Permit 3: repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure not requiring pre-construction notification to the Corps (404 permit application). While a formal pre-construction notification was not required, sites in Waters of the US must adhere to the conditions of the Nationwide Permit 3, Nationwide Permit General Conditions, and South Dakota Conditions.

Please refer to the attached *Fact Sheet Nationwide Permit 3 and 2021 Nationwide Permits Regional Conditions*

**PLEASE REFER TO THE TABLE OF WETLANDS IN THE SECTION A ENVIRONMENTAL  
COMMITMENTS.**



# **Nationwide Permit 3**

## **Maintenance**

**Expires March 14, 2026**

### **1. Maintenance.**

- a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.
- b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

- c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

**Notification:** For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

**Note:** This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

## Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued.

Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR

402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take”



provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR

330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106

consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only

after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the

required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWP, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency

to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank

stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;



(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee

cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) (i) A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.
- (ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible

inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity’s compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies’ concerns were

considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource

functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is

required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### **Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).



**US Army Corps  
of Engineers®**  
Omaha District

**2021 Nationwide Permits  
Regional Conditions  
Omaha District  
State of South Dakota**

The following Nationwide Permit (NWP) regional conditions will be used in the State of South Dakota. The issuance of the NWPs was announced in the January 13, 2021, issue of the Federal Register (86 FR 2744) and December 27, 2021, issue of the Federal Register (86 FR 73522). Regional conditions are placed on NWPs to ensure projects result in no more than minimal adverse impacts to the aquatic environment and to address local resources concerns.

**A. PRECONSTRUCTION NOTIFICATION REQUIREMENTS APPLICABLE TO ALL NWPs  
OR LIMITED REVOCATION OF NWPs**

For all NWPs, permittees must notify the Corps in accordance with General Condition 32 Preconstruction Notification (PCN) requirements for regulated activities located within or comprised of the following:

**1. Wetlands Classified as Peatlands:**

For the purposes of this condition, peatlands are permanently or seasonally waterlogged areas with a surface accumulation of peat (organic matter) 30 centimeters (12 inches) or more thick. Under cool, anaerobic, and acidic conditions, the rate of organic matter accumulation exceeds organic decay. Any peat-covered areas, including fens, bogs, and muskegs, are all peatlands.

- a. PCN required for NWP 3, 5, 20, 27, 30, 32, and 38.
- b. All NWPs not listed above are revoked for use in peatlands.

**2. Waters Adjacent to Natural Springs:**

PCN required for any regulated activity located within 100 feet of the water source in natural spring areas. For the purpose of this condition, a spring water source is defined as any location where there is flow emanating from a distinct point at any time during the growing season.

Springs do not include seeps and other groundwater discharge areas where there is no distinct point source of waters. Springs do not include drain tile outlets.

**B. REQUIRED BEST MANAGEMENT PRACTICES APPLICABLE TO SOUTH DAKOTA**

**1. Suitable Material:**

Permittees are reminded of General Condition No. 6 which prohibits use of unsuitable material. A list of materials prohibited or restricted as fill material in waters of the United States can be found at:

<http://www.nwo.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/2034/Article/12320/prohibited-restricted-materials.aspx>



**2021 Nationwide Permits  
Regional Conditions  
Omaha District  
State of South Dakota**

**2. Culvert Countersink Depth:**

For all NWP in jurisdictional streams and a stable stream bed, culvert stream crossings shall be installed with the culvert invert set below the natural stream channel flow line according to the table below. This regional condition does not apply in instances where the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or result in lowering the elevation of the stream reach.

<b>Culvert Type</b>	<b>Drainage Area</b>	<b>Minimum Distance Culvert Invert Shall Be Lowered Below Stream Flow Line</b>
All culvert types	< 100 acres	Not required
Pipe diameter <8.0 ft	100 to 640 acres	1/2-ft
Pipe diameter <8.0 ft	>640 acres	1-ft
Pipe diameter > 8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1-ft

- a. The stream flow line shall be defined as the longitudinal average of the low flow stream channel.
- b. The slope of the culvert should be parallel to the slope of the stream flow line.
- c. The culvert invert depression depth shall be measured at the culvert inlet for culverts installed at a slope less than the slope of the stream flow line.
- d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.



THE FOLLOWING UTILITY COMPANIES ARE INVOLVED ON

PROJECT \_\_\_\_\_ PT 0905(117)261, Lyman County, PCN 080A

The contractor shall contact the following utilities in a sufficient amount of time prior to starting work. The companies will identify their facilities, and it is the responsibility of the contractor and the company to coordinate their work to avoid damage to existing facilities and to allow for relocation of facilities as may be required for grading work:

The following utilities were determined to be involved and were formally notified on May 30, 2024. Utilities were formally notified again with a revised SDDOT Construction Plan Set on February 20, 2025, that if their facilities are located within the existing public right-of-way, any adjustment of their facility would have to be accomplished at no cost to the State, **within 90 days from receipt of the notice, unless other arrangements are made with the Area Engineer.**

- (1) CenturyLink dba. Lumen  
15 4<sup>th</sup> Ave SW  
Aberdeen SD, 57401  
**CONTACT: Cory Moser, TELE. #605-290-7886**  
[cory.moser@lumen.com](mailto:cory.moser@lumen.com)

Lumen has fiber and copper facilities running through the project limits, one cable at approximately 68' L of I-90's Business Loop alignment and another at approximately 58' R of I-90's Business Loop alignment. Lumen intends to start their relocation of these facilities over a mile north of the project limits, proposing to directionally drill new conduits in one pathway in the south public right-of-way of I-90's Business Loop and intends to continue the relocation all the way into the City of Oacoma. Lumen is still currently confirming if their contractor can drill at the depths required for new SDDOT culverts at approximate STA. 132+00 and STA. 132+50. If their contractor cannot drill to the required depths, Lumen may apply to relocate into the I-90's north right-of-way around the project limits. Lumen would then place new copper and fiber in these conduits. All existing cables would then be abandoned-in-place. Lumen intends on their relocation being completed by June 1<sup>st</sup> 2025. Lumen's facilities are in the present public right-of-way, the relocation/adjustments necessary to accommodate the highway construction will be accomplished at no cost to the State and performed in coordination with the highway construction.

- (2) City of Oacoma  
PO Box 129  
Oacoma SD, 57365  
**CONTACT: Jaica Kenzy or Brian Mahrt (Utilities Manager), TELE. #605-734-4455**  
[oacomasd@midstatesd.net](mailto:oacomasd@midstatesd.net)

The City has 2 water main pipelines and a sanitary sewer line within the project limits. The City's first water main crosses proposed culverts at approximately STA. 1557+00 - 80' R of I-90's Business Loop alignment. This water main had multiple failed attempts to determine approximate location and depth. Although this water main was not spotted, it was determined that this water main is lower than the depths required for the new culverts being placed on this SDDOT project. The City has a second water main that was relocated Summer of 2024 to approximately STA. 1557+50 - 47' L of I-90's Business Loop

alignment at a depth of 24' to top of the water main. This should place the new water main 5' under proposed SDOT culverts.

The City also has a sanitary sewer that was relocated Summer of 2024 to approximately STA. 1557+90 - 90' L of I-90's Business Loop alignment at a depth of 18' to the top of sewer pipeline. This should place the new sanitary sewer approximately 6' below the proposed culverts. Banner Associates oversaw the relocation work and can provide as built plans if necessary. The City has facilities located within the existing public right-of-way which, after the City's review of the highway construction plans, they have adjusted/relocated as necessary. As the City's facilities were in existing public right-of-way, the relocation/adjustments were necessary to accommodate the highway construction and accomplished at no cost to the State and performed in coordination with the highway construction.

- (3) Midstates Communications  
PO Box 48  
Kimball SD, 57355-0048  
**CONTACT: Andrew London TELE. #605-281-0001**  
[andrew@midstaff.net](mailto:andrew@midstaff.net)

Midstate has 3 cables within the work limits. Midstate has a 96 fiber in the north ditch of the west bound lane of I-90 alignment approximately from STA. 130+00 to 136+00-136' R or 6-8' south of the fence. This fiber should not be affected by the project and is a high importance fiber optic cable that ties the western side of South Dakota to the eastern side for telecommunications.

Midstate also has two fiber optic cables a 144 fiber and a 288 fiber in the south ditch of the I-90 Business Loop that proceed through the work area. Offset for these fibers are 38' R and 42' R off the alignment of the I-90 Business Loop. Midstate will relocate these fibers by directional drilling from I-90's Business Loop alignment approximately STA. 1555+35 R to STA. 1558+37 R at a depth of 30-35' or deeper. Midstate will then pull back 3-1.25" innerducts through the 1 bore path. The existing fiber optic cables will be exposed by backhoeing 100' back at approximately STA. 1554+35-100' R and STA. 1559+37-100' R where 30"x48"x36" underground vaults will be set flush to grade. The new innerducts and existing fiber optic cables will be placed into these new vaults. New fiber optic cables will be pulled through new innerducts into the new vaults and spliced there. Midstate intends on having their relocation completed by June 21<sup>st</sup>, 2025. The rest of the fiber optic cable in the work area will be abandoned-in-place. Midstate's facilities are present in the public right-of-way, the relocation/adjustments necessary to accommodate the highway construction will be accomplished at no cost to the State and performed in coordination with the highway construction.

- (4) West Central Electric Coop Inc.  
PO Box 17  
Murdo SD, 57559-0017  
**CONTACT: Scott Kittelson, TELE. #605-530-1548**  
[scott.kittelson@wce.coop](mailto:scott.kittelson@wce.coop)

West Central has Overhead Power 69kV transmission and 14.4kV distribution jointly attached on the same poles running northeasterly through the entire project limits approximately STA. 1546+00 to STA. 1563+00-92' L of I-90's Business Loop alignment. West Central plans on rerouting these overhead powerlines within the present right-of-way that have been determined to be a conflict to the construction process when crane use is necessary. West Central has proposed to place a new pole at

approximately STA. 1555+15-93' L along with new guy and anchors at approximately STA. 1555+45-93' L to STA. 1555+55-93' L. West Central will reroute both powerlines then northwesterly onto private property around SDDOT construction limits. West Central has proposed to place new guy and anchors at approximately STA. 1561+50-93' L to STA. 1561+68-93' L for an existing power pole at approximately STA. 1562+00-93' L. West Central is also proposing to then place new guy and anchors at approximately STA. 1562+74-93' L to 1562+84-93' L for a new pole at approximately STA. 1563+14-93' L. Once SDDOT construction has been completed, West Central will reinstall the powerlines back to their present locations. West Central intends on having their relocation completed by June 21<sup>st</sup>, 2025. West Central Electric Coop.'s facilities are present in the public right-of-way, the relocation/adjustments necessary to accommodate the highway construction will be accomplished at no cost to the State and performed in coordination with the highway construction.

The requirements relating to Cooperation Between Contractors, as set forth in Section 5.7 of the Standards Specifications for Roads and Bridges, 2015 edition, shall prevail throughout the limits of this project.





# South Dakota Department of Transportation

I-90 Oacoma Pipe

## Special Provisions



HDR Project No. 10311723

SDDOT Project No. PT 0905(117)261

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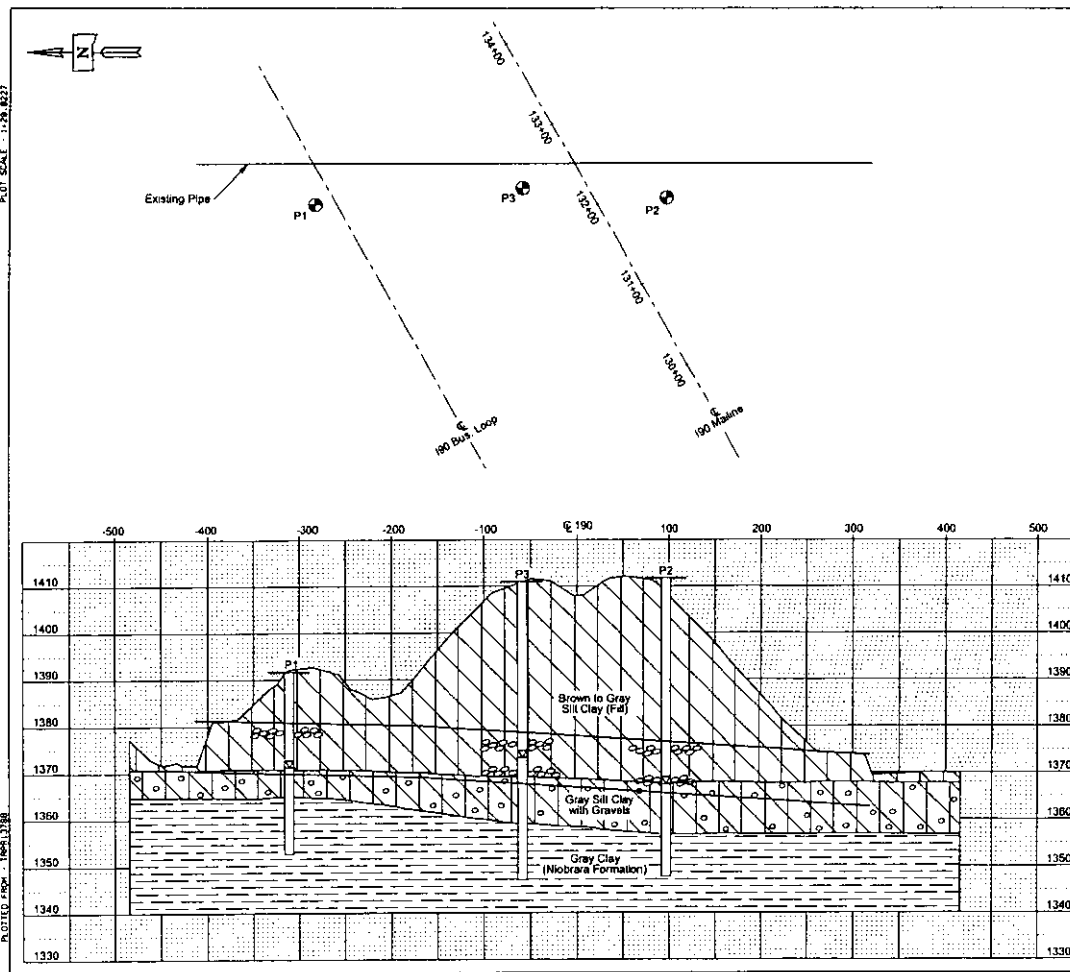
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## **DIVISION 33 — UTILITIES**

33 05 03 - CONTACT GROUTING



STATE	PROJECT	SHEET NO.	TOTAL SHEETS
SD			
Plotting Date: 09/12/2022			



The Niobrara Formation is a marine deposited chalk or calcareous marl with a textural classification that varies from clay to silt clay. Color is light gray which weathers to yellow. The formation contains limy shale and thin interbedded layers of shaly limestone. Limestone zones may be present that can be considered hard and dense. Non weathered Niobrara chalk is considered to be "Soft Rock".

The Geotechnical Engineering Activity has all of the boring logs and laboratory test results available for review at the Central Office in Pierre.

#### LEGEND

Auger Test      Water

All auger test holes are drilled with a 6 1/2 inch diameter hollow stem auger.

#### GROUNDWATER ELEVATIONS AUGUST 2022

P1	1371.2
P2	1367.6
P3	1373.3

IM-P 0905(117)261 LYMAN COUNTY PCN 080A  
190 EB, WB, & BUSINESS LOOP - 1.0 MI. E. OF OACOMA  
SEC. 18 - T104N - R71W

#### SITE PLAN & SUBSURFACE PROFILE

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED
	HN	JT	

BRUCE ENGINEERS

FILE: \\BRUCE\SUBSURFACE\DRW11004

## **SECTION 31 09 20**

### **SETTLEMENT INSTRUMENTATION AND MONITORING**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Furnishing, installing, and monitoring settlement instrumentation to monitor ground movements around and above microtunneling operations and shaft excavations. The Work includes but is not limited to: Installing surface control points, installing subsurface monitoring points, furnishing monitoring equipment, and recording observations and measurements from the monitoring points on a periodic basis before, during, and after microtunneling and excavation work.
- B. The Contractor is responsible for surveying the elevations of the surface control points, the subsurface monitoring points, and other instrumentation locations in accordance with the requirements herein. Elevations shall be determined before operations begin to establish a baseline, and during and after operations to monitor any movements related to the microtunneling and shaft construction. All monitoring points will be surveyed after trenchless construction has been completed to evaluate long-term settlements, as specified herein.
- C. Minimum instrumentation requirements are shown on the Plans and specified herein. Additionally, the Contractor shall install other instrumentation as necessary to control operations, monitor ground conditions and ground response to achieve specified project requirements and to prevent damage to existing structures and facilities.

##### **1.2 REFERENCE STANDARDS AND EXISTING INFORMATION**

- A. Referenced Standards:
  - 1. Standard Specifications and Guidelines:
    - a. ASCE Standard Design and Construction Guidelines for Microtunneling, ASCE /CI 36-14.
    - b. South Dakota Department of Transportation (SDDOT) Standard Specifications for Roads and Bridges with Supplemental Specifications and Errata.
- B. Subsurface Information:
  - 1. Site Plan and Subsurface Profile, Appendix A.

##### **1.3 DEFINITIONS**

- A. Surface Control Points: Control points established as a reference for measuring elevation of the ground surface using optical survey methods.
- B. Subsurface Monitoring Point: A cased borehole settlement monitoring point located above the tunnel crown used for detecting settlement between the location of the settlement point and the tunnel excavation.

##### **1.4 DESIGN CRITERIA**

- A. Any ground movements (settlement/heave) shall be limited to values that shall not cause damage to adjacent utilities and facilities. In no case shall settlements exceed the applicable values listed in Table 1 below.

**Table 1 – Maximum Allowable Settlement Values**

<b>Site Feature</b>	<b>Allowable Settlement / Heave (IN)</b>
Interstate Highway Traffic Lanes	0.50
Surface Streets	1.00
Underground Utilities	1.00
Unimproved Ground	3.00

## **1.5 QUALITY ASSURANCE**

- A. Surveyor Qualifications: All surveying specified as performed by the Contractor and required for control of the work as determined by the Contractor shall be performed by a land surveyor licensed in the State of South Dakota with previous experience surveying for the detection of surface deformations.
- B. Settlement monitoring points shall be set at 10 FT along the center of the proposed construction activity.
- C. Should actual field conditions prevent installation of instruments at the location specified herein, obtain written acceptance from the Engineer for new instrument location and elevation.
- D. Surveying for monitoring settlement instrumentation shall be referenced to the same control points and benchmarks established for setting out the Work. Control points shall be tied to benchmarks and other monuments outside of the zone of influence of the excavation or trenchless construction.

## **1.6 SUBMITTALS**

- A. Submittals shall be made in accordance with these Specifications. Provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All Drawings shall be legible with dimensions accurately shown and clearly marked in English. Poor quality Drawings and photographs will not be accepted.
  - 1. Submit the following, at least one (1) month before scheduled installation of monitoring points:
    - a. Instrumentation Schedule: Submit the proposed schedule for installing the surface control points and subsurface monitoring points.
    - b. Description of methods and materials for installing and protecting surface control points and subsurface monitoring points.
    - c. Drawings with locations of proposed monitoring points shown in plan and profile.
  - 2. Reports and Records:
    - a. The Contractor shall submit all reports of monitoring data to the Engineer.
    - b. Within 72 HRS following installation of the instruments, submit Drawings showing the actual as-built installed location, the instrument identification number, the instrument type, the installation date and time, and the tip elevation and instrument length. Include details of installed instruments, accessories and protective measures including all dimensions and materials used.
    - c. Submit surveyed baseline measurements of all monitoring points at least 14 days prior to commencing shaft excavation to establish baseline readings.
    - d. Submit surveyed measurements of monitoring points during and after construction in accordance with Part 3 of this Specification.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. All instrumentation shall remain the property of the Contractor following completion of the Work and shall be removed or abandoned according to applicable codes and standards unless otherwise noted.
- B. Surface Control Points: Surface control points shall be established by an inscribed marking or approved surveyors nail driven flush with the surface in asphalt or concrete paved areas. In landscaped areas, surface control points shall be established by driving a 2 by 2 IN timber stake flush with the ground. The stake shall be driven to a depth required to provide a stable control point given the soil conditions. Each control point shall have a tag or marking indicating the station and offset from centerline.
- C. Subsurface Monitoring Points: Subsurface monitoring points shall be established and installed as indicated on the Drawings. Each point shall consist of a #6 rebar settlement rod installed within and isolated from a PVC cased borehole. The settlement rod shall be driven 6 to 12 IN past the bottom of the borehole casing and the tips shall be located at 10 FT above the pipe crown along the centerline or as directed by the Engineer. The settlement rod shall be secured to the PVC casing with a 12 IN length of loose cable or chain to prevent the rod from falling more than approximately 12 IN. The casing shall be flush with pavement or recessed, and capped and protected with a road box if installed within traffic lanes, shoulders, parking lots, or bike lanes and shall be in accordance with South Dakota DOT and other applicable permit requirements.

## **PART 3 - EXECUTION**

### **3.1 GENERAL REQUIREMENTS**

- A. Instrumentation shall be installed at the monitoring locations, and as approved by the Engineer. Instruments shall be installed in accordance with the approved installation schedule.
- B. The Contractor shall locate conduits and underground utilities in all areas where borings are to be drilled and instruments installed. Instrument locations shall be modified, as approved by the Engineer, to avoid interference with existing utilities. Repair damage to existing utilities resulting from instrument installations at no additional cost to the Owner.
- C. Contractor shall provide access and assistance to the Engineer for obtaining monitoring data.
- D. Provide data from readings of all monitoring points to the Engineer within 24 HRS of reading.

### **3.2 MONITORING FREQUENCY**

- A. Surface Control Points: Initial survey measurements shall be obtained prior to any excavation and at two-day intervals after beginning shaft excavation and microtunneling operations. Once microtunneling begins, surface monitoring points shall be surveyed once for every 30 FT of tunnel advance. Additionally, all surface monitoring points shall be surveyed at least once per day during microtunneling operations. Once microtunneling is completed, all surface settlement points shall be surveyed once per day for the first 7 days, once at 14 days, and once at 30 days after completion of microtunneling. Monitoring of surface settlement points shall continue at least a weekly basis beyond 30 days if movements are observed between subsequent readings until no further movements are observed for 3 consecutive readings.
- B. Subsurface Monitoring Points: Once microtunneling begins, subsurface monitoring points within 50 FT of the tunnel face shall be surveyed once for every 30 FT of tunnel progress. Additionally, all monitoring points shall be surveyed at least once per day during microtunneling operations. Once microtunneling operations are complete, all settlement monitoring devices shall be surveyed once per day for the first seven days, once at 14 days, and once at 30 days after completion of the trenchless work. Monitoring point surveys will continue at least a weekly

basis beyond 30 days if movements are observed between subsequent readings until no further movements are observed for 3 consecutive readings.

- C. Locate and confirm all utilities and protect utilities or relocate monitoring points as necessary to protect all utilities. Follow accepted industry best practices and State law for one-call notification and visual confirmation of locations of all crossing and adjacent utilities within 10 FT.
- D. Subsurface monitoring point installations shall be completed at least 14 days in advance of commencing shaft construction or microtunneling operations.
- E. Conduct drilling operations using appropriate methods that are consistent with anticipated geologic conditions.
- F. Subsurface monitoring rods shall move freely with the soil at the tip and shall be isolated from the soil surrounding the borehole by the casing.
- G. Protection: Install protective housing with cap. Protective housing shall be installed within a flush-mounted precast concrete box or vault so as not to obstruct vehicle or foot traffic and shall be in accordance with South Dakota DOT standards and permit requirements.

### **3.3 INSTRUMENT PROTECTION, MAINTENANCE, AND REPAIR**

- A. Protect the instruments and surface control points from damage. Damaged installations shall be replaced or repaired prior to continuing excavation, pipejacking, or microtunneling, unless permitted otherwise in writing by the Engineer.

### **3.4 ABANDONMENT OF INSTRUMENTS**

- A. Surface Control Points: All surface control points on public property shall remain in place at the completion of the Work. Remove all surface control points on private property during the cleanup and restoration work, or as required by the Engineer.
- B. Subsurface Monitoring Points: Properly abandon all monitoring point boreholes, by grouting drilled holes with neat cement grout. Subsurface monitoring points shall be abandoned at the conclusion of the monitoring phase (See Paragraph 3.2 B) or as required by the Engineer.

## **END OF SECTION**

## **SECTION 31 23 50**

### **SHAFT EXCAVATION AND SUPPORT**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

- A. The Contractor shall design, furnish, install, and maintain a system of temporary supports, including all bracing and associated items, to retain excavations in a safe manner, to control ground movements and to control groundwater inflows. Upon completion of the required excavation and pipe installation, the Contractor shall remove the support system, as specified and backfill the excavations.
- B. The Contractor shall have sole responsibility for selection of watertight shaft type, construction method, and sizing the excavations to accommodate shoring, bracing, and pipe installation to the specified lines, grades and tolerances. The shafts shall be sized to facilitate construction of connections, vaults, and other permanent structures shown on the Plans.
- C. The work shall include site grading; temporary access road construction; fencing and signage; protection of utilities; construction staging areas; design and construction of shaft excavations and excavation support systems; material disposal; control and disposal of infiltrating groundwater, surface water, and construction water; backfilling and abandoning shafts; and site restoration.
- D. Acceptable shaft types include driven interlocking sheetpiles, or traditional trench box systems. The following shaft construction methods shall not be allowed: soldier piles and lagging, beam and plate, or speed shores.

##### **1.2 QUALITY ASSURANCE**

- A. Referenced Standards:
  - 1. The publications listed below form a part of this Specification to the extent referenced. Where conflicts between these Specifications and the referenced code or standard occur, the more restrictive language shall govern. The latest edition available on the date of issue of Contract Documents shall be used.
  - 2. Commercial Standards:
    - a. AISC - Manual of Steel Construction.
    - b. ASTM A36, Standard Specification for Carbon Structural Steel.
    - c. ANSI/AWS, D1.1, Structural Welding Code.
    - d. ASTM A328, Standard Specification for Steel Sheet Piling.
    - e. Occupational Safety and Health Administration (OSHA) Regulations, 29 CFR Part 1926 Subpart P – Excavations and Subpart S – Underground Construction.
  - 3. Standard Specifications and Guidelines:
    - a. ASCE Standard Design and Construction Guidelines for Microtunneling, ASCE/CI 36-14.
    - b. South Dakota Department of Transportation (SDDOT) Standard Specifications for Roads and Bridges with Supplemental Specifications and Errata.
- B. Subsurface Information:
  - 1. Site Plan and Subsurface Profile, Appendix A.

##### **1.3 DEFINITIONS**

- A. Sheetpile Shaft: A watertight excavation support system consisting of watertight interlocking steel sheetpiles driven or vibrated into place, with a concrete working slab designed to prevent groundwater inflows or heave.

- B. Settlement Point: A point with elevation and spatial location established by survey prior to construction. The point is re-surveyed periodically to monitor ground movements. The point may be a nail, pin, subsurface settlement rod, borehole extensometer, or other device that can be readily located and surveyed.

#### **1.4 DESIGN CRITERIA**

- A. The Contractor shall design all shafts to function as watertight shafts and provide a continuous, dry, excavation support system. Shafts shall be designed to support earth and groundwater pressures, equipment, applicable traffic, and construction loads and pressures (i.e. annulus grouting pressures) and other surcharge loads in accordance with the site conditions, the Subsurface Profile, and any other requirements described in these Drawings and Specifications. Design excavation support systems in accordance with AISC and ACI code provisions, as applicable. The shaft design shall allow the safe and expeditious construction of the permanent facilities without excessive movement or settlement of the ground and in a manner that will prevent damage to, or movement of, any adjacent structures, utilities, or other facilities.
- B. All shaft components, including external supports shall be within the construction easement or public rights-of-way.
- C. Excavation support systems shall be designed and stamped by a Civil or Structural Engineer registered in the State of South Dakota who has a minimum of five years of experience in the design of soil retaining structures.
- D. The design of shoring and protection methods that meet the specification requirements herein are the Contractor's responsibility and shall be of a size large enough to facilitate all the necessary groundwater control, construction operations, pipeline equipment and operations, microtunneling operations, and to accommodate indicated connections to other reaches of the project. Shoring design is subject to review and approval by the Engineer. Allowable shoring options include:
  - 1. Interlocking Sheetpiles.
  - 2. Traditional trench box systems.
- E. The jacking shaft and thrust block shall be designed to provide adequate jacking capacity to resist anticipated jacking forces with an appropriate factor of safety. The Contractor is advised that the earth slopes downward behind the thrust wall of the jacking shafts, as shown in the Drawings. Soil resistance behind the jacking shaft may be inadequate to resist anticipated jacking forces without additional measures. The Contractor may need to employ additional measures such as driving closely spaced soldier piles behind the sheets that extend several feet below the shaft invert, structurally tying the shaft support elements together to mobilize soil friction along the shaft sidewalls, or other measures.
- F. In all areas, excavation support systems shall be designed by the Contractor to support earth pressure, unrelieved hydrostatic pressures, bottom heave, utility loads, equipment, applicable traffic loads, and other surcharge loads in such manner as will allow safe construction and will prevent damage to adjacent structures (including existing pipelines and utilities) and injury to workers and the public. In addition, the installation of excavation support systems shall not cause a disruption to public convenience or access.
- G. Excavation support systems shall be designed to be compatible with the geologic conditions described in the Subsurface Profile and observable at the site.
- H. The support system shall be designed to protect adjacent utilities from damage and to control horizontal and vertical movements to avoid damage.
- I. The concrete slab at each excavation shall be designed to protect the excavation invert in accordance with these minimum design criteria:
  - 1. Have a finished concrete slab to seal the shaft from groundwater inflows and to resist uplift of the completed shaft. The concrete plug or slab reinforcing may be designed to

- structurally tie the slab to the shaft walls to take advantage of the shaft dead weight and sidewall friction in resisting uplift due to buoyancy. Alternately, the concrete plug or slab may be designed to resist uplift without contributions from sidewall friction and shaft dead weight.
2. Be capable of resisting design hydrostatic uplift with a minimum safety factor of 1.3, or equipped with a groundwater/pressure relief system to assure a minimum safety factor of 1.3 for reduced hydrostatic uplift pressures.
  3. Be capable of supporting such combined dead and live loads as are required by the Contractor's means and methods.
- J. The shaft floors shall be designed with a sump to allow removal of any groundwater, rainwater, runoff, or construction water that enters the shaft.
- K. Shafts shall be designed for staged installation and removal of all components to accommodate construction of connections and backfill sequences.
- L. When in use, shafts shall have protective guard rails or fencing surrounding the shaft that complies with OSHA requirements.
- M. Shoring of shafts shall extend not less than 3 and not more than 5 FT above the ground surface, to discourage accidental or unauthorized entry. Jacking shafts shall be covered during any periods of inactivity greater than 24 HRS with chain link fabric covers to discourage unauthorized entry. Shafts shall have a protective perimeter guard rail installed during use which complies with all OSHA requirements.

## **1.5 SUBMITTALS**

- A. Submittals shall be made a minimum of four weeks before any work referred to in the submittals is scheduled to commence and shall provide sufficient detail to allow the Engineer to determine whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Poor quality drawings and photographs will not be accepted.
- B. The Engineer's review of submitted details and data will be based on consideration of requirements for the completed work, protection of existing utilities, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and approval of the Contractor's submittals by the Engineer shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.
- C. Shop Drawings: As a minimum, the following information shall be submitted:
1. Name and qualifications of person responsible for excavation support system design, and who will sign and seal the shaft design Drawings.
  2. Scaled Drawings (plan and section views with dimensions and sizes) showing the proposed shaft elements; adjacent and nearby existing structures and utilities; details of all pipe penetrations; staging areas for all shaft construction operations such as sheetpile storage, and polymer tanks.
  3. Submit letter signed by authorized representatives of General Contractor and microtunneling subcontractor, stating that the parties have reviewed the jacking and reception shaft designs, and the designs meet performance and safety requirements of the microtunneling subcontractor, including provisions for adequate jacking capacity, working space, and safe retrieval of the MTBM.
  4. Details of procedures for preloading bracing members.
  5. Details for protecting existing utilities and structures.
  6. Methods and sequencing of excavation and installation of staged excavation support including a schedule with major milestones such as driving of sheets for sheet-pile shafts, pouring of concrete slab, grouting, and dewatering of the shaft interior, etc.
  7. Describe procedure for ensuring that jacking shaft can provide adequate jacking capacity without excessive deformation of shaft supports.



8. Methods and sequencing of launch/retrieval through the shaft wall. Describe in detail the steps that will be taken to ensure the soil is stable prior to boring through/removal of the shaft wall. The Contractor shall submit ground improvement methods that will be used if necessary to stabilize soil at the launch/retrieval locations to prevent inflow of soil and groundwater into the shaft.
  9. Methods and details of containment, hauling, and disposal of the excavated materials, all spoils and other materials used in shaft construction. Submit written documentation signed by the disposal site owner or manager indicating that the site will accept the muck and that the site is in compliance with all applicable local, State, and Federal regulations. Submit muck transport plans including route to be used and measures to avoid spillage onsite or onto streets and highways. Submit proposed locations of stockpiled excavated material.
  10. Procedures for checking and maintaining plumbness of the shaft and ensuring proper elevation has been reached.
  11. Concrete mix information and placement procedures for the concrete slab and/or any contact grout.
  12. Anticipated difficulties and proposed resolutions, including excessive movement of shaft elements, flooding, bottom heave, and inability to install the shaft to the required depth.
  13. Methods for backfilling of voids as required to minimize ground movement and protect adjacent property.
  14. Measures to control groundwater inflows, methods of maintaining bottom stability, and protection of subgrade.
- D. Design Assumptions and Calculations: Submit all calculations in a neat and legible format. The calculations shall be performed by or under the direct supervision of a licensed Civil or Structural Engineer, registered in the State of South Dakota, who shall seal and sign the calculations.
1. Design groundwater elevation and basis.
  2. Calculations for the shaft support elements and any bracing, indicating it can withstand all earth and groundwater pressures, equipment, applicable traffic, and construction loads and other surcharge loads in accordance with the site conditions, the Subsurface Profile, and any other requirements described in these Plans and Specifications.
  3. Calculations of Jacking Thrust Capacity: The jacking shaft and thrust block shall be designed to provide adequate jacking force capacity to resist anticipated jacking forces with an appropriate factor of safety. Soil resistance behind the jacking shaft thrust block wall may be inadequate to resist jacking forces anticipated without additional measures. The Contractor may need to employ additional measures such as driving closely spaced soldier piles behind the sheets that extend several feet below the excavation bottom, structurally tying the shaft support elements together by welding wales to sheets and welding corner braces to the wales to stiffen the support system and mobilize soil shear friction along the shaft sidewalls, or other measures.
  4. Calculations for the structural design of the concrete slab, and uplift resistance of the shaft. Confirm that concrete slab weight, structural connection to sheetpile walls, weight of casing, and any frictional resistance assumed along sidewalls of the shaft are adequate to resist uplift and that assumptions are reasonable and appropriate. Confirm that an adequate factor of safety against uplift is achieved under the most extreme loading conditions.
- E. Steel Sheetpiles:
1. Describe equipment and procedures to be used to construct the sheetpile shafts.
  2. Describe procedure for installing and sealing corners.
  3. Describe procedure for installing concrete slab to the required thickness and at the correct elevation.
  4. Describe procedures for providing control of groundwater inflows and soil at launch/retrieval locations.

5. Describe procedure for supporting or working around existing utilities within the anticipated shaft limits.
- F. Construction Records: The Contractor shall submit the following to the Engineer at the times indicated.
  1. Written daily progress reports shall be submitted during construction. The progress reports shall have field logs recorded at intervals of 5 FT or less during excavation and shall be submitted to the Engineer within one working day of the shift for which the logs were created. As a minimum, the logs shall include:
    - a. The date, starting time, and finish time.
    - b. Equipment used.
    - c. Actual quantities and descriptions of excavated material.
    - d. Any unusual conditions, breakdowns, and delays, including problems with support.
    - e. Detailed description of the support installed, including sizes, lengths, and spacing.
    - f. Pumping rates from shaft sumps and inflow conditions.
    - g. Deformation monitoring results, and record of action taken by the Contractor's designer and the Contractor if deflections are excessive.
  2. Results of all material and field tests shall be submitted at the end of each shift, and results of lab tests within one week of completing each test.
- G. Post-Construction: Within 15 days of backfill of excavations, the Contractor shall submit a detailed as-built location plan of all remaining buried shoring members including size, location, and cutoff elevation.

## **1.6 QUALITY CONTROL, TESTS, AND INSPECTIONS**

- A. Contractor Qualifications and Experience: The Contractor who shall perform the work specified herein shall have successfully completed at least three (3) shafts using each of the proposed shaft construction methods of similar size, depth, and complexity, and in similar soil conditions, within the past five (5) years. In addition, the superintendent(s) for the construction work shall have demonstrated successful experience with the proposed shaft construction method(s).
- B. The Contractor shall immediately notify the Engineer, in writing, when any problems are encountered with equipment or materials, or if the Contractor believes the conditions encountered are materially and significantly different than those represented within the Contract Documents.
- C. Construction Monitoring: Settlement of adjacent property and/or facilities will not be permitted.
- D. The Contractor shall coordinate with the Engineer regarding additional quality assurance testing to be provided at the Owner's discretion. The Contractor shall permit free access, during construction of shoring systems for the Owner's testing staff. The Contractor shall allow access to the Engineer and shall furnish necessary assistance and cooperation to aid the Engineer in observations and data and sample collection.
- E. Quality control, testing, and inspection shall be provided as required by the Contractor's design engineer and in accordance with approved submittals. The Contractor's design engineer shall visit the site to observe the work in progress on at least a weekly basis or more frequently if required by the Engineer. The Contractor's design engineer shall provide reports summarizing conditions encountered and general assessment of work within two days of each visit.
- F. All work shall be performed in the presence of the Engineer, unless the Engineer has granted prior approval in writing to perform such work in their absence.

## **1.7 WARRANTY**

- A. The Contractor shall be solely responsible for, and bear the sole burden of cost for any and all damages resulting from improper shoring or failure to shore.
- B. The safety of workers, the protection of adjacent structures, property and utilities, and the installation of adequate supports for all excavations shall be the sole responsibility of the Contractor.
- C. The design, planning, installation, and removal of all shoring shall be accomplished in such a manner as to maintain stability of the required excavation and prevent movement of soil that may cause damage to adjacent shoring systems, structures and utilities, damage or delay the work, or endanger life and health. Settlement of all excavations shall be the responsibility of the Contractor.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Structural Steel: ASTM A36.
- B. Steel Sheetpiles: ASTM A328.

## **PART 3 - EXECUTION**

### **3.1 GENERAL**

- A. Shaft excavations and site development shall commence only after approval of applicable submittals by the Engineer. Install excavation support systems in accordance with approved submittals.
- B. Before beginning construction, adequately protect existing structures, utilities, trees, shrubs, and other existing facilities. The repair of or compensation for Contractor-caused damage to existing facilities shall be at no cost to the Owner.
- C. The Contractor shall furnish all necessary equipment, materials, power, water, and utilities for shaft construction, utility protection, utility replacement, and other associated work required for the Contractor's methods of construction
- D. Excavation shall be performed in sequence with installation of shoring and bracing in a manner that limits settlement of surrounding ground and adjacent vaults, utilities, structures, or roads, and that presents no hazard to traffic.
- E. The Contractor shall install settlement monitoring points and submit surveyed baseline measurements of all monitoring points before beginning any excavation. Excavations and construction for site development shall not extend beyond the property lines and limits of disturbance shown on the Plans.
- F. The Contractor shall conduct all excavation, shoring, temporary facilities, materials storage, and construction traffic within construction easements established for this project. All work shall be in accordance with applicable permits.
- G. All welding shall conform to the applicable provisions of ANSI/AWS D1.1.
- H. The Contractor shall provide temporary safety railing and fencing around all excavations.
- I. The deviation from plumb shall not exceed 1 FT in 100 FT or 1 percent. Any correction of shaft deviation, and any construction and associated costs resulting from relocation of appurtenances inside the shaft, including pipe connections and the launch and retrieval seals, caused by the shaft's deviation from plumb or other deficiencies in workmanship shall be accomplished at the Contractor's expense and shall not be cause for schedule extension.

- J. All excavated spoils, polymers, or other materials used during shaft construction shall be completely contained when stockpiled on site and shall be disposed of by Contractor at a licensed landfill site at completion of the shaft construction. Any spills shall be completely contained and cleaned up promptly by the Contractor. Under no circumstances will spoils or polymers be allowed to enter sanitary or storm sewers or any water body.
- K. Pumping from shaft sumps shall not result in boils, softening of the ground, or loss of fines. Sumps, sub-drains, and drain blankets shall be installed as necessary, using suitable filters or screens so that fines are not removed from the formation.

### **3.2 INTERNAL BRACING SUPPORT SYSTEM**

- A. Internal supports, including wales, struts, and corner braces, shall be installed sequentially as the shaft is excavated. At no time shall the unsupported excavation depth exceed the design spacing plus 2 FT of horizontal support members as shown on approved submittals. All internal supports shall be installed within  $\pm 3$  IN of design locations shown on approved submittals.
- B. The internal bracing support system shall include wales, struts, corner braces, and/or plate stiffeners, as appropriate to safely support the design loads and consistent with means and methods of Contractor.
  - 1. Struts with intermediate bracing shall be provided as needed to enable shafts to carry maximum design load without distortion or buckling.
  - 2. Web stiffeners, plates, or angles shall be included as needed to prevent rotation, crippling, or buckling of connections and points of bearing between structural steel members. Allow for eccentricities caused by field fabrication and assembly.
  - 3. All bracing support members shall be installed and maintained in tight contact with each other and with the surface being supported.
  - 4. Bracing members shall be preloaded by jacking struts, if necessary, to control shoring movement. Bracing members shall be preloaded in accordance with methods, procedures, and sequence as described in the submittals. Excavation work shall be coordinated with installation of bracing and preloading. Steel shims and steel wedges shall be welded or bolted in place to maintain the preloading force in the bracing after release of the jacking equipment pressure. Support and preload shall be installed immediately after installation and prior to continuing excavation.
  - 5. Procedures that produce uniform loading of bracing member shall be used without eccentricities or overstressing and distortion of members of system.

### **3.3 STEEL SHEETPIILING INSTALLATION**

- A. Sheetpiles shall be driven in plumb position with each sheetpile interlocked with adjoining piles for its entire length so as to form a continuous diaphragm throughout the length of each run of wall, bearing tightly against original ground. Sheetpiles shall be driven to the depth indicated on the shop drawings. Care shall be exercised in driving so that interlocking members can be extracted without damaging adjacent structures or utilities. The methods of driving, cutting, and splicing shall conform to the Shop Drawings.
- B. Sheetpile corners shall be installed with interlocks and bulbs properly engaged for full depth of sheetpiles. If interlocks and bulbs cannot be properly engaged for full depth, connections shall be welded continuously to seal all cracks and avoid inflows of groundwater and soils.
- C. The strength of any grout mixture used behind the steel sheetpiles for the purposes of microtunneling shall be selected to allow the Microtunnel Boring Machine (MTBM) to excavate or advance through the grouted zone during both launch and retrieval.

### **3.4 INSTRUMENTATION AND SETTLEMENT MONITORING**

- A. Performance of excavation support system shall be monitored for both horizontal and vertical deflections.

- B. If excessive settlement or deflection of supports or surface features occur that exceed those values predicted by the Contractor's shoring designer, modifications to the excavation and shoring approach will be required. Revised shop drawings and calculations shall be submitted by the Contractor to the Engineer. Changes to excavation sequence and shoring shall be implemented as may be necessary at no additional cost.

### **3.5 REMOVAL OF SUPPORT SYSTEM**

- A. Excavation support shall not be removed until support can be removed without damage to existing facilities, completed work, or adjacent property.
- B. As a minimum, excavation support shall be removed between the existing adjacent surface grade and 10 FT below the adjacent surface grade. As-built Drawings shall be prepared showing location of temporary shoring and bracing that remains in place.
- C. Excavation support shall be removed in a manner that will maintain support as excavation is backfilled and will not leave voids in backfill. Removal of the support system shall be performed in a manner that will not disturb the pipeline, the compacted backfill, or adjacent construction or facilities.
- D. Any void left by shoring system or voids created by the removal of the shoring system shall be filled with controlled density fill, lean concrete, or cement grout, as approved by the Engineer to provide soil support between backfill zone and the native soil.
- E. Sheetpile and soldier pile or beam removal shall be performed in a manner that will avoid "vibro-consolidation" of sandy or granular material below the excavation that could lead to settlement of the pipeline or other works of construction.
- F. The support system removed from the excavation shall remain the property of the Contractor and shall be removed from the site.

### **3.6 CLEANUP**

- A. The Contractor shall remove all construction debris, spoil, slurry, oil, grease, and other materials from the shaft, pipeline, and all surface work areas upon completion of construction of the pipeline. Cleanup will be incidental to the construction. No separate payment shall be made for the cleanup.

## **END OF SECTION**

## **SECTION 33 05 03**

### **CONTACT GROUTING**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

A. Section Includes:

1. Minimum requirements for contact grouting of all voids and annular space outside the jacking pipe after trenchless installations are complete, and around shafts as necessary to prevent surface settlement.

##### **1.2 QUALITY ASSURANCE**

A. Referenced Standards:

1. The publications listed below form a part of this Specification to the extent referenced. Where conflicts between these Specifications and the referenced specification, code, or standard occur, the more restrictive specification shall govern. The latest edition available on the date of issue of Contract Documents shall be used.
  - a. Commercial Standards:
    - 1) ASTM International (ASTM):
      - a) C31, Standard Practice for Making and Curing Concrete Test Specimens in the Field.
      - b) C33, Standard Specification for Concrete Aggregates.
      - c) C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
      - d) C94, Standard Specification for Ready-Mixed Concrete.
      - e) C109, Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-inch Cube Specimens).
      - f) C144, Standard Specification for Aggregate for Masonry Mortar.
      - g) C150, Standard Specification for Portland Cement.
      - h) C494, Standard Specification for Chemical Admixtures for Concrete.
      - i) C618, Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
      - j) C 937, Standard Specification for Grout Fluidifier for Preplaced-Aggregate Concrete.
    - b. Standard Specifications and Guidelines:
      - 1) South Dakota Department of Transportation Standard Specifications for Roads and Bridges.
      - 2) ASCE Standard Design and Construction Guidelines for Microtunneling, ASCE/CI 36-14.

B. Subsurface Information:

1. Site Plan and Subsurface Profile, Appendix A.

C. Grout Strength Tests:

1. Prepare samples for 24 HR and 28-day compressive strength tests according to ASTM C31 for cylinders or ASTM C109 for cubes. Test samples according to ASTM C39 or C109 as applicable. Grout for the cylinders or cubes shall be taken from the nozzle of the grout injection line. Collect at least one set of four (4) samples for each 500 CU FT of grout injected but not less than one set for each grouting shift, unless directed in writing otherwise by the Engineer.

##### **1.3 DESIGN CRITERIA**

- A. Contact grout shall be used to fill any voids caused or encountered outside the jacking pipe, and to fill any voids caused or encountered outside of shafts.

- B. Grout Mixes: Develop one or more grout mixes designed to completely fill the voids outside the casing or shafts and to provide acceptable strength to prevent settlement. Grout used outside shaft excavations shall be excavatable by the tunneling equipment. Make four (4) samples of each proposed grout mix and determine 24 HR and 28-day strength in accordance with ASTM C39 or C109. All grout mix proportions shall be subject to review and acceptance by the Engineer.
- C. Grout Composition: Grout shall consist of Portland cement, bentonite, fluidifier as necessary, and water in the proportions specified herein or as approved by the Engineer. Fly ash may be added to the grout mix as approved by the Engineer.
- D. Options: Utilize sand in grout mix in an amount no greater than six times the cement content by weight.
- E. Compressive Strength: The minimum unconfined compressive strength at 24 hours shall be at least 10 psi. The minimum unconfined compressive strength at 28 days shall be 50 psi. The maximum unconfined compressive strength shall be compatible with Contractor's proposed microtunneling equipment and shall not exceed 500 psi at 28 days.

## **1.4 SUBMITTALS**

- A. Submittals shall be made in accordance with these Specifications. Provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Poor quality drawings and photographs will not be accepted.
- B. Product Data:
  - 1. Manufacturer's product data sheets indicating:
    - a. Mixing, handling, storage, and waste disposal requirements.
    - b. Source of supply for each grout ingredient.
  - 2. Calibration procedures for gauges and meters to be used in grouting operations.
- C. Work Plan and Methods:
  - 1. Submit work plan for each type of contact grouting required, including: contact grouting methods and details of equipment, grouting procedures and sequences, injection pressures, monitoring and recording equipment, pressure gauge calibration data, methods of controlling grout pressure, method of transporting grouting equipment and materials within the pipe, and provisions to protect pipe lining or shaft supports.
  - 2. Include the means and methods for collecting and disposing of excess and waste material, collecting and disposing of water resulting from grouting operations, and maintaining clean working areas.
  - 3. Submit details of grout mix proportions, admixtures, including manufacturer's literature, and laboratory test data verifying the strength of the proposed grout mix.
- D. Reports and Records:
  - 1. Maintain and submit daily logs of grouting operations, including grouting locations, pressures, volumes, and grout mix pumped, and time of pumping. Note any problems or unusual observations on logs.
- E. Grout Strength Tests
  - 1. Submit test results for 24 HR and 28-day compressive strength tests for the cylinder molds or grout cubes obtained during grouting operations within one (1) week of conducting tests.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Cement: Cement shall be Type II or Type V Portland cement conforming to ASTM C150. Type II cement shall meet Table 4 false set requirements of ASTM C150.

- B. Bentonite: Bentonite shall be a commercially processed powdered bentonite, Wyoming type, such as Imacco-gel, Black Hills, or equal.
- C. Fly ash: Conform to ASTM C618.
- D. Sand: ASTM C33; Fine aggregate 100 percent minus No. 16 mesh.
- E. Fluidifier: Fluidifiers shall hold the solid constituents of the grout in colloidal suspension, be compatible with the cement and water used in the grouting work, and comply with the requirements of ASTM C937.
- F. Admixtures: Other admixtures may be used subject to the written approval of the Engineer to improve the pumpability, to control set time, and to prevent segregation and bleeding.
  - 1. ASTM C494 Type A.
  - 2. Compatible with proposed mixing water and containing no more than 0.1 percent chloride ion by weight of cement.

## 2.2 EQUIPMENT

- A. Equipment for mixing and injecting grout shall be adequate to satisfactorily mix and agitate the grout and force it into the grout ports, in a continuous flow at the desired pressure. Pumps shall be capable of continuously developing a sustained pressure of 0.6 FT per foot of overburden at the grout port connection. Sustained grouting pressures shall not exceed 0.6 psi per foot of overburden unless otherwise approved by the engineer.
- B. Two pressure gauges shall be provided, one at the grout pump and one at the collar of each port being grouted. The accuracy of the gauges shall be periodically checked with an accurately calibrated pressure gauge. A minimum of two spare pressure gauges shall be available on site at all times.
- C. The grouting equipment shall be provided with a meter to determine the volume of grout injected. The meter shall be calibrated in cubic feet to the nearest one-tenth of a cubic foot.
- D. The grouting equipment shall be maintained in satisfactory operating condition throughout the course of the work to ensure continuous and efficient performance during grouting operations.
- E. Suitable stop valves shall be provided at the collar of each port for use in maintaining pressure as required until the grout has set.
- F. Grout hoses shall have an inside diameter not less than 1-1/2 IN nor greater than 2 IN and capable of withstanding the maximum water and grout pressures to be used.
- G. Grouting Equipment:
  - 1. General: Provide for continuous circulation of grout within the system.
  - 2. Mixer:
    - a. Utilize a high-speed colloidal-type mixer with a tangential return flow from the mixer pump capable of providing a homogenized mix.
    - b. Size to ensure an uninterrupted supply of grout to the pump.
    - c. Provide with a means of accurately measuring and metering grout ingredients, including modifying the water/cement ratio.
  - 3. Agitator:
    - a. Equip with:
      - 1) Baffles to induce turbulence.
      - 2) Rotating paddles to assure thorough mixing of the grout prior to and during injection.
  - 4. Pumps:
    - a. Utilize an appropriate grout pump for the type, volume, and pressures specified.
    - b. Equip with a water connection to facilitate flushing the system.
    - c. Equip with a pressure gage as specified herein.
  - 5. Other equipment:



- a. Packers: Capable of sealing grout ports and holes without leakage when grouting at the maximum specified pressure.
  - b. Hoses and Piping:
    - 1) Provide a manifold system of valves and pressure gauges in the line at the collar of the grout port to permit accurate control and monitoring of grouting pressure, bleeding, and regulation of flow.
    - 2) Size: To fit the injection ports.
  - c. Pressure gages: Accurate to  $\pm 2$  psi through the allowable grouting pressure range.
- H. Maintain an adequate supply of spare parts and equipment to assure uninterrupted grouting operations.

## **PART 3 - EXECUTION**

### **3.1 GENERAL REQUIREMENTS**

- A. All grouting operations are to be performed in the presence of the Engineer. Notify the Engineer at least 72 hours in advance of starting contact grouting operations.
- B. The Contractor shall take care to prevent the spill or escape of grout to the ground surface, into any water body, or into any sanitary or storm sewer. The Contractor shall closely monitor grouting operations to detect any spills or escape of grout to the surface or into any water body, sanitary sewer, or storm sewer. Any such spill shall be immediately contained and cleaned up by the Contractor at no additional cost.
- C. During grouting work, provide for adequate disposal of all waste and wastewater. Remove and properly dispose of all waste grout resulting from grouting operations.
- D. Remove the plug from grout port locations where grouting is to be performed.
- E. Evacuate hole of water prior to grouting.
- F. Affix valve to each cleaned grout port.

### **3.2 MIXING AND INJECTION OF GROUT**

- A. All materials shall be free of lumps when put into the mixer and the grout mix shall be continuously agitated. Grout shall flow unimpeded and shall completely fill all voids. Grout not injected within 90 minutes of mixing shall be wasted.
- B. The grouting process shall be operated and controlled so that the grout is delivered uniformly and steadily.
- C. Recirculate grout mixes when any new mix is batched or after adding water or fluidifier to mix. Recirculate mix for at least 2 minutes prior to pumping grout into grout port.
- D. In general, grouting will be considered completed when less than one cubic foot of grout of the accepted mix and consistency can be pumped in 5 minutes under the specified maximum pressure or when grout of the same color and consistency being pumped issues from the adjacent grout port during annular grouting of the pipe. After the grouting is finished, the valve shall be closed before the grout header is removed, and remain closed until grout has set.
- E. The maximum sustained grouting pressure shall be 0.6 FT per foot of overburden at the grout port collar connection, unless otherwise approved in writing by the Engineer. Do not pump grout into more than one grout port simultaneously.
- F. Relieve air and water through the closest valved, open grout port.
- G. Inject grout at a maximum pressure of 10 psi measured at the collar of the grout port being grouted.

- H. Use packers in the grout ports during grouting to prevent soil and water from entering the trenchless pipe.
- I. Do not close any valved, open, un-grouted grout port if communication is noted until:
  - 1. Grout of the same consistency as that being injected issues forth.
  - 2. Grout issues forth at the volume rate being injected.
- J. Grout each grout port to refusal.
- K. At completion of grouting, seal all grout ports with plugs designed to prevent long-term infiltration of soil and water into the new installed pipe(s). No leakage will be allowed.

### **3.3 GROUTING OF SHAFT EXTERIORS**

- A. The Contractor shall use contact grouting to fill any voids caused or encountered during shaft construction that could lead to shaft movements during microtunneling operations, or that could lead to settlement and damage of installed pipe, surface features, or subsurface utilities.

### **3.4 CONTACT GROUTING OF JACKED PIPELINES**

- A. The Contractor shall use contact grouting to completely fill the void space outside the jacking pipe caused by the microtunneling machine (MTBM) overcut, and any voids caused or encountered during the trenchless construction.
- B. Commence contact grouting outside of the jacking pipe within 24 HRS following the completion of each drive. Once started, contact grouting shall continue uninterrupted until the entire pipe string has been grouted.
- C. An attempt shall be made to hook-up and pump grout at every port or coupling unless approval is granted by the Engineer in writing to omit grouting of selected ports.
- D. Before attempting to grout a port, the Contractor shall use rebar or steel rod to clean the area outside the grout port of loose soil and to provide a path for grout to travel.
- E. Inject grout through the grout connections in such a manner as to completely fill all voids outside the pipe. Grout pressure shall be controlled to avoid damaging the pipe, and to avoid movement of the surrounding ground or improvements.
- F. Grouting shall generally progress sequentially in a constant upgradient direction from one grout port to the next grout port in the sequence indicated in the approved submittals.
- G. At all times during the grouting operations, sufficient contact grout ports ahead of the port to be grouted shall be cleaned and ready for grouting. Valves or other suitable devices shall be attached and placed in the fully open position on all open grout ports within the maximum grout communication distance, as determined by the Contractor and accepted by the Engineer.
- H. For any port ahead of the grouting operation, with a valve attached, and the valve in the open position, such port shall be considered grouted if grout issues forth of the same consistency and color, and at the same rate as that being pumped. Replace grout plugs in pipe at the completion of grouting.
- I. Pipe grout fittings shall be sealed with screw type plugs upon completion of grouting.
- J. Perform Contact Grouting through crown of the pipes.
- K. Perform Contact Grouting at the spring line of the pipes if voids are observed.

### **3.5 CONTACT GROUTING OF SUBSURFACE SETTLEMENT POINT BOREHOLES**

- A. The Contractor shall use contact grouting to fill and abandon boreholes and casings for subsurface monitoring points after all settlement monitoring measurements have been completed.

### **3.6 CLEANUP**

- A. After completion of contact grouting, all related construction debris, grout, oil, grease, and all other materials shall be removed from the jacking pipe, jacking and receiving shafts, and all work areas.

**END OF SECTION**

## **SECTION 33 05 24 MICROTUNNELING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. This Section establishes the minimum requirements for installing pipe by trenchless methods at locations indicated on the Drawings. The Contractor shall furnish all labor, equipment, power, water, and materials necessary for microtunneling pipe installation and other associated work.
- B. Related Specification Sections include but are not necessarily limited to:
  - 1. Section 31 09 20 - Settlement Instrumentation and Monitoring.
  - 2. Section 31 23 50 - Shaft Excavation and Support.
  - 3. Section 33 05 03 - Contact Grouting.

#### **1.2 QUALITY ASSURANCE**

- A. Referenced Standards:
  - 1. The publications listed below form a part of this Specification to the extent referenced. Where conflicts between these Specifications and the referenced specification, code, or standard occur, the more restrictive specification shall govern. The publications are referenced in the text by basic designation only. Where a date is given for referenced standards, that edition shall be used. Where no date is given for referenced standards, the latest edition available on the date of issue of Contract Documents shall be used.
    - a. Safety Codes:
      - 1) Occupational Safety and Health Administration (OSHA) Regulations and Standards for Underground Construction, 29 CFR Part 1926, Subpart S, Underground Construction, and Subpart P, Excavations.
    - b. Standard Specifications and Guidelines:
      - 1) South Dakota Department of Transportation Standard Specifications for Roads and Bridges.
      - 2) ASCE Standard Design and Construction Guidelines for Microtunneling, ASCE/CI 36-14.
- B. Subsurface Information:
  - 1. Site Plan and Subsurface Profile, Appendix A.

#### **1.3 DEFINITIONS**

- A. Carrier Pipe: Permanent pipe for operational use that is used to convey flows. Carrier pipes may be installed inside a casing pipe, or direct-jacked, if designed for direct jacking and permitted for the crossing.
- B. Intermediate Jacking Station (IJS): A fabricated steel cylinder fitted with hydraulic jacks spaced around the circumference which is incorporated into the pipeline between two specially fabricated pipe sections. The function of an intermediate jacking station is to distribute the jacking load along the pipe string during pipe installation. The hydraulic jacks are removed at the completion of a drive and the gap between adjacent pipe sections is fully closed by pushing the pipes together with the main shaft jacks or another IJS. The steel cylinder remains as an extended sleeve or coupling. The steel cylinder should be protected from corrosion, consistent with corrosion protection used for the jacking pipe and joints.
- C. Jacking Pipe: Pipe jacked behind the microtunneling machine. The jacking pipe shall be the carrier pipe or casing pipe, specifically designed to be installed by pipejacking using microtunneling equipment.

- D. **Jacking Record:** A computer-generated or manually recorded report that contains information on microtunneling operations and may include: date, time, name of operator, tunnel drive identification, installed tunnel length, rate of advance, jacking forces, cutterhead speed and torque, slurry inflow and outflow rates and pressures, bypass valve position, use of any cutting or high-pressure nozzles, face pressure, steering jack positions, line and grade offsets, any movement of the guidance system, machine inclination and roll, intermediate jacking station use and jacking forces, pressure, volume, and location of any lubricant pumped, problems encountered with the tunneling machine or other components or equipment, and durations and reasons for delays.
- E. **Lubrication/Grout Port:** A port located within the MTBM or in the jacking pipe fitted with a one-way valve for injection of lubrication material or grout into the annular space between the pipe and the ground.
- F. **Microtunnel Boring Machine (MTBM):** Remote-controlled, guided slurry shield that can provide continuous support to the excavation face. The MTBM is operated from a control container located on the ground surface. Soil excavation is achieved by a rotating cutterwheel. Excavated soil enters a slurry chamber where it is mixed with water to form a slurry. Pumps cycle the slurry to the surface where a separation plant removes the solids from the slurry. The recycled slurry is then returned to the face in a closed system of pumps and hoses. Because of the remote-control operation and the closed spoil-removal system, routine personnel entry into the MTBM is not required. Slurry used to convey spoil may be water; however, it may contain additives such as bentonite that allow it to carry more solids and provide gel strength to prevent the slurry from permeating the soils at the heading. The guidance system consists of a laser or theodolite and EDM device mounted in the jacking shaft communicating a reference line to a target mounted in the MTBM's articulated steering head. The target in an MTBM provides the operator with information about machine altitude and pitch and can allow for accurate steering control.
- G. **Microtunneling:** A remotely controlled, guided, pipejacking process that provides continuous support to the excavation face and uses a pressurized slurry spoil removal system. The microtunneling process does not require routine personnel entry into the tunnel. A key element of microtunneling is the ability to control the stability of the face by applying fluid and mechanical pressure to balance the earth and groundwater pressures.
- H. **Obstruction:** Objects located wholly or partially within the cross-sectional area excavated by the microtunneling machine that prevent the forward movement of the microtunneling machine after all diligent efforts to advance past the object by the Contractor have failed.
- I. **Portal Stabilization:** Stabilization of the soil and groundwater outside the portal to prevent soil or excessive groundwater inflows into the shaft that may lead to settlement around the shaft or flooding of the excavation. Portal stabilization may be accomplished using ground improvement (such as jet grouting), double sheeting methods combined with contact grouting (guillotine method) or may be integral to the shaft construction method (as for auger-drilled shafts and secant pile shafts).
- J. **Settlement Point:** A point with elevation and spatial location established by survey prior to construction. The point is re-surveyed periodically to monitor ground movements. The point may be a nail, pin, subsurface settlement rod, borehole extensometer, or other device that can be readily located and surveyed.

#### **1.4 DESIGN CRITERIA**

- A. **Microtunneling Equipment:**
  - 1. Only remotely operated microtunneling equipment using spoil removal, shall be used for all microtunneling work required for this project as defined in this Section. The microtunneling machine shall be manufactured by Akkerman, Herrenknecht, Iseki, Lovat, Wirth/Soltau, or approved equal that specializes in the design and fabrication of this type of equipment. The machine shall be capable of fully supporting the face

during both excavation and shutdown periods, and shall have the capability of preventing loss of ground and groundwater inflows. The system shall be capable of adjustment required to counterbalance the groundwater and soil pressures at the tunnel face to an accuracy of  $\pm 1$  FT of equivalent hydrostatic pressure (i.e.,  $\pm 62.4$  psf). A pressure gage shall be provided so the operator can monitor the pressure exerted at the heading.

2. Microtunneling equipment selected for the project shall be suitable for and capable of efficiently advancing through the geologic conditions described in the Subsurface Profile and the geologic conditions anticipated by the Contractor. The microtunneling machine shall be capable of crushing or excavating boulders or other objects up to 25 percent of the outside diameter of the MTBM and up to an unconfined compressive strength of 30,000 psi.
  3. The Contractor is advised that it may not be permitted to retrieve the MTBM using a rescue shaft excavated within the Interstate right-of-way. The machine shall be capable of being retrieved, i.e. withdrawn through the jacking shaft without the need for an intermediate rescue shaft, if forward progress cannot be achieved. Reversible jacks with a closure device and grouting nipple at the entry seal shall be provided for this project. The Contractor may propose an alternate, subject to Engineer's approval. The method proposed for retrievability must be capable of ensuring stability of the aborted bore and avoiding settlement and/or subsidence.
  4. The machine shall have a watertight articulation joint between two segments of the shield. The shield shall be steerable in both the vertical and horizontal directions to allow the operator to maintain line and grade within the specified tolerances. The guidance system shall be designed to function at the maximum required drive length without loss of accuracy or reliability of function. A display showing the position of the machine in relation to design line-and-grade shall be provided at the control panel to allow the operator to continuously monitor line and grade deviations.
  5. The cutterhead shall have a reversible drive system so that it can rotate in either direction and shall have other suitable provisions to minimize rotation or roll of the machine or pipe during installation.
  6. The maximum radial overcut shall be 1 IN. The minimum radial overcut shall be 1/2 IN. The radial overcut shall be determined as the difference between the maximum diameter created by the overcut band on the machine and the outer diameter of the pipeline or casing, divided by two.
  7. A lubrication injection system shall be provided and used to inject pipe lubricant around the MTBM and jacking pipe to decrease frictional resistance. Lubrication materials may include a mixture of bentonite and/or polymers and water. Lubrication ports shall be provided in the MTBM and jacking pipe to allow for lubrication along the pipe string at intervals of not more than 10 FT.
  8. The MTBM shall be equipped with a computerized data acquisition system for collecting information for the jacking record. An on-site printer and disk drive will also be required for production of a printed daily jacking record and an electronic copy of the data. As a supplement to the computerized data acquisition system, the Contractor shall also use manual data acquisition for collecting information for the jacking record.
  9. Where there is a potential for flammable or noxious gases to be encountered, or if required by OSHA, the machine shall have an automatic shut-off switch and provisions for continuous gas monitoring.
- B. Methods and equipment shall control surface settlement and heave above the pipeline to prevent damage to existing utilities, facilities, and improvements. Ground movements (settlement/heave) shall be limited to values that do not cause damage or distress to surface features, utilities, or improvements. The Contractor shall be responsible for any damage to existing features, improvements, or utilities, and shall repair any damage to the satisfaction of the Engineer, at no additional cost to the Owner, and without schedule extension.

- C. The slurry separation plant shall be designed to achieve the rates of spoil separation and slurry cleaning required for planned production rates. Shaker screens, hydrocyclones and centrifuges will likely be required for efficient separation of spoils. The separation plant must fit within the allowable work areas shown on the Plans. Excavated slurry pits or ponds will not be allowed. Additionally, all excavated materials and slurry must be discharged into, and completely contained within tanks, trucks, or other containers at all times. On-site stockpiling or disposal shall not be permitted.
- D. Intermediate jacking stations (IJSs) for direct-jacked carrier pipe shall be fully gasketed between the interjack shell and each pipe special, with two (2) gaskets installed on each pipe. The IJS sleeve must be made of material with the same corrosion resistance as the jacking pipe joint. The number of IJSs and pipe specials is to be determined by the Contractor and their planned usage shall be described in the Contractor's submittal. The Contractor shall install and use IJSs as indicated in its accepted submittal; however, an intermediate jacking station must be used immediately if jacking forces for any segment reach or exceed 70 percent of the safe design capacity of the jacking pipe, IJS pipe, jacking frame, or thrust block, whichever is lowest. The Contractor may elect to use IJSs before jacking forces reach the threshold values.
- E. Pipe design for jacking loads and acceptable fabrication tolerances is the responsibility of the Contractor. Maximum jacking loads applied to the jacking pipe shall not exceed 40 percent of the ultimate compressive strength of the pipe material or the maximum design strength of the pipe as established by the manufacturer, whichever is lower.
- F. A thrust block shall be used to transfer jacking loads to the soil behind the jacking shaft. The thrust block face shall be constructed perpendicular to the proposed pipe alignment. The thrust block shall be designed to withstand the maximum jacking forces developed by the main jacks, without excessive deflection or displacement. Forces applied to the soil shall not exceed the allowable passive earth pressure described in Contractor's approved submittal, with a minimum factor of safety of 1.5, or the strength of the ground support system with consideration of passive soil resistance and allowable deformations of the support system and soil mass. (See also Section 31 23 50, Submittals.)
- G. Provide launch and retrieval seals at all shaft exit and entry locations. Provide portal stabilization as required to prevent loss of ground and uncontrolled inflows at entry and exit seal locations.

## 1.5 SUBMITTALS

- A. Submittals shall be made a minimum of four weeks before any work referred to in the submittals is scheduled to commence and shall provide sufficient detail to allow the Engineer to judge whether the proposed equipment, materials, and procedures will meet the Contract requirements. All drawings shall be legible with dimensions accurately shown and clearly marked in English. Poor quality drawings and photographs will not be accepted.
- B. The Engineer's review of submitted details and data will be based on consideration of requirements for the completed work, protection of existing utilities, and the possibility of unnecessary delays in the execution of the work to be constructed under this Contract. Review and approval of the Contractor's submittals by the Engineer shall not be construed in any way as relieving the Contractor of its responsibilities under this Contract.
- C. The Contractor shall prepare and submit to the Engineer, the following:
  - 1. Qualifications: Submit the name of the Contractor that will perform the microtunneling work and written documentation summarizing the qualifications of the firm, description of reference projects including owner's name and contact information, project superintendent, machine operators, and site safety representative. Submit personnel qualifications in accordance with Paragraphs 1.7 B through F. Provide qualifications and training records for site safety representative, personnel responsible for air quality monitoring, and licensed surveyor.

2. Microtunneling Equipment: Submit the following describing the microtunneling equipment and construction methods to be employed:
- a. A detailed description of the equipment to be used in completing each microtunnel drive.
  - b. Manufacturer's literature describing the microtunneling system(s) including the machine(s) and all ancillary equipment. Provide descriptions of projects on which this system has been successfully used including names, addresses, and telephone numbers of owner's representatives for these projects as well as length, diameter, and pipe material used. If a used or refurbished MTBM is proposed, list previous usage, modifications made and dates of modifications, and detailed description of the extent and dates of refurbishment. Include the following information concerning the MTBM:
    - 1) Dimensions.
    - 2) Torque, rotation speed range, and no-load or "dry" torque reading.
    - 3) Cutter types, number, configuration, and gauge cutter setting for overcut, (include photographs).
    - 4) Articulation and steering capability.
    - 5) Cutterhead jets/ports.
    - 6) Face/excavation chamber pressure gauge locations and types.
  - c. The excavation diameter based upon the outermost dimensions of the shield. Also provide the radial overcut which shall be determined as the difference between the maximum shield diameter and the outer diameter of the jacking pipe, divided by two.
  - d. A description of the alignment control systems including manufacturer's literature and drawings showing setup, support provisions, and other details for the laser, theodolite, and water level system. Submit a description of surveying methods to set guidance system positions and a description of procedures to check and reset or realign guidance system during construction. Submit a description of methods to ensure that thrust block, exit and entry seals, and jacking frame are installed on proper line and grade. Submit results of line and grade survey to ensure that the thrust block, jacking frame, guide rails, entry seal, and exit seals are installed properly prior to launch of each drive. Confirm that these systems can achieve the required pipeline line and grade within the specified tolerances.
  - e. Capacity, number, and arrangement of main jacks including details of the thrust ring, thrust block, jacking frame, jacking controls, pressure gauges, and jack calibration data (pressure vs. force relationship for each stage of the jacks). Also, submit pipe restraint device to prevent pipe movement into shaft when rams are retracted, where necessary.
  - f. Details of intermediate jacking stations, including material of IJS sleeve, number of hydraulic cylinders per IJS, thrust capacity, quantity to be used, and anticipated placement within the pipe string.
  - g. Details of pipe lubrication injection system and pipe lubricants to be used during microtunneling, including manufacturer's literature and MSDS sheets. Include a description of proposed lubrication procedures during jacking, including estimated volumes of lubricant that will be pumped. Confirm that sufficient volume of lubricant will be pumped at all times to completely fill the annular space outside the jacking pipe.
  - h. Details of spoil and slurry handling, separation, transport, and disposal equipment and procedures including details of slurry additives, slurry separation plant, and the location of slurry and spoil disposal sites. Confirm that slurry and spoils shall be contained at all times and shall not be stockpiled or dumped on site or allowed to spill and collect around slurry separation plant. Provide manufacturers description for slurry additives and Material Safety Data Sheets (MSDSs).
  - i. Ventilation and air quality monitoring system, including monitors for MTBM deactivation and alarm activation.



3. **Work Area Layout Drawings:** The Contractor shall submit shaft layout drawings detailing dimensions and locations of all equipment, including overall work area boundaries. Shaft layout drawings will be required for jacking and receiving shaft locations and shall be to scale, or show correct dimensions. The Contractor's layout drawings shall show that all equipment and operations shall be completely contained within the allowable construction zones shown on the Plans.
4. **Schedule:** Provide a schedule for all microtunneling work, identifying all major construction activities as independent items. The schedule shall include, as a minimum, the following activities: mobilization, groundwater control at jacking and receiving shafts, shaft excavation and support, working slab construction, thrust wall construction, jacking equipment setup, ground stabilization, entry ring installation for launch of machine, microtunneling, retrieval of the MTBM, removal of shaft supports and shaft backfill, site restoration, cleanup, and demobilization. The schedule shall also include the work hours and workdays for each activity, and a written description of the construction activities. The schedule will be reviewed by the Engineer and shall be updated and resubmitted by the Contractor every two (2) weeks or more frequently if requested by the Engineer.
5. **Daily Records:** The following daily records shall be submitted to the onsite Engineer by noon on the day following the shift for which the data or records were taken.
  - a. **Jacking Records:** The Contractor shall provide complete jacking records to the Engineer. These records shall include, at a minimum: date, time, name of operator, tunnel drive identification, installed pipe number and corresponding tunnel length, rate of advance, jacking forces, cutterhead speed and torque, slurry flow rates and pressures, bypass valve position, use of any cutting or high-pressure nozzles, face pressure, steering jack positions, line and grade offsets, any movement of the guidance system, machine inclination and roll, intermediate jacking station use and jacking forces, problems encountered with the tunneling machine or other components or equipment, and durations and reasons for delays. Computer-recorded data should be referenced to time and distance and should be recorded at time intervals of one minute or less. Manually recorded observations should be made at intervals of not less than three times per pipe, whenever conditions change, and as directed by the Engineer. At least seven (7) days prior to the launch of the machine, the Contractor shall submit samples of the automated and manual jacking records. Samples shall include electronic data and any necessary programs to interpret data, and the manual logs or records to be used.
  - b. **Lubrication Records:** The Contractor shall provide lubrication records to the Engineer. These records shall include the injection locations along the pipe string, lubrication type and additives, and amount, in gallons, of lubricant pumped throughout a drive. The record will also include the type of additive used and date, time, and drive distance when used.
  - c. **Slurry Additives:** The Contractor shall provide records of all slurry additives including any bentonite and polymers. The time and volume, or weight, of the additive shall be noted. Measurements of mud weights, specific gravity, and viscosity shall be made at the beginning, middle, and end of each shift, and submitted with the daily logs. Measurements shall be made on slurry samples taken from the slurry tanks and noted accordingly.
6. **Calculations:** Calculations shall be submitted in a neat, legible format. Assumptions used in calculations shall be consistent with information provided in the Subsurface Profile. All calculations shall be prepared by or under the direct supervision of a Professional Engineer licensed in State of South Dakota, who shall stamp and sign calculations.
  - a. Design calculations demonstrating that the proposed jacking pipe is capable of supporting the maximum stresses to be imposed during jacking. The calculations shall take into account earth and hydrostatic loads, jacking forces, external loads such as live loads due to traffic, and any other loads that may be reasonably

- anticipated during jacking and during the service life of the pipe. All loads shall be shown and described. Include assumed maximum drive length. Additionally, provide an estimate of the maximum jacking force expected to complete each drive, accounting for both face pressures and frictional resistance along the pipe string.
- b. Calculations demonstrating that the soils behind the thrust block can transfer the maximum planned jacking forces exerted by the main jacks to the ground during pipe installation with a factor of safety of at least 1.5, without excessive deflection or displacement. (See also Section 31 23 50, Submittals.) The thrust block capacity submittal shall be coordinated between the General Contractor and microtunneling subcontractor, if applicable.
7. Intermediate Jacking Stations: Drawings and design details for intermediate jacking stations including dimensions, shell materials, proposed spacing, method of operation, number of stations, method of abandonment, and final seal configuration.
  8. Portal Stabilization: The Contractor shall submit details on portal stabilization and the method of controlling groundwater inflows and loss of ground into the shafts at all times, including the periods during launch and retrieval of the microtunneling machine.
    - a. Provide a description of the methods to be used for each portal stabilization technique proposed. Provide a description of the method for verifying soil stability prior to removing shoring at entry and exit portals. Provide shop drawings showing the details and dimensions of each stabilization system and full narrative describing the procedures.
    - b. Provide a description of the secondary or remedial methods that will be employed if the initial stabilization efforts fail to achieve the required stabilization.
  9. Jacking Pipe: Submit detailed drawings of the jacking pipe indicating the location and spacing of lubrication fittings, joint details, joint cushioning materials, gaskets, and intermediate jacking station pipe details. Indicate the ultimate and allowable jacking capacity, the required fabrication tolerances to prevent damage to the pipe during installation and provide a certification indicating that the pipe meets these tolerances and is designed to meet all anticipated loading conditions with a factor of safety of 2.5.
  10. Contingency Plans: The following list includes problem scenarios that may be encountered during the microtunneling operations. The Contractor shall submit contingency plans for dealing with each problem scenario while satisfying the specifications. These plans shall include the observations and measurements required to clearly identify the cause of the problems.
    - a. Machine unable to advance:
      - 1) Possible obstructions (including boulders, old foundations, well casing, metallic debris, or reinforced concrete).
      - 2) Insufficient jacking capacity.
      - 3) Machine or component malfunction.
    - b. Slurry separation problems:
      - 1) Cuttings are not adequately separated using the slurry separation plant.
      - 2) Cuttings settle out in the slurry lines before reaching the separation plant.
    - c. Strong hydrocarbon smell is detected in the slurry returns, MTBM, tunnel, or in the shaft. Combustible gas meters at MTBM or in tunnel exceed 10 percent of LEL for methane or possible volatile organic compounds.
    - d. Laser distorted by heat, humidity, or physical disturbance.
    - e. Jacking Forces:
      - 1) Jacking forces increase dramatically or suddenly.
      - 2) Jacking forces reach design capacity of pipe, jacking frame, or thrust wall (treat these scenarios as separate incidents).
    - f. Settlement and Subsidence:
      - 1) Survey measurements indicate deformations exceed allowable limits.
      - 2) Excavated volumes significantly exceed pipe volume installed.

- 3) Slurry face pressures and/or torque on head decrease suddenly and significantly.
  - g. Groundwater inflows to shaft increase significantly and/or transport fines into shaft in measurable quantities.
  - h. Steering or guidance/tracking system difficulties result in line and grade tolerances being exceeded.
  - i. Pipe has been damaged or has been found to be out of compliance with specifications:
    - 1) Before installation.
    - 2) During, or after installation.
  - j. Thrust block deforms excessively under jacking loads, or provides insufficient capacity to advance pipe.
  - k. Control signal is lost. Cannot monitor position, torque, thrust, steering jack position, or other performance parameters.
  - l. Excessive pipe separation at joints or pipe string movement into shaft is experienced when jacks are retracted.
11. Safety Plan: A Safety Plan for the microtunneling operations including air monitoring equipment and procedures, and provisions for lighting, ventilation, and electrical system safeguards.

## 1.6 QUALITY CONTROL

- A. Failure to meet the qualification requirements is failure to fulfill the Contract and the Contractor will be required to obtain a subcontractor that meets the qualification requirements.
- B. All microtunneling work shall be performed by an experienced Contractor who has at least five (5) years of experience in performing microtunneling work and has completed at least five (5) projects of similar diameter in similar ground conditions involving a total of 5,000 FT of microtunneling. The Contractor shall submit a description of referenced projects including owner's name and contact information, project superintendent, and machine operators.
- C. The project superintendent shall have at least five (5) years of experience supervising microtunneling construction. The Contractor shall submit a description of referenced projects including owner's name and contact information, project superintendent, and machine operators.
- D. The microtunneling machine operator(s) shall have technical training in the operation of the proposed microtunneling equipment and shall have completed, as a primary operator, at least five (5) similar microtunneling projects of similar diameter, in similar ground conditions, involving a total of 5,000 FT of microtunneling. The Contractor shall submit a description of referenced projects including owner's name and contact information, project superintendent, and machine operators.
- E. The site safety representative and personnel responsible for air quality monitoring shall be experienced in tunnel construction and shall have current certification by OSHA.
- F. The Contractor shall secure and pay for a surveyor who shall be responsible for line-and-grade control. The surveyor responsible for line-and-grade control shall be a Licensed Surveyor registered in the State of South Dakota who has prior experience in similar projects.
- G. The Contractor shall provide at least 72 HRS advance written notice to Engineer of the planned launch of the MTBM.
- H. All work by the Contractor shall be done in the presence of the Engineer unless the Engineer grants prior written approval to perform such work in Engineer's absence.

- I. The Contractor shall immediately notify the Engineer, in writing, when any problems are encountered with equipment or materials, or if the Contractor believes the conditions encountered are materially and significantly different than those represented within the Contract Documents.
- J. The Contractor shall allow access to the Engineer and shall furnish necessary assistance and cooperation to aid the Engineer in observations, measurements, data and sample collection, including, but not limited to the following:
  - 1. The Owner and/or Engineer shall have reasonable access to the operator control container prior to, during, and following all microtunneling operations. This shall include, but not be limited to, providing visual access to real-time operator control screens, gauges, and indicators.
  - 2. The Owner and/or Engineer shall have reasonable access to the jacking and reception shafts prior to, during, and following all jacking operations. This shall include, but not be limited to, visual inspection of installed pipes, and verification of line and grade. The Contractor shall provide safe access in accordance with all safety regulations.
  - 3. The Owner and/or Engineer shall have reasonable access to the slurry separation plant prior to, during, and following all microtunneling operations. This shall include, but not be limited to, reasonable access to shaker screens, hydrocyclones, conveyor belts, centrifuge equipment, and slurry and spoil holding tanks. The Engineer shall be allowed to collect soil samples from the shaker screens and/or spoil holding tanks on the slurry separation plant a minimum of once per installed pipe section, or every 10 FT, whichever is more often, and at any time when soil conditions change or debris or foreign objects are apparent or suspected.
  - 4. The Owner and/or Engineer shall have reasonable access to the bentonite lubrication plant prior to, during, and following all jacking operations. This shall include, but not be limited to, reasonable access to visually inspect storage and mixing tanks, lubricant pressures and pumping rates, and amount and type of lubricants on site.

## **1.7 SAFETY**

- A. The Contractor is responsible for safety on the job site. Methods of construction shall be such as to ensure the safety of the Work, Contractor's and other employees on site, and the public. Perform all work in accordance with all current applicable regulations and safety requirements of the Federal, State, and local agencies. Comply with all applicable provisions of 29 CFR Part 1926, Subpart S, Underground Construction and Subpart P, Excavations, by OSHA. In the event of conflict, comply with the more stringent requirements.
- B. No gasoline powered equipment shall be permitted in jacking and receiving shafts. Diesel, electrical, hydraulic, and air powered equipment is acceptable, subject to applicable local, State, and Federal regulations.
- C. Furnish and operate a temporary ventilation system in accordance with applicable safety requirements when personnel are in the shaft or in the pipe. Perform all required air and gas monitoring. Ventilation system shall provide a sufficient supply of fresh air and maintain an atmosphere free of toxic or flammable gasses in all underground work areas.

## **1.8 MEASUREMENT AND PAYMENT**

- A. Items spelled out in this section shall override measurement and payment provisions of all Plan Notes.
- B. Incidental Items: There are numerous incidental items of work that are required to complete the trenchless installations for the project. While these items may not be specifically mentioned or illustrated by the Contract Documents and there may be no specific pay items listed for them, the Contractor will be required to perform those incidental tasks that can be

anticipated through review of the Contract Documents, inspection of the construction areas, and experience in this class of trenchless construction.

1. Items considered incidental work shall not be measured for payment or paid for as such unless specified as unit price by items on the Bid Form. These items and their costs shall be included in the unit prices or lump sum bid for the pay items unless bid separately. Incidental items may include but are not limited to the following:
    - a. Development of Contingency Plan(s).
    - b. Development of Safety Plan(s).
    - c. Dewatering.
    - d. Disposal of material from pipe cleaning. Proper disposal of all waste.
    - e. Equipment (either rented or owned) used in the trenchless operation.
    - f. Excavation, sheeting or shoring of all receiving shafts.
    - g. Insurance.
    - h. Material Royalties.
    - i. Permits.
    - j. Portal stabilization.
    - k. Rental fees.
    - l. Settlement instrumentation and monitoring.
    - m. Site security.
    - n. Submittals or calculations as required or outlined in this Specification Section or in related specification sections.
    - o. Surveyor responsible for line and grade control of the trenchless installation.
    - p. Temporary lighting of work areas or signage.
- C. Bid Items related to this work are listed in Estimate of Quantities in Design Drawings.
- D. If a changed condition occurs or the Contractor deems that additional compensation is warranted for work or materials not covered in the Contract, the Contractor shall give the Engineer written notice of the claim as outlined in the Standard Specifications and Guidelines.
1. As discussed in Article 3.5 of this Specification, obstructions up to 25 percent of the diameter of the cutter head are to be included in the Contractor's bid for the trenchless work. The Contractor will receive compensation for removal of obstructions, as defined as metallic debris, reinforced concrete, whole trees, rocks and other hard objects larger than 25 percent of the outer diameter of the shield or cutter head, which cannot be broken up by the cutting tools with diligent effort, and that are partially or wholly within the cross-sectional area of the bore. Compensation for cost and time will be negotiated with the Contractor by the Owner on a case-by-case basis. The Owner will not consider damage to or the loss of the shield or cutter head as acceptable for compensation in this negotiation. The sole risk of such equipment impacts are solely on the Contractor.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Steel Pipe.

## **PART 3 - EXECUTION**

### **3.1 GENERAL REQUIREMENTS**

- A. Microtunneling shall not begin until the following tasks have been completed:
1. Contractor has requested locates from all utility owners, in accordance with State One-call Laws and Common Ground Alliance best practices, and all requested utility locates have been made, or area marked clear.

2. Contractor shall conduct visual site inspection and records search of as-builts to investigate potential unmarked, mismarked, and abandoned utilities.
  3. Contractor shall confirm locates of all marked and discovered utilities, using vacuum potholing or other soft dig techniques for all crossing utilities and all adjacent utilities within the tolerance zone defined by State One-Call Laws.
  4. All required submittals have been provided, reviewed, and accepted.
  5. Jacking shaft and receiving shaft excavations and support systems for each drive have been completed in accordance with approved submittals. Elevations of working slab surfaces have been surveyed to confirm that work can be completed in accordance with alignment and grade shown on Plans.
  6. The Contractor has stabilized the soils at entry and exit locations as required to stabilize weak, running, or flowing soils. The Contractor has confirmed that the ground has been stabilized to the extent that ground will remain stable without movement of soil or water while the entry/exit location shoring is removed and while the machine is being launched or received into a shaft or during jacking operations.
  7. All settlement monitoring instruments have been installed, surveyed, and baseline survey measurements have been provided to and accepted by the Engineer.
  8. The location, orientation and grade of the jacking frame or guide rails have been surveyed to ensure they are on the proper line and grade and to verify that they are properly supported. Special care shall be taken when setting the guide rails or jacking frame in the jacking shaft to ensure stability and accuracy of the alignment and grade.
  9. Guide rails or jacking frame shall be securely attached to the shaft supports and concrete working slab to prevent movement or shifting during the work.
  10. A start-up inspection of all mechanical and hydraulic systems associated with the microtunneling operations has been completed. The system shall be tested on the surface to ensure that the microtunneling machine and supporting equipment are functioning properly. The Engineer shall be notified at least 72 HRS prior to the start-up inspection and a site inspector representing the Owner will be present during the start-up inspection. Key machine performance data will be measured and recorded by the Contractor during this inspection, including cutterhead rotational torque, functionality of main and steering jacks, laser/theodolite/water level, and target, and other components. The records of the start-up inspection will be submitted to the Engineer within 24 HRS of the completed inspection.
  11. Site safety representative has prepared a code of safe practices and an emergency plan in accordance with the Safety Plan. Provide the Engineer and Owner with a copy of each prior to starting microtunneling. Hold safety meetings and provide safety instruction for new employees. Conduct a pre-construction safety conference. Arrange this conference and inform the Engineer of the time and place of the conference at least seven (7) days in advance.
- B. The Contractor shall properly manage and dispose of groundwater inflows to the shafts in accordance with all permit conditions. The Contractor shall not discharge groundwater inflows into storm sewers, sanitary sewers, water bodies, or streets.
- C. The Contractor shall furnish all necessary equipment, power, water, and utilities for pipejacking, pipe lubricant mixing and pumping, spoil removal and disposal, grouting, and other associated work required for the Contractor's methods of construction.
- D. Conduct all operations such that trucks and other vehicles do not interfere with traffic or create a mud, dust, or noise nuisance in the streets and to adjacent properties. Promptly clean up, remove, and dispose of mud, spoils and slurry spillage, and any slurry discharges.
- E. All work shall be done so as not to disturb roadways, adjacent structures, landscaped areas, or existing utilities. Any damage shall be immediately repaired to original or better condition and to the satisfaction of Engineer at no additional cost to the Owner.

- F. Whenever there is a condition that is likely to endanger the stability of the excavation or adjacent structures, the Contractor shall operate with a full crew 24 HRS a day, including weekends and holidays, without interruption, until those conditions no longer jeopardize stability.

### **3.2 JACKING OPERATIONS**

- A. Provide a suitable jacking frame and thrust block to carry out the work. Provide, install, and operate intermediate jacking stations as necessary to complete the microtunneling drives indicated on the Plans and in accordance with design criteria.
- B. The Contractor shall install and use IJSs if jacking forces for any segment reach or exceed 70 percent of the safe design capacity of the jacking pipe, IJS pipe, jacking frame, or thrust block, whichever is lowest. The Contractor may elect to use IJSs before jacking forces reach the threshold values.
- C. Transport the jacking pipe from storage to the jacking shaft without damage. Transport methods shall be acceptable to pipe manufacturer. Damaged jacking pipe shall not be used in the Work, unless permitted in writing by the Engineer. Set the pipe to be jacked on properly braced and supported guide rails or jacking frame.
- D. Testing of the joints of each jacking pipe shall be in accordance with the testing requirements of the applicable pipe specification.
- E. The axial forces from the thrust jacks shall be distributed to the jacking pipe uniformly through a thrust ring and cushion material to prevent damage to the ends of the pipe. The Contractor or pipe manufacturer shall install pipe cushion materials between each direct-jacked pipe joint. The cushion materials or compression rings will be made of plywood or other materials recommended by the pipe manufacturer and reviewed by the Engineer. The compression rings shall not protrude beyond the inner or outer diameter of the pipe. The compression rings shall be of sufficient thickness and stiffness to distribute the jacking load between successive pipe sections, and minimize eccentric loading. Jacking forces applied to the pipe shall not exceed the specified allowable compressive stresses stated in Paragraph 1.4E of this Specification.
- F. Jacking pipe sections shall be jacked into position following the design line and grade without damaging the pipe. In the event a section of pipe is damaged during the jacking operation, the Contractor, with written approval from the Engineer, shall make temporary repairs to the pipe and shall jack the pipe through to the next shaft for removal. Other methods of repairing the damaged pipe may be used if approved in writing by the Engineer.

### **3.3 MICROTUNNELING**

- A. Microtunneling shall be completed in accordance with approved submittals, and all applicable permit conditions.
- B. Microtunneling operations shall control surface settlement and heave above the pipeline to prevent damage to existing utilities, facilities, and improvements. The Contractor shall repair any damage resulting from construction activities, at no additional cost to Owner and without extension of schedule for completion. The Contractor shall pressure grout any voids caused by or encountered during microtunneling, as specified in Section 33 05 03 - Contact Grouting. The Contractor shall modify equipment and procedures as required to avoid recurrence of excessive settlements, heave, or damage.
- C. Provide an automated lubrication system, and inject pipe lubricants through injection ports at the rear of the microtunneling machine and ports in the jacking pipe, to minimize pipe friction. Pipe lubricants shall be injected continuously as the pipe is advanced and in sufficient volume to at a minimum completely fill the calculated overcut volume.

- D. Pressure shall be applied at the tunnel face to maintain face stability and shall be monitored continuously. Face pressure shall be maintained between calculated active and passive earth pressure.
- E. The microtunneling machine shall be operated to restrict the excavation of the materials to a volume equal to the MTBM and pipe jacked, to prevent loss of ground and settlement or possible damage to overlying structures. Control the advance rate and monitor the volume of material excavated and adjust advance rate, as required, to avoid loss of ground, over-excavation, or surface heave.
- F. Control slurry pressure and avoid excessive pumping pressures to prevent the discharge of slurry at the ground surface or into any water body. Contain and clean up any slurry discharges immediately. Wash any paved areas with water to avoid the tracking of slurry away from the discharge area.
- G. Completely contain, transport, and dispose of all excavated materials, waste slurry, and drilling fluids away from the construction site. All spoils and slurry must be contained in trucks, tanks, or other containers at all times. Dumping of spoil or slurry on the ground, discharge into sewers, or discharge into the shafts is not permitted. Slurry shall be pumped into tanker trucks and disposed of at acceptable facilities in accordance with current State regulations for disposal of these materials. Only use the disposal sites identified in approved submittals for muck and slurry disposal.

### **3.4 CONTROL OF LINE AND GRADE**

- A. The Contractor shall verify survey benchmarks prior to the start of construction, and shall confirm positions or report any errors or discrepancies in writing to the Engineer.
- B. After confirming all established benchmarks, use these benchmarks to furnish and maintain all reference lines and grades for microtunneling. The Contractor shall use these lines and grades to establish the exact location of the MTBM as it is being advanced using a laser and theodolite guidance system and water level. Submit to Engineer copies of field notes used to establish all lines and grades and allow Engineer to check guidance system setup prior to beginning each microtunneling drive. Provide access for Engineer to perform survey checks of guidance system and line-and-grade of jacking pipe on a daily basis during microtunneling operations. The Contractor is fully responsible for the accuracy of the Work and the correction of it, as required.
- C. The jacking pipe shall be installed in accordance with the following tolerances:
  - 1. Variations from design line:  $\pm 3$  IN maximum.
  - 2. Variations from design grade:  $\pm 2$  IN maximum.
- D. The machine shall be steered to maintain line and grade within the tolerances specified. This shall be achieved by continuously monitoring and adjusting line, grade, machine inclination, roll, and steering attitude during the operation. If the installation deviates from line or grade, make the necessary corrections, and return to the design alignment and grade at a rate of not more than 1 IN per 25 FT.
- E. The guidance system shall be mounted independently from the thrust block and jacking frame to maintain alignment if there is movement of equipment during jacking. Stop microtunneling operations and reset guidance system if its alignment shifts or is moved off design alignment and grade for any reason. Check guidance system setup at least once per shift. Guidance system should only be reset by experienced, competent surveying personnel in accordance with approved procedures outlined in the submittals.
- F. Monitor line and grade continuously during microtunneling operations. Record deviation with respect to design line and grade at least once per foot and submit records to Engineer. Control line and grade of the jacking pipe to within the specified tolerances.



- G. If the pipe installation does not meet the specified tolerance, the Contractor shall correct the installation including any necessary redesign of the pipeline or structures and acquisition of necessary easements. All corrective work shall be performed by the Contractor at no additional cost to the Owner and without schedule extension, and is subject to the written approval of the Engineer.

### **3.5 OBSTRUCTIONS**

- A. If the microtunneling operations should encounter an object or condition that impedes the forward progress of the machine, the Contractor shall notify the Engineer immediately. The Contractor shall propose one of the plans previously submitted per Paragraph 1.5.C.10 of this Specification to correct the condition, and remove, clear, or otherwise make it possible for the microtunneling machine and jacked pipe to advance past any and all objects or obstructions that impede forward progress of the machine. Upon written notification of the Engineer, the Contractor shall immediately proceed with removal of the object or obstruction by means of an obstruction removal shaft or by other approved methods, as submitted by the Contractor. An obstruction removal shaft shall consist of a small excavation for the purpose of removing the obstruction. The Contractor will receive compensation for removal of obstructions, as defined as metallic debris, reinforced concrete, whole trees, rocks and other hard objects larger than 25 percent of the outer diameter of the shield or cutter head, which cannot be broken up by the cutting tools with diligent effort, and that are partially or wholly within the cross-sectional area of the bore. Compensation for cost and time will be negotiated with the Contractor by the Owner on a case-by-case basis. The Contractor will receive no additional compensation for removing, clearing, or otherwise making it possible for the microtunneling machine to advance past objects consisting of cobbles, boulders, wood, non-reinforced concrete, and other nonmetallic objects or debris with maximum lateral dimensions less than 25 percent of the outer diameter of the shield or cutterhead, whichever is larger.

### **3.6 CLEANUP**

- A. After completion of microtunneling and carrier pipe installation, all construction debris, slurry, oil, grease, and other materials will be removed from the microtunneled pipe, jacking and receiving shafts, and all Contractor work areas. Cleaning shall be incidental to the construction. No separate payment shall be made for cleanup.
- B. Restoration shall follow construction as the work progresses, and shall be completed as soon as possible. Restore and repair any damage resulting from surface settlement caused by shaft excavation, or pipejacking. Any property damaged or destroyed, shall be restored to a condition equal to or better than existing prior to construction. Restoration shall be completed no later than thirty (30) days after the microtunneling is complete. The restoration shall include all property affected by the construction operations.

## **END OF SECTION**

**SECTION 33 11 03**  
**PIPE CLEANING AND INTERNAL**  
**INSPECTION OF PIPELINES**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Pipe Cleaning:
  - 1. This Section specifies the requirements for cleaning of pipes and structures prior to rehabilitation. Work for cleaning consists of furnishing all labor and equipment to remove and dispose of the accumulated sediments in pipes and structures located within the project limits.
    - a. Heavy cleaning is required prior to the rehabilitation of the existing pipe.
    - b. Light cleaning is required after pipe installation.
  - 2. Cleaning of pipes to be removed is not required unless an obstruction preventing the effective replacement of the existing pipe is discovered.
- B. Internal Inspection of Pipelines:
  - 1. This Section specifies the requirements for internal inspection of the existing pipelines.
    - a. All pipes shall be inspected after cleaning.

**1.2 DEFINITIONS**

- A. Heavy Cleaning: cleaning which is greater than light cleaning. May include removal of sediments, debris, grease, scale, roots, and encrustations.
- B. Light Cleaning: two or fewer passes through the pipe with cleaning nozzles.

**1.3 QUALITY ASSURANCE**

- A. Pipe Cleaning:
  - 1. Quality Assurance:
    - a. No chemicals shall be used to clean the pipe without prior written authorization of the Engineer. In no case shall any chemical additive be used that might be considered hazardous or considered detrimental to organisms, or detrimental to old or new pipe materials.
    - b. The Contractor shall be solely responsible for reviewing available records and assessing the existing facilities to determine the expected quantity of sediments, debris, grease, scale, and encrustations to be removed by the cleaning process selected by the Contractor to comply with the requirements of this Section.

**1.4 SUBMITTALS**

- A. Pipe Cleaning:
  - 1. A letter identifying the equipment and the methods the Contractor plans to employ to remove sediment, debris, grease, scale, encrustations, and roots from the individual diameters of sewer pipes and structures. Each method proposed (due to varying pipe diameters) shall be addressed and reviewed. The letter shall include:
    - a. Detailed explanation of the entire cleaning process including removal and disposal of debris.
    - b. Schedule of activities.
    - c. References where the Contractor has used the identified cleaning method successfully within the past three (3) years.
    - d. List of actions planned to mitigate impact to the public during the cleaning operation.

2. The Contractor shall submit documentation certifying the safe transport and disposal of material removed from the pipeline.

### **1.5 CONTRACTOR RESPONSIBILITIES - INSPECTION**

- A. The CONTRACTOR shall be qualified or shall have a qualified independent company specializing in internal inspections to inspect the pipe interior using a color camera and providing required documentation.
- B. The CONTRACTOR shall be responsible for properly inspecting the pipe or providing approval of the finished inspection video.

## **PART 2 - PRODUCTS**

### **3.1 CLEANING EQUIPMENT**

- A. Equipment shall be capable of removing dirt, grease, rocks, sand, roots, and obstructions (as deemed reasonable by the Engineer) from pipelines.
- B. High-Velocity, Hydro Cleaning Equipment:
  1. High-Pressure Hose: 700 FT minimum.
  2. Hydraulically driven hose reel.
  3. High Velocity Nozzle:
    - a. Appropriate for the condition of the pipe or manhole to avoid structure failure.
    - b. Two minimum.
    - c. Capable of producing scouring action from 10 to 45 DEG in lines to be cleaned.
  4. High-velocity Gun: Capable of producing flows ranging from fine spray to long distance solid stream.
  5. Water Tank: 1,000 GAL storage minimum.
  6. Auxiliary engines and pumps.
  7. Equipment Operating Controls: Locate above ground.
  8. Working Pressure: Minimum 2,000 LBS/SQ IN at 35 GPM.

### **2.1 INSPECTION EQUIPMENT**

- A. Equipment to operate inside the pipe including, but not limited to, cables, power source, lights, and camera shall be operative in 100 PCT humidity conditions.
- B. Support equipment including, but not limited to, monitor, footage counter, winches, rewinders, and computer, recording instruments located above-ground suitable to inspection work.
- C. Remote Operated Camera:
  1. Camera shall be nationally-recognized testing laboratory (NRTL) certified for a normal sewer environment when gas meter readings of the manhole airspace indicate an LEL less than 10 PCT and shall be explosion proof certified for hazardous environment when gas meter readings of the manhole environment indicate an LEL greater than 10 PCT.
  2. Resolution: 350 lines per inch, minimum, color image.
  3. Pan and tilt unit, with adjustable supports specifically designed and constructed for operation in connection with pipe inspection.
  4. 65 degree viewing angle, minimum and automatic or remote focus and iris controls.
  5. Skid mounts, sized for each pipe diameter, or self-propelled.
  6. Equipped with tag line suitable for pulling camera backwards.
  7. Automatic or remote-controlled tint and brightness balance adjustments.
- D. Handheld Camera:
  1. Color image and minimum 8-megapixel resolution.
- E. Camera Lighting:
  1. Minimize reflection.
  2. Sufficient for diameters including 108 IN and 132 IN.
  3. Provide clear view of entire inside periphery of pipe.

- E. Adjustable through range from 4 IN to infinity.
- F. Remote Reading Footage Counter:
  - 1. Calibration: Each day prior to start of Work using walking meter, roll-a-tape, or other suitable device.
  - 2. Accurate to plus or minus 2/10ths of a foot over 1,000 FT of pipe inspected.

## **2.2 INSPECTION RECORDING MEDIUM**

- A. The inspection shall be recorded, stored and submitted on an external hard drive using high-quality MPG format on disks formatted for use with PC systems. The audio portion of the composite disc shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of the oral report.

## **PART 3 - EXECUTION**

### **3.2 GENERAL - CLEANING**

- A. The Contractor shall exercise care and rely on good judgment based on previous experience to determine if a pipe is in poor condition and at risk of collapse before cleaning. The Contractor shall notify the Engineer in writing if the pipe cannot be cleaned due to condition. The Contractor shall provide description of pipe and explanation of reason for not cleaning the pipe.
- B. The Contractor shall notify the Engineer and Owner immediately in the event of any blockage or pipe collapse.
- C. The Contractor shall always conduct work to prevent any blockage or failure and minimize surcharging in the pipe. Damage to existing facilities because of the Contractor's work shall be promptly repaired in kind at no additional cost to the Owner.
- D. When using hydraulically propelled cleaning tools that depend on water pressure to provide cleaning force, or tools that retard flow are used, take precautions to ensure that water pressure created does not damage or cause flooding of public or private property.
- E. The Contractor shall be thoroughly familiar with all phases of pipe cleaning to ensure the completion of this Contract without causing a health hazard or damage to public and private properties.
- F. The Contractor shall be responsible for clean-up and repair any damage caused by their actions to the satisfaction of the Engineer.

### **3.3 PIPE CLEANING**

- A. The Contractor shall clean existing sediment, debris, scale, roots, encrustations, and grease accumulations from the pipelines to be lined and adequately prepare the surfaces for rehabilitation methods suitable for the type and volume of material to be removed.
- B. Pipe cleaning shall restore pipe to allow trenchless installation of 108 IN diameter slip line pipe. No additional payment will be considered based on the number of passes required.
- C. When using hydro-cleaning equipment for pipes, make minimum of two passes through pipe segment. During final cleaning, make as many passes as necessary to remove debris as indicated, with a minimum of one pass through each pipe segment.
- D. Begin pipe cleaning at upstream end of reach and proceed in downstream direction.
- E. Supply water for performing high-velocity hydro cleaning or flushing:
  - 1. Potable water will be available to Contractor from existing City of Oacama hydrants. Contractor shall make arrangements and pay associated costs for use of potable water through the City of Oacama.
- F. The Contractor will implement appropriate sediment control measures prior to water flushing to prevent discharges from the project boundaries.

### **3.4 DISPOSAL OF SEDIMENTS**

- A. Any sediment or debris from cleaning operations larger than mesh size 1 IN sieve shall not be deposited downstream channel or water body. Sedimentation deposit downstream, as determined by the Engineer, shall be removed at no additional cost to the Owner.
- B. All materials larger than mesh size 1 IN sieve generated during cleaning shall be removed and transported to an approved disposal site.
- C. Remove sediments and material from cleaning operation at the end of each workday.
- D. Any loose debris in the pipeline prior to rehabilitation that is not removed with hydraulic jet cleaning equipment shall be removed by the Contractor using a bucket machine or approved equal.
- E. The Contractor shall be responsible for transporting and disposing, including all disposal fees, of any sediments and material removed from the storm sewer or structures. Off-site disposal of all material removed from the sewer shall be the Contractor's responsibility.
- F. Hauling containers shall be watertight and shall be certified for transport of this material.
- G. On-site stockpiling of removed material will not be permitted.
- H. The Contractor is responsible for obtaining all necessary permits and approval and paying fees from all regulatory agencies required to perform the work, including transport of sediments. Submit all permits to Owner.

### **3.5 VERIFICATION OF CLEANING**

- A. Contractor shall demonstrate to Engineer results of cleaning effort before any other Work is allowed.
- B. Visual verification shall be made by the Engineer to determine acceptance of cleaning. Re-clean pipeline segment if Engineer determines that cleaning is not adequate.

### **3.6 INTERNAL INSPECTION OF PIPELINES**

- A. Pipe shall be televised complete from end to end in a continuous run unless obstruction prevents camera passage in a pre-rehab inspection. Image stream must clearly show the camera starting and ending at the upstream and downstream, unless a defect(s) does not allow it.
- B. Pipe defects shall be recorded, in addition to any location determined not to be clean.

### **3.7 INSPECTION RATE**

- A. Maximum rate of travel shall be 30 FT per minute when recording. The camera shall be stopped for a minimum of five seconds at each pipe defect.

### **3.8 INSPECTION RECORDING**

- A. Set the camera so that axis is as close to centerline of pipe as possible.
- B. Provide a 360 degree view of the pipe interior when moving forward.
- C. Keep camera lens clean and clear. If material or debris obscures image and reduces visibility, clean or replace lens prior to proceeding with inspection.
- D. Camera lens may submerge only while passing through clearly-identifiable line sags (or vertical misalignments).
- E. Lighting intensity shall be remote controlled and shall be adjusted to minimize reflective glare. Lighting and camera quality shall provide a clear, in-focus image of the inside periphery of the storm sewer.
- F. The system of cabling employed to transport the camera and transmit its signal shall not obstruct the camera's view.
- G. Prior to inspection interior pipe wall shall be marked with pipe footage from a known end point.

### **3.9 INSPECTION RECORDS**

- A. Electronic Inspection Report:

1. Electronic Format: Electronic file shall be consecutively numbered and labeled and submitted to the Engineer. The Engineer will review to make sure that the required information is provided and the recording is of acceptable quality. If the Engineer determines that the disc is defective or not of adequate quality, the Contractor shall inspect again at no additional cost to the Owner.
  2. Complete one inspection record for each section of pipe.
  3. Provide separate records for normal and reverse setups of same segment.
  4. Originals shall be maintained onsite throughout Project and copy shall be submitted to Engineer.
  5. Contractor shall maintain a copy of all inspection documentation for the duration of the Work and warranty period.
- B. Electronic Disc Labeling:
1. Provide typed label on disc and that indicates the following:
    - a. Owner's Name.
    - b. Project Title.
    - c. Date of Inspection.
    - d. Inspection company name.
- C. Still Image:
1. Provide whenever defect is encountered that interrupts completion of inspection (i.e., collapsed pipe, deformed pipe, severe offset joints, heavy debris or roots).
  2. Provide typed label on front of photograph with upstream and downstream identification numbers, and footage (if not visible on photograph).

### **3.10 DRAWING CORRECTIONS**

- A. Drawings shall be corrected to reflect actual field conditions and corrections shall be incorporated into the As-Built Drawings.
- B. Verify pipe material, diameter and surface lengths.

### **3.11 QUALITY ASSURANCE**

- A. The Engineer will review inspection data to ensure compliance with the requirements listed in this Section. If, in the opinion of the Engineer, the inspection is not acceptable, reinspection will be completed by the Contractor at no additional cost to the Owner.
- B. The Contractor shall be responsible for modifications to inspection equipment and/or inspection procedures to achieve report material of acceptable quality. No Work shall commence prior to approval of the material by the Engineer. Once accepted, the report material shall serve as a standard for the remaining Work.

## **END OF SECTION**

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
STEEL BEAM GUARDRAIL  
AASHTO M 180 DESIGNATION**

**OCTOBER 8, 2024**

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**Section 630.2 B. – Page 427 – Delete and replace with the following:**

**B. Beam Guardrail:**

For all projects let prior to January 1, 2027 the following shall apply:

Beam guardrail will conform to AASHTO M 180-18, Type I, or AASHTO M 180-23, Type I, unless the plans specify another type.

For all projects let January 1, 2027 and after the following shall apply:

Beam guardrail will conform to the most recent, at the time of the letting, version of AASHTO M 180, Type I, unless the plans specify another type.

**Section 630.2 C. – Page 427 – Delete and replace with the following:**

**C. Bolts, Nuts, and Washers:**

For all projects let prior to January 1, 2027 the following shall apply:

Bolts, nuts, and washers will be as specified in AASHTO M 180-18 or AASHTO M180-23.

For all projects let January 1, 2027 and after the following shall apply:

Bolts, nuts, and washers will be as specified in the most recent, at the time of the letting, version of AASHTO M 180.

\* \* \* \* \*





**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
ACKNOWLEDGEMENT AND CERTIFICATION REGARDING  
ARTICLE 3, SECTION 12  
OF THE SOUTH DAKOTA CONSTITUTION**

**AUGUST 24, 2023**

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In accordance with the State of South Dakota Office of the Governor Executive Order 2023-13, the following will apply to all contracts:

The Contractor acknowledges and certifies that the following information is correct:

**CERTIFICATION OF NO STATE LEGISLATOR INTEREST:**

Contractor (i) understands neither a state legislator nor a business in which a state legislator has an ownership interest may be directly or indirectly interested in any contract with the State that was authorized by any law passed during the term for which that legislator was elected, or within one year thereafter, and (ii) has read South Dakota Constitution Article 3, Section 12 and has had the opportunity to seek independent legal advice on the applicability of that provision to this contract. By signing this contract, Contractor hereby certifies that this contract is not made in violation of the South Dakota Constitution Article 3, Section 12.

It is understood and agreed that, if this certification is false, such false certification will constitute grounds for the Department to terminate the contract.

The Contractor further agrees to provide immediate written notice to the Department if during the term of the contract it no longer complies with this certification and agrees such noncompliance may be grounds for contract termination.

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
BUY AMERICA**

**MAY 1, 2024**

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**Section 6.9 – Page 46 – Delete and replace with the following:**

**6.9 BUY AMERICA** – Iron & steel, manufactured (composite) products, and construction materials must be produced in the United States in accordance with these Buy America requirements. Buy America preference applies to articles, materials, and supplies required to be consumed in, permanently incorporated into, or affixed to the completed project. Buy America preference does not apply to tools, equipment, and supplies such as temporary works and other temporary items brought to the project and removed at or before the final completion of the project. Temporary items are items that are not part of contract specifications, items that are not required in the design or final working drawings, and items that are removed or could be removed but allowed to remain in place if requested by the Contractor and approved by the Engineer.

**A. Certification:** The following category-based requirements will apply for each article, material, or supply.

- 1. Iron & Steel:** A statement will be included on the certification stating whether the iron or steel is of domestic or foreign origin. The Department will consider iron & steel that does not require separate certification in accordance with the Department's Materials Manual as miscellaneous iron & steel. The Contractor will provide the Department a completed and signed Miscellaneous Materials Buy America Certificate stating the miscellaneous iron & steel required to be consumed in, permanently incorporated into, or affixed to the completed project complies with the Buy America requirements specified herein.
- 2. Manufactured (Composite) Products:** Due to an existing nationwide waiver, manufactured (composite) products currently have no specific requirements.
- 3. Construction Materials:** Construction materials and construction materials currently on the Department's Approved Products List will be treated as "Tier 1" items in accordance with the Required Samples, Tests, and Certificates (RSTC) section of the Department's Materials Manual. The

Contractor will provide the Department a completed and signed Miscellaneous Materials Buy America Certificate stating the construction materials required to be consumed in, permanently incorporated into, or affixed to the completed project complies with the Buy America requirements specified herein.

**B. Determination of Material Category:** The Department, in the Department's sole discretion, will classify an article, material, or supply into one of the following categories, (1) Iron & Steel, (2) Manufactured (Composite) Product, (3) Construction Material, or (4) Excluded Material. Articles, materials, and supplies will be considered to fall into only one single category of Buy America requirements. Some contract items are composed of multiple components that may fall into different categories. Individual components and composite items will be classified based on their nature when they arrive on the work site.

- 1. Iron & Steel:** The Department will classify items wholly or predominantly composed of iron or steel or a combination of both as iron & steel.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50% of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.

- 2. Manufactured (Composite) Products:** The Department will classify items not specifically classified as iron & steel, construction materials, or excluded materials which are fabricated, combined, or manufactured through a manufacturing process into a commercially available composite item as manufactured (composite) products. The Department will classify items consisting of 2 or more of the listed construction materials combined through a manufacturing process as a manufactured (composite) product. The Department will classify items consisting of 1 of the listed construction materials combined with a material not listed through a manufacturing process as a manufactured (composite) product.

- 3. Construction Materials:** The Department will classify only the materials specifically listed as construction materials as construction materials.

Minor additions of articles, materials, supplies, or binding agents to a construction material will not change the categorization of the construction material.

- 4. Excluded Materials:** The Department will classify cement and cementitious materials; aggregates such as stone, sand, or gravel; and aggregate binding agents or additives as excluded materials.

**C. Iron & Steel:** Structural steel and other iron and steel products will be produced in the United States. To be considered produced in the United States, all manufacturing processes, from the initial melting stage through the application of coatings, must occur in the United States. The application of a coating is interpreted to mean all processes that protect or enhance the value of material or product to which it is applied; examples are epoxy coatings, galvanizing, and painting.

Buy America does not apply to iron ore, scrap, pig iron, and processed, pelletized, and reduced iron ore.

If iron ingots or steel billets produced in the United States are sent out of the country for a subsequent manufacturing process and then are brought back into the United States, the full value of the iron or steel as it reenters the country (including the original billet cost and any coatings) will be considered foreign.

If foreign iron or steel components are combined with other components into a fabricated or assembled manufactured (composite) product, the foreign iron or steel content of the manufactured (composite) product is not only the value of the foreign iron or steel components, but also the pro-rata value of the fabrication and assembly labor and overhead used in the combining the foreign iron or steel and other components into the finished manufactured (composite) product, including coatings.

**D. Manufactured (Composite) Products:** Iron and Steel components of manufactured (composite) products will comply with the Buy America requirements for iron & steel. Due to an existing nationwide waiver, manufactured (composite) products without iron and steel components currently have no specific requirements.

**E. Construction Materials:** Construction materials will be produced in the United States. Each construction material is followed by a standard for the material to be considered produced in the United States.

A construction material is an article, material, or supply that is one of the following:

1. Non-ferrous metals. All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
2. Plastic and polymer-based products including polyvinylchloride, composite building materials, and polymers used in fiber optic cables. All manufacturing processes, from initial combination of constituent plastic or

polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.

3. Glass including optic glass. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
  4. Fiber optic cable including drop cable. All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
  5. Optical fiber. All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
  6. Lumber. All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
  7. Engineered wood. All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.
  8. Drywall. All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- F. Unavailability of Compliant Items:** If the Contractor discovers a Buy America compliant item or items does not exist or an item becomes unavailable, the Contractor will immediately notify the Department. The Contractor will furnish written documentation of the Contractor's complete efforts to obtain a compliant item. This documentation will include a complete contact log with dates and times of the Contractor's efforts to obtain a compliant item, the responses received, and any correspondence between the Contractor and potential suppliers of the item which demonstrate efforts to obtain a compliant item. If, based on review of the documentation provided, the Department determines all potential options to obtain a compliant item have been exhausted; the Department will determine the appropriate course of action.
- G. Non-Compliant Items:** If the Engineer, in the Engineer's sole discretion, determines an article, material, or supply provided to the project does not comply with these Buy America requirements but is available; the following will apply:

1. If the non-compliant item is not permanently incorporated into the completed work, the Contractor will not permanently incorporate the item and will replace the non-compliant item with an item that complies with the Buy America requirements specified herein at the Contractor's expense.
2. If the non-compliant item has been permanently incorporated into the completed project; the Engineer, in the Engineer's sole discretion, will determine if the non-compliant item must be removed and replaced including any completed work at the Contractor's expense or if the non-compliant item may remain in place in accordance with both of the following requirements:
  - a. Minor quantities of non-compliant iron & steel may be incorporated in the Department's sole discretion based on the Department's review of the Contractor's documented invoiced material costs, provided the invoiced material costs of all non-compliant iron & steel do not exceed 0.1% of the total contract amount or \$2,500, whichever is greater.
  - b. Minor quantities of non-compliant iron & steel and construction materials may be incorporated in the Department's sole discretion based on the Department's review of the Contractor's documented invoiced material costs, provided the total value of the non-compliant items does not exceed 5.0% of the total applicable costs for the project or \$1,000,000, whichever is less.

The total value of the non-compliant items will include non-compliant iron & steel and non-compliant construction materials. The total value of the non-compliant items will not include excluded materials, manufactured (composite) products, or other items within the scope of an existing Buy America waiver.

The total value of an item includes the cost of the material plus the cost of transportation to the project site, as evidenced by delivery receipt, but does not include the labor costs to assemble and install at the project site.

The total applicable project costs will be defined as the total value of materials used in the project that are subject to a domestic preference requirement, including the total value of any iron & steel, construction materials, manufactured (composite) products, and other items within the scope of an existing Buy America waiver. The total applicable project costs will not include excluded materials.

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
LIABILITY INSURANCE**

**APRIL 21, 2022**

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**Section 7.15 – Page 50 – Delete and replace with the following:**

**7.15 LIABILITY INSURANCE** - The Contractor will 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. The insurance will cover all operations under the contract, whether performed by the Contractor or by subcontractors, and will name the State of South Dakota, the Department, and the Department's officers and employees as additional insureds, but liability coverage is limited to claims not barred by sovereign immunity. The State of South Dakota, the Department, and the Department's officers and employees do not hereby waive sovereign immunity for discretionary conduct as provided by law. Before commencing the work, the Contractor will furnish certificates of insurance, certifying that the policies will not be changed or cancelled until 30 calendar days' written notice has been given to the Department.

The certificates of insurance will provide evidence that the Contractor carries sufficient liability insurance to protect the public from injuries sustained by reason of pursuing the work, and that Workers' Compensation Insurance meets the requirements of the South Dakota Workers' Compensation Law.

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
RESPONSIBILITY FOR DAMAGE CLAIMS**

**APRIL 21, 2022**

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**Section 7.14 – Page 50 – Delete and replace with the following:**

**7.14 RESPONSIBILITY FOR DAMAGE CLAIMS** - The Contractor will indemnify the State of South Dakota, the Department, and the State's officers and employees, from all suits, actions, or claims of any character, including suits in which the State, Department, or the State's officers and employees are sued, brought because of any injuries or damages received or sustained by any person, persons, or property arising at least in part from the Contractor's operations; 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 "Workers' Compensation Act", or any other law, ordinance, order, or decree. The Contractor's obligation to indemnify will include the payment of reasonable attorney fees and other costs of defense. So much of the money due the Contractor under and by virtue of the 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, the Contractor's surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid will 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 the Contractor's insurer that adequate public liability insurance and property damage insurance providing coverage for such particular claims as may be made is in force, and the Contractor provides evidence the claim has been submitted to the Contractor's insurer. 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.

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
RESTRICTION OF BOYCOTT OF ISRAEL**

**JANUARY 31, 2020**

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In accordance with the State of South Dakota Office of the Governor Executive Order 2020-01 the following will apply to all contracts unless the amount being bid is less than \$100,000:

By submitting a bid proposal for this contract, the bidder certifies and agrees the following information is correct for the bidder and all subcontractors (all tiers) and suppliers with five (5) or more employees:

The bidder, in preparing the bid proposal or in considering proposals submitted from qualified potential suppliers and subcontractors, or in the solicitation, selection, or commercial treatment of any supplier or subcontractor; has not refused to transact business activities, has not terminated business activities, and has not taken other similar actions intended to limit its commercial relations, related to the subject matter of the bid proposal, with a person or entity on the basis of Israeli national origin, or residence or incorporation in Israel or its territories, with the specific intent to accomplish a boycott or divestment of Israel in a discriminatory manner. It is understood and agreed that, if this certification is false, such false certification will constitute grounds for the Department to reject the bid proposal submitted by the bidder on this contract and terminate any contract awarded based on the bid. The bidder agrees to provide immediate written notice to the Department if, during the term of the contract awarded to the bidder, the bidder no longer complies with this certification. The bidder further agrees such noncompliance may be grounds for contract termination.

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
CONTRACTOR ADMINISTERED PRECONSTRUCTION MEETING  
  
DECEMBER 18, 2019**

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**I. DESCRIPTION**

This work consists of the Contractor scheduling and conducting a preconstruction meeting prior to beginning work on this contract. Additionally, this work consists of the Contractor providing the Area Engineer a completed list of required submittals.

**II. MATERIALS (Not Specified)**

**III. CONSTRUCTION REQUIREMENTS**

The Area Engineer will provide the Contractor the Authorization Form for Preconstruction Meeting (Form DOT-270) and the Contractor's Required Submittals Form (Form DOT-272) after the date of the Notice of Award and no later than 10 business days after the date of the Notice to Proceed.

The Contractor's authorized representative as indicated on the Signature Authorization Form (Form DOT-209) will complete, in its entirety, the first page of the Authorization Form for Preconstruction Meeting and will initial each proceeding section. By initialing each section, the Contractor is confirming comprehension of each section.

The Contractor's Required Submittals Form is a document outlining information required prior to the completion of the project. This list will include two types of submittals; 1) information required before scheduling a preconstruction meeting and 2) information required before the Contractor begins related work. The Department reserves the right to request additional information not included in the original list of required submittals. The list of required submittals will include, but is not limited to, proposed sequence changes, shop drawings, permits, certifications, mix designs, labor compliance, equal employment opportunity, and disadvantaged business enterprise documents. The Area Engineer will update the Contractor's Required Submittals Form with any project specific requirements and cross out or delete those that do not apply prior to providing the document to the Contractor.

Prior to scheduling the preconstruction meeting, the Contractor will complete and provide the Area Engineer all items on the list of required submittals that are

required as described in 1) above. If the Contractor cannot complete and provide a submittal item required prior to scheduling the preconstruction meeting, the Contractor will contact the Area Engineer to establish a mutually agreed upon date when the required submittal will be completed and provided to the Area office.

The Contractor will not begin work on an item until the Contractor has provided the Area Engineer with all required information for the applicable work item and the appropriate office has approved the information, if necessary. The Contractor will make every reasonable effort to deliver the required submittals at the earliest possible time.

When the Contractor has provided the Area Engineer all required submittals, except those mutually agreed upon to be provided at a later date or dates, the Contractor will schedule a preconstruction meeting with the Area Engineer.

Within 2 business days following the Contractor scheduling the preconstruction meeting, the Area Engineer will prepare and send the Contractor a meeting confirmation and the Preconstruction Meeting Outline (Form DOT-271).

The Area Engineer will edit and amend the Preconstruction Meeting Outline, as necessary, to meet the specific needs of the project. The Area Engineer will complete the project information and the Department information prior to furnishing the form to the Contractor.

The Contractor will complete the Contractor's portion of the Preconstruction Meeting Outline and will add additional discussion items as needed. The Contractor will send the meeting notice and final Preconstruction Meeting Outline to the Area Engineer, all subcontractors, utility companies, railroad companies (if applicable), and all suppliers at least 5 business days prior to the preconstruction meeting.

The Area Engineer will send the notice of the meeting and the final Preconstruction Meeting Outline of discussion items to any other government entities and other principle stakeholders involved in the project at least 3 business days prior to the preconstruction meeting.

At the discretion of the Area Engineer, the preconstruction meeting may be held in person, videoconference, or over the phone. The Contractor's competent superintendent who will be working on this project, as required by Section 5.5, or the Contractors Project Manager, as required by the Special Provision for Cooperation by Contractor and Department (if applicable), , is required to attend the preconstruction meeting.

The Contractor will lead the meeting discussion as described in the Preconstruction Meeting Outline. The Area Engineer will prepare the meeting minutes including any unresolved items and distribute the minutes to all attendees



and principle stakeholders within 5 business days following the preconstruction meeting.

#### **IV. METHOD OF MEASUREMENT**

The Department will not make a separate measurement for the preconstruction meeting.

#### **V. BASIS OF PAYMENT**

The Department will not make a separate payment for the preconstruction meeting. All costs associated with the preconstruction meeting will be incidental to other contract items.

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### FUEL ADJUSTMENT AFFIDAVIT

Project Number \_\_\_\_\_  
PCN \_\_\_\_\_  
County \_\_\_\_\_

*For project let using the SDEBS) and in accordance with Section 9.12, the bidder is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment program. Prior to execution of the contract, the successful bidder must submit this completed form to the Department for approval. 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**

**STANDARD TITLE VI / NONDISCRIMINATION ASSURANCES  
APPENDIX A & E**

**MARCH 1, 2016**

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 (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
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 will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or

is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

**Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
DISADVANTAGED BUSINESS ENTERPRISE**

**FEBRUARY 9, 2024**

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The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of Department-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate.

**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:** No specific DBE participation goal is specified for a contract.
- C. Disadvantaged Business Enterprise (DBE):** A for-profit small business that is 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 the bidder receives an oral or written response 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.
- G. Reasonable Effort:** For projects when goals are not specified, bidders are encouraged to solicit all certified DBEs listed in the appropriate work classifications in the DBE directory that have indicated in the directory they are

willing to work in the project's geographic area and also those that are listed on the plan holders list.

## **II. Bidding Requirements**

A bidder must not discriminate on the basis of race, color, national origin, or sex in the solicitation 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 sanctions allowed by regulation, administrative rule, or law.

The Bidder's failure to carry out the requirements of this special provision will be treated as a non-responsive bid.

On contracts that specify a specific DBE contract participation goal, all bidders must include their DBE commitment for the contract in the bidding files provided by the Department.

If the contract indicates "Not Specified," all bidders are encouraged to include their anticipated DBE utilization for the contract in the bidding files provided by the Department.

Each bidder must submit a list of all subcontractors and suppliers (DBEs and non-DBEs) the bidder received quotes from for that contract with the bid files.

A Contractor must 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, upon request from the Department all bidders who did not meet or exceed the goal must provide GFE documentation as indicated in Section III of this special provision.

When the DBE participation is "Not Specified" on a contract, each bidder is encouraged to use DBE Contractors; however no bidder will be required to furnish GFE documentation.

Bidders must submit GFE documentation, when requested by the Department, within 2 business days from the date bidders are contacted by the Department. Section III of this special provision provides information on the types of action bidders should make as part of their GFE to obtain DBE participation. Bidders may submit documentation with the bidding files provided all pertinent information is included. Bidders must submit any missing documentation within 2 business days from the date the Department contacts the bidder. If the bidder fails to comply with this requirement, the Department will consider the bid proposal irregular and may reject the bid proposal.



If the apparent low bidder does not provide documentation showing GFE as required 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 apparent low bidder's efforts do not establish GFE, the apparent low bidder will be notified that the bid is not responsive. The apparent low bidder will have 2 business 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 argument about why the bid should not be rejected. The Department Secretary or the Secretary's designee will issue a written decision on responsiveness of the bid within 2 business days after the meeting.

If the apparent low bid is rejected for failure to meet the GFE or other requirements, the next apparent low bidder's GFE will be reviewed, unless all bids are rejected. Unless all bids are rejected, award of the contract will be made to the lowest bidder with a responsive bid.

The lowest responsive bidder on a project with a specified goal will be required to complete form DOT-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 DBE commitment. 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**

If a GFE package is requested on a contract with a specified goal, the bidders must submit documentation showing compliance with the following requirements:

- A.** The bidders will 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 Department of Transportation Electronic Bid System (SDEBS), SDEBS may be used to document the log of solicitation efforts for the project.

- B.** The bidders will also submit documentation that shows GFE in relation to the following requirements:
1. The bidder must select contract work items to encourage DBE participation. This includes 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.
  2. The bidder must solicit all certified DBEs that are listed in the appropriate work classifications in the DBE directory and that have indicated in the directory they are willing to work in the project's geographic area. Without exception, all DBEs who are listed on the plan holders list by 10 AM central time 7 calendar days prior to the bid letting must be solicited in accordance with Section III.B.3 of this special provision. If the bidder has not solicited any DBE meeting these requirements, the bidder will provide a detailed written explanation showing why the DBE was not solicited.
  3. To provide adequate time for the DBE to respond with a quote in the normal course of business, the bidder must make the initial solicitation at least 6 calendar days by mail or 5 calendar days by phone, fax, or e-mail prior to the letting date. Without exception, all DBEs who are listed on the plan holders list by 10 AM central time 7 calendar days prior to the bid letting must be solicited.
  4. If the bidder does not receive a positive contact from a DBE, the bidder must follow up the initial solicitation with a second solicitation by phone, fax, or e-mail to determine whether the DBE is interested in quoting. The bidder must make this second solicitation at least 2 business days prior to the letting.
  5. The bidder will provide interested DBEs with adequate and timely information about plans, specifications, and requirements of the contract to assist DBEs in responding to a solicitation.
  6. 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 reject a quote. A bidder must not reject a DBE as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities.
  7. Any additional information requested by the Department.
- C.** 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 the bidder's 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.

- D.** The bidder must explain why the specified goal could not be met.
- E.** The bidder must identify any additional efforts the bidder made to secure DBE participation.

#### **IV. Counting DBE Participation**

On projects with a specified goal, the contract commitment, as submitted with the bid, will be documented on form DOT-289R/C as included in the contract documents.

If the project is shown as "Not Specified," the anticipated DBE utilization, as submitted with the bid, will be documented on form DOT-289 R/N – DBE Utilization Form, as included in the contract documents. The DBE utilization shown on this form is not a commitment to use the DBE. This information will be used by the Department to track anticipated DBE usage.

Only the portion of a contract 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. Supplies and equipment the DBE subcontractor purchased or leased from the Contractor or its affiliate is not allowed to be included.

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 the DBE is responsible for execution of the work of a contract and is carrying out the DBE's 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, the industry practice, and 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 the DBE 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 and 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% 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% 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 prior to and including the date of the Notice of Award. Additionally, the Department will not count toward DBE participation materials or services provided by a DBE who loses certification at any time after the date of the Notice of Award except in the case of a DBE whose ineligibility is caused solely by having exceeded the size standard.

No intended or actual subcontracting arrangement which is contrived to artificially inflate DBE participation is 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 a particular business arrangement is not allowable, the dollar amount of the unallowable DBE participation will 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 form DOT-289R/C. The Contractor will be directed to seek additional participation from other DBEs to meet the unallowable portion on that contract.

All Contractors and DBEs shall cooperate fully and promptly with the Department in compliance reviews, investigations, and other requests for information. If the Department determines a Contractor was a knowing and willing participant in an unallowable business arrangement, or in the event of repeated violations, falsification, or misrepresentation, the Department will impose sanctions. Sanctions may include, but are not limited to one or more of the following:

- Assessment of liquidated damages as stated in Section VII of this special provision
- 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

## **V. Joint Checks to DBEs**

A joint check is a check issued by a prime Contractor to a DBE subcontractor and to a material supplier or another third party for items or services to be incorporated into a project. For a prime Contractor to receive DBE credit, the DBE must perform a commercially useful function and be responsible for negotiating price, determining quality and quantity, ordering materials and installing (where applicable) and paying for materials.

To ensure that the DBE is independent of the prime Contractor and in compliance with the regulation, use of joint checks will be reviewed and allowed only under following conditions:

- Issued for valid reasons only, not simply for the convenience of the prime Contractor
- Used for a specific contract or specific time frame and not long-term or open ended
- Payment is made to the DBE and not directly to the supplier
- Requested and received prior written approval from the DBE Compliance Officer.

The request must include the following:

- Name of the DBE
- The DOT contract number(s)
- The DOT PCN number(s)
- The work the DBE will be performing on each contract
- Name of the supplier(s) used by the DBE
- The specific reason(s) for issuing joint checks

The Department will review the request and verify the circumstances indicated in the request with the DBE. A copy of the request and approval will be provided to the prime Contractor and the DBE.

## **VI. Certification of DBE Performance and Payments**

Within 30 calendar days of the date of the Acceptance of Field Work the Contractor is required to submit form DOT-289 (Certification of DBE Performance and

Payments), listing all DBEs that participated in the contract, and the total dollar amount paid (and anticipated to be paid) to each. DBE attainments are compared to commitments on form DOT-289R/C and any payments less than 90% of that commitment, without proper justification and documentation, will have liquidated damages assessed against the contract. The Contractor's final payment is not released until receipt of the form DOT-289.

Contractors are required to maintain a running tally of payments to DBEs. For reports of payments not being made in accordance with the prompt payment provision, alleged discrimination against a DBE or other similar complaint, the tally may be requested for review by the Department. The Department may perform audits of contract payments to DBEs to ensure that the amounts paid were as reported on the form DOT-289. All Contractors participating in Federal-aid contracts are expected cooperate fully and promptly with the Department in compliance reviews, investigations and other requests for information regarding payments to DBEs. Their failure to do so is grounds for appropriate sanctions or action against the Contractor.

The Department will monitor the running tally on a program basis and if reporting issues are identified, additional reporting requirements may be implemented.

The Contractor is required to report payments to DBEs twice a year from the date of the Notice to Proceed until the date of the Acceptance of Field Work. Reporting periods and deadlines for payment reporting submittals will be in accordance with the following:

<b>Reporting Period:</b>	<b>Reporting Deadline:</b>
October 1 to March 31	April 30
April 1 to September 30	October 31

For each reporting period, the Contractor is required to submit form DOT-289 listing all DBEs that participated in the contract, the payments to DBEs for that reporting period, and the total dollar amount paid to each DBE. For each reporting period after the Notice to Proceed, the Contractor will mark the form DOT-289 as "On-Going" when reporting payments to DBEs prior to the Date of the Acceptance of Field Work. Within 30 calendar days of the date of the Acceptance of Field Work and all DBE payments have been made, the Contractor is required to submit form DOT-289 and the Contractor will mark the form DOT-289 as "Final".

Each form DOT-289 must be provided to the Engineer by the reporting deadline stated above.

DBE payment are compared to commitment on form DOT-289R/C and any payment less than 90% of that commitment, without proper justification and documentation, will result in the Department assessing liquidated damages

against the contract. The Contractor's final payment will not be released until receipt of the form DOT-289 marked "Final".

## **VII. Liquidated Damages**

**A.** If the Contractor does not meet its contract commitment documented on form DOT-289 R/C, the Department will assess liquidated damages according to the following schedule:

1. For the first \$1,000 DBE deficiency, 100% of the deficiency.
2. For the next \$9,000 DBE deficiency, 50% of the deficiency.
3. For the next \$10,000 DBE deficiency, 25% of the deficiency.
4. For any remaining DBE deficiency in excess of \$20,000, 10% of the deficiency.

This liquidated damage provision will not be applicable where actual payment to a DBE is within 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 its control, to meet the contract commitment on form DOT-289R/C, 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. No request for a waiver will be accepted after Acceptance of Field Work has been issued.

## **VIII. Termination or Substitution of a DBE**

The Contractor will not be allowed to terminate or substitute a DBE without the Department's prior verbal consent followed by written approval. This includes, but is not limited to, instances in where the Contractor desires to perform work originally committed to a DBE with its own forces, with an affiliated company, with a non-DBE, or with another DBE. Department approval is required when the contract contains a "specified goal" on form DOT-289R/C and the DBE to be terminated or substituted is listed as a commitment on the form DOT-289R/C.

The Department will provide written consent only if the Department agrees the Contractor has good cause to terminate the DBE listed on the form DOT-289R/C. Good cause includes the following:

- The DBE fails or refuses to execute a written contract



- The DBE fails or refuses to perform the work of the DBE subcontract in a manner consistent with normal industry standards or Department specifications unless the failure or refusal by the DBE is a result of unfair or discriminatory actions by the Contractor
- The DBE fails or refuses to meet the Contractor's reasonable nondiscriminatory bond requirements
- The DBE becomes bankrupt, insolvent, or exhibits credit unworthiness
- The DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215, and 1,200 or applicable state law
- The Department has determined that the DBE is not a responsible Contractor
- The DBE voluntarily withdraws from the project and provided the Department with a written notice of withdrawal
- The DBE is found to be ineligible to receive DBE credit for the type of work required
- A DBE owner dies or becomes disabled with the result that the DBE is unable to complete its work on the contract
- Other documented good cause that the Department determines to substantiate the termination of the DBE.

Good cause does not exist if the Contractor seeks to terminate a DBE so the Contractor can self-perform the work for which the DBE was committed, or so the Contractor can substitute another DBE or non-DBE Contractor after the contract award.

Before submitting a request to terminate or substitute a DBE to the Department, the Contractor must first provide written notice to the DBE, with a copy of the notice to the DBE Compliance Officer, of the Contractor's intent to request to terminate or substitute, and the reason for the request.

The Contractor must give the DBE 5 calendar days to respond to the notice and advise the Department and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Department should not approve the Contractor's action. If required in a particular case as a matter of public necessity (e.g. safety), the Department may provide a response period shorter than 5 calendar days.

When a DBE is terminated or fails to complete its work on the contract for any reason, the Contractor must make good faith efforts to replace the committed DBE with another DBE. The Contractor must make efforts to find another DBE to perform the same amount of work under the contract as the DBE that was terminated. The letter to the Department requesting termination or substitution must include the name of the DBE and dollar amount of the replacement DBE. If the Contractor is unable to find another DBE, the Contractor must provide the

names of the DBEs it contacted and reason why they were unable to use those DBEs.

If the Contractor does not utilize or pay DBEs as required, liquidated damages will be assessed as specified in Section VII of this special provision. In addition, if the Contractor is found to have knowingly and willingly attempted to circumvent the DBE contract provisions, the Department will not make payment for the work that was originally committed to a DBE and the Department may impose sanctions referred to in Section IV of this special provision.

The Contractor does not need Department approval to terminate or substitute a DBE under the following circumstances:

- The DBE is being used on a contract with a “Specified Goal” however the DBE was not listed as a DBE commitment on form DOT-289R/C.
- The DBE was listed as an anticipated utilization on a “Not Specified” DBE goal contract on form DOT-289R/N.

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

**FEBRUARY 5, 2024**

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**Notice of 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 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%	Oglala Lakota	7.9%
Buffalo	7.9%	Hanson	0.8%	Pennington	3.4%
Butte	7.9%	Harding	7.9%	Perkins	7.9%
Campbell	7.9%	Hughes	7.9%	Potter	7.9%
Charles Mix	0.8%	Hutchinson	0.8%	Roberts	1.3%
Clark	1.3%	Hyde	7.9%	Sanborn	0.8%
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. 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 a 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 shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is shown by county designation on the Title Sheet of the plans.

#### **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 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 7 a 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 or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting 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 unions have employment opportunities available, and maintain a record of the organizations' 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 such 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 therefor, along with whatever additional actions the Contractor may have taken.

D. Provide immediate written notification to the Director when the union or unions 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 compiled 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 Contractor's EEO policy with other 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 work force.

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 obligations.

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 goals 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, sexual orientation, gender identity, 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, helper, 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 the 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).

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION FOR  
REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS  
FHWA 1273 (OCTOBER 23, 2023)**

**OCTOBER 18, 2023**

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The following are amendments to the above contract provisions.

**Section I.4.**

Delete this section and replace with the following:

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a Federal-aid construction project unless it is labor performed by convicts who are on parole, supervised release, or probation.

**Section IV.**

Delete the first three sentences of the first paragraph and replace with the following:

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway and to all portions of Transportation Alternatives Program (TAP) funded projects.

**Section IV.3.b.(1)**

Delete this section and replace with the following:

The Contractor and each related subcontractor must submit weekly, for each week in which any contract work is performed, an electronic certified weekly payroll report. The Contractor is responsible for the submission of certified payroll reports by all subcontractors. The payroll report must be submitted electronically to the Elation System website. The Contractor must submit a legally valid electronic signature. The Elation System website can be accessed by logging onto the State of South Dakota's single sign-on website at <https://mysd.sd.gov/> or can also be accessed at <https://elationsys.com/>. First time users will need to use the Promotion Code SDDOT-19. The payroll report must be submitted within fourteen (14) calendar days after the end of the workweek.

**Section IV.3.b.(2)**

Delete the third sentence.

**Section IV.3.b.(3)**

Delete the first paragraph and replace with the following:

Each certified weekly payroll report must include the most recent South Dakota Department of Transportation (SDDOT) Statement of Compliance Form, signed by the Contractor or related subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract. The Instructions for the SDDOT Statement of Compliance Form are found at <https://dot.sd.gov/doing-business/contractors/labor-compliance/certified-payrolls-let-after-6/5/19>. The SDDOT will not accept any payroll report which does not include the most recent SDDOT Statement of Compliance Form. The SDDOT Statement of Compliance Form must certify the following:

**Section IV.3.b.(4)**

Delete this paragraph and replace with the following:

The weekly submission of a properly executed SDDOT Statement of Compliance Form shall satisfy the requirement for submission of the "Statement of Compliance Form" required by paragraph 3.b.(3) of this section.

**Section IV.4.a.(1)**

Delete the first sentence and replace with the following:

Apprentices will be permitted to work at less than the predetermined rate for the work they perform, but not less than the Common Laborer wage rate contained in the bid documents, when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA.

\* \* \* \* \*

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, 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. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

### II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) 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 provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 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 contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its 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, sexual orientation, gender identity, 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, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program 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 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 or other knowledgeable company official.

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 minorities and women.

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 minorities and women 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 minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women 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, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such 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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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 its 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 their avenues of appeal.

#### **6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

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). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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 employees who are minorities and women 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 good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. 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 good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith 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, sexual orientation, gender identity, 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 contracting agency 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 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, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. 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 contracting agency.

#### **8. Reasonable Accommodation for Applicants /**

**Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

#### **9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:**

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. 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 the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

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

(1) The number and work hours 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; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency 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](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), 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 will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The 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.

(4) In the event the contractor, the laborers or mechanics to be employed in the 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 will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph



2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

### 3. Records and certified payrolls (29 CFR 5.5)

*a. Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

*(2) Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

*(3) Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

*(4) Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

*b. Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

*(2) Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

*(3) Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

*(4) Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.



(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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 wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 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 U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.** a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## **V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. 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 or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

**4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

**5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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 contracting agency. 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 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased 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 or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and  
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

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 or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI 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. Pursuant to 23 CFR 635.116(c), 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 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 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 contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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 Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the 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. 23 CFR 635.108.

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 Part 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. 3704). 29 CFR 1926.10.

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. 3704).

## **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

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 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier 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 first tier 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 first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first 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 entering into this transaction. 2 CFR 180.330.

g. The prospective first tier 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 Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective 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. 2 CFR 180.325.

\* \* \* \* \*



## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment 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, 2 CFR 180.800;

(3) 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 (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

\*\*\*\*\*

## **3. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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. 2 CFR 1200.220 and 1200.332.

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 exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

\* \* \* \* \*

#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

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

\* \* \* \* \*

#### **XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

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 its bid or proposal that the participant 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.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.



**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

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

**OCTOBER 24, 2019**

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This proposal contains a copy of the most recent United States Department of Labor (USDOL) Davis-Bacon Act Wage Decision.

The Contractor and each related subcontractor will pay their respective employees not less than the USDOL minimum wage for each work classification an employee actually performs at the site of the work.

The Contractor and each related subcontractor must submit weekly, for each week in which any contract work is performed, an electronic certified weekly payroll report. The payroll report must be submitted electronically to the Elation System website. The Elation System website can be accessed by logging onto the State of South Dakota's single sign-on website at <https://mysd.sd.gov/> or can also be accessed at <https://elationsys.com/>. First time users will need to use the Promotion Code SDDOT-19. The payroll report must be submitted within fourteen (14) calendar days after the end of the workweek. The payroll reports submitted shall set out accurately and completely all the information required to be maintained under 29 C.F.R. 5.5(a)(3)(i). Weekly transmittals must include an individually identifying number for each employee, such as the last four digits of the employee's social security number, but these weekly transmittals must not include full social security numbers or home addresses. The Contractor is responsible for the submission of certified payroll reports by all subcontractors.

Each certified weekly payroll report must include the most recent South Dakota Department of Transportation (SDDOT) Statement of Compliance Form, signed by the Contractor or related subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract. The Instructions for the SDDOT Statement of Compliance Form are found at <https://dot.sd.gov/doing-business/contractors/labor-compliance/certified-payrolls-let-after-6/5/19>. The SDDOT will not accept any payroll report which does not include the most recent SDDOT Statement of Compliance Form.

\* \* \* \* \*



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

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

**Agency:** U.S. DOL  
**Wage Decision Number:** **SD20230032 SD1**  
**Counties:** SD Statewide  
**Wage Decision Date:** **03/10/2023 (Mod-0)**

**\*SUSD2023-001 01-11-2023**

**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; Oilier/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; Skid Steer

**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;  
Rumble Strip Machine

**GROUP G04**

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

**GROUP G05**

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

<u>Rates</u>	<u>Fringes</u>
22.38	0.00
23.16	0.00
24.41	0.00
31.94	0.00
26.45	0.00
24.57	0.00
24.68	0.00
26.07	0.00
27.18	0.00
30.01	0.00
24.52	0.00
25.88	4.28
29.78	5.04

**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 work classifications and rates.

\*Classifications listed under an "SU" identifier were derived from survey data and the published rate is the weighted average rate of all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates.

Survey wage rates are not updated and will remain in effect until a new survey is conducted.

**A COPY OF THIS DOCUMENT, COLORED TAN, 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****Counties: South Dakota Statewide**

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In the listing above, the "SU" identifier indicates the rates were derived from survey data. As these weighted average rates include all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of the survey on which these classifications and rates are based. The next number, 007 in this example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

For SDDOT Defined Work Classifications, please visit: <https://dot.sd.gov/doing-business/contractors/labor-compliance>

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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 Hour 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.

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**END OF GENERAL DECISION**

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
SUPPLEMENTAL SPECIFICATIONS TO  
2015 STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES**

**SEPTEMBER 7, 2022**

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The Supplemental Specifications dated September 7, 2022 are in effect for and made a part of this contract.

The Supplemental Specifications may be obtained from the Department website or the local Area Office or by contacting the Operations Support Office.

Department Website:

<https://dot.sd.gov/doing-business/contractors/standard-specifications/2015-standard-specifications>

Operations Support:

605-773-3571

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS**

**DECEMBER 6, 2023**

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The following unit bid prices have been established by the South Dakota Department of Transportation Commission.

These prices will be pre-entered in the bidding package 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.

<b>Specification Section Number</b>	<b>Specification Section Name</b>	<b>Item Name</b>	<b>Price per Item</b>
5.8	Construction Stakes, Lines, and Grades	Engineer Directed Surveying/Staking	\$175.00/hour
7.7	Public Convenience and Safety	Water for Dust Control	\$35.00/M.Gal
7.7	Public Convenience and Safety	Dust Control Chlorides	\$0.70/lb
9.3	Payment for extra haul of Materials	Extra Haul	\$0.25/ton mile (Truck) or \$0.10/ cubic yard station (Scraper)
120.5 A.5.	Roadway and Drainage Exc. & Emb.	Unclassified Excavation, Digouts	\$15.00/cu.yd.
120.5 H.	Roadway and Drainage Exc. & Emb.	Extra Haul	\$0.25/ton mile (Truck) or \$0.10/cubic yard station (Scraper)
120.5 I.	Roadway and Drainage Exc. & Emb.	Water for Embankment	\$35.00/M.Gal
421.5	Undercutting Pipe & Plate Pipe	Undercutting Culverts	\$20.00/cu.yd.

510.5 D.	Timber, Prestressed, and Steel Piles	Timber Pile Splice	\$850.00/each
		Steel Pile Splices (*All Weights)	Splice made before either of the pieces has been driven.
		8 HP*	\$200.00/each
		10 HP*	\$250.00/each
		12 HP*	\$275.00/each
		14 HP*	\$300.00/each
		Steel Pile Splices (*All Weights)	Splice made after one of the pieces has been driven.
		8 HP*	\$400.00/each
		10 HP*	\$525.00/each
		12 HP*	\$650.00/each
		14 HP*	\$750.00/each
510.5 E.	Timber, Prestressed, and Steel Piles	Pile Shoes (Timber Pile)	\$190.00/each
510.5 H.	Timber, Prestressed, and Steel Piles	Pile Tip Reinforcement (Steel Pile)	
		10" HP Tip Reinforced	\$200.00/each
		12" HP Tip Reinforced	\$225.00/each
		14" HP Tip Reinforced	\$275.00/each
601.5	Haul Roads	Granular Material	\$28.00/ton
601.5	Haul Roads	Asphalt Concrete (including asphalt)	\$160.00/ton
601.5	Haul Roads	Cover Aggregate	\$55.00/ton
601.5	Haul Roads	Asphalt for Prime	\$1200.00/ton
601.5	Haul Roads	Asphalt (Tack, Flush & Surface Treatment)	\$800.00/ton
601.5	Haul Roads	Water	\$35.00/M.Gal
601.5	Haul Roads	Dust Control Chlorides	\$0.70/lb
634.5	Temporary Traffic Control	Flagging	\$36.03/hour
634.5	Temporary Traffic Control	Pilot Car	\$52.75/hour

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**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
REGARDING  
STORM WATER DISCHARGES  
TO WATERS OF THE STATE**

**MAY 8, 2018**

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In compliance with the provisions of the South Dakota Water Pollution Control Act and the Administrative Rules of South Dakota (ARSD), Article 74:52, the State of South Dakota has been issued Permit No. SDR10#### "GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES". This permit authorizes the discharge of storm water in accordance with the conditions and requirements set forth in the permit.

The Contractor, by signing the CONTRACTOR AUTHORIZATION FORM and submitting a bid or proposal, certifies the following:

"I certify under penalty of law that I understand and will comply with the terms and conditions of the Surface Water Discharge General Permit for Storm Water Discharges Associated with Construction Activities for the project identified above."

A copy of the full version of the General Permit for Storm Water Discharges Associated with Construction Activities, dated 04/01/2018, must be posted on the job site. The General Permit for Storm Water Discharges Associated with Construction Activities is available for downloading and printing from the SD DENR website:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx>

The Contractor may also obtain a printed copy of the permit from the SDDOT Project Development office or from the SDDOT Area Office assigned to this project.

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