HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
DT1502 01/2020 s.66.0901(7) Wis. Stats

Proposal Number: 016

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	HIGHWAY
Clark	7840-03-73	WISC 2024421	USH 10 - Greenwood; Black River Bridge B-10-0398	CTH G

ADDENDUM REQUIRED

ATTACHED AT BACK

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required: $75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: August 13, 2024 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time June 15, 2026	
Assigned Disadvantaged Business Enterprise Goal 4%	This contract is exempt from federal oversight.

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)	(Bidder Signature)
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)
(Date Commission Expires)	(Bidder Title)

Notary Seal

For Department Use Only

Type of Work:
Grading, Base, Concrete Approach Slabs, Asphalt Pavement, Bridge Replacement, Guardrail.

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder, signing and submitting this proposal, agrees and declares as a condition thereof, to be bound by the following conditions and requirements.

If the bidder has a corporate relationship with the proposal design engineering company, the bidder declares that it did not obtain any facts, data, or other information related to this proposal from the design engineering company that was not available to all bidders.

The bidder declares that they have carefully examined the site of, and the proposal, plans, specifications and contract forms for the work contemplated, and it is assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions and contract. It is mutually agreed that submission of a proposal shall be considered conclusive evidence that the bidder has made such examination.

The bidder submits herewith a proposal guaranty in proper form and amount payable to the party as designated in the advertisement inviting proposals, to be retained by and become the property of the owner of the work in the event the undersigned shall fail to execute the contract and contract bond and return the same to the office of the engineer within fourteen (14) days after having been notified in writing to do so; otherwise to be returned.

The bidder declares that they understand that the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the specifications.

The bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amounts in full payment of said work.

The bidder declares that all of the said work will be performed at their own proper cost and expense, that they will furnish all necessary materials, labor, tools, machinery, apparatus, and other means of construction in the manner provided in the applicable specifications and the approved plans for the work together with all standard and special designs that may be designed on such plans, and the special provisions in the contract of which this proposal will become a part, if and when accepted. The bidder further agrees that the applicable specifications and all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

The bidder, if awarded the contract, agrees to begin the work not later than ten (10) days after the date of written notification from the engineer to do so, unless otherwise stipulated in the special provisions.

The bidder declares that if they are awarded the contract, they will execute the contract agreement and begin and complete the work within the time named herein, and they will file a good and sufficient surety bond for the amount of the contract for performance and also for the full amount of the contract for payment.

The bidder, if awarded the contract, shall pay all claims as required by Section 779.14, Statutes of Wisconsin, and shall be subject to and discharge all liabilities for injuries pursuant to Chapter 102 of the Statutes of Wisconsin, and all acts amendatory thereto. They shall further be responsible for any damages to property or injury to persons occurring through their own negligence or that of their employees or agents, incident to the performance of work under this contract, pursuant to the Standard Specifications for Road and Bridge Construction applicable to this contract.

In connection with the performance of work under this contract, the contractor agrees to comply with all applicable state and federal statutes relating to non-discrimination in employment. No otherwise qualified person shall be excluded from employment or otherwise be subject to discrimination in employment in any manner on the basis of age, race, religion, color, gender, national origin or ancestry, disability, arrest or conviction record (in keeping with s.111.32), sexual orientation, marital status, membership in the military reserve, honesty testing, genetic testing, and outside use of lawful products. This provision shall include, but not be limited to the following: 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. The contractor further agrees to ensure equal opportunity in employment to all applicants and employees and to take affirmative action to attain a representative workforce.

The contractor agrees to post notices and posters setting forth the provisions of the nondiscrimination clause, in a conspicuous and easily accessible place, available for employees and applicants for employment.

If a state public official (section 19.42, Stats.) or an organization in which a state public official holds at least a 10% interest is a party to this agreement, this contract is voidable by the state unless appropriate disclosure is made to the State of Wisconsin Ethics Board.

BID PREPARATION

Preparing the Proposal Schedule of Items

A. General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

(3) The department will provide bidding information through the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at http://www.bidx.com/ after 5:00 PM local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (*.ebs or *.00x) is used to submit the final bid.

(4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

Info Tech Inc.
5700 SW 34th Street, Suite 1235
Gainesville, FL 32608-5371
email: mailto:customer.support@bidx.com

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the department's web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4th floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.

(7) Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B. Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

4. Have a properly executed annual bid bond on file with the department.
5. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid
4. Submit the bid before the hour and date the Notice to Contractors designates
5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.

(3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

B.2 On a Printout with Accompanying Diskette or CD ROM

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite□□ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name
BN00
Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite□□ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

B Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

Proposal Number	Project Number	Letting Date
Name of Principal		
Name of Surety	State in Which Surety is Organized	

We, the above-named Principal and the above-named Surety, are held and firmly bound unto the State of Wisconsin in the sum equal to the Proposal Guaranty for the total bid submitted for the payment to be made; we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. The condition of this obligation is that the Principal has submitted a bid proposal to the State of Wisconsin acting through the Department of Transportation for the improvement designated by the Proposal Number and Letting Date indicated above.

If the Principal is awarded the contract and, within the time and manner required by law after the prescribed forms are presented for signature, enters into a written contract in accordance with the bid, and files the bond with the Department of Transportation to guarantee faithful performance and payment for labor and materials, as required by law, or if the Department of Transportation shall reject all bids for the work described, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. In the event of failure of the Principal to enter into the contract or give the specified bond, the Principal shall pay to the Department of Transportation **within 10 business days of demand** a total equal to the Proposal Guaranty as liquidated damages; the liability of the Surety continues for the full amount of the obligation as stated until the obligation is paid in full.

The Surety, for value received, agrees that the obligations of it and its bond shall not be impaired or affected by any extension of time within which the Department of Transportation may accept the bid; and the Surety does waive notice of any such extension.

IN WITNESS, the Principal and Surety have agreed and have signed by their proper officers and have caused their corporate seals to be affixed this date: **(DATE MUST BE ENTERED)**

PRINCIPAL

(Company Name) **(Affix Corporate Seal)**

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Name of Surety) **(Affix Seal)**

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

IMPORTANT: A certified copy of Power of Attorney of the signatory agent must be attached to the bid bond.

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

Time Period Valid (From/To)
Name of Surety
Name of Contractor
Certificate Holder Wisconsin Department of Transportation

This is to certify that an annual bid bond issued by the above-named Surety is currently on file with the Wisconsin Department of Transportation.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the annual bid bond.

Cancellation: Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

(Signature of Authorized Contractor Representative) (Date)

Effective with March 2010 Letting

LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

Name of Subcontractor	Class of Work	Estimated Value

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor 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 contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

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

6. The prospective contractor agrees by submitting this proposal that, should this contract 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 entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 - "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. 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 a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor 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 may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

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

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

   (b) Have not within a 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;

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

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

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

Special Provisions

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STSP'S Revised January 5, 2024

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 7840-03-73, USH 10 – Greenwood, Black River Bridge B-10-0398, CTH G, Clark County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2024 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20240105)

2. Scope of Work.

The work under this contract shall consist of grading, base aggregate dense, HMA pavement, removing bridge B-10-0378, constructing Structure B-10-0398, riprap, steel plate beam guard, signing, pavement marking, dredging and disposal of dredge materials, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

Begin work within 10 calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the approved start date.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment.

Interim Completion and Liquidated Damages #1 – CTH G tree clearing, grubbing, and Amphibian and Reptile Exclusion Fencing: December 13, 2024

Complete construction operations on CTH G to the stage necessary to have all necessary Amphibian and Reptile Exclusion Fencing installed by December 13, 2024.

If the contractor fails to complete the work necessary to have all necessary Amphibian and Reptile Exclusion Fencing installed by 11:59 PM on December 13, 2024, the department will assess the contractor $945 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on December 14, 2024. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Interim Completion and Liquidated Damages #2 – CTH G roadway approaches paved, roadway portion of structure completed, and temporary access roads within limits of Black River removed: November 14, 2025

Complete construction operations on CTH G to the stage necessary to reopen it to through traffic by November 14, 2025. Do not reopen until completing the following work: complete structure and roadway work required to completely open the roadway and remove all portions of the temporary access roads that are within the Black River.

If the contractor fails to complete the work necessary to reopen CTH G to traffic by 11:59 PM on November 14, 2025, the department will assess the contractor $2,185 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 15, 2025. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed according to standard spec 108.11.

Fish Spawning

There shall be no instream disturbance of Black River at Station 10+00 as a result of construction activity under or for this contract, from March 1 to June 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of smallmouth bass.

A partial date waiver to instream timeout work restrictions has been provided for temporary construction access construction, temporary shoring installation, temporary shoring support material installation, and turbidity barrier installation. Work for these activities may begin on May 15. Dredging, bridge removal or other in-waterway activities not conducted within the turbidity barrier or shoring are not included in the waiver and the March 1 to June 15 timeout period shall apply to such activities.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Migratory Birds

No evidence of swallow or other migratory bird nests have been observed on or under the following structures(s) during the preconstruction inspection. However, if nesting is later observed prior to or during construction, the contractor shall implement avoidance/deterrent measures or obtain a depredation permit. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from April 15 to August 31.

- B-10-0378

Northern Long-eared Bat *(Myotis septentrionalis)*

Northern long-eared bats (NLEB) have the potential to inhabit the project limits because they roost in trees, bridges, and culverts. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

To avoid adverse impacts upon the NLEBs, no tree clearing is allowed between April 1 and October 31, both dates inclusive. If the required tree clearing is not completed by March 31, the department will suspend all tree clearing and associated work directly impacted by clearing.

Tree clearing is limited to that which is specified in the plans. Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

Submit a schedule and description of clearing operations with the ECIP 14 days prior to any clearing operations. The department will determine, based on schedule and scope of work, what additional erosion control measures shall be implemented prior to the start of clearing operations, and list those additional measures in the ECIP.

State Threatened Turtle Species

Suitable habitat may be present within the project vicinity. Therefore, the following actions are required to follow the Broad Incidental Take Permit:

1. Ground disturbance, heavy equipment operation or supply/equipment storage within nesting habitat (exposed sand or gravel areas within 984 feet of a suitable stream/river, including roadsides and gravel shoulders) is not allowed during the nesting season (May 15 – September 15, both dates inclusive) unless exclusion fencing has been installed or the nesting habitat has been made unsuitable outside of these dates.
2. Instream work and drawdowns near the riverbanks are not allowed during the maximum overwintering period (November 1 – March 14, both dates inclusive). Instream work includes, but is not limited to, streambank/riprap installation, ford installations, open cut trenching, and dredging.
3. Project personnel will be made aware of the potential for state threatened turtles in this area. Project personnel must move any turtles observed on site out of harm's way to an area of suitable habitat outside the project area.

Install exclusion fencing once trees are cleared and removed, but prior to grubbing or any other ground disturbing activity. Exclusion fencing will need to be installed around the work area according the WDNR Amphibian and Reptile Exclusion Fencing Protocols including:

1. Install fencing prior to any ground disturbing activities or May 1, whichever comes first.
2. Install around the entire disturbance area unless suitable habitat is not present around the entire disturbance area and approach has been received from DNR staff.
3. Install fencing with stakes placed on the constructions side of the fence.
4. Fencing must be at least 24 inches high with at least 4 inches trenched into the soil and at least 20 inches exposed above ground.
5. Install turn-arounds at ends and any access openings needed in fencing in order to redirect animals away from openings.

4. Traffic.

Close CTH G to traffic from N. River Road to N. Reese Avenue as shown in the plans to facilitate construction operations under this contract. Place the appropriate signing and barricades prior to beginning work on the closed roadway section.

Maintain emergency access to the project at all times.

Detour

Detour CTH G along CTH O, CTH OO, and STH 73 as shown in the plans.

Trail Signage

The existing Corridor 20 snowmobile/ATV/UTV trail along CTH G will be closed during construction. Detour signs will be erected by Clark County. Contact Brian Duell, Clark County Highway Commissioner at (715) 743-3680 or brian.duell@co.clark.wi.us, 14 days prior to anticipated closure to coordinate signage installation.

5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying CTH G traffic during the following holiday and special event periods:

- From noon Wednesday, November 27, 2024 to 6:00 AM Friday, November 29, 2024 for Thanksgiving Day;
- From noon Monday, December 23, 2024 to 6:00 AM Thursday, December 26, 2024 for Christmas Day;
- From noon Monday, December 30, 2024 to 6:00 AM Thursday, January 2, 2025 for New Year's Day;
- From noon Friday, January 17, 2025 to 6:00 AM Tuesday, January 21, 2025 for Martin Luther King Jr. Day;
- From noon Friday, May 23, 2025 to 6:00 AM Tuesday, May 27, 2025 for Memorial Day;
- From noon Thursday, July 3, 2025 to 6:00 AM Monday, July 7, 2025 for Independence Day;
- From noon Friday, August 29, 2025 to 6:00 AM Tuesday, September 2, 2025 for Labor Day;
- From noon Wednesday, November 26, 2025 to 6:00 AM Friday, November 28, 2025 for Thanksgiving Day;
- From noon Tuesday, December 23, 2025 to 6:00 AM Friday, December 26, 2025 for Christmas Day;
- From noon Tuesday, December 30, 2025 to 6:00 AM Friday, January 2, 2026 for New Year's Day;
- From noon Friday, January 16, 2026 to 6:00 AM Tuesday, January 20, 2026 for Martin Luther King Jr. Day;
- From noon Friday, May 22, 2026 to 6:00 AM Tuesday, May 26, 2026 for Memorial Day.

6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

stp-107-066 (20080501)

The utility work plan includes additional detailed information regarding the location of known discontinued, relocated, or removed utility facilities. These can be requested from the Wisconsin Department of Transportation during the bid preparation process or from the project engineer after the contract has been awarded and executed.

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 14 to 16 calendar days in advance of when the prior work will be completed, and the site will be available to the utility owner. Follow-up with a confirmation notice to the engineer and the utility owner not less than 3 working days before the site will be ready for the utility owner to begin its work.

The following companies have facilities within project limits. These anticipate relocation.

Astrea - Communications has existing fiber optic facilities approximately 21' to 26' north of CTH G centerline.

Astrea will relocate existing storage vaults/splice vaults away from bridge abutment and relocate the fiber route to the south side of the bridge for the river crossing. Existing vault at approximate Station 8+25, 30' LT, to relocate to approximate Station 3+30, 20' LT, and existing vault at approximate Station 11+50, 25' LT, to relocate to approximate Station 13+50, 30' LT. New ducts will be bored crossing county highway G to reach Xcel pole lines where we will transition to overhead fiber. This work will be completed prior to construction.

Xcel Energy - Electric has existing overhead electric facilities approximately 45' south of CTH G centerline.

Prior to construction:

Xcel Energy has an existing utility pole location at Station 104+15 LT in 12"-18" grade cut. They will remove the existing 30' pole and set new 35' pole, 2'-3' behind existing pole.

At Station 8+40 RT, they will remove an existing light pole and overhead secondary at roadway near bridge and reinstall with a new 35' wood light pole and light after bridge construction is complete.

At Station 11+60 RT, they will remove an existing light pole and overhead secondary at roadway near bridge and reinstall with a new 35' wood light pole and light after bridge construction is complete.

During construction, notify Xcel as described above to arrange temporarily moving overhead conductors. This work at each location is estimated to take 10 working days:

At Station 8+40 RT, they will move existing two-phase overhead conductors (12.5kv) 3'-4' further south for added clearance.

At Station 11+60 RT, they will move existing two-phase overhead conductors (12.5kv) 3'-4' further south for added clearance. Utility pole will be replaced due to age and condition of pole.

The following companies have facilities within project limits. No conflicts are anticipated.

Badger Telecom (TDS) - Communications has existing communication facilities approximately 32’ to 41’ south of CTH G centerline.

City of Greenwood - Water has existing water main approximately 45’ to 50’ north and parallel to CTH G centerline and 60’ to 65’ south.

Everstream - Communications has nearby existing fiber optic lines outside of anticipated construction limits.

We Energies - Gas has existing gas facilities along the west side of N. Reese Street.

7. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has received written verification of coverage under the Section 404 Transportation Regional General Permit from the U.S. Army Corps of Engineers. Comply with the requirements of the permit in addition to requirements of the special provisions.

A copy of the permit is available from the regional office by contacting Tou Yang at (715) 833-5570.

If the contractor requires work outside the proposed slope intercepts, based on their method of operation to construct the project, it is the contractor’s responsibility to determine whether a U.S. Army Corps of Engineers Section 404 permit modification is required. If a Section 404 permit modification is necessary, obtain the permit modification prior to beginning construction operations requiring the permit. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the permit modification. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit modification request.

8. Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-2). The permit can be found at:

https://widnr.widen.net/s/s5mwp2gd7s/finalsignedwisdotcsgp

A certificate of permit coverage is available from the regional office by contacting Tou Yang at (715) 833-5570. Post the permit certificate in a conspicuous place at the construction site.

stp-107-056 (20230629)

9. Construction Over or Adjacent to Navigable Waters.

The Black River is classified as a state navigable waterway under standard spec 107.19.

stp-107-060 (20171130)

Navigation Buoys and Signs

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to place informational waterway markers in the Black River under this contract. Conform to all permit requirements for the project.

Place navigation buoys and signs upstream and downstream of the bridge construction as shown in the plans.

In addition, install a notification sign at the Greenwood County Park informing potential recreational river watercraft of work at the CTH G crossing of the Black River.

River Traffic Control

During critical operations where the river must be closed to traffic for the safety of the public, provide personnel in boats upstream and downstream of the project area to stop or direct river traffic until river traffic can safely proceed.

Include the cost of obtaining and placing navigation buoys, the notification sign, and river traffic control in other work items.

10. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

http://dnr.wi.gov/topic/invasives/disinfection.html

Use the following inspection and removal procedures:

1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    4.1. Washing with ~212 F water (steam clean), or
    4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
    4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore, this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

11. Environmental Protection - Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement, or other appropriate best management practice prior to discharge. Submit the proposed means and methods of dewatering for each required location for approval as part of the Erosion Control Implementation Plan (ECIP). Include details of how the intake will be managed to not cause an increase in the background level turbidity prior to treatment and any additional measures necessary to prevent sediments from reaching the project limits or wetlands and waterways.

Guidance on Dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061. This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material and removal of the dewatering system and is incidental to contract work.

ncr-107-025 (20160401)

Fish that become stranded in dewatered areas should be captured and returned to the active channel immediately.

12. Environmental Protection - Wetlands.

Project construction staging materials and equipment will not be stored, even temporarily, in any wetland areas. Store all materials within the footprint of the roadway surface.

13. Erosion Control Structures.

Within three calendar days after completing the excavation for a substructure unit, place riprap or other permanent erosion control items required by the contract or deemed necessary by the engineer around the unit at a minimum to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as the engineer directs.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived.

stp-107-070 (20191121)

14. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

Paul M. Garvey, License Number AII-117079, inspected Structure B-10-0378 for asbestos on January 19, 2021. No Regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is included with the bid package or available from Tou Yang, (715) 833-5570, Tou.Yang@dot.wi.gov.

According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 03/20), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to from Tou Yang, (715) 833-5570, Tou.Yang@dot.wi.gov and via e-mail to dothazmatunit@dot.wi.gov or via U.S. mail to DOT BTS-ESS attn: Hazardous Materials Specialist, 5 South S.513.12, PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-10-0378, CTH G Begley St over Black
- Site Address: Section 03/T26N/R02W and Section 34/T27N/R02W; 0.3 mile west of junction with STH 73
- Ownership Information: Clark County Highway Department, 511 W South Street, Loyal, WI 54446
- Contact: Brian Duell
- Phone: (715) 743-3680
- Age: 86 years old. This structure was constructed in 1938.
- Area: 7,162 SF of deck

Insert the following paragraph in Section 6.g.:

If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

stp-107-125 (20220628)

15. Removing Structure Over Waterway Remove Debris B-10-0378, Item 203.0250.01.

Conform to the requirements of standard spec 203 and as hereinafter provided.

Add the following to standard spec 203.3.2.2.1:

(8) The existing CTH G Bridge is a National Register Eligible Historic Structure. As part of the environmental coordination process for the bridge replacement, consulting parties were given the opportunity to request that certain bridge components be salvaged. A request has been received to salvage the following components, if possible:

a) North half of the portal bracing on the west end of the east truss span. Cut gusset plates and adjacent truss members to leave the "x" configuration, along with the upper and lower struts, of the requested half the portal bracing intact.

Salvaged components are to be in their existing condition, prior to the beginning of bridge removal operations. Use care when salvaging the above components to prevent any scratches, dents or bends during removal.

(9) Stockpile salvaged materials onsite and notify Brian Duell, Clark County Highway Commissioner, at (715) 743-3680 or brian.duell@co.clark.wi.us when all materials to be salvaged are ready to be picked up.

(10) Remove old culverts and old timber piles under the existing bridge, as shown on the plans, to an elevation at least 2 feet below the finished ground line. These removals are considered instream work, and the instream restrictions listed in article 3 of these special provisions shall apply.

Add the following to standard spec 205.5.3:

(10) Payment includes removing old culverts and timber piles under the bridge.

16. Polymer Overlay, Item 509.5100.S.

A Description

This special provision describes providing two layers of a two-component polymer overlay system to the bridge decks the plans show.

B Materials

B.1 General

Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department's approved product list.

B.2 Polymer Resin

Furnish a polymer resin base and hardener composed of two-component, 100 percent solids, 100 percent reactive, thermosetting compound with the following properties:

Property	Requirements	Test Method
Gel Time[1]	15 - 45 minutes @ 73° to 75° F	ASTM C881
Viscosity[1]	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm
Shore D Hardness[2]	60-75	ASTM D2240
Absorption[2]	1% maximum at 24 hr	ASTM D570
Tensile Elongation[2]	30% - 70% @ 7 days	ASTM D638
Tensile Strength[2]	2000 to 5000 psi @ 7 days	ASTM D638
Chloride Permeability[2]	<100 coulombs @ 28 days	AASHTO T277

[1] Uncured, mixed polymer binder

[2] Cured, mixed polymer binder

Ensure that the polymer resin when mixed with aggregate has the following properties:

Property	Requirement[1]	Test Method
Minimum Compressive Strength	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C579 Method B, Modified[2]
Thermal Compatibility	No Delaminations	ASTM C884
Minimum Pull-off Strength	250 psi @ 24 hrs	ASTM C1583

[1] Based on samples cured or aged and tested at 75°F

[2] Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

B.3 Aggregates

Furnish natural or synthetic aggregate that is non-polishing; clean; free of surface moisture; fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and conform to the following:

Aggregate Properties

Property	Requirement	Test Method
Moisture Content[1]	1/2 of the measured aggregate absorption, %	ASTM C566
Hardness	≥6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face and 80% with at least 2 fractured faces of material retained on No.16	ASTM D5821
Absorption	≤1%	ASTM C128

[1] Sampled and tested by the department before placement.

Gradation

Sieve Size	% Passing by Weight
No. 4	100
No. 8	30 – 75
No. 16	0 – 5
No. 30	0 – 1

B.4 Approval of Bridge Deck Polymer Overlay System

A minimum of 20 working days before application, submit product data sheets and specifications from the manufacturer, and a certified report of test or analysis from an independent laboratory to the engineer for approval. The department will sample and test the aggregates for gradation and moisture content before placement. If requested, supply the department with samples of the polymer for the purpose of acceptance testing.

B.4.1 Product Data Sheets and Specifications

Product data sheets and specifications from the manufacturer consists of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, general instructions, or any other applicable information.

B.4.2 Certified Report of Test or Analysis

Conform to the following:

Polymer Binder: Submit a certified report of test or analysis from an independent laboratory dated less than 3 years before the date of the project letting showing the polymer binder meets the requirements of section B.2.

Aggregates: Submit a certified report of test or analysis from an independent laboratory dated less than 6 months before the date of the project letting showing the aggregates meet the requirements of section B.3.

C Construction

C.1 General

Ensure that the overlay system is 1/4 inch thick or thicker.

Conform to the following:

Field Review: Conduct a field review of the existing deck to identify any possible surface preparation and material compatibility issues.

Pre-Installation Meeting: Conduct a pre-installation meeting with the manufacturer's representative and the engineer before construction. Discuss the field review findings, verification testing of the surface preparation and establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. Supply for the engineer's use for the duration of the project, a Concrete Surface Profile (CSP) chip set of 10 from the International Concrete Repair Institute (ICRI).

Manufacturer's Representative: An experienced manufacturer's representative familiar with the overlay system installation procedures shall be present at all times during surface preparation and overlay placement to provide quality assurance that the work is being performed properly. This requirement may be reduced at the engineer's discretion.

Material Storage: Store and handle materials according to the manufacturer's recommendations. Store resin materials in their original containers in a dry area. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.

C.2 Deck Preparation

C.2.1 Deck Repair

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to remove and repair the concrete deck will be paid for under other items.

Use deck patching products that are compatible with the overlay system. Patching materials with magnesium phosphate shall not be used. Place patches after surface is prepared via shot blasting and cleaning as described in Section C.2.2 of this specification. Portland cement concrete patches shall be used for joint repairs and full depth deck repairs with a plan area larger than 4 sf, unless approved otherwise by the Structures Design Section. If rapid-set concrete is used, place patches per the manufacturer's recommendation. If Portland cement concrete is used, place patches per standard spec 509.3.9.1.

Deck patching shall be filled and properly finished prior to overlay placement. Do not place overlay less than 1 hour, or per the manufacturer's recommendation, after placing rapid-set concrete patches in the repair areas. Do not place overlay less than 28 days after placing Portland cement concrete patches in the repair areas.

C.2.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ASTM C1593. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of 1/4 inches or more is greater than 50 percent of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours before the application of the overlay system.

Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from materials adhering and entering. Tape or form all construction joints to provide a clean straight edge.

Before shot blasting, remove pavement markings within the treatment area using an approved mechanical or blasting method.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 (free of contaminants, dust, and loose concrete) by sand blasting, using wire wheels, or other approved method.

Just before overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely. If prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (brush/breeze blast) the exposed surfaces.

The engineer may consider alternate surface preparation methods per the overlay system manufacturer's recommendations. The engineer will approve the final surface profile and deck cleanliness before the contractor placing the polymer overlay.

C.2.3 Transitional Area

If the plans show, create a transitional area approaching transverse expansion joints and ends of the deck using an approved mechanical or blasting method. Remove 1/4 inch to 5/16 inch of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

If the plans show, create a transitional area on the approach pavement. Prep and place the first lift 3 feet beyond the end of the deck the same width as the deck. Prep and place the second lift 6 feet beyond the end of the deck the same width as the deck.

C.3 Overlay Application

Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions. Do not apply the overlay system if any of the following exists:

1. Ambient air temperature is below 50 F or above 100 F.
2. Deck temperature is below 50 F.
3. Moisture content in the deck exceeds 4.5 percent when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured according to ASTM D4263.
4. Rain is forecasted during the minimum curing periods listed under C.5.
5. Materials component temperatures below 65 F or above 99 F.
6. Concrete deck age is less than 28 days.
7. The deck temperature exceeds 100 F.
8. If the gel time is 10 minutes or less at the predicted high air temperature for the day.

After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck. Provide appropriate protective measures to prevent contamination from equipment allowed on the deck during preparation and application operations. Begin overlay placement as soon as possible after surface preparation operations.

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place but will require additional applications before opening to traffic.

After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer. Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer. Apply all courses of the overlay system before opening the area to traffic. Do not allow equipment or traffic on the treated area until directed by the engineer.

After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer. Before applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.

Before opening to traffic, clean expansion joints and joint seals of all debris and polymer. A minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.

C.4 Application Rates

Apply the polymer overlay in two separate courses according to the manufacturer's instructions, but not less than the following rate of application.

Course	Minimum Polymer Rate[1] (GAL/100 SF)	Aggregate[2] (LBS/SY)
1	2.5	10+
2	5.0	14+

[1] The minimum total applications rate is 7.5 GAL/100 SF.

[2] Application of aggregate shall be of sufficient quantity to completely cover the polymer.

C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

	Average temperature of deck, polymer and aggregate components in degrees F							
Course	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-99
1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.	1 hr.
2	8 hrs.	6.5 hrs.	6.5 hrs.	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.

If faster cure times are desired and achievable, submit to the engineer a certified test report from an independent laboratory showing the material is able to reach a compressive strength of 1000 psi as tested per ASTM C 579 Method B within the temperature ranges and cure times for which the product is proposed to be placed. Establish ambient air, material, and substrate temperatures from the manufacturer for field applications. Field applications will not be allowed below the documented temperatures.

C.6 Repair of Polymer Overlay

Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation. Submit repair procedures from the manufacturer to the engineer for approval. Absent a manufacturer's repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete before placement of polymer overlay; and place the polymer overlay according to section C.3.

D Measurement

The department will measure Polymer Overlay by the square yard, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
509.5100.S	Polymer Overlay	SY

Payment is full compensation for preparing the surface; for tensile bond testing; for creating the transitional area; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials.

The department will pay separately for deck repairs.

stp-509-030 (20200629)

17. MGS Guardrail.

Supplement standard spec 614.2.5.2 with the following:

(2) Wood posts are required for guardrail having Treated Timber Rub Rail.

18. Excavation, Hauling, and Disposal of Dredged Soil, Item SPV.0035.01.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of soil dredged from the Black River, as shown on the plans, at an off-site location (farm field, non-metallic mine, etc.) that meets all applicable project and regulatory requirements and is located 1,200 feet or greater, from the City of Greenwood well head protection areas. Other materials, including cobbles and boulders encountered during river channel dredging or pier and abutment excavation should be considered common excavation. The nearest DNR licensed disposal facility is:

Cranberry Creek Landfill
2510 Engel Road
Wisconsin Rapids, WI 54495

Perform this work conforming to standard spec 205 and Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport dredged soil.

A.2 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC
Address: 999 Fourier Drive, Suite 101, Madison, WI 53717
Contact: Dan Haak
Phone: (608) 886-7423
E-mail: dhaak@trccompanies.com

The role of the environmental consultant will be limited to:

1. Documenting that activities associated with management of dredged soil are in conformance with the dredged soil management methods for this project as specified herein; and
2. Obtaining the necessary approvals for disposal of dredged soil from the off-site location or DNR licensed landfill.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the dredge area to the environmental consultant. Also notify the environmental consultant at least three calendar days before beginning excavation activities in the dredge area.

Coordinate with the environmental consultant to ensure that the environmental consultant has the opportunity to be present during excavation activities in the dredge area. Perform excavation work in the dredge area on a continuous basis until excavation work is completed.

Identify the off-site location or DNR licensed landfill that will be used for disposal of dredged soils and provide this information to the environmental consultant no later than 30 calendar days before beginning excavation activities in the areas to be dredged or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of dredged soils from the DNR licensed landfill. If disposing of dredged soil at a DNR licensed landfill, material testing and characterization may be required. The environmental consultant will collect representative samples of the dredged material, laboratory-analyze the samples, and advise the contractor, within 10 business days of sampling of disposal requirements. Do not transport dredged soil offsite without prior approval from the environmental consultant.

B (Vacant)

C Construction

Add the following to standard spec 205.3:

Control operations in the dredge areas and riverbank areas below the ordinary high-water mark to minimize the quantity of soil excavated.

Directly load and haul dredged soils to the off-site location. Use loading and hauling practices that are appropriate to prevent any spills or releases of dredged water, soils or residues. The dredged soils shall be stored and transported in sealed boxes or containers to prevent the dredged soils from draining or dewatering in the wellhead protection area. If disposal at a DNR licensed landfill is selected, sufficiently dewater soils and sediment prior to transport so as not to contain free liquids. Sediment dewatering will be conducted according to best management practices and will comply with the requirements of all applicable state and federal permits. Filtered water from dewatered sediments can be discharged back into the body of water from which it was removed.

If obviously contaminated soils or sediment or signs of NR 500 non-exempt solid waste and hazardous materials are unexpectedly encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Examples of these unexpected conditions may include, but are not limited to, buried containers or tanks, noxious odors and fumes, stained soils, sheen on ground water, other industrial wastes, and significant volumes of municipal or domestic garbage.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Dredged Soil in cubic yards of dredged soil hauled to the approved off-site location, or DNR licensed landfill.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Excavation, Hauling, and Disposal of Dredged Soil	CY

Payment is full compensation for excavating, loading, hauling, and disposing of dredged soils at an approved off-site location or DNR licensed landfill; and obtaining solid waste collection and transportation service operating licenses.

19. Temporary Emergency Action Plan, Item SPV.0060.01.

A Description

A.1 General

This special provision describes developing an emergency response plan in case of a rising water or flood event on the Black River at the project location. Submit the Temporary Emergency Action Plan (TEAP) for approval within one month after the contract execution. Construction operations that impact the Black River floodplain shall not occur until the TEAP is approved.

A.2 Contacts

Wisconsin Department of Natural Resources (WDNR)

Brad Betthauser, Transportation Liaison
910 Hwy 54 E
Black River Falls, WI 54615
(715) 213-9064
Bradley.BettHauser@wisconsin.gov

Clark County

Brian Duell, Highway Commissioner
511 W South Street
Loyal, WI 54446
(715) 743-3680
brian.duell@co.clark.wi.us

City of Greenwood

David Hansen, Mayor
201 S Main Street
Greenwood, WI 54437
(715) 267-6205
mayor@greenwoodwi.com

Wisconsin Department of Transportation

Tou Yang
718 W Clairemont Avenue
Eau Claire, WI 54701
(715) 833-5570
Tou.Yang@dot.wi.gov

Provide contact information as described in the Temporary Emergency Action Plan.

B (Vacant)

C Construction

Install a stake-mounted staff gauge, or similar as approved by the engineer within the limits of the river at the project location. Calibrate the staff gauge to the vertical datum for the project to allow for the correlation of water elevation readings to critical elevations shown on the plans.

C.1 General

Prior to starting construction, provide a Temporary Emergency Action Plan (TEAP) to the engineer, City of Greenwood, Clark County and WDNR for approval which addresses the requirements presented in this article and the Emergency Response article. The TEAP shall include emergency contact information, including cell phone numbers of the project superintendent and foreman. The numbers provided shall be monitored 24 hours a day, 7 days a week. A template for the TEAP is provided for reference in this article.

Monitor the Black River water elevation each day work is being completed, and every day during rising water or flood events, using the staff gauge installed at the project location and record in a daily log. Monitor on a daily basis precipitation amounts at the project site and upriver locations and record in a daily log.

The TEAP shall take effect when the water level reaches an elevation of 1109.00 (one-foot below the temporary construction access elevation) and the water level is still rising. The TEAP shall take effect at a lower water elevation if the rate of water elevation increase is such that executing the TEAP at water elevation 1109.00 would not allow adequate time to evacuate workers, equipment and materials from the temporary construction access.

Remove all equipment and materials, excluding temporary works such as the temporary construction access, from the floodplain during shutdown periods.

C.2 Submittals

Provide the Temporary Emergency Action Plan as described in this article and the Emergency Response article.

Submit any proposed changes that may impact the Temporary Emergency Action Plan, such as changes to temporary construction access, for approval.

All submittals will be reviewed by the engineer, City of Greenwood, Clark County and WDNR. Allow up to 2 weeks for review.

C.3 Temporary Emergency Action Plan (TEAP) Contents

The contents of the TEAP shall present provisions for monitoring and evaluating rising water or flood conditions, actions that will be taken to promote the safety of personal and the environmental integrity of the Black River floodplain.

Provide a site map in the TEAP that identify the locations of the following:

1. Stake-mounted staff gauge
2. Temporary construction accesses
3. Locations available for storing materials and equipment outside of the floodplain.

Include the construction schedule in the EAP.

C.4 Temporary Emergency Action Plan (TEAP) Template

Include the following in the Emergency Action Plan:

> **Emergency Action Plan**
>
> For the Construction Activities within the Black River
>
> Date:_____
>
> Project 7840-03-73, USH 10 - Greenwood, Black River Bridge B-10-0378, CTH G, Clark County, Wisconsin
>
> ***Introduction***
>
> The purpose of this plan is to describe the actions which will be taken by the contractor, in the event of rising waters or flooding, during construction of proposed Structure B-10-398 carrying CTH G over the Black River.
>
> _____ is the contractor for the Project. The contractor has taken into account the potential for a flooding event in planning, scheduling, and selecting the means and methods for the elements of the project within the Black River floodplain.

Overview of Construction Planned within Levee Area

The Project involves the replacement of existing Structure B-10-378 with proposed Structure B-10-398.

A site map is included as Attachment A.

The temporary construction access plan is provided as Attachment B.

Schedule and Duration of Construction Activities

Work is scheduled to commence after _____ upon approval of this Temporary Emergency Action Plan and be completed by _____. The schedule for construction is included as Attachment C.

Monitoring for Rising Water or Flooding Situations

The following procedures will be in place to monitor and be prepared for an emergency situation regarding high water levels in the Black River:

1. Emergency contact information for _____ is listed below. In the event of an emergency in the area of the project, the following should be contacted:

   Superintendent: _____

   Mobile: _____

   Project Foreman: _____

   Mobile: _____

2. The Black River level will be monitored on a daily basis by _____. The Black River level will be determined using stake-mounted staff gauge installed at the project location.

   Daily precipitation at the project site and precipitation at upriver locations will be monitored by: _____.

   This information will be used to evaluate the need for contingency measures to be implemented.

3. Notify the engineer, City of Greenwood, Clark County and WDNR representatives as soon as possible if it is decided to cease construction operations due to an emergency or high-water level situation. Also notify the engineer, Greenwood, Clark County and WDNR representatives prior to resuming the construction operations.

Actions to be Taken for Rising Water or Flooding Situations

When Black River levels reach an elevation of 1109.00 (1-foot below the low-point of the temporary construction accesses), coordination will take place with the engineer, City of Greenwood, Clark County and WDNR personnel to determine any necessary emergency action for work on the temporary construction accesses and within the floodplain.

Emergency actions, depending on the situation and anticipated rate of rise of floodwater, as directed by the engineer, City of Greenwood, Clark County and WDNR personnel may include:

1. Stoppage of work and observations for evidence of erosion of the temporary causeway.
2. Assess and document personnel, equipment and materials within the floodplain.
3. Removal of personnel, equipment and materials from the temporary construction access and the floodplain.
4. Notification of local law enforcement and/or emergency responders
5. Document equipment and materials that could not be evacuated from the floodplain.

Returning to Work

Coordinate with the engineer, City of Greenwood, Clark County and WDNR to determine the timing and sequencing of activities as appropriate for returning to work on the temporary construction access and within the floodplain following the receding of rising or flood waters.

Cleanup and Recapture

Coordinate with the engineer, City of Greenwood, Clark County and WDNR to assess equipment and materials that could not be evacuated and develop a work plan to cleanup and recapture those items, if possible.

Emergency Contact Information

Contractor Contact:
Superintendent: _____
Mobile: _____
Project Foreman: _____
Mobile: _____
E-Mail: _____

WDNR:
Kevin Christorf, Conservation Warden
(715) 210-0135
Kevin.Christorf@wisconsin.gov

Clark County:
Brian Duell, Highway Commissioner
511 W South Street
Loyal, WI 54446
(715) 743-3680
brian.duell@co.clark.wi.us

City of Greenwood:
David Hansen, Mayor
201 S Main Street
Greenwood, WI 54437
(715) 267-6205
mayor@greenwoodwi.com

Wisconsin DOT:
Tou Yang
718 W Clairemont Avenue
Eau Claire, WI 54701
(715) 833-5570
Tou.Yang@dot.wi.gov

List of Attachments to this TEAP:

A. Site Map

B. Temporary Construction Access Plan

C. Contractor's Construction Schedule

D Measurement

The department will measure Temporary Emergency Action Plan for each unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Temporary Emergency Action Plan	EACH

Payment is full compensation for preparing the Temporary Emergency Action Plan; providing and installing a stake-mounted staff gauge: for providing all submittals; for monitoring river levels; for project coordination; and all personnel and incidentals necessary to complete the work.

20. Emergency Response, Item SPV.0060.02.

A Description

This special provision describes providing the emergency response, according to the approved Temporary Emergency Action Plan (TEAP), in case of a rising water or flood event. Construction operations impacting the Black River floodplain shall not occur until the TEAP is approved.

B (Vacant)

C Construction

Minimize impacts to the Black River floodplain during construction. Do not disturb areas outside of the construction limits shown in the plans unless approved by the engineer. Replace all disturbed areas back to original condition or according to the plans.

Document and remove personnel, equipment and materials from the Black River floodplain during rising water or flood events in the accordance with the TEAP.

Coordinate with the engineer, City of Greenwood, Clark County and WDNR to determine timing and sequence of activities, as appropriate for returning to work following the receding of rising or flood waters.

Complete cleanup and recapture of items within the floodplain that could not be removed prior to the rising water or flood event.

D Measurement

The department will measure Emergency Response as each individual occurrence, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Emergency Response	EACH

Payment is full compensation for emergency responses taken; for documenting and removing personnel, equipment and materials from the floodplain; returning to work; completing cleanup and capture of items that could not be removed from the flood plan prior to the rising water or flood event; and all materials, equipment, personnel and incidentals necessary to complete the work.

21. Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 48-Inch, Item SPV.0060.03.

A Description

A.1 General

This special provision describes providing specialized equipment and trained testing personnel and to perform Crosshole Sonic Log (CSL) testing of drilled shafts according to the plans and as hereinafter provided. CSL testing is required for shaft foundations for Structure B-10-398.

Crosshole Sonic Logging, (CSL), is a nondestructive testing method that measures the time for an ultrasonic pulse to travel from a signal source inside an access tube to a receiver inside another access tube and evaluates the integrity of drilled shafts.

A.2 CSL Testing Personnel Requirements

Provide a CSL testing expert to direct and perform all aspects of the CSL testing and provide interpretation of results. The CSL testing expert shall be a professional engineer licensed in the State of Wisconsin, be employed by an independent testing agency, and have experience on a minimum of 5 projects performing CSL testing of drilled shafts. The independent testing agency shall have a minimum of 3 years of experience in performing CSL testing of drilled shafts. Submit the qualifications of the proposed CSL testing expert to the engineer for approval prior to beginning drilled shaft installation.

B (Vacant)

C Construction

C.1 CSL Testing Coordination

Schedule and coordinate drilled shaft construction with the CSL testing expert. Alter normal construction procedures as necessary to facilitate the CSL testing procedure. This includes providing suitable and safe access to the site and specific locations of drilled shafts to be tested and aiding the CSL expert to facilitate the CSL testing.

C.2 CSL Testing

Perform CSL testing and analysis on each completed drilled shaft. Conduct CSL testing according to ASTM D 6760. Notify the engineer of the date and time of each CSL test at least 48 hours prior to the scheduled test. Perform CSL testing after the drilled shaft concrete has cured at least 72 hours and after the concrete compressive strength reaches or exceeds 2,500 psi.

Pull the CSL probes simultaneously, starting from the bottoms of the access tubes, over an electronic depth measuring device. Perform the CSL tests with the source and receiver probes in the same horizontal plane. Continuously record CSL signals at depth intervals of 2.5 inches or less from the bottom of the tubes to the top of each shaft. Perform CSL testing on every possible tube combination.

Immediately report potential local defects indicated by testing to the engineer.

Grout the access tubes after testing is complete, at the direction of the engineer. Place the grout with a pump, starting at the bottom of each access tube.

C.3 CSL Evaluation

Evaluate the concrete in the shaft using the following classification on each CSL profile:

- Satisfactory:
    - FAT increase 0% to 20%, and;
    - Energy reduction less than or equal to 9 decibels
- Defect:
    - FAT increase greater than 20%, or;
    - Energy reduction greater than 9 decibels

C.4 CSL Testing Reports

Within three working days of completion of CSL testing and receipt of shaft construction record, submit a CSL Testing Report for each tested drilled shaft to the engineer summarizing CSL testing results. At a minimum the CSL testing reports must include:

1. A description of the testing equipment, the date and location of test, and the number of days between concrete placement and CSL testing.
2. The CSL ultrasonic profiles with analyses of the following all tube pair combinations tested:
    a. First pulse arrival time (FAT) versus depth.
    b. Relative pulse energy / amplitude versus depth.
    c. A presentation of the nested signal peak as a function of time plotted versus depth (waterfall diagram).
    d. Note all shaft-specific construction information (e.g. elevations of the top of shaft, bottom of casing, bottom of shaft, etc.), on all pertinent graphical displays.
3. Indication of size and location along the depth of the shaft of all defects.
4. A discussion and assessment of the data quality and integrity of the tested drilled shaft, including a discussion of all interpretations in conflict with the evaluation criteria in subsection C.3, as well as a discussion of all other unusual results.
5. Conclusions or recommendations concerning the acceptability of the drilled shaft based on the interpretation of the CSL testing results against the evaluation criteria in subsection C.3.

D Measurement

The department will measure Crosshole Sonic Log (CSL) Testing pay items by the unit for each drilled shaft tested, acceptably completed, regardless of the number of access tubes in the shaft.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 48-Inch	EACH

Payment is full compensation for furnishing testing equipment and performing CSL testing; evaluating and interpreting results; and for providing test reports.

The department will pay separately for furnishing and installing CSL access tubes under drilled shaft bid items in the contract.

22. Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch, Item SPV.0060.04.

A Description

A.1 General

This special provision describes providing specialized equipment and trained testing personnel and to perform Thermal Integrity Profiler (TIP) testing of drilled shafts continuously during concrete placement and curing according to ASTM D7949 “Standard Test Methods for Thermal Integrity Profiling of Concrete Deep Foundations”, as the plans show, and as hereinafter provided. TIP testing is required the drilled shaft foundations for Structure B-10-398.

TIP testing records temperature of curing concrete (hydration energy) along the length of a drilled shaft to assess the quality of drilled shaft foundations hereinafter referred to as “drilled shafts”. Data will be acquired using Thermal Wires™, hereinafter referred to as “thermal wires”, tied to the reinforcement bar cage and installed prior to concreting. The expected temperature at any location is dependent on the shaft diameter, mix design, time of measurement and distance to the center of the shaft. TIP measurements are used to estimate the shape of the shaft along the length of the shaft. These estimates are compared with concreting logs to assess the overall quality of the shaft.

TIP testing can be performed using embedded thermal wires or using probes lowered into embedded tubes. This special provision specifies the thermal wire method.

A.2 TIP Testing Personnel Requirements

Provide a TIP testing expert to direct and perform all aspects of the TIP testing and provide interpretation of results. The TIP testing expert must be a professional engineer licensed in the State of Wisconsin. The TIP testing expert shall be employed by an independent testing agency with documented and approved experience in TIP testing. Submit the qualifications of the proposed TIP testing expert to the engineer for approval prior to beginning drilled shaft installation.

B Materials

Provide a TIP testing data acquisition system consisting of multiple thermal wires embedded in the drilled shaft concrete to be TIP tested and connected to a computer-based data recorder. The data collection system shall be capable of automatically collecting temperature verses time after casting data along the length of the drilled shaft at intervals of 15 minutes. The thermal wires and TIP testing data acquisition system shall be as manufactured by:

Pile Dynamics Incorporated
30725 Aurora Road
Cleveland Ohio 44139
Phone: (216) 831-6131
Web Page: www.pile.com

Provide equipment with the following minimum requirements:

a. A computer-based TIP Data Acquisition System to monitor and download temperature versus time after casting.

b. Ability to automatically collect data at user defined time intervals (typically 15 minutes).

C Construction

C.1 TIP Testing Coordination

Schedule and coordinate drilled shaft construction with the TIP testing expert. Alter normal construction procedures as necessary to facilitate the TIP testing procedure. This includes providing suitable and safe access to the site and specific locations of drilled shafts to be tested and providing assistance to the TIP expert to facilitate the TIP testing.

C.2 Thermal Wire Installation

Install thermal wires as shown in the plans the full length of drilled shafts and according to the procedures and recommendations of the TIP expert. For the initial installation of thermal wires in the contract, the TIP expert shall be on site to provide guidance and training on the installation and hookup of the thermal wires.

For the drilled shafts indicated on the plans to be TIP tested, install the number of thermal wires that is equal to or greater than the shaft diameter. For example, a drilled shaft diameter of 4.5 feet shall have minimum 5 thermal wires evenly spaced around the perimeter of the reinforcement cage and as shown in the plans. The minimum number of thermal wires for any shaft diameter shall be 5.

Align and attach the thermal wires to the main longitudinal reinforcement of the drilled shaft spaced approximately equally around the perimeter of the drilled shaft reinforcement cage. Stretch the thermal wires to minimize the wire slack and tie vertically at a maximum of every 3 feet to the main longitudinal reinforcement. Locate the thermal wire on the main longitudinal reinforcement bar such that it is 90º to the line connecting the reinforcement to the center of the shaft.

Extend the TIP wires from the bottom of the drilled shaft to at least 3 feet above the top of the drilled shaft, or 2 feet above the ground or water surface, whichever is higher, for shafts with cut-off below the ground surface. TIP wires extending beyond the top of the drilled shaft shall be attached to a CSL tube or similarly rigid support at frequent and regular intervals. Connect the thermal wires to the Thermal Access Port, acquire and analyze data as detailed in this special provision.

Provide and install one additional thermal wire supported and attached to a longitudinal reinforcement bar positioned parallel to and offset from the perimeter reinforcement at a fixed and known radial distance closer to the center of the shaft, typically at least 2 inches or as shown in the plans. Record the offset distance to the closest perimeter thermal wire before placing the reinforcement bar cage into the drilled shaft.

C.3 TIP Testing

Connect the thermal wires to a Thermal Access Port (TAP) prior to or immediately following drilled shaft concrete placement. Care shall be taken to record the position of each cable in the cage by serial number. The exact timing and duration of data measurement will be determined by the contractor’s TIP testing expert. Collect data at time intervals of 15 minutes for the duration of time sufficient to reach and record the peak heat of hydration temperature, but for a minimum of 48 hours or longer minimum duration as recommended by the TIP expert or as directed by the engineer. After completion of the data collection period, connect the TAP to the main TIP data acquisition unit and download the data files for inspection and evaluation of temperatures versus time for depth along the length of the drilled shaft.

Potential local defects indicated by locally low temperatures relative to the average temperature at that depth, or average temperatures significantly lower than the average temperatures at other depths, shall be immediately reported to the engineer.

C.4 TIP Testing Reports

Within five working days of completion of TIP testing and receipt of shaft construction record, submit a TIP Testing Report for each drilled shaft tested to the engineer, summarizing TIP testing results. At a minimum the TIP testing reports must include:

1. Shaft-specific construction information (e.g., elevations of the top of shaft, bottom of casing, bottom of shaft, etc.) should be noted on all pertinent graphical displays so that the temperature plots are adjusted for end effects.
2. Graphical displays of temperature measurements in each thermal wire versus depth at peak temperature.
3. Indication of unusual temperatures, particularly significantly cooler local deviations of the average at any depth from the overall average over the entire length, in either probe or thermal wire measurements.
4. The overall average temperature at peak temperature. This temperature is proportional to the average radius computed from the actual total concrete volume installed. Radius at any point can then be determined from the temperature at that point compared to the overall average temperature.
5. A depiction of the shaft radius vs. depth including the concrete cover at peak temperature. Variations in temperature between wires (at each depth) which in turn correspond to variations in cage alignment should be noted.
6. The cage alignment or offset from center should be noted.
7. Conclusions or recommendations concerning the acceptability of the drilled shaft based on the interpretation of the TIP testing results obtained.

D Measurement

The department will measure Thermal Integrity Profiler (TIP) Testing pay items by the unit for each drilled shaft tested, acceptably completed, regardless of the number of thermal wire strings in the shaft.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch	EACH

Payment is full compensation for furnishing and installing the thermal wires and data collection unit; evaluating and interpreting results; and for providing test reports.

23. Temporary Construction Access, Item SPV.0060.05.

A Description

This special provision describes constructing and removing temporary access to the site from the east and/or west side of the Black River as necessary to provide for the transport of equipment and materials necessary for the construction of Structure B-10-398 and for the removal of Structure B-10-378.

B Materials

B.1 Permits

The department has obtained a permit from the Army Corps of Engineers for the construction of the temporary access required to construct Structure B-10-398 and to remove Structure B-10-378. The permitted temporary access is shown in the plan.

B.2 Deliverables

Show all temporary access locations and elevations on the ECIP.

The temporary access configuration shown in the plan has been evaluated for the Q100 flood event, and it has been determined that this access configuration avoids any increase to the base flood elevation (BFE) on insurable structures.

For any proposed temporary access configuration that increases the elevation or footprint of the access from what is shown in the plans, prepare and submit hydraulic calculations and report the increase in water surface elevation (WSE), and the extent of the increased WSE upstream of the access, for Q100 regulatory flood event. If required, calculations shall be signed and sealed by a professional engineer licensed in the state of Wisconsin. The engineer and WDNR will complete a review of the hydraulic calculations within 10 days of submittal. Do not construct any proposed temporary access with increased elevations or a larger footprint than the access shown in the plans until the engineer and WDNR approve the hydraulic calculations.

For proposed temporary access with increased elevations or a larger footprint than the access shown in the plans, the causeway design, layout, openings, widths, and elevations must avoid any increase to the base flood elevation BFE on insurable structures. Any increase to the BFE that impacts insurable structures will require contractor notification of all impacted property owners, City of Greenwood Planning Committee, County Zoning Department (as needed), and additional FEMA coordination.

B.3 Aggregate and Geotextile

If used, provide clean or washed riprap or breaker run for material placed within the limits of the Black River. Salvaged or recycled materials will not be allowed. Smaller aggregate may be placed on top of the riprap or breaker run as a driving/working surface.

If smaller aggregate is used as a driving/working surface, provide geotextile type HR between the riprap or breaker run and the smaller aggregate.

Prior to placement, obtain approval from the engineer for all materials that are to be used for construction of the temporary access. All materials shall conform to the pertinent requirement of the standard specs.

C Construction

C.1 Restrictions

Certain work activities have date restrictions to protect environmental resources or structures. Adhere to the work restriction dates listed in the Prosecution and Progress.

Temporary causeways within the Black River may remain in place until November 14, 2025, but may be removed earlier if they are no longer necessary for construction. Remove each temporary access in such a manner that provides the least disturbance to the riverbed. Contact WDNR prior to repairs and removal of each temporary access.

Adhere to the requirements in articles Temporary Emergency Action Plan and Emergency Response of these special provisions for any response(s) to be carried out by the contractor related to temporary access.

C.2 Erosion Control

Implement all temporary erosion control measures required for construction of each temporary access as shown in the ECIP. Implement methods to limit debris and transport of fines in the Black River during construction and removal of any fill placed in the river for temporary access.

After each temporary access is no longer needed, thoroughly remove all material that has been placed for the purposes of temporary access.

C.3 Restoration

Restore the Temporary Construction Accesses upon completion of work according to standard specifications and the ECIP.

Except for clearing and grubbing, the contractor shall restore the access locations to a pre-construction condition. Unless otherwise approved by the department, the existing roadway, driveways, and all other features within the work area shall be protected. Damages to the site resulting from contractor operations shall be replaced by the contractor in kind at contractor’s own cost and expense.

C.4 Amphibian and Reptile Exclusion Fencing

Install exclusion fencing according to standard spec 628.3.4 and the plan details.

Construction activities and timeframes are provided in Prosecution and Progress article of these special provisions.

C.5 Riverbed Survey

Conduct a riverbed scanning survey before the construction of each temporary access and after removal of each temporary access to document the riverbed has been restored to preconstruction conditions within the limits of the temporary access.

D Measurement

The department will measure Temporary Construction Access as one unit, acceptably completed, in which one unit includes all temporary access locations.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Temporary Construction Access	EACH

Payment, in which one unit includes all temporary access locations, is full compensation for any required hydraulic calculations and modeling; for any required public and agency coordination and/or permitting; for constructing, maintaining, and removing temporary access(es); for performing riverbed surveys; for grading existing or proposed embankments for access; for providing, installing, and removing temporary erosion control and final restoration for all areas disturbed outside the shown project limits; for installation and removal of temporary culverts if used; for installation and removal of temporary shoring if used. Temporary river access may include, but is not limited to, the use of temporary bridges, barges, causeways, trestles, etc.

24. Treated Timber Rub Rail, Item SPV.0090.01.

A Description

Furnish and attach a nominal 2-inch x 10-inch treated timber to the back of the posts used for MGS guardrail as shown on the plans and as directed by the engineer.

B Materials

The treated timber rub rail shall be according to the applicable provisions of standard spec 507 and shall be either Pacific Coast Douglas Fir or Southern Yellow Pine. The preservation treatment shall be either a chromated copper arsenate solution or an ammoniacal copper arsenate solution. All lag screws and washers shall be galvanized or cadmium plated meeting the requirements of standard spec 614.2.1.

C Construction

The Treated Timber Rub Rail shall be securely attached to the guardrail posts with the lag bolts and washers countersunk as shown on the plans. Splices in the rail will be permitted at the post, provided the splice spacing is at least 12.5 feet.

D Measurement

The department will measure Treated Timber Rub Rail by the linear foot, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Treated Timber Rub Rail	LF

Payment is full compensation for furnishing and installing timber rub rail and associated hardware.

25. Drilled Shaft Foundation 48-Inch, Item SPV.0090.02.

A Description

This special provision describes installing drilled foundation shafts for bridge foundations as shown on the plans.

Do not start work on any drilled foundation shafts until acceptance of the Drilling Contractor Qualification submittal and the acceptance of the Drilled Foundation Shaft Installation Plan.

A.1 Qualifications of the Contractor

A.1.1 Drilling Contractor Qualification Submittal

Submit the drilling contractor's qualifications, staff experience records, and equipment cut sheets and descriptions that will perform the work in this special provision at the preconstruction meeting or 21 calendar days prior to the start of drilled shaft construction, whichever date is earlier. The engineer will accept or reject the drilling contractor's qualifications, staff experience records, and equipment descriptions within 7 calendar days after receipt of the submission.

The drilling contractor performing the work described in these special provisions must have drilled foundation shaft project(s) successfully completed similar to those that the plans show using equipment meeting the requirements in subsection B.2 within the last five years. Submit a list outlining the drilling contractor's experience on at least five projects where they have successfully completed drilled foundation shaft construction, including one project completed within the last five years. A separate shaft project is defined as a project with at least 120 linear feet of total shaft length. Include in the project experience at least one project completed in soil and groundwater conditions similar to that anticipated for this project. Include in the project experience advancing drilled shafts with a shaft size at least as large as the plans show to a depth of at least 30 feet below the original ground surface. Show in at least one project evidence of permanence with a five-year minimum age. Include in the project experience documentation for each project a brief project description, detail the size of the shafts, construction methods used during installation, methods used for shaft stabilization, local soil conditions, actual construction time and contact information consisting of an individual's name and current phone number. Contacts must be capable of verifying project participation.

A.1.2 Staff Experience

Submit contractor staff experience records of the on-site engineer, on-site supervisors, crew chiefs and drill operators, who will be assigned to the project. Provide for each staff record a summary of each individual's experience that is complete enough for the engineer to determine whether each individual has satisfied the following qualifications. Do not use consultants or manufacturer's representatives in order to meet the requirements of this section.

- On-site engineer - Assign an individual as principal in charge and the contractor's main contact who has at least five years of drilled shaft experience, at least one year of which is as an employee of the contractor in good standing, and who has completed at least one successful drilled foundation shaft project using a shaft size at least as large as the plans show.
- On-site supervisor - Assign an individual to supervise the work who has at least five years of drilled shaft experience, at least one year of which is as an employee of the contractor in good standing, and who has completed at least three successful drilled foundation shaft projects using shaft sizes at least as large as the plans show. Include at least one project completed in soil and groundwater conditions similar to those anticipated for this project.
- Crew chiefs and drill operators - Assign crew chiefs and drill operators who have at least five years of drilled shaft experience using equipment meeting the requirements in subsection B.2, at least one year of which is as an employee of the contractor in good standing. Include at least one project completed in soil and groundwater conditions similar to those anticipated for this project.

List, as a minimum for each of the above individuals, three references of owners or engineers familiar with their work and provide address, phone, and e-mail contact information for each reference.

A.1.3 Equipment Requirements

Submit equipment cut sheets and descriptions to perform the work in this special provision that meet the requirements in subsection B.2.

A.2 Substitutions

The contractor may submit his own organization, staff and equipment to fulfill the requirements of subsections A.1.1, A.1.2, and A.1.3, as the drilling contractor or he may sublet to subcontractor. However, the organization approved that fulfills the requirements of subsection A.1.1 shall be the organization that performs the work in this special provision.

Request in writing to the engineer to provide substitute drilling contractor, staff or equipment not identified in the contractor's accepted drilling contractor qualification submittal. Substitute drilling contractor, staff or equipment must be equivalently or better qualified as determined by the engineer. Provide the experience

and qualification information for the proposed substitute drilling contractor, staff or equipment as was originally provided in the drilling contractor's qualification submittal. The substitute drilling contractor, staff or equipment will not be permitted to start or continue any drilled foundation shaft work until the engineer confirms their qualifications and accepts the proposed drilling contractor, staff or equipment to work on the project.

Expect suspension by the engineer of drilled foundation shaft work if the contractor substitutes unqualified drilling contractor for accepted drilling contractor, unqualified personnel for accepted personnel, or unqualified equipment for accepted equipment, during construction. If work is suspended due to the substitution of unqualified drilling contractor, personnel, or equipment, the adjustment in contract time resulting from the suspension of work will not be allowed.

B Materials

B.1 General

Concrete, drilling fluid, reinforcement and formwork shall be in accordance to the requirements of QMP Drilled Shafts, standard specifications, as shown on the plans, and as hereinafter provided.

In the event that the provisions of other specification clauses cause ambiguity or conflict with these special provisions, the stricter requirement shall apply unless otherwise accepted by the engineer.

B.2 Equipment

Equipment used for excavation, drilling, and cleaning operations shall have adequate capacity including power, torque, and down thrust to excavate a hole to a depth equal to the maximum depth of the drilled shafts shown in the plans plus 15 feet, or plus 20 percent of their maximum depth, whichever is greater. Anticipate and make available at the job site all equipment necessary and essential to penetrate soft and hard soils, as well as obstructions, during the construction of the drilled shafts.

Where hard soils, or other material including natural or man-made obstructions are encountered and cannot be drilled using conventional earth or rock augers, drilling buckets, and/or over reaming tools; provide drilling equipment including, but not limited to rock core barrels, rock tools, down the hole hammers, chisels, air tools, or any other equipment necessary to construct the drilled shaft excavation to the depth and size as shown on the plans.

When applicable, or required by the engineer, provide equipment that produces a stable slurry suspension, mechanical agitation, and a pipeline or other safe methods of transporting the slurry to the drilled shaft and means of removing slurry for recovery and recirculation.

B.3 Casing

B.3.1 Left-In-Place Casing

Left-in-place casing shall be steel that minimally conforms to ASTM A36. Substitution of steel material with properties meeting or exceeding ASTM A36 may be used if approved by the engineer. Supply casing of the minimum length to achieve the length shown on the plans. Left-in-place casing shall be rigid, smooth, clean, watertight, and of ample strength to withstand both handling and installation stresses and the pressure of both concrete and the surrounding earth materials. The inside diameter of casing shall not be less than the specified size of the drilled shaft. All casing diameters shown on the plans refer to O.D. dimensions.

If a temporary casing is used in addition to a left-in-place casing, any annular spacing between the casings shall be filled with grout.

B.4 Reinforcing Steel and Spacers

Deformed reinforcing bars shall comply with the size, dimension, spacing, and details shown on the plans. In addition, they shall conform to AASHTO M31, Grade 60, and all the pertinent requirements of standard spec 505. Non-corrosive wheel type spacers and boots shall be used to properly position the reinforcing steel. All reinforcing steel shall be 100% wire tied between the vertical reinforcement and ties.

B.5 Crosshole Sonic Logging (CSL) Tubes

Access tubes for CSL testing shall be 2 inches I.D. schedule 40 steel pipe conforming to ASTM A 53, Grade A or B, Type E, F, or S. Pipes shall have a round, regular internal diameter, free of defects or obstructions; including any defect at the pipe joints, to permit the free unobstructed passage of source and receiver probes. Each tube or steel pipe shall be fitted with a watertight shoe onto the bottom and a removable cap at the top. Both, the shoe and cap shall be watertight and free from corrosion. The internal

and external faces of the CSL tubes shall be clean to ensure passage of the probes and produce a good bond with the concrete.

Furnish neat cement grout for filling the access tubes at the completion of the CSL tests. Use grout that is a homogeneous mixture of water and Portland cement Type I/II or Type 1 L (MS). Do not exceed a water-cement ratio of 0.45. Provide grout with an unconfined compressive strength equal to the required compressive strength of the drilled shaft at 28 days when tested in accordance with ASTM C 1107.

B.6 Template

Provide a steel plate template at each drilled shaft foundation location to accurately locate and maintain the position of the shaft as shown on the plans. Provide concrete, reinforcement and formwork for the template according to the requirements of standard spec 501, 502 and 505 and as hereinafter provided.

B.7 Thermal Integrity Profiler (TIP) Wires

Install wires and provide other accessories described in bid item Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch elsewhere in these special provisions.

C Construction

C.1 Drilled Foundation Shaft Installation Plan

C.1.1 General

Prepare a Drilled Shaft Installation Plan and submit it at the preconstruction meeting or at least 30 calendar days prior to beginning drilled shaft foundation construction, whichever date is earlier. Submit the Drilled Shaft Installation Plan to the engineer for review. The engineer will accept the plan as submitted or return the plan with requested revisions. Do not start any drilled shaft installation until the engineer accepts the Drilled Shaft Installation Plan. Acceptance of the installation plan does not relieve the contractor of responsibility for successful completion of the drilled shafts.

C.1.2 Subsurface Conditions

The contractor is strongly advised to obtain and review the Geotechnical Exploration and Foundation Evaluation Report for the bridge structure for which the drilled foundation shafts are being constructed.

The contractor is encouraged to consider rock core drilling described in subsection C.3.6.7 prior to excavation of shafts socketed into rock. If not completed already, the contractor shall complete test cores at each shaft to confirm rock conditions and tip depths. Account for rock variability described in the geotechnical report and construction schedule concerns in making this determination.

C.1.3 Submittals

The Drilled Foundation Shaft Installation Plan shall include the following:

a. **Job Site Visit**. Acknowledge that the job site was visited to verify the site conditions with regard to entrance, access, overhead lines, subsurface features, clearing and grubbing, permitting, and collecting all information necessary to plan and execute the installation of the drilled shafts.

b. **Plan to Protect Existing Structures**. Outline the steps to be taken during drilled shaft installation to protect adjacent or nearby structures and utilities.

c. **Details of Environmental Control Procedures**. Provide plan to prevent loss of slurry or concrete into waterways, project areas, or protected areas. Detail method to ensure the compliance with state and federal environmental regulations during drilled shaft construction.

d. **List of Proposed Equipment**. Include details of proposed templates; number and sizes of cranes; number and size of oscillators; number and sizes of drills, include rotary torque, crowd force drills, and maximum drilling depth; diameter, length, and reach of augers, bailing buckets, guide walls, templates, and roller bits; cleaning equipment including cleaning buckets, submersible pumps, or air-lifted pumps; size of de-sanding equipment and slurry pumps; soil/rock-coring sampling equipment; inspecting drilled shaft apparatus; length and diameter of tremie or size of concrete pumps; size, length, and thickness of casings; over reaming equipment; and all relevant equipment necessary to complete the drilled shaft installation. Acceptance of the installation plan by the department does not relieve the contractor responsibility to provide other equipment, if necessary, to achieve satisfactory shaft installations meeting the requirements of this special provision.

e. **Details of Sequence of Drilled Shaft Installation and Time for Construction Operations**. Include a layout of the drilled shaft installation sequence. Provide a sequential list of installation steps and a time table of operations for installing casing, sealing casing, excavation and/or drilling time, drilled shaft cleaning, rock coring, drilled shaft inspection, concrete placement. Consider the effect of construction operations of one drilled shaft onto the adjacent drilled shaft(s) and utilities and avoid construction conflicts that will affect the quality or integrity of the completed work. Indicate when and what construction sequence modifications shall be performed under atypical situations, i.e, weekend or holiday shutdowns, unanticipated shutdowns due to equipment issues, etc.

f. **Proposed Drilled Shaft Installation Procedure(s)**. Provide details of the proposed shaft installation procedures, including coring or drilling boulders, rock, obstructions or steep sloping surfaces, when required, and meeting the minimum installation requirements set forth in subsection C.3. Provide method for identification of the competent or bearing material before finalizing the excavation. Provide method for monitoring verticality of the drilled shaft walls during excavation, and details of proposed corrective measures to be implemented for shafts out of tolerance. Provide details of the methods and means of preventing displacement of the casing and/or drilled shaft during installation.

g. **Details of Slurry Operations.** Provide details of slurry type, methods to mix, circulate, de-sand, and test the slurry to comply with this special provision. Include details of procedures to prevent loss of slurry or concrete into waterways, sewers, and other areas to be protected. Provide slurry handling and disposal plan that complies with applicable state and federal regulations, as well as permit requirements.

h. **Inspection and Cleaning**. Provide methods to clean and inspect the drilled shaft excavation prior to reinforcement placement.

i. **Crosshole Sonic Logging (CSL).** Provide methods to install and secure the CSL pipes to the reinforcing cage or steel core, along with the proposed selection of pipe and size.

j. **Details of Reinforcement Steel Placement During Construction**. Include methods to ensure cage centering and cover; proper cage orientation, cage integrity while lifted during placement, number of cranes, number of lift points, and number of spreader bars; number and location of bottom and side spacers; cage support; and tie downs during concrete placement.

k. **Concrete Placement Plan**. The purpose of the Concrete Placement Plan is to ensure that a sufficient quantity of concrete is at the job site or in transit to the job site so that the entire pour can be done without delay. Include location of the concrete plant, number of trucks, estimated delivery times, estimated time between trucks, and number of trucks at the site before placement begins. Indicate the use of tremie or concrete pump lines and details of the seal to be used at the bottom end of the tremie or concrete pump line. Breakdowns of concrete plants, trucks, or traffic problems shall be considered under this Concrete Placement Plan. The contractor shall be aware of, and account for, batch, travel, and concrete placement times. Include an estimate of the concrete placement time per drilled shaft. When applicable, detail excavation to grade and finishing of the drilled shafts.

l. **Methods of Handling and Disposal of Spoil Excavation, Waste Slurry, Waste Concrete, and Drilled Shaft Cutoffs**. Present sufficient details to the engineer to evaluate the adequacy and compliance of the contractor's methods of disposal with the standard specifications, including all related environmental permits and local regulations.

m. **Other Information** requested on the plans or by the engineer.

n. **Reinforcing Steel Assembly and Installation Plan.** For shafts with a 4'-6" minimum nominal diameter and 40'-0" minimum length, prepare and submit the reinforcing steel assembly and installation plan. Reinforcing steel shop drawings, details of reinforcement placement, including bracing, centering, and lifting methods, and the method to assure the reinforcing cage position is maintained during construction, including use of bar boots and/or rebar cage base plates, and including placement of rock backfill below the bottom of shaft elevation shall comply with the pertinent requirements of the specifications.

The reinforcing steel assembly and installation plan shall include:

- Procedure and sequence of steel reinforcing bar cage assembly.
- The tie pattern, tie types and tie wire gages for all ties on permanent reinforcing and temporary bracing.
- Number and location of primary handling steel reinforcing bars used during lifting operations.
- Type and location of all steel reinforcing bar splices.
- Details and orientation of all internal cross-bracing, including a description of connections to the steel reinforcing bar cage.
- Description of how temporary bracing is to be removed.
- Location of support points during transportation.
- Cage weight and location of the center of gravity.
- Number and location of pick points used for lifting for installation, and for transport (if assembled off-site).
- Crane charts and a description and/or catalog cuts for all spreaders, blocks, sheaves and chockers used to equalize or control lifting loads.
- The sequence and minimum inclination angle at which intermediate belly rigging lines (if used) are released.
- Pick point loads at 0, 45, 60 and 90 degrees and at all intermediate stages of inclination where rigging lines are engaged or slackened.
- Methods and temporary supports required for cage splicing.
- For picks involving multiple cranes, the relative locations of the boom tips at various stages of lifting, along with corresponding net horizontal forces imposed on each crane.

C.1.4 Acceptance

The department will evaluate the Drilled Shaft Installation Plan for conformance with the requirements of these special provisions. Within 14 calendar days after receipt of the Drilled Shaft Installation Plan, the engineer will notify the contractor of the acceptance of the plan, or of additional information and/or changes required. Any unacceptable part of the Drilled Shaft Installation Plan will require resubmission. The contractor must resubmit the Drilled Shaft Installation Plan for evaluation and review with the necessary changes or additional information provided. The engineer will provide a written notice of acceptance or rejection of contractor's resubmitted Drilled Shaft Installation Plan within 14 calendar days after its receipt. The accepted contractor's Drilled Shaft Installation Plan will be subjected to trial and satisfactory performance in the field, and the engineer will grant final acceptance of the plan after its satisfactory field performance.

After assessment or reassessment of the Drilled Shaft Installation Plan has been made and the engineer has granted its acceptance, do not make any changes to the plan without written consent of the engineer.

C.3 Drilled Shaft Installation

C.3.1 General

Carry out the work in accordance to the accepted Drilled Foundation Shaft Installation Plan. The resulting installation plan shall include length of left-in-place casing, use of any temporary casing with grouting procedures, details of the constituent materials of any drilling fluid or means used for stabilization of the bottom of the excavation, the details of rock socket construction, the method of inspection, details of the concrete design mix, concreting method, the anticipated time to complete one shaft, and the pattern of construction.

Ensure that damage does not occur to the completed shafts through their working methods. Submit to the engineer a drilled shaft installation sequence. The proposed sequence and timing of shaft installation shall be such that the installation work shall not cause any damage to adjacent shafts. The shaft installation shall not commence until acceptance of the engineer has been obtained.

C.3.2 Temporary Working Surface

Use a temporary working surface to provide a level surface at the top of shafts for drilling where needed.

C.3.3 Forcible Correction

Where shafts have not been positioned within the specified limits no method of forcible correction will be permitted.

C.3.4 Records

Keep a record of all shafts installed. Give a copy of the record of the work done each day to the engineer within 24 hours of that day's work being completed. The engineer will accept the record form before drilled shaft works commence. Incorporate any comment by the engineer into the record form. Note all unexpected drilling or installation conditions in the records.

C.3.5 Method of Drilled Shaft Installation

C.3.5.1 General

The wet method shall be used to produce a sound and durable structure foundation free of defects.

Advance permanent casing through the unstable condition(s) and to the projected depth by twisting, drilling, or vibrating. Obtain prior approval from the engineer for vibrating the casing. After the casing is in place, excavate inside the casing to the projected shaft tip elevation using the wet excavation techniques described below. Clean the bottom of the excavation; test the drilling fluid for compliance with these special provisions, if applicable.

C.2.5.2 Wet Method

Use the wet installation method, or the casing installation method, for all drilled shaft locations. When using the wet method below the groundwater table, all drilled shaft operations shall be accomplished while maintaining a positive head of fluid above the water table.

When using the wet installation method, follow the following steps:

a. Drill the excavation and keep the drilled shaft always filled with fluid such as water, natural slurry, or slurry. Maintain a sufficient head of not less than 5 ft and maintain stability against heave and blow-in in the bottom of the excavation.
b. During excavation, test the properties of the fluid for compliance with these specifications, clean or desand the fluid as applicable.
c. Clean the bottom of the excavation with a bailing bucket, an airlift, a submersible pump, or other devices after the excavation is completed.
d. Just before lowering the reinforcing cage, test the fluid for conformance with the specifications.
e. Pour the concrete with a tremie pipe or a pump line extending to bottom of the excavated shaft to displace the fluid up and out of the shaft.

C.3.6 Excavations

C.3.6.1 General

Excavations required for the drilled shafts shall be performed through whatever materials encountered, of the dimensions and to the elevations shown in the plans, or as directed by the engineer. The excavation and installation method shall be suitable for the intended results and materials encountered. Blasting is not permitted.

Maintain a construction log during the drilled shaft excavation. Include on the construction log information such as ground elevation, groundwater elevation, sequence number, method of installation, machines and tools employed, drilling fluids employed, drilling times, excavated materials and their particular elevations, soil/rock-cores samples and their particular elevations, rock sockets and their elevation, bells plus their size and elevations, and all other information relevant to the excavation process that will assist the engineer in evaluating the foundation. Information shall also include proposed methods for disposal of excavated material and slurry conforming to state and local environmental regulations, codes and ordinances, the standard specifications, or as directed by the engineer.

C.3.6.2 Protection of Existing Structures

Take all reasonable precautions to prevent damage to existing structures and utilities. These measures shall include, but are not limited to, vibration monitoring or subsidence control during installation of casings, sheets, or drilling operations.

C.3.6.3 Drilled Shaft Excavation

Provide the necessary equipment to remove and dispose of all materials encountered in forming the drilled shaft excavation to the dimension and elevation as shown on the plans, or as directed by the engineer. Contractor's equipment may include, but are not limited to, augers and rotary drills. Unless otherwise shown on the plans, the drilled shaft excavations in overburden materials shall be vertical bored holes extending from the ground surface down to design tip elevation or the competent soil material, whichever is greater, where competent soil material is defined as the soil that will provide support and satisfactory performance to the structure.

In case of groundwater or severe seepage condition, with the flow of water very difficult to control, take appropriate measures including excavation with drilling fluid or excavation through a casing as indicated in the Drilled Shaft Installation Plan.

C.3.6.4 Lost Tools

Drilling tools that are lost in the excavation shall not be considered obstructions and shall be promptly removed. All costs due to removal of lost tools shall be borne by the contractor including costs associated with hole degradation during removal operations or time while the hole remains open.

C.3.6.5 Inspections and Cleanliness of Excavation

Provide the details of drilled shaft inspection and cleanliness within the Drilled Foundation Shaft Installation Plan, required by subsection C.1.3 of this specification. Provide equipment and tools for checking the dimensions and alignment of each drilled shaft excavation and coordinate schedules for inspection of the excavation with the engineer. Determine dimensions, alignment, and final depth of the drilled shafts after final cleaning. When applicable, provide visual confirmation with a camera or safe access and egress to the engineer for inspection of the drilled shaft excavation prior to placement of the rebar cage and concrete. After the drilled shaft excavation has been prepared for inspection, notify the engineer. The cleanliness and the bearing surface of the drilled shafts will be evaluated and accepted by the engineer. Unless the engineer specifies otherwise, the contractor's cleaning operation shall be considered sufficient when no more that 50 percent of the bottom area of each shaft has less than 1/2--inch of sediment or debris at the time of hole acceptance just prior to steel positioning and concrete placement. The maximum depth of sediment or any debris at any location on the bottom of the shaft shall not exceed 1 1/2-inch at the time of concrete placement.

C.3.6.6 Safety

Do not permit any worker to enter the drilled foundation shaft excavation for any reason unless a suitable casing has been installed, the water level has been lowered and stabilized below the level to be occupied, and suitable safety equipment and procedures have been provided to the personnel entering the excavation which includes OSHA certification for confined-entry-space.

C.3.6.7 Test Core

At each drilled shaft, once the excavation is completed to the required minimum shaft embedment, clean the drilled shaft of any mud, loose soils and rock. Level the shaft bottom and eliminate any protuberance of rock into the limits of the shaft. Collect a test core of the rock (beginning at the drilled shaft base level) with a core diameter of not less than 2.125-inches (NQ core) and core length of not less than 10 feet and according to ASTM D2113.

The department will verify that this rock core has a recovery of at least 50 percent throughout the length cored. If the core does not meet the above requirements, extend the core as directed by the engineer. Subsequently, extend the drilled shaft embedment to the engineer-directed level.

Rock core drilling may be performed prior to excavation of the drilled shaft provided it is extended to the necessary depths and meets the recovery requirements outlined above or as directed by the engineer. The contractor is encouraged to review the geotechnical report listed in subsection C.1.2 in order to make this determination.

After the shaft bearing level is established by the engineer, immediately grout the test core hole.

C.3.6.8 Record Information

Provide to the department the drilled shaft excavation records and report any unusual observation to the engineer within 8 hours of discovery. Submit a draft of this form for each completed drilled shaft within 24 hours of shaft completion and submit the final form within 2 weeks. Submit relevant information on a daily basis, or more frequently when variations occur, or as otherwise required by the engineer.

Report the drilled shaft construction progress in accordance with “Records and Forms” Drilled Shafts: Publication No. FHWA-NHI 18-024, GEC 010 (September 2018), Chapter 15 and Appendix E.

C.3.7 Placement of Reinforcing Steel Cage

Prior to placement of the reinforcing steel and concrete, if slurry fluid was employed during the installation of the drilled shaft, test the slurry for compliance with this specification as described in the QMP Drilled Shafts special provision. Slurry Tests shall be performed along the shaft and at the bottom of the shaft. Adjust the slurry properties as necessary to meet the specifications.

Prior to placement of the reinforcing steel and concrete, ensure that the C.3.6.5 cleanliness requirements are met.

Concrete or non-corrosive spacers shall be used at sufficient intervals not exceeding 10 feet along the reinforcement cage or the steel core. A minimum of 4 spacers shall be spaced evenly around the circumference of any shaft with a maximum space around the shaft circumference of 30 inches between any spacer (i.e., at any given level a 48-inch diameter shaft shall have 7 spacers). The first spacers shall be placed 1.5 feet from the bottom of the shaft with successive spacers at maximum intervals of 10 feet along the shaft. Spacers shall be of an appropriate diameter wheel to provide minimum clearance shown on the plans between the shaft excavation walls and the steel reinforcement.

C.3.8 CSL Access Tube Installation

Drilled shafts must be fitted with CSL test tubes to evaluate their integrity as shown on the plans.

Install the access tubes or pipes as nearly parallel and far as possible from the longitudinal bars. The number of tubes to be installed per each drilled shaft diameter is as indicated in the table below:

Drilled Shaft Diameter	Number of CSL Tubes	Tube Spacing
48-inches	4 minimum	90 degrees

Securely attach the tubes to the interior of the reinforcement cage with a minimum concrete cover of three inches. The tubes may be attached to the exterior of the cage when accepted by the engineer provided the minimum cover requirement of 3-inches over the tubes shall be maintained. In all cases, the tubes shall be as near to vertical and parallel as possible.

Extend the tubes from the bottom of the drilled shaft to at least 3-feet above the top of the drilled shaft, or 2-feet above the ground surface for shafts with cut-off below the ground surface. The tubes must be watertight and capped to prevent concrete or debris from entering during manipulation of the cage and concreting. Care must be taken during lifting and lowering the steel reinforcement so as not to damage the tubes. Fill the CSL tubes with potable water prior to concrete placement. For production shafts and upon completion of the CSL tests, remove all the water from the access tubes or drilled holes and fill them with an approved grout.

C.3.9 TIP Wire Installation

Drilled shafts must be fitted with TIP wires to evaluate their integrity as shown on the plans. Install wires and provide other accessories described in bid item Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch included in these special provisions.

C.3.10 Concrete Placement

C.3.10.1 General

Do not prime pump within the drilled shaft. Place concrete continuously once concrete placement is started. No intermediate construction or cold joints are permitted within a single drilled foundation shaft.

Test the concrete delivered to the job site for compliance with the QMP Drilled Shafts special provisions, the standard specifications and these special provisions. Record the actual volume of concrete placed against the theoretical volume vs depth at depth intervals not exceeding the shaft diameter.

C.3.10.2 Concrete Placement Time

Ensure excavation inspection occurs no later than 24 hours after excavation is complete. Place concrete within three hours after excavation inspection and approval unless otherwise directed by the engineer. If the concrete is not placed within this time frame, the excavation must be re-inspected and accepted by the engineer prior to concrete placement.

C.3.10.3 Concrete Placement by Free Fall

Concrete placement within drilled shafts by free fall is not permitted.

C.3.10.4 Concrete Placement by Tremie Pipes

Use tremie pipes to place the concrete inside the excavation. Keep the discharge end of the tremie a minimum of 7-feet below the level of the fresh concrete already placed inside the excavation to maintain a seal. The concrete shall flow into position by pressure through a steel tremie with a minimum diameter of 10-inches. Seal the bottom of the tremie using one way flap valve, before it is lowered into the wet excavation. If water/slurry enters the tremie pipe after concrete pouring has started, the tremie must be withdrawn, cleaned, resealed, and pouring restarted. If for some reason, the tremie is raised out of the fluid concrete or the concrete inside the drilled shaft drops down contaminating the tremie, completely remove and clean the tremie, then replace the seal at the bottom of the tremie and lower the tremie back as far below as possible into the already placed concrete.

C.3.10.5 Concrete Placement by Concrete Pumps

Concrete pumps and concrete lines can be used to place concrete in drilled shafts rapidly or to deliver the concrete from a distant location. However, due to the need to disassemble the pump line to allow the removal of casing sections and potential air pockets, disruption in concrete flow, the concrete pump placement directly within the shaft is not permitted on this project. The pump must discharge the concrete into a minimum 10-inch diameter steel tremie with a bottom one-way flap valve.

All pump lines and connections shall be watertight and must guide the concrete to the discharge point at the center of the rebar cage or steel core and drilled shaft excavation. The pump line may be flexible; however, inside the shaft use a minimum 10-inch diameter steel tremie pipe that can deliver the concrete in an uninterrupted manner. Keep the bottom of the tremie or discharge orifice 7-feet below the surface of fluid concrete already placed to avoid sudden jumping of the pump line out of the excavation. Concreting shall continue until over pouring is evident at the top of the drilled shaft and until dark gray concrete (acceptable concrete) can be distinguished from the drilling fluid.

C.3.10.6 Casting Level

Over pour concrete above the top of shaft cut-off level to ensure that all concrete at and below cut-off level is homogeneous and free of laitance and deleterious materials. Account for room and access requirements when cut-off level is below grade to adequately perform this task and protect adjacent ground from caving in.

C.3.11 Construction Tolerances for Individual Shafts

Drilled foundation shaft excavations or completed drilled foundation shafts constructed out of the tolerance will not be accepted. The contractor is responsible for correcting to the satisfaction of the engineer all unacceptable work. Materials, construction, work, engineering analysis, and redesign necessary to complete corrections to out-of-tolerance excavations or completed drilled shafts shall be furnished to the department without either cost or time extension for the project. Comply with the following construction tolerances:

a. The final, as constructed position of the drilled shaft shall be within a maximum of 2 inches in any direction from the theoretical position shown on the plans, unless otherwise permitted by the engineer prior to construction.

b. The vertical alignment of the drilled shaft excavation shall not vary by more than 1/16 inch per foot from plumb vertical.

c. The diameter of the installed drilled shaft shall not be less than the diameter of the drilled shaft shown on the plans. Any conflicts due to a casing that is greater in diameter than the plan shaft diameter shall be remedied by the contractor. No additional compensation or schedule time shall be granted to the contractor for resolving any conflicts due to oversized casings. Employ equipment and methods of excavation to complete the drilled shaft excavation to a planar bottom, and the cutting edges of the equipment used during the excavation shall be normal to equipment's vertical axis within a tolerance of 3/8-inch per foot. The bottom of the drilled shaft excavation shall be normal to the axis of the drilled shaft within ¾ inch per foot.

d. Tolerances outlined in sections a. to c. herein shall be checked and finally met by the contractor prior to placement of the reinforced rebar cage or steel core inside the shaft hole. Ensure the drilled shaft casing avoids conflicting with the reinforced rebar cage in adjacent shafts by ensuring that the provisions of C.3.10.b are never violated. If these provisions are violated, rectify the shaft in accordance with subsection C.3.12.

f. After the concrete is poured, the top elevation of the installed drilled shaft shall be within 1-inch of the top elevation of the corresponding drilled shaft on the plans, and the top of the reinforcing steel cage shall be within the positional tolerance shown on the plans. The center of the reinforcing cage shall be the center of the drilled shaft.

C.3.12 Non Destructive Testing Program

Perform CSL and TIP testing as specified elsewhere in the special provisions, and as directed by the engineer.

C.3.13 Acceptance for Constructed Drilled Shafts

C.3.13.1 General

Any drilled foundation shafts that are not constructed and installed in accordance to these special provisions will be rejected by the engineer. Rejected shafts shall be replaced or rectified by the contractor using methods and procedures subject to the acceptance of the engineer before beginning replacement or rectification. If required to rectify rejected shafts, shaft replacement, shaft repair, or the cost of constructing additional shafts, will be at no additional cost to the department and no additional time will be added to the contract.

In the event that a shaft or shafts are rejected, work on remaining drilled shafts in the contract cannot continue until the contractor re-visits and re-submits a revised drilled shaft installation plan and the revised plan is accepted by the engineer. The revised plan must address any construction issues that resulted in or contributed to the reason(s) for which the deficient shaft(s) were rejected. No additional time will be added to the contract for the time required to revise and accept the revised drilled shaft installation plan.

C.3.13.2 Based on Specifications

The department will only accept drilled foundation shafts that conform to these special provisions. Drilled foundation shafts and related work constructed in any manner that disregards any specified requirement will not be accepted. This includes:

a. Drilled foundation shaft excavations constructed out-of-tolerance, as specified in this specification. When repair to an out-of-tolerance shaft is possible as determined by the engineer, fix the drilled shaft to meet the tolerances before the contractor is permitted to proceed further with any drilled shaft construction. All repairs must be acceptable to the engineer before the contractor may resume the drilled shaft work.

b. Excavation of a drilled foundation shaft with slurry not conforming to the QMP Drilled Shafts special provision.

c. Drilled foundation shafts exhibiting cuttings from slurry at the drilled shaft bottom; showing soft, incomplete, or unclean bottoms; or presenting side sloughing and sedimentation at the bottom.

d. Drilled foundation shafts with honeycomb intrusions or concrete in which the fines have been washed out or water channels in concrete.

e. Horizontal discontinuity or necking in the drilled foundation shaft concrete.

f. Quarter-moon-shaped soil intrusions on the sides of a drilled foundation shaft.

g. Folded-in debris inside a drilled foundation shaft.

h. Drilled foundation shafts for which the mix design has been altered without the acceptance of the engineer, including the unauthorized addition of water to a mix design to bring it to a certain slump.

i. Drilled foundation shafts constructed in a manner where concrete placement has failed to meet the required time requirements, placement tolerances, or the methods of installation did not have the engineer’s acceptance.

j. Drilled foundation shafts constructed with concrete not meeting the minimum 28-day compressive strength requirement shown on the plans.

C.3.13.3 Based on the CSL or TIP Tests

Reports for the various tests performed elsewhere in the special provisions will be reviewed by the engineer. If the reports indicate significant anomalies or defects, the engineer will direct the contractor to core the shaft(s) at the location(s) of the defect or anomaly. The coring shall be a minimum of NX sized double tube core barrel. The engineer will determine the number of cores, length(s), location(s), and

testing methodology. If the coring or core sample testing results confirm the presence of significant anomalies or defects, the drilled shaft will be determined to be unacceptable and rejected by the engineer. Upon rejection of the shaft(s), submit a remedial action plan to the engineer for correcting the rejected work. The remedial action plan shall include detailed shaft repair or replacement procedures if necessary and will be subject to acceptance by the engineer. Any modifications to the drilled shaft, load transfer mechanisms, and elements affected by the proposed remedial actions will require calculations and working drawings and shall be made and stamped by a professional engineer, registered in the state of Wisconsin.

In the event that the engineer directs the contractor to core through the concrete and the coring and associated core sample tests confirm the presence of anomalies or defects, the cost of coring, hole closure, core sample tests, and all labor and materials to perform the accepted remedial actions shall be provided at no additional cost to the department and with no extension of the contract time originally granted.

In the event that the engineer directs the contractor to core through the concrete and the core or core sample tests do not confirm the presence of anomalies or defects, the cost of the coring, hole closure and associated testing shall be borne by the department.

Frequent defects as determined by the engineer will result in a re-evaluation of the contractor's installation procedure and, depending on the frequency and type of defect, the engineer may require the contractor to change or modify his procedure.

D Measurement

The department will measure Drilled Foundation Shaft (diameter) of individual shafts by the linear foot, acceptably completed. Longer shafts, larger shaft diameters, additional excavation, and additional concrete placed beyond the limits of the plan dimensions will not be measured for payment unless authorized and agreed to in advance of placement by the engineer.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Drilled Shaft Foundation 48-Inch	LF

Payment is full compensation for preparing all submittals, including the Drilled Foundation Shaft Installation Plan; furnishing, and installing full depth permanent casing, templates, placing and removing temporary working surfaces, drilling fluids, documentation, clearing or removal of surface obstructions, clearing or removal of known man-made or natural obstructions; drilling the shafts, handling and disposal of the excavated, augered and cored soils, and any drilling fluids; lifting and positioning the reinforcement steel cage, including any required wheel type spacers, boots, internal bracing of the reinforcement steel cage, and any other temporary lifting supports; furnishing and placing the concrete for the Drilled Foundation Shafts to the dimensions and elevations as shown on the plans, including removal of over pour concrete; and furnishing, installing and closing the crosshole logging tubes.

Reinforcement bars are measured and paid under the bid item Bar Steel Reinforcement HS Bridges.

26. QMP Drilled Shafts.

A General

This special provision describes performing work conforming to standard spec 501, 502, 701, 710, and 715 (conform to QMP Concrete Structures) except as deleted or additionally stipulated herein. This specification applies to all drilled shaft concrete placed under the following bid item:

SPV.0090.02 Drilled Shaft Foundation 48-Inch

B Materials

B.1 Concrete Mix Physical Requirements

Use high compressive strength concrete for drilled shaft construction and relatively high cement content in the concrete mix with 590 to 675 pounds of cement per cubic yard. Additives or admixtures, when they are used, shall be clearly indicated. The concrete shall be a flowable, non-segregating concrete mix that does not exhibit rapid slump loss.

Unit Weight of Concrete, AASHTO T 121: Weight must be between 140 to 160 lb/ft^3.

Fine and course aggregate shall conform to the requirements of standard spec 501.2.5 except as modified herein.

Fine aggregate shall conform to the following gradation requirements:

Sieve Size	Percent Passing (by weight)
3/8”	100
No. 4	90 – 100
No. 16	45 – 85
No. 50	5 – 30
No. 100	0 – 10
No. 200	0 – 3.5

Coarse aggregates shall conform to the following gradation requirements:

Sieve Size	Percent Passing (by weight)
1/2”	100
3/8”	85 – 100
No. 4	10 – 30
No. 8	0 – 10
No. 16	0 – 5
No. 200	0 – 1.5

Any chemical admixture(s) to be used, other than air-entraining agents or water reducers from the department approved list, must be approved in advance by the engineer and meet the requirements of AASHTO M 194, as documented by independent laboratory test reports.

The adjustment of dosage rates of concrete admixtures will be permitted without requiring a new mix design.

B.2 Slump

The trial mix design for drilled shaft concrete shall include a Slump Loss Graph, or Slump versus Time after Batching. The Slump Loss Graph of a proposed drilled shaft mix design shall illustrate the slump reducing slowly and still exceeding a 5-inch slump two hours after batching. Careful attention to concrete mix designs made with retarders must be exercised. Monitor slump to assure that all concrete placement is completed before any mix begins setting. Operations may need to be adjusted to reduce the number of shafts that are completed during a single pour event.

Adding water to a ready-mix truck is prohibited. In cases in which part of the water of the concrete mix is added at the batch plant and the remaining water is added at the job site, the amount of water to be added at the job site shall be stated on the mix design sheet carried by the ready-mix truck driver. Testing of concrete will then be conducted on the resulting mix, and further water cannot be added at any time to increase the mix slump or to bring the mix to a specific slump. If after all the water permitted in the mix design has been added and the slump is still out of these specifications, the contractor must reject the mix. Repair or replace drilled shafts of questionable concrete design mixes at no additional cost to the department.

The following table presents the ranges for the slump.

	Slump Range in Inches		
	Concrete Placed by Free Falling	Concrete Placed by Tremie	Concrete Placed by Pump
Dry Installation Method			
Uncased or Cased Excavations	7 to 9	8 to 9½	7 to 9½

Wet Installation Method

Uncased or Cased Excavations	N/A	8 to 9½	7 to 9½

B.3 Slurry

B.3.1 General

Slurry shall be a stable suspension of mineral in potable water or polymer slurry. Maintain a stable suspension at all times. Bentonite slurry shall be mineral slurry of powdered Wyoming or Dakota bentonite, with density, viscosity, and pH as specified in the table below. Polymer slurry shall be a suspension of powdered polyacrylamide or vinyl polymer with the following characteristics:

Property at 60°F Units	Mineral Slurry	Polymer Slurry	Test Method
Density in Fresh Water (lb/ft^3) [(a)]	85 max (no end bearing) 70 max (w/ end bearing)	64 max	ASTM D4380
Viscosity (sec/quart)	26 to 50	40 to 90 [(c)]	Marsh Funnel API-RPI3B-1, Sect. 2
pH	7 to 12	7 to 12	ASTM D4972
Sand Content (%) [(b)]	20 max (no end bearing) 4 max (w/ end bearing)	1 max	200 Sieve Retain

[(a)] Test for sand content as determined by the American Petroleum Institute.

[(b)] Bentonite slurry shall be disposed of offsite in an approved manner as accepted by the WDNR.

[(c)] Or per manufacturers recommendations and approved by the engineer.

The contractor may adjust the range of slurry properties when field trials and field tests show that modifications are necessary to bring the slurry to specifications.

Obtain slurry samples from the midpoint and bottom of each drilled shaft prior to the placement of the reinforcing steel. Correct the slurry as necessary to meet the specification requirements.

B.3.2 Tests

To ensure that the results are within the ranges stated in the table above, perform the following tests on the mineral slurry supplied to the drilled shaft excavation at different depths within the drilled shaft using a slurry sampler.

B.3.2.1 Wisconsin Method of Test for Density of Slurry (Mud Weight)

Density shall be measured at 68°F. This test is identical to ASTM D 4380 except that the mineral slurry to be tested shall consist of processed attapulgite or bentonite clays, and the temperature of the slurry (using a 0-105°C thermometer) shall be measured and recorded on the drilling Mud Report form.

B.3.2.2 Wisconsin Method of Test for Viscosity of Slurry

The viscosity shall be measured at 68°F or a constant temperature with the Marsh Cone Method.

B.3.2.2.1 Scope

The Marsh Funnel or Marsh Cone is used to measure viscosity of drilling fluids. This test method has been adapted from Section 2 of the American Petroleum Institute (API) Recommended Practice FM8-RP13B-1: Standard Procedure for Field Testing Water-Based Drilling Fluids (FM 8-RP13B-1). Use of a direct-reading viscometer has been eliminated.

B.3.2.2.2 Equipment

Marsh Funnel: A Marsh Funnel is calibrated to out-flow 946 mL (one quart) of fresh water at a temperature of 21 ±3°C (70 ±5°F) in 26 ±0.5 seconds. A graduated cup is used as a receiver.

Specifications:

Funnel Cone Length	305 mm (12.0 in.)
Diameter	152 mm (6.0 in.)
Capacity to bottom of screen	1500 mL
Orifice Length	50.8 mm (2.0 in.)
Inside Diameter	4.7mm (3/16 in.)
Screen	12 mesh

Has 1.6 mm (1/16 in.) openings and is fixed at a level 19.0 mm (3/4 in.)

B.3.2.3 Wisconsin Method of Test for Sand Content of Slurry

B.3.2.3.1 Scope

The sand content of mud is the volume percent of particles larger than 74 microns. It is measured by a sand-screen set. This test method has been adapted from Section 5 of the American Petroleum Institute (API) Recommended Practice 13B-1: standard Procedure for Field Testing Water-Based Drilling Fluids (RP13B-1).

B.3.2.3.2 Equipment

200-mesh sieve, 63.5 mm (2.5 in.) in diameter.

Funnel to fit sieve.

Glass measuring tube marked for the volume of mud to be added. The tube is graduated from 0 to 20 percent in order to read directly the percentage of sand.

B.3.2.3.3 Procedure

Fill the glass measuring tube with mud to the “mud” mark. Add water to the next mark. Close the mouth of the tube and shake vigorously. Pour the mixture onto the clean, wet screen. Discard the liquid passing though the screen. Add more water to the tube, shake, and again pour onto the screen. Repeat until the tube is clean. Wash the sand retained on the screen to free it of any remaining mud.

Put the funnel upside down over the top of the sieve invert. Slowly tip the assembly and insert the tip of the funnel into the mouth of the glass tube. Wash the sand into the tube by playing a fine spray of water through the screen. Allow the sand to settle. From the graduations on the tube, read the volume percent of the sand.

Report the sand content of the mud by percent volume. Report the source of the mud sample, i.e., above shaker, suction pit, etc. Coarse solids other than sand will be retained on the screen (e.g., lost circulation material) and the presence of such solids should be noted.

B.3.2.4 Wisconsin Method of Test for pH of Slurry

pH shall be measured by the Electric pH meter or pH indicator paper strips.

B.3.2.4.1 Scope

Field measurement of drilling fluid (or filtrate) pH and adjustments to the pH are fundamental to drilling fluid control. This test method has been adapted from Section 7 of the American Petroleum Institute (API) Recommended Practice 13B-1: Standard Procedure for Field Testing Water-Based Drilling Fluids (RP 13B-1).

The recommended method for pH measurement of drilling fluid is with a glass electrode pH meter. This method is accurate and gives reliable pH values, being free of interference if a high quality electrode system is used with a properly designed instrument. Rugged pH instruments are available that automatically temperature compensate the slope and are preferred over the manually adjusted instruments.

NOTE: Color matching pH paper and sticks are used for field pH measurements but are not the methods recommended. These methods are reliable only in very simple water muds. Mud solids, dissolved salts and chemicals, and dark-colored liquids cause serious errors in pH paper values. Readability is normally about 0.5 pH unit.

B.3.2.4.2 Equipment

pH meter: millivolt range potentiometer calibrated to show pH units for measuring the potential between a glass-membrane electrode and a standard “reference” electrode. The instrument is (preferred) to be water, shock, and corrosion-resistant and portable. Specifications are:

pH range: 0 to 14.

Electronics type: solid state (preferred).

Power source: batteries (preferred).

Operating temperature range: 0-66°C (32-150°F).

Readout: digital (preferred).

Resolution: 0.1 pH unit.

Accuracy: ±0.1 pH unit.

Repeatability: 0.1 pH unit.

Adjustments.

“Temperature” compensation of electrode system.

“Slope” of electrode system (preferred).

“Calibration” setting of readout. (Instrument with the above internal temperature compensation is preferred.)

Electrode system: A combination system of a glass electrode for sensing H^+ ions and a standard voltage reference electrode, constructed as a single electrode (preferred). Body of this probe should be constructed of durable material. A flat-end probe is preferred for better protection and easier cleaning of the electrode. Waterproof connection to the meter is recommended. Specifications are:

- Glass pH electrode response range: 0 to 14 pH unit.
- Electrodes: a glass electrode and a silver/silver chloride electrode in combination, having a ceramic or a plastic single or double junction.
- Electrolyte in reference electrode: KCl gel.
- Glass composition: suitable for low sodium ion error.
- Sodium ion error: at pH = 13 or at 0.1 mole Na^+ ion, an error less than 0.1 pH unit.
- Buffer solutions: three solutions to calibrate and set slope of pH meter prior to sample measurement.
    - pH = 4.0: potassium hydrogen phthalate at 0.05 molar in water. Gives 4.01 pH at 24°C (75°F).
    - pH = 7.0: potassium dihydrogen phosphate at 0.02066 molar and disodium hydrogen phosphate at 0.02934 molar in water. Gives 7.00 pH at 24°C (75°F).
    - pH = 10.0: sodium carbonate at 0.025 molar and sodium bicarbonate at 0.025 molar in water. Gives 10.01 pH at 24°C (75°F).

NOTE: Buffers may be obtained from supply houses as pre-made solution, dry-powder packages, or a given formula, but must duplicate National Bureau of Standards primary or secondary buffers. Shelf life of all buffers not to exceed six months. Date of preparation of buffer should be shown on bottles used in the field. Bottles should be kept tightly stoppered.

Distilled or deionized water: in spray bottle.

Soft tissues: to blot electrodes.

Thermometer: glass, 0-150°C (32-220°F).

Accessory equipment: Soft-bristle test tube brush: to clean electrode.

Mild liquid detergent: Ivory, or equivalent.

Electrode storage vial: to keep electrode moist.

Sodium hydroxide: 0.1 molar (approximately); to recondition electrode.

Hydrochloric acid: 0.1 molar (approximately); to recondition electrode.

Ammonium bifluoride: 10% solution (approximately); to recondition electrode.

CAUTION: This is a strong and toxic acid.

Hydrofluoric acid: ACS reagent grade.

CAUTION: This is a strong acid.

B.3.2.4.3 Procedure – pH Measurement

Obtain sample of fluid to be tested. Allow it to reach 24±3°C (75±5°F). Allow buffer solution to also reach the same temperature as the fluid to be tested.

NOTE: For accurate pH measurement; the test fluid, buffer solution, and reference electrode must all be at the sample temperature. The pH of the buffer solution indicated on the container label is the correct pH only at 24°C (75°F). If attempting to calibrate at another temperature, the actual pH of the buffer at this temperature must be used. Tables of buffer pH values at various temperatures are available from the suppliers and should be used in the calibration procedure.

Clean electrodes by washing with distilled water and blot dry. Place probe into pH 7.0 buffer.

Turn on meter; wait 60 seconds for reading to stabilize. Measure temperature of pH 7 buffer solution. Set this temperature on “temperature” knob. Set meter reading to “7.0” using “calibration” knob. Rinse probe with distilled water and blot dry.

Repeat operations using either pH 4.0 or pH 10.0 buffer. Use pH 4.0 if “acidic” sample, or pH 10.0 if “alkaline” sample is to be tested. Set meter to number “4.0” or “10.0” respectively, using “slope” adjustment knob. (If no “slope” knob exists, use the “temperature” knob to set “4.0” or “10.0” on meter). Check the meter with pH 7 buffer again. If it has changed, reset to “7.0” with “calibration” knob. Repeat procedures to ensure equipment is properly calibrated.

NOTE: Discard and do not reuse the sample of buffer solutions used in calibration. Meter should be fully calibrated every day using two buffers. Check with pH 7 buffer every three hours. If meter calibrates properly, rinse electrode with distilled water and blot dry. Place electrode in sample to be tested and stir gently. Allow 60 to 90 seconds for reading to stabilize.

Record sample pH to nearest 0.1 pH unit and the temperature of sample tested. Carefully clean the electrode in preparation for next usage. Store in vial of pH 4 buffer. NEVER let the probe tip become dry. Turn meter off and close cover to protect instrument. Avoid storing instrument at extreme temperatures (below 0°C (32°F) or above 49°C (120°F)).

Care of Electrode: Cleaning the electrode will be necessary periodically, especially if oil or clay particles coat the face of the glass electrode or the porous frit of the reference electrode. Clean electrode with a soft-bristle brush and a mild detergent. Reconditioning the electrode may be necessary if plugging becomes sever, as indicated by slow response, drifting of readings, or if “slope” and “calibration” cannot be mutually set. Recondition by soaking electrode for 10 minutes in 0.l M HCl followed by rinsing in water and soaking for 10 minutes in 0.1 M NaOH and rinsing again. Check electrode for response by performing calibration. If electrode continues to perform poorly, soak electrode for two minutes only in 10% $NH_4F \cdot HF$ solution. (CAUTION: This is strong and toxic acid). Replace electrode system if above steps fail to recondition it.

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Drilled Shafts

Costs for all sampling, testing, and documentation required under this special provision and all other associated work are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay.

27. Select Crushed Material for Travel Corridor, Item SPV.0195.01.

A Description

This special provision describes furnishing and placing select crushed material to fill voids to create a wildlife travel corridor.

B Materials

Furnish select crushed material according to the pertinent requirements of standard spec 312. Material shall be clean and substantially free from material passing the No. 4 (4.75mm) sieve.

C Construction

Place the material after the heavy riprap has been completed within the limits defined in the structure plans. Place material such that voids in the finished surface are 3 inches or less in any dimension.

D Measurement

The department will measure Select Crushed Material for Travel Corridor by the ton, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Select Crushed Material for Travel Corridor	TON

Payment is full compensation for providing, placing, and shaping the material.

ADDITIONAL SPECIAL PROVISION 1 (ASP 1)
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

TrANS is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of $5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

   Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that ___3___ *(number)* TrANS Graduate(s) be utilized on this contract.

2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of $5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

   Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that ___3___ *(number)* TrANS Apprentice(s) be utilized on this contract.

3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.

4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.

5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

II. RATIONALE AND SPECIAL NOTE

The $5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the $5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

<u>NOTE</u>: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

III. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups,

disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal

Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

(1) To increase the overall effectiveness of the State highway agencies' approved training programs.

(2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b*)* (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a*)* (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM IMPLEMENTATION

Authority

Wisconsin Department of Transportation (WisDOT) is a recipient of funds from the US Department of Transportation's Federal Highway Administration. The DBE program is a federal program applicable on all contracts administered by WisDOT that include federal-aid highway funds. The authority for the DBE program is the Transportation Bill as approved by Congress periodically. DBE program guidance and requirements are outlined in the Code of Federal Regulations at 49 CFR Part 26. This contract is subject to DBE provisions because it is financed with federal-aid-highway funds. Additionally, this contract is subject to the *State of Wisconsin Standard Specifications for Highway and Structure Construction* and all applicable contract documents.

Requirements

Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE program regulatory provisions will be considered a material breach of contract. This is nonnegotiable.

If a contractor fails to carry out the DBE program requirements and/or the Required Contract Provisions for Federal Aid Contracts (FHWA 1273) referenced in this document, sanctions will be assessed depending upon the facts, reasoning, severity, and remedial efforts of the contractor that may include: termination of contract, withholding payment, assessment of monetary sanctions, and/or suspension/debarment proceedings that could result in the disqualification of the contractor from bidding for a designated period of time.

(1) The Commitment to Subcontract to DBE (Form DT1506 or digital submittal), Attachments A, and Good Faith Effort Documentation (Form DT1202) will be submitted as described in Section 2.
(2) Any change to DBE Commitments thereafter must follow modification of DBE subcontracting commitment as described in Section 9.
(3) The Department requires this list of DBE subcontractors from all bidders at time of bid to ensure the lowest possible cost to taxpayers and fairness to other bidders and subcontractors. Bid shopping is prohibited.
(4) The contractor must utilize the specific DBE firms listed in the approved DBE Commitment to perform the work and/or supply the materials for which the DBE firm is listed unless the contractor obtains written consent in advance from WisDOT. The contractor will not be entitled to payment for any work or materials on the approved DBE Commitment that is not performed or supplied by the listed DBE without WisDOT's written consent.

Description

The Wisconsin Department of Transportation is committed to the compliant administration of the DBE Program. The DBE provisions work in tandem with FHWA 1273 and WisDOT's *Standard Specifications for Highway and Structure Construction* and *Construction and Materials Manual*. The WisDOT Secretary is signatory to assurances of department-wide compliance.

The Department assigns the contract DBE goal as a percentage of work items that could be performed by certified DBE firms on the contract. The assigned DBE goal is expressed on the bid proposal as a percentage applicable to the total contract bid amount.

(1) WisDOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned contract DBE goal by subcontracting work to a DBE firm or by procuring services or materials from a DBE firm.

(2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:

- Produce accurate and complete quotes
- Understand highway plans applicable to their work
- Understand specifications and contract requirements applicable to their work
- Understand contracting reporting requirements

(3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

1. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

a. **Assigned DBE Contract Goal:** The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.

b. **Bid Shopping:** In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.

c. **DBE:** Disadvantaged Business Enterprise – A for-profit small business concern where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations.

d. **DBE Commitment:** The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal. The prime contractor will have the option to submit the DT1506 digitally, as an entry with the bid in Bid Express, or as an attachment to the bid.

e. **DBE Utilization:** The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of the DBE Commitment, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved DBE Commitment, and those submitted after approved commitment with Attachment A.

f. **Good Faith Effort:** Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.

g. **Manufacturer:** 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.

h. **Reasonable Price:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.

i. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.

j. **Tied quote:** Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

2. WisDOT DBE Program Compliance

a. Documentation Submittal

- The Commitment to Subcontract to DBE (Form DT1506 or digital submittal) must be submitted at the time of bid (Tuesday) by all prime contractors.
- Attachments A OR quotes from all DBEs included in the Commitment must be submitted at bid (Tuesday) **OR**
- Within one-hour following bid submittal by ALL prime contractors via eSubmit (Tuesday).
- If only DBE quotes were submitted, all remaining signed Attachments A must be submitted within 24-hours of bid closing via eSubmit (Wednesday).
- If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) and supporting documentation must be submitted within 24-hours of bid closing (Wednesday) via eSubmit. Instructions for eSubmit.

**Bidders have the option of submitting the DBE Commitment at the time of bid via direct entry through Bid Express OR with attachment of Form DT1506 (Commitment to Subcontract to DBE). The DBE Commitment entered with bid is the digital form of the DT1506. Separate submission of Form DT1506 is not required if the DBE Commitment is entered in Bid Express. Form DT1202, if applicable, is no longer required to be submitted at time of bid; submit DT1202 within the 24-hour supplemental time frame following bid closing.

The DBE Office will not certify Good Faith Effort and the Bureau of Project Development will consider the bid nonresponsive if the contractor fails to furnish the DBE Commitment (digitally entered into the bid OR Form DT1506 as an attachment), Attachments A, and Form DT1202 if applicable, as required. See sample forms in the Appendix.

b. Verification of DBE Commitment

The documentation related to DBE subcontract commitment submitted prior to contract award is evaluated as follows:

(1) DBE Goal Met

If the bidder indicates that the contract DBE goal is met, the Department will evaluate the DBE Commitment submitted with bid OR Form DT1506, and Attachments A to verify the actual DBE percentage calculation. If the DBE Commitment is verified, the contract is eligible for award with respect to the DBE Commitment.

(2) DBE Goal Not Met

a) If the bidder indicates a bid percentage on the DBE Commitment that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) within 24-hours of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. The Department will review the bidder's DBE Commitment and evaluate the bidder's good faith efforts submission.

b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:

1. *Approve* the request (adequate documentation of GFE has been submitted) - no conditions placed on the contract with respect to the DBE Commitment;
2. *Deny* the request (inadequate documentation of GFE has been submitted) - the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.

c) If the Department denies the bidder's request, the contract is ineligible for award. The Department will provide a written explanation for denying the request to the bidder. The bidder may appeal the Department's denial (see Section 4).

Supplemental good faith effort documentation must be submitted through eSubmit.

3. Department's Criteria for Good Faith Effort Documentation

The Federal-aid Construction Contract Provision, referenced as FHWA-1273, explicitly states that the prime contractor shall be responsible for all work performed on the contract by piecework, station work, or subcontract.

The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of the contract including assurances of equal employment opportunity laws, DBE regulations, and affirmative action. Compliance encompasses responsible and responsive action, documentation, and good faith effort.

Contractually, all contractors, subcontractors, and service providers on the contract are bound by FHWA 1273 and DBE program provisions. **Prime contractors should encourage subcontractors to utilize DBE firms whenever possible to contribute to the assigned DBE contract goal.**

Bidders are required to document good faith effort. Per 49 CFR Part 26.53, good faith effort is demonstrated in one of two ways. The bidder:

(1) Documents that it has obtained enough DBE participation to meet the goal; OR

(2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

Appendix A of 49 CFR Part 26 provides guidance concerning good faith efforts. WisDOT evaluates good faith effort on a contract basis just as each contract award is evaluated individually.

The efforts employed by the bidder should be those that WisDOT can reasonably expect a bidder to take to actively and aggressively obtain DBE participation sufficient to meet the DBE contract goal. The Department will only approve demonstration of good faith effort if the bidder documents the quality, quantity, and intensity of the variety of activities undertaken that are commensurate with expected efforts to meet the stated goal.

The Department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort activity. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

a. Solicitation Guidance for Prime Contractors:

(1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.

(2) As needed, request assistance with DBE outreach and follow-up by contacting the Department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE_Alert@dot.wi.gov

(3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.

(4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in* Appendix B. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE firms to do work in a prime contractor's area of specialization.

i. Solicit quotes from certified DBE firms who match possible items to subcontract using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which quotes are being sought to DBE_Alert@dot.wi.gov

ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): https://www.bidx.com/wi/main, postal mail, email, fax, and phone.

a. Contractors must ask DBE firms for a response in their solicitations. See *Sample Contractor Solicitation Letter,* Appendix B. This letter may be included as an attachment to the sub-quote request.

b. Solicit quotes at least 10 calendar days prior to the letting date to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.

c. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the solicitation.

iii. Upon request, provide interested DBE firms with adequate information about plans, specifications, and the requirements of the contract by letter, information session, email, phone call, and/or referral.

iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit, or insurance if requested.

v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:

a. Email to all prospective DBE firms in relevant work areas

b. Phone call log to DBE firms who express interest via written response or call

c. Fax/letter confirmation

d. Signed copy of record of subcontractor outreach effort

b. Guidance for Evaluating DBE quotes

(1) Quote evaluation practices required to evaluate DBE quotes:

i. Reasonable Price**:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).

(2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:

i. Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, ***a discussion*** between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.

a In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

b Additional evaluation - Evaluation of DBE quotes with tied bid items. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples:

i Compare bid items common to both quotes, noting the reasonableness in the price comparison.

ii Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

See Appendix D – *Good Faith Effort Evaluation Measures* and Appendix E - *Good Faith Effort Best Practices.*

c. Requesting Good Faith Effort Evaluation At the time of bid- if the DBE goal is not met in full, the prime contractor must indicate they will file form DT1202- Documentation of Good Faith Effort within 24-hours of bid submission. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. Supporting documentation for the DT1202 is to include the following:

(1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.

(2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.

(3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.

(4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.

(5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.

(6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials

(7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

If the Good Faith Effort documentation is deemed adequate, the request will be approved and the DBE office will promptly notify the Prime Contractor and Bureau of Project Development.

If the DBE Office denies the request, the Prime Contractor will receive written correspondence outlining the reasons. The Department encourages the Prime Contractor to communicate with DBE staff to clarify any questions related to meeting goals and/or contractor demonstration of good faith efforts.

If the contract is awarded, the Prime Contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved DBE Commitment. No contractor, prime or subsequent tier, shall be paid for completing work assigned to a DBE subcontractor on an approved DBE Commitment unless WisDOT has granted permission for the reduction, replacement, or termination of the assigned DBE in writing. If a prime contractor or a subcontractor on any tier uses its own forces to perform work assigned to a DBE on an approved DBE Commitment, **they will not be paid for the work**. Any changes to DBE Commitment after the approval of the DBE Commitment must be reviewed and approved by the DBE Office prior to the change (see Section 9).

Additional resources for demonstrating and tracking good faith effort can be found on the “Contracting with a DBE” webpage in the ASP-3 and Good Faith Effort Guidance section.

4. Bidder's Documentation of Good Faith Effort Evaluation Request Appeal Process

A bidder can appeal the Department's decision to deny the bidder's demonstration of Good Faith Effort through Administrative Reconsideration. The bidder must provide a written justification refuting the specific reasons for denial as stated in the Department's denial notice. The bidder may meet in person with the Department if so requested. Failure to appeal within 5 business days after receiving the Department's written notice denying the request constitutes a forfeiture of the bidder's right of appeal. Receipt of appeal is confirmed by email date stamp or certified mail signed by WisDOT staff. A contract will not be executed without documentation that the DBE provisions have been fulfilled.

The Department will appoint a representative who did not participate in the original good faith effort determination, to assess the bidder's appeal. The Department will issue a written decision within 5 business days after the bidder presents all written and oral information. In that written decision, the Department will explain the basis for finding that the bidder did or did not demonstrate an adequate good faith effort to meet the contract DBE goal. The Department's decision is final.

5. Determining DBE Eligibility

Directory of DBE firms

a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx

b. The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.

c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

6. Counting DBE Participation

Assessing DBE Work

The Department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the UCP agencies. The Department only counts the value of the work a DBE actually performs towards the DBE goal. The Department assesses the DBE work as follows:

a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.

b. The Department counts fees and commissions the DBE subcontractor charges for providing bona fide professional, technical, consultant, or managerial services. The Department also counts fees and commissions the DBE charges for providing bonds or insurance. The Department will only count costs the program engineer deems reasonable based on experience or prevailing market rates.

c. If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.

d. The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.

e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.

f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it is committing/contracting the DBE to do. Note that the Department encourages the Prime Contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

g. The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment A forms for additional DBE firms.

h. See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE_Alert@dot.wi.gov

*Note: A sublet request is required for DBE work, regardless of subcontract tier, and also for reporting materials or supplies furnished by a DBE.

- Sublet Requests via form DT1925 or WS1925 are required for 1st Tier DBEs
- For all 2nd Tier and below notification of DBE sublet is indicated by the contractor entering them in CRCS

7. Credit Evaluation for Trucking

All bidders are expected to adhere to the Department's current trucking policy posted on the HCCI website at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

The prime contractor is responsible for ensuring that all subcontractors including trucking firms, receive Form FHWA 1273: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf

See Section 8 for Broker credit.

8. Credit Evaluation for Manufacturers, Suppliers, Brokers

The Department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The Department will count the material and supplies that a DBE firm provides under the contract for DBE credit based on whether the DBE firm is a manufacturer, supplier, or broker. Generally, DBE credit is determined through evaluation of the DBE owner's role, responsibility, and contribution to the transaction. Maximum DBE credit is awarded when the DBE firm manufactures materials or supplies. DBE credit decreases when the DBE firm solely supplies materials, and minimal credit is allotted when the DBE firm's role is administrative or transactional. It is the bidder's responsibility to confirm that the DBE firm is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506 or DBE Commitment submitted with the bid.

a. Manufacturers

(1) 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 the general character described by the specifications.

(2) If the materials or supplies are obtained from a DBE manufacturer, **100%** percent of the cost of the materials or supplies counts toward DBE goals.

b. Regular Dealers of Material and/or Supplies

(1) 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 of the general character described by the specifications

and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.

(3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:

i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

(4) When DBE suppliers are contracted, additional documentation must accompany the DBE Commitment and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with documentation of the calculations used as the basis for the purchase agreement, subcontract, or invoice. WisDOT recognizes that the amount on the Attachment A form may be more or less than the amount on the invoice per b.(1) above.

i. The bidder should respond to the following questions and include with submission of form DT1506 or the DBE Commitment entered with bid:

a. What is the product or material?

b. Is this item in the prime's inventory or was the item purchased when contract was awarded?

c. Which contract line items were referenced to develop this quote?

d. What is the amount of material or product used on the project?

(5) Supplies purchased in **bulk** from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.

i. To ensure that the appropriate credit is assigned, follow the procedure below:

a. When DBE suppliers are contracted for bulk supply or commodity purchases, an invoice or bill-of-sale that includes names of the contractor and the DBE supplier should be submitted to the DBE Office via eSubmit (preferred during letting) or the DBE_Alert email box. The supply/commodity credit may be applied during the federal fiscal year (October- September) in which the purchase was made.

b. When the contractor intends to apply the credit to a particular project, submit a copy of the original invoice, documentation of the calculations for supplies/commodities to be used on the project, and an Attachment A. Indicate on the Attachment A:

c. This supply/commodity is in the prime's inventory or pre-paid in case of commodities

d. The full value of the original invoice submitted to the DBE Office, above in (1)

e. The amount of material or product used on this project

f. Fuel estimate listed on Attachment A will be recorded as a deduction from the full fuel purchase amount shown on the invoice

ii. DBE Office Process (Applies only to bulk purchases)

a. Supply/Commodity commitment is received

b. Engineer verifies amount listed on invoice and enters the full amount into spreadsheet

c. The amount of credit applied for each project is updated on the spreadsheet until the bulk purchase is exhausted

d. Engineer informs contractor when full amount of bulk purchase has been applied

c. Brokers, Transaction Expediters, Packagers, Manufacturers' Representatives

(1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.

(2) Brokerage fees are calculated as **10%** of the purchase amount.

(3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site.

(4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

9. DBE Commitment Modification Policy (Formerly "DBE Replacement Policy")

a. Issuing a Contract Change Order

Any changes or modifications to the contract once executed are considered contract modifications and as such require a change order. In addition, the DBE office must provide consent for reduction, termination, or replacement of subcontractors approved on the DBE Commitment *in advance* of the modification for the prime contractor to receive payment for work or supplies. Additions to the DBE Commitment do not require advance notification of the DBE office. (see below e. DBE Utilization beyond the approved DBE Commitment)

b. Contractor Considerations

(1) A prime contractor cannot modify the DBE Commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DBE Commitment without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

(2) If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.

(3) The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.

(4) In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason, or is terminated from a contract, the Prime Contractor must undertake efforts to maintain its commitment to the assigned DBE goal.

(5) The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.

i. Before the Prime Contractor can request modification to the approved DBE Commitment, the Prime Contractor must:

a. Make every effort to fulfill the DBE Commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor's expectations for successful performance on the contract. Document these efforts in writing.

b. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor's intent to request to modify the Commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.

c. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who has been approved for DBE credit on a contract, including preparation and coordination efforts.

d. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, to respond, in writing. EXCEPTION: The Prime Contractor must provide a verifiable reason for a response period shorter than five days. For example, a WisDOT project engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.

e. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

c. Request to Modify DBE Subcontracting Commitment

The written request referenced above may be delivered by email or fax. The request must contain the following:

(1) Project ID number

(2) WisDOT Contract Project Engineer's name and contact information

(3) DBE subcontractor name and work type and/or NAICS code

(4) Contract's progress schedule

(5) Reason(s) for requesting that the DBE subcontractor be replaced or terminated

(6) Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, MODIFICATION" Email: DBE_Alert@dot.wi.gov + Project Engineer

WisDOT will review the request and any supporting documentation submitted to evaluate if the circumstance and the reasons constitute good cause for replacing or terminating the approved DBE subcontractor.

Good Causes to Replace a DBE subcontractor according to the federal DBE program guidelines {49 CFR part 26.53}

- The listed DBE subcontractor fails or refuses to execute a written contract
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215, and 1,200 or applicable state law
- The prime has determined that the listed DBE subcontractor is not a responsible contractor
- The listed DBE subcontractor voluntarily withdraws from the project and provides written notice of its withdrawal
- The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required

- A DBE firm owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract.

d. Evaluation and Response to the Request

WisDOT's timely response to the Prime Contractor's request for modification of the approved DBE Commitment will be provided to the prime and the WisDOT project engineer via email.

If WisDOT determines that the Prime Contractor's basis for reduction in participation, replacement, or termination of the DBE subcontractor is not consistent with the good cause guidelines, the DBE office will provide a response via email within 48-hours of receipt of request from the Prime Contractor as indicated by email time stamp. The communication will include: the requirement to utilize the committed DBE, actions to support the completion of the contractual commitment, a list of available WisDOT support services, and administrative remedies, including withholding payment to the prime, that may be invoked for failure to comply with federal DBE guidelines for DBE replacement.

The WisDOT contact for all actions related to modification of the approved DBE Commitment is the DBE Program Engineer who can be reached at DBE_Alert@dot.wi.gov or (414) 335-0413.

e. DBE Utilization beyond the approved DBE Commitment

When the prime or a subcontractor increases the scope of work for an approved DBE subcontractor or adds a DBE subcontractor who was not on the approved form DT1506 or DBE Commitment submitted with bid at any time after contract execution, this is referred to as voluntary DBE contract goal achievement. The contractor must follow these steps to ensure that the participation is accurately credited toward the DBE goal:

(1) Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DBE Commitment based on the email/discussion and the new Attachment A.

(2) When adding to an existing DBE Commitment, submit a new Attachment A to the DBE Alert mailbox

(3) OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete"

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, New Attachment A" Email: DBE_Alert@dot.wi.gov

Special note on trucking

- DBE truckers added to the sublets in CRCS *will* be approved without DBE credit (You will see a "N" in CRCS instead of "Y")
- Prime Contractors may enter a "place holder" e.g. $1000.00, for DBE Trucking in CRCS if the full amount of trucking is unknown for sublet purposes only
- The hiring contractor may obtain the Attachment A with DBE signature included but the **Prime Contractor** must sign the Attachment A before submitting
- DBE truckers need to be added to the DBE commitment once. If the DBE trucker is on the initial commitment (DT1506/E1506) there is no requirement to submit another Attachment A for that trucker for that contract.

10. Commercially Useful Function

a. Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.

b. The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.

c. A DBE firm is performing a commercially useful function if the following conditions are met:

(1) For contract work, the DBE is responsible for executing a distinct portion of the work and is carrying out its responsibilities by actually performing, managing, and supervising that work.

(2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

d. Offsite Hauling – when DBE truck will haul between a pit and plant or location other than the construction site associated with the commitment

(1) Indicate Offsite Hauling on Attachment A

(2) Discuss offsite hauling at weekly progress meetings with Project Engineer (PE)

(3) PE conducts spot checks of pits/plants to verify DBE truck is hauling and/or verifying hauling log

(4) Prime should be prepared to submit haul tickets, plant/pit tickets, timecards, and other pertinent documentation if requested by PE or DBE Office

11. Credit Evaluation for DBE Primes

WisDOT calculates DBE credit based on the amount and type of work performed by DBE certified firms for work submitted with required documentation. If the prime contractor is a DBE certified firm, the Department will only count the work that the DBE prime performs with its own forces for DBE neutral credit. The Department will also calculate DBE credit for work performed by any other DBE certified subcontractor, DBE certified supplier, and DBE certified manufacturer on the contract in each firm's approved NAICS code/work areas that are submitted with required documentation. Crediting for manufacturers and suppliers is calculated consistent with Section 8 of this document and 49 CFR Part 26.

12. Joint Venture

A joint venture is an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest. If a DBE performs as a participant in a joint venture, the Department will only credit the portion of the total dollar value of the contract equal to the portion of the work that the DBE performs with its own forces.

13. Mentor-Protégé

a. If a DBE performs as a participant in a mentor-protégé agreement, the Department will credit the portion of the work performed by the DBE protégé firm.

b. DBE credit is evaluated and confirmed by the DBE Office for any contracts on which the mentor-protégé team identifies itself to the DBE Office as a current participant of the Mentor-Protégé Program.

(1) DBE credit may only be awarded to a non-DBE mentor firm for using its own protégé firm for less than one half of its goal on any contract; and

(2) Not award DBE credit to a non-DBE mentor firm for using its own protégé firm for more than every other contract performed by the protégé firm.

c. A DBE protégé firm may be eligible for conditional NAICS code extension for training with the mentor. Request permission from the DBE Office- Certification area.

d. Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

14. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE subcontractor, a prime contractor, and the regular dealer or materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE firm in cases where the DBE subcontractor and materials have been approved for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE firm is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE firm must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

a. The Prime Contractor must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.

(1) Request should be made when the DBE Commitment or the Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.

(2) Approval/Permission must be granted prior to the issuance of any joint checks.

(3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.

(4) The joint check for supplies must be strictly for the cost of approved supplies.

b. The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an ‘extra participant’ in the transaction. The DBE firm’s role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor’s tasks should include the following:

(1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price, and delivery of materials.

(2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.

c. The Prime contractor/payor acts solely as a guarantor.

(1) The Prime Contractor agrees to furnish the check used for the payment of materials/supplies under the contract.

(2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractor’s negotiated unit price.

15. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

Appendix A
Substantive Conversation Guidelines

The substantive conversation is critical to all bidders' demonstration of good faith effort to meet the DBE goal prior to bid opening. Relationship building between primes and subcontractors is crucial to DBE goal attainment. Responsible bidders seek to build rapport with potential DBE subcontractors to understand capacity, areas of expertise, and assess contracting feasibility. Bidders who compete for WisDOT contracts are specialty contractors responding to a growing and changing contract environment. Just as these specialists are responsible for care of the roads, they are likewise responsible for contributing to the health of the industry. The substantive conversation drives collaboration that will build industry health and capacity. The following is intended to provide guidance for such discussions but is not an exhaustive list. Contractors are encouraged to incorporate their existing strategies for cultivating business relationships as well.

<u>Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released weeks prior to each Let)</u>

1. Determine DBE subcontractor's interest in quoting
2. If response indicates inexperience with quoting- offer support/assistance to the DBE in understanding the industry including fundamentals a subcontractor needs to know, required reading and/or resources.
3. Assess their interest and experience in the road construction industry by asking questions such as:

- Have you competed for other WisDOT contracts? Ratio of competed/to wins
- Have you performed on any transportation industry contracts (locally or with other states)?
- What the largest contract you've completed?
- Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
- Does this project fit into your schedule? Are you working on any contracts now?
- Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
- What region do you work in? Home base?
- Which line items are you considering?
- Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
- Do you understand where your work fits in the project schedule, project phases?

<u>Following Bid Opening- this discussion can happen at any time</u>

1. After reviewing their quote, note the following in your discussion:

- Does the quote look complete? Irregular?
- Are there errors in the quote? Are items very high or very low?
- In general, does the quote look competitive?

2. Questions and Advice for the bidder to share with the potential DBE subcontractor:

- What line items would typically be in a competitive quote for a subcontractor of their specialty?
- How many employees and what is their role/experience/expertise in your firm?
- Do you have resources for labor (union member, family-based, community-resourced) and capital (banking relationship, bond agent, CPA)?
- Where have you worked: cities, states, government, commercial, residential/private sector, etc. Explain similarities or differences.
- Refer them to reliable, trusted, industry resources that can educate or connect them to relevant resources, education/certification resources, more appropriate contract opportunities.
- Discussion about prime contract and subcontract liability, critical path items, contract quantities, schedule risks, and potential profit/loss (for upcoming known projects or in general).
- Discussion of bonding, insurance, and overall business risk considerations.

Appendix B

Sample Contractor Solicitation Letter Page 1

(This sample is provided as a guide, not a formatting requirement)

DBE Solicitation - [Month] [Day], [Year] WisDOT Bid Letting

Attention all DBEs. [Prime Contractor] is actively seeking your quote for the [Month][Day], [Year] Bid Letting. [Prime Contractor] is considering bidding on the projects listed on page 2 as a prime contractor. Please see page 2 for instructions and the sub-contractable opportunities for each proposal.

Does [Prime Contractor] accept quotes in areas we might self-perform? Yes, we do! We support this federal rule and (if needed) we consider areas we might self-perform an opportunity to provide in the field assistance and training if we award your quote.

Where can DBEs find the plans, specifications & addenda? Please visit [Prime Contractor's] plan room [LINK] or on WisDOT's Highway Construction Contract Information HCCI website: Wisconsin Department of Transportation Highway Construction Contract Information (wisconsindot.gov). This same website can be checked for the contract status.

What should your quote include? All the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should also note items that you are DBE certified to perform, tied items, and any special terms. Please use page 2 as your cover sheet for your quote.

Do you have a question regarding bonding, credit, insurance, equipment, or supplies/materials? We welcome all DBE questions! Please call [Prime Contractor] and ask to speak with [Contact]. [Prime Contractor] can provide basic information as well as a referral to a trusted industry partner for insurance and bonding needs.

When are quotes due?

[Month] [Day], [Year] at [Time]. We accept quotes via SBN, email, or fax. Please make every effort to have your quotes in by this time or earlier. Quality check your quote so it includes the correct letting date, project ID, proposal number, unit price and extension.

Who can DBEs contact for questions, information, clarification or for a quote evaluation? [Project Manager Name] [Phone] [Email]. If you are quoting [Prime Contractor] for the first time, we encourage you to come meet with us in person to discuss the project. Our office hours are 7:30 a.m. – 5:00 p.m. On bid day, we are in the office by 6:30 a.m.

Why partner with [Prime Contractor]?

DBE partnership is a core part of [Prime Contractor's] mission. Including DBEs at the beginning of each project is essential in the success of each project. We consider DBEs to be important industry partners who bring dedication and knowledge at various stages during construction. We are proud to be an industry leader with our DBE partnership. Your success as a DBE is our success.

Sample Contractor Solicitation Letter Page 2

(This sample is provided as a guide, not a formatting requirement)

REQUEST FOR QUOTE

[Prime Contractor]
Letting Date: [Month] [Day], [Year]
Project IDs: 1234-56-00 (Proposal #1) & 1234-01-78 (Proposal #6)

Please check all that apply:
____Yes, we will be quoting the projects & items listed below
____ No, we are not interested in quoting on the letting or its items referenced below
____ Please take our name off your monthly DBE contact list
____ We have questions about quoting this letting. Please have someone contact me at this number:

Prime Contractor Contact:_____ DBE:_____
Phone:_____ Fax:_____
Email:_____

Please circle the proposals and items you will be quoting below and contact us with any questions

Proposal **County**	**1** **Dane County**	**6** **Crawford County**
Clearing & Grubbing	**X**	**X**
Dump Truck Hauling	**X**	**X**
Curb/Gutter/Sidewalk	**X**	
Erosion Control Items		**X**
Excavation	**X**	**X**
Pavement Marking		**X**
Traffic Control	**X**	
Sawing	**X**	**X**
QMP, Base		**X**
Pipe Underdrain	**X**	
Landscape		**X**
Beam Guard	**X**	
Electrical	**X**	
Signs/Posts/Markers		**X**
Survey/Staking		**X**

Again, please make every effort to have your quotes into our office by time deadline prior to the letting date.

Sample Contractor Solicitation Email - Simplified

(This sample is provided as a guide, not a formatting requirement)

ATTENTION DBEs

- **[Prime Contractor] specializes in municipal projects in the XX Region(s)**
- **We have successfully competed for *and* completed XX WisDOT projects over the past XX years**
- **Consider [Prime Contractor] your partner on WisDOT Projects**

[Prime Contractor] is seeking *your* subcontractor quote for the XX/XX/20XX WisDOT bid letting on the below projects:

Project	Proposal	County	Region
1234-56-00	**2**	**Dane**	**SW**
1234-01-78	**6**	**Crawford**	**SW**

- Please review the attachments **[attach Solicitation Letter]** and respond with your intent to quote (or not) along with the work items you are interested in performing and respond via fax or email by ***date***. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Please include labor, equipment, material, and related bonding or insurance.

- If you have any questions regarding bonding, credit, insurance, equipment and/or materials/supplies, please feel free to call [Prime Contractor] and ask for [Contact]. **(Include if your company is willing to answer these types of DBE questions)**

- Plans and Specifications can be found: **WisDOT HCCI Website: List webpage where plans are located**

- If you do choose to quote, please make every effort to have your quote into our office by ***time and date.*** Make sure the correct letting date, project number, unit price and extension are included in your quote.

- Should you have questions regarding the mentioned project, please call our office at (414) 555-5555 and we will direct you to the correct estimator/project manager.
  Our office hours are 7:30 a.m. - 5:00 p.m.

Thank you – we look forward to working with your company on this project!

Prime Contractor
Project Manager
Direct: 414-555-5555
Cell: 414-555-5556

Sample Contractor Solicitation Email to non-DBE WisDOT Subcontractors - Simplified

(This sample is provided as a guide, not a formatting requirement)

ATTENTION WisDOT SUBCONTRACTORS

[Prime Contractor] is considering bidding on the below projects for the XX/XX/20XX WisDOT Bid Letting:

Project	Proposal	County	Region	DBE Goal
1234-56-00	2	Dodge	SW	6.00%
1234-01-78	11	Adams	NC	3.00%
1234-00-99	20	Buffalo	NW	5.00%
1234-00-98	33	Portage	NC	6.00%

The above projects have DBE goals and [Prime Contractor] is committed to DBE inclusion with every project. As such, we are requesting:

- All WisDOT Subcontractors to **solicit and utilize** DBEs in your quotes.
- DBE participation can be achieved through purchasing materials from DBE suppliers, using DBE subcontractors and/or DBE trucking firms or any combination of these.
- If there is an opportunity to untie an item in your quote so a DBE can be utilized, please look for those opportunities as well.
- Your quote will be evaluated based on the amount of DBE participation your company is able to provide when compared to other quotes for the same work.

If you do choose to quote, please make every effort to have your quote into our office by **time and date.** Please submit all quotes to [Email]. Make sure the correct letting date, project number, unit price and extension are included in your quote.

Should you have questions regarding the mentioned project, the Project Manager contact is: [Name] [Phone Number] [Email]

Thank you for utilizing DBEs who are trusted industry partners with WisDOT projects.

Prime Contractor
Project Manager
Direct: 414-555-5555
Cell: 414-555-5556

Appendix C
Small Business Network (SBN) Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
    a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for later completion.
2. Create sub-quotes for the subcontracting community:
    a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
    b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
    c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE preferred request.
    d. Add attachments to sub-quotes.
3. View sub-quote requests & responses:
    a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
    b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. View Record of Subcontractor Outreach Effort:
    a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
    b. Easily locate pre-qualified and certified small and disadvantaged businesses.
    c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
    d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. The DBE will provide free SBN accounts to DBEs when requested. Use DBE_Alert@dot.wi.gov to request an account. **DBE firms can:**

1. View and reply to sub-quote requests from primes:
    a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
    a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
    b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes. c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
    a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
    a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
    b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
    c. Add attachments to a sub-quote.
    d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
    a. Receive a confirmation that your sub-quote was opened by a prime.
    b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
    c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
    a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select “Order Bid Express.” The Small Business Network is a part of the Bid Express Basic Service.

Appendix D

Good Faith Effort Evaluation Measures *by categories referenced in DBE regulations*

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met or if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- Review and response to DBE quotes including provision of information about plans, specifications,and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's 30%
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (*points added for each day prior to letting*)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- Evidence of negotiation with the DBE firm about current and future Let opportunities
- Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements

GFE Evaluation Rubric – Phase 1 – Initial Review

DT1202	Examples	Rating	OBOEC Feedback
Solicitation Documentation	Identify all reasonable and available activities performed to solicit the interest of all certified DBEs who have capacity and ability to perform work on the project. *Such as: Updated solicitation letter and email, timely solicitation, and follow-up, and/or utilized various methods to communicate solicitation (ex: letter, email, publication, posting and/or website)*		
Selected Work Items Documentation	All work items are broken out into economically feasible units to facilitate DBE participation. *Such as: Selected work items are specific to each proposal and clearly identified in all solicitation(s)*		
Documentation of Project Information provided to Interested DBEs	Provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation. *Such as: Project information is clearly identified in all solicitation(s)*		
Documentation of Negotiation with Interested DBEs	Provide sufficient evidence demonstrating that good faith negotiations took place during the bid letting. *Such as: Documented attempts with DBEs or on behalf of DBEs to increase DBE participation*		
Documentation of Sound Reason for Rejecting DBEs	Provide sufficient evidence demonstrating that DBEs are rejected for sound reasons. *Such as: Detailed and thoughtful analysis that considers both the percentage and dollar difference when rejecting a DBE including past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, and other tangible factors.*		
Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials	Documented assistance in both solicitation(s) and outreach to DBEs.		
Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support	Effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well participation in activities that support DBE business development. *Such as: Variety of activities that translate into meaningful DBE participation*		
Documentation of other GFE activities	*Such as: Used DT1202 Excel Workbook, Diversity & Inclusion company policy, Mentor-Protégé participant, awarded neutral DBE after bid submission, included company GFE overview/strategy information and/or company website highlights DBE opportunities and participation*		
Overall Demonstration of GFE			

GFE EVALUATION RATING LEGEND – PHASE 1 – Initial Review

Documentation provided by bidder is evaluated and rated on the rubric. Bidders should include activities characterized by the following types of effort:

ACTIVE & AGGRESSIVE: Demonstrated through engaged and assertive activity
QUALITY: Demonstrated through essential character of conscientious and serious activity
QUANTITY: Demonstrated through a measurable number of activities
SCOPE & INTENSITY: Demonstrated through a rigorous approach to an appropriate and purposeful range of activities
TIMING: Demonstrated through engagement efforts beyond simple solicitation, initiated early in the process

GFE EVALUATION – PHASE 2 – Team Review

GFE Team completes:

- Review of activities included on the rubric
- Review of the intent to award and sound reasoning submitted by Prime
- Bid analysis to confirm if any bid submitted met the DBE goal
- Review average of other bidders DBE goal achievement
- Team review of combined efforts documented in Phase 1 and 2 constitute final GFE determination

Rating Scale:

- **GFE Approval:**
  Bona Fide = 6 or more categories color coded green.
  Genuine effort characterized by sincere and earnest activities – "Solicitation" and "Sound Reasoning" must be green

- **GFE Approval:**
  Sufficient = 5 or more categories color coded green or yellow
  Adequate effort documented with a variety of quality activities – "Solicitation" and "Sound Reasoning" must be green or yellow

- **GFE Denial:**
  Pro Forma efforts = 4 or less categories color coded green or yellow. Perfunctory effort characterized by routine or superficial activities

Green = Exceeds expectations
Yellow = Meets expectations
Red = Areas in need of attention and/or absence of documentation **See OBOEC Rubric Analysis_Feedback**

Excerpt from Appendix A to 49 CFR Part 26:
V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed

GFE RUBRIC ANALYSIS	
OBOEC DECISION	APPROVAL OR DENIAL
Prime Contractor	
Proposal	
Project	
Bid Letting	
DBE Goal Amount	
DBE Goal Amount Achieved	
Bid Analysis	
Goal %	Achieved %
Apparent Low Bidder	%
Bidder B	
Bidder C	
Average of OTHER Bidders (Not including Apparent Low Bidder)	
DBE Quotes Received	
DBE Quotes Awarded	
DBE Quote(s) Rejected	**Rejected Quote Analysis**
DBE Quote(s) Awarded	**Awarded DBE Amount**

Appendix E
Good Faith Effort Best Practices

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance.
- Participate in speed networking and mosaic exercises as arranged by DBE office.
- Host information sessions not directly associated with a bid letting.
- Participate in a formal mentor protégé or joint venture with a DBE firm.
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Facilitate a small group DBE 'training session' clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Quality of communication, not quantity creates the best results. Contractors should be thorough in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs.
- Participate on advisory and mega-project committees.
- Sign up to receive the DBE Contracting Update.
- Consider membership in relevant industry or contractor organizations.
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

Appendix F
Good Faith Effort Evaluation Guidance
Appendix A of 49 CFR Part 26

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract for procuring construction, equipment, services, or any other purpose, a bidder must, in order to be responsible and/or responsive, make sufficient good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, Part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, you have the responsibility to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made, based on the regulations and the guidance in this Appendix.

The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call. Determinations should not be made using quantitative formulas.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. (1) Conducing market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.

(2) The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. (1) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.

(2) A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, State, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

VI. A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.

[79 FR 59600, Oct. 2, 2014]

Appendix G

(SAMPLE) Forms DT1506 and DT1202

Official Form DT1506 can be found here: https://wisconsindot.gov/Documents/formdocs/dt1506.pdf

Clear

Wisconsin Department of Transportation

COMMITMENT TO SUBCONTRACT TO DBE

DT1506 12/2021 s.84.06(2) Wis. Stats.

☐ Non-Traditional Project

Project ID: ______

Proposal # ______

Prime Contractor: ______

County: ______

Letting Date: ______

Total $ Value of Prime Contract: $ ______

DBE Contract Goal: ______ %

DBE Goal Achieved: 0.00 %

This contract requires that a specified percentage of the work be subcontracted to a disadvantaged business enterprise and that this information be submitted as described in ASP-3. The submittal of this form with the bid proposal constitutes your DBE commitment. Include Attachment A for DBEs included on commitment.

This form must be completed and returned for this proposal. See page 2 for instructions.

1. DBE Firm	2. Work or Items to be subcontracted	3. Supplier Y/N	4. Trucking Only	5. DBE Full Subcontract $	6. DBE Amount for Credit $
			O# L#		
			O# L#		
			O# L#		
			O# L#		
			O# L#		
			O# L#		
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			O# L#		
			O# L#		
				$ 0.00	$ 0.00

Government Use Only Approved Amounts		
A =	$	%
V =	$	%
Total =	$	%

Signature:

Date:

Good faith effort approved: Yes ☐ No ☐

______

Prime Representative Signature & Date

______

DBE Office Signature & Date Approved

COMMITMENT TO SUBCONTRACT TO DBE
ATTACHMENT A

CONFIRMATION OF PARTICIPATION

Project I.D.:	Proposal Number:
Letting Date:	

Name of DBE Firm Participating in this Contract:	
Name of the Prime/Subcontractor who hired the DBE Firm: *(list all names of tiers if more than one)*	
Type of Work or Type of Material Supplied:	
Total Subcontract Value:	Total DBE Credit Value:

FOR PRIME CONTRACTORS ONLY: I certify that I made arrangements with the participating DBE firm to perform the type of work listed or supply the material indicated above for the subcontract value listed above.	Prime Contractor Representative's Signature
	Prime Contractor Representative's Name (Print Name)
	Prime Contractor (Print Company Name)
	Date

FOR PARTICIPATING DBE FIRMS ONLY: I certify that I made arrangements with the Prime Contractor or the Hiring Contractor to perform the type of work or supply the material indicated above for the subcontract value listed above.	Participating DBE Firm Representative's Signature	Date
	Participating DBE Firm Representative's Name (Print Name)	
FOR DBE TRUCKING FIRMS ONLY: I certify that I will utilize, for DBE credit, only trucks listed on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks as listed below.	Participating DBE Firm (Print Company Name)	
	DBE Firm's Address:	

# Owned Trucks	# Leased Trucks	# DBE-Owned Leased Trucks	# Non-DBE-Owned Leased Trucks

☐ Off site Hauling

Official Form DT1506 can be found here: https://wisconsindot.gov/Documents/formdocs/dt1506.pdf

DOCUMENTATION OF GOOD FAITH EFFORT

Wisconsin Department of Transportation
DT1202 3/2020

Project ID	Proposal No.	Letting
Prime Contractor		County
Person Submitting Document		Telephone Number
Address		Email Address

All bidders must undertake necessary and reasonable steps to achieve the assigned DBE contract goal per federal regulatory guidance at 49 CFR Part 26. Bidders use this form to document all efforts employed to meet the assigned goal as a record of contractor good faith efforts (GFE). Refer to ASP3 or 49 CFR Part 26 for guidance on actions that demonstrate good faith effort.

It is critical to list all efforts, attach documentation, and follow the instructions to complete this submission. Documentation of good faith effort includes copies of each DBE and non-DBE subcontractor quote submitted to the bidder for the same line items. Utilize the sample documentation logs to document and organize efforts.

Submit good faith effort documentation per ASP-3 guidelines.

Instructions: Provide a narrative description of all activities pursued to demonstrate good faith efforts, any corresponding documentation, and applicable explanation on separate pages. Include the following items, organized in the order listed below.

1. **Solicitation Documentation:**
   - a. **Purpose:** To identify all reasonable and available activities the bidder performed to solicit the interest of all certified DBEs who have the capacity and ability to perform work on the project. All solicitation efforts should begin as early as possible to ensure DBEs have ample time to respond and ask questions.
   - b. **Action:** Identify and list all activities engaged in to solicit DBEs using all reasonable and available means such as written notice and follow-up communications; substantive conversations; pre-bid meetings; networking events; market research; advertising.
2. **Selected Work Items Documentation:**
   - a. **Purpose:** To ensure that all work items are broken out into economically feasible units to facilitate DBE participation. This must occur even when you prefer to perform the work yourself.
   - b. **Action:** Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
3. **Documentation of Project Information provided to Interested DBEs:**
   - a. **Purpose:** To provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.
   - b. **Action:** Provide DBEs access to plans, specifications, and other contract requirements. Early solicitation allows ample opportunity to provide project information, links to Let advertisements, and substantive engagement with DBEs.

4. **Documentation of Negotiation with Interested DBEs:**
   a. **Purpose:** To ensure that negotiations with interested DBEs were made in good faith providing evidence as to why agreements could not be reached for DBEs to perform work.

   b. **Action:** Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts. A bidder using good business judgment considers a number of factors in negotiating with all subcontractors, and the firm's price and capabilities in addition to contract goals are taken into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for failing to meet the DBE goal as long as costs are reasonable. (see 49 CFR Part 26 Appendix A)

5. **Documentation of Sound Reason for Rejecting DBEs:**
   a. **Purpose:** To ensure that bidders avoid rejecting DBEs as unqualified without sound reasons. Reasons for rejection must be based on thorough investigation of DBE capabilities.

   b. **Action:** Provide sufficient evidence to demonstrate that DBE was rejected for sound reasons such as past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, other tangible factors.

6. **Documentation of Assistance to Interested DBEs - Bonding, Credit, Insurance, Equipment, Supplies/Materials:**
   a. **Purpose:** To assist interested DBEs in obtaining bonds, lines of credit, insurance, equipment, supplies, materials, and other assistance or services.

   b. **Action:** Assist interested DBEs in obtaining bonding, lines of credit or insurance, and provide technical assistance or information related to plans, specifications, and project requirements. Assist DBEs in obtaining equipment, supplies, materials or other services related to meeting project requirements (excluding supplies or equipment the DBE purchases from the prime).

7. **Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support:**
   a. **Purpose:** To effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well as participation in activities that support DBE business development.

   b. **Action:** Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Return to:
Wisconsin Department of Transportation
DBE Program Office
PO Box 7965
Madison, WI 53707-7965
DBE_Alert@dot.wi.gov

I certify that I have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, as demonstrated by my responses and as specified in Additional Special Provision 3 (ASP-3).

I certify that the information given in the Documentation of Good Faith Efforts is true and correct to the best of my knowledge and belief.

I further understand that any willful falsification, fraudulent statement, or misrepresentation will result in appropriate sanctions, which may involve debarment and/or prosecution under applicable state (Trans 504) and Federal laws.

(Bidder/Authorized Representative Signature)

(Print Name)

(Title)

Good Faith Effort -- Sample Documentation Logs

The sample logs below are provided as guides rather than exhaustive list. See ASP3, Appendix A for additional examples of demonstrable good faith efforts. Attach documentation for each activity listed.

Acceptable forms of documentation include copies of solicitations sent to DBEs, notes from substantive conversations and negotiations with DBEs, copies of advertisements placed, email communications, all quotes received from DBEs and from all subcontractors who were considered alongside DBE quotes, proof of attendance at applicable networking events; flyers for events or workshops for DBEs offered by the prime, and other physical records of good faith efforts activities.

SOLICITATION LOG

Date	Activity	Name of DBE Solicited	Follow-up
4/1/2020	Sent May Let solicitation	Winterland Electric	Spoke with Mark Winterland on 4/15/20 to ask if he would quote

SELECTED WORK ITEMS SOLICITED LOG

Work Type	DBE Firm	Contact Person	Date	Contact Mode
Pavement Marking	ABC Marking	Leslie Lynch	4/1/2020	Email; phone
	#1 Marking Co.	Mark Smart	4/1/2020	Email; left VM
Electrical	Winterland Electric	Tabitha Tinker	4/3/2020	Email, left VM
	Superstar Wiring	Jose Huascar	4/3/2020	Email; phone

INFORMATION PROVIDED LOG

Request Date	DBE Firm	Information Requested & Provided	Response Date
4/1/2020	Winterland Electric	Requested info on electrical requirements; provided plan and link to specs	4/3/2020
4/21/2020	Absolute Construction	Wanted to know how and when supplies are paid for by WisDOT; referred to spec that covers stockpiling	4/21/2020

NEGOTIATIONS LOG

Date	DBE Firm	Contact Name	Work Type	Quotes Rec'd?	Considered for project?	If not selected, why?
4/12/2020	ABC Landscape	John Dean	Erosion Control	Yes	No	Cannot perform all items
4/17/2020	Wild Ferns	Sandy Lynn	Erosion Control	Yes	Yes	
4/20/2020	#1 Marking	Mark Smart	Electrical	Yes	Yes	

ASSISTANCE LOG

Date	DBE Firm	Contact Person	Assistance Provided
4/1/2020	ABC Sawing	Jackie Swiggle	Informed DBE on how to obtain bonding
4/17/2020	Supreme Construction	Winston Walters	Provided contact for wholesale supply purchase

OUTREACH & BUSINESS DEVELOPMENT LOG

Date	Agency/Organization Contacted	Contact Person	Assistance Requested
4/1/2020	Women in Construction	LaTonya Klein	Contact information for woman-owned suppliers
4/28/2020	WBIC	Sam Smith	Asked for information to provide to DBE regarding financing programs through WBIC

Official Form DT1202 can be found here: https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx

ADDITIONAL SPECIAL PROVISION 4

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor is not allowed to withhold retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Acceptance and Final Payment

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work.

Additional Special Provision 6 (ASP-6)
Modifications to the standard specifications

Make the following revisions to the standard specifications:

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108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

108.9.4.1 Winter Suspension for Completion Date Contracts

(1) The contractor may request a winter suspension for a completion date contract. If the department determines weather conditions do not allow for the completion of the remaining work, the department may approve the contractor's request and determine the start date of the winter suspension. The end date of the winter suspension is March 31 or a date mutually agreed upon by both parties. For multi-year contracts, the department will only consider winter suspension for the final year of the contract.

(2) During winter suspension, store all materials in a manner that does not obstruct vehicular and pedestrian traffic and protect the materials from damage. Install traffic control and other safety devices necessary to protect the traveling public and pedestrians. Provide suitable drainage and install temporary erosion control where necessary. If the winter suspension begins when liquidated damages are being assessed, or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the cost of necessary pre-suspension work is incidental. If the winter suspension begins prior to the contract completion date, and the work has progressed as scheduled and would have been completed prior to the completion date, the cost of pre-suspension work will be paid as specified under 109.4.

(3) For a winter suspension that begins prior to the contract completion date and the work has progressed as scheduled and would have been completed prior to the completion date, the engineer will extend contract time to correspond with the end of the winter suspension and liquidated damages will not be assessed during the winter suspension.

(4) For a winter suspension that begins when liquidated damages are being assessed or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the engineer will not extend contract time. Time will be suspended until the end of the winter suspension. Liquidated damages will not be assessed during the winter suspension and liquidated damages will resume at the end of the winter suspension.

108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:

(1) Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.

(2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.

(3) The following are non-compensable delays:

1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
4. Delays from fires or epidemics.
5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
6. Altered quantities as specified in 109.3.

108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:

(1) Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.

(2) The following are compensable delays:

1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
2. A contract change for an engineer-ordered suspension under 104.2.2.3.
3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25.
4. The unexpected discovery of a hazardous substance consistent with 107.24.
5. The non-completion of work that utilities or other third parties perform, if that work is not completed as specified in the contract.

(3) For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under 108.11, and will pay the contractor for delay costs determined as follows:

1. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
2. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

---

310 Open Graded Base

310.2 Materials

Replace paragraph two with the following effective with the November 2023 letting:

(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in Table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (% passing by weight)

AASHTO No. 67[1]

SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
2-inch	-
1 1/2-inch	-
1-inch	100
3/4-inch	90 – 100
1/2-inch	-
3/8-inch	20 – 55
No. 4	0 – 10
No. 8	0 – 5
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	<=1.5

[1] Size according to AASHTO M43.

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390 Base Patching

390.4 Measurement

Replace entire section with the following effective with the November 2023 letting:

(1) The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

(2) The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.

(3) The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

390.5 Payment

Replace entire section with the following effective with the November 2023 letting:

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
390.0100	Removing Pavement for Base Patching	CY
390.0201	Base Patching Asphaltic	TON
390.0305	Base Patching Concrete HES	CY
390.0405	Base Patching Concrete SHES	CY

(2) Payment for Removing Pavement for Base Patching is full compensation for removing old pavement; for preparing the foundation and bringing up to grade. If the engineer orders the contractor to excavate yielding or unstable subgrade materials and backfill with suitable materials, the department will pay for that work with contract bid items or as agreed upon using 109.4.

(3) Payment for Base Patching Asphaltic is full compensation for providing and compacting asphaltic mixture including asphaltic binder.

(4) Payment for Base Patching Concrete HES and Base Patching Concrete SHES is full compensation for providing, curing, and protecting concrete. Payment also includes providing tie bars and dowel bars in unhardened concrete and steel within the patch. For tie bars and dowel bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5.

(5) Payment for Base Patching SHES also includes providing test data to the engineer as specified in 416.2.4.

(6) The department will pay for sawing existing concrete pavement for removal under the Sawing Concrete bid item as specified in 690.5.

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460 Hot Mix Asphalt Pavement

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:

(4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:

Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.

Batch plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.

Asphalt content (AC) in percent:

Determine AC using one of the following methods:

- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

Bulk specific gravity of the compacted mixture:

According to WTM T166.

Theoretical maximum specific gravity:

According to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G_{mb}) of the compacted mixture according to WTM T166.

Maximum specific gravity (Gmm) according to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

460.3.3.2 Pavement Density Determinations

Replace entire section with the following effective with the February 2024 letting:

(1) The engineer will determine the target maximum density using department procedures described in WTM T355. The engineer will determine density according to CMM 815 and WTM T355 as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.

(2) Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.

(3) A lot is defined as one day's production for each sublot type or one production shift if running 24 hours per day and placed within a single layer for each location and target maximum density category indicated in table 460-3. The lot density is the average of the tests taken for that lot. The department determines the number of tests per lot according to WTP H-002.

(4) An HTCP-certified Nuclear Density Technician I (NUCDENSITYTEC-I) or a nuclear density ACT working under a NUCDENSITYTEC-I technician, will locate samples and perform the testing. A NUCDENSITYTEC-I technician will coordinate and take responsibility for the work an ACT performs. No more than one ACT can work under a single NUCDENSITYTEC-I technician. The responsible NUCDENSITYTEC-I technician will ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly.

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503 Prestressed Concrete Members

503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:

(5) Furnish prestressed concrete members cast from air-entrained concrete, except I-type girders may use non-air-entrained concrete. Use type I, IL, IS, IP, IT, II, or III cement. The contractor may replace up to 30 percent of type I, IL, II, or III cement with an equal weight of fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.4.2.2 and slag conforms to 501.2.4.2.3. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.5.2 for air-entrained concrete. Use only coarse aggregate conforming to 310.2(2).

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604 Slope Paving

604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:

(3) Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

TABLE 604-01 COARSE AGGREGATE (% passing by weight)

AASHTO No. 4[1]

SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 4
2-inch	100
1 1/2-inch	90 - 100
1-inch	20 - 55
3/4-inch	0 - 15
1/2-inch	-
3/8-inch	0 - 5
No. 4	-
No. 8	-
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	<=1.5

[1] Size according to AASHTO M43.

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612 Underdrains

612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:

(1) Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

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614 Semi-rigid Barrier Systems and End Treatments

614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:

(1) Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

TABLE 614-2 FINE AGGREGATE GRADATION

SEIVE	FINE AGGREGATE (% PASSING by WEIGHT)
3/8-inch	100
No. 4	90 - 100
No. 8	-
No. 16	45 - 85
No. 30	-
No. 50	5 - 30
No. 100	0 - 10
No. 200	<=3.5

628 Erosion Control

628.2.13 Rock Bags

Replace paragraph two with the following effective with the November 2023 letting:

(2) Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

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639 Drilling Wells

639.2.1 General

Replace paragraph two with the following effective with the November 2023 letting:

(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

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652 Electrical Conduit

652.3.1.2 Installing Underground

Replace paragraph two with the following effective with the November 2023 letting:

(2) Excavate trenches true to line and grade to provide the conduit uniform bearing throughout its length. Do not backfill the trench before inspecting the conduit. Carefully tamp the backfill in place as specified for placing backfill in layers in 651.3. Place at least 0.7 cubic feet of coarse aggregate gradation conforming to 604.2(3) directly under each drainage hole.

ERRATA

390.3.4 Special High Early Strength Concrete Patching

Correct errata link in paragraph (1) by changing from 416.3.8 to 416.3.7.

(1) Construct as specified for special high early strength repairs under 416.3.7 except as follows:

- The contractor may delay removal for up to 14 calendar days after cutting the existing pavement.
- Open to traffic as specified for concrete base in 320.3.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
6. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
7. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.

B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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*. 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*, 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 reprocurement 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/WHD/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 reprocurement 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 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).

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.

NON-DISCRIMINATION PROVISIONS

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).

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 "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	County	%	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 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 the 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 ten (10) working days of award of any construction subcontract in excess of $10,000.00 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.

   As referred to in this section, the Director means:

   Director
   Office of Federal Contract Compliance Programs
   Ruess Federal Plaza
   310 W. Wisconsin Ave., Suite 1115
   Milwaukee, WI 53202

   The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

ADDITIONAL FEDERAL-AID PROVISIONS

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, bidding 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.

BUY AMERICA PROVISION

Buy America (as documented in 88 FR 57750 (2 CFR part 184 and 200) from the Office of Management and Budget: Federal Register: Guidance for Grants and Agreements) shall be domestic products and permanently incorporated in this project as classified in the following three categories, and as noted in the Construction and Materials Manual (CMM):

1. Iron and Steel

   All iron and steel manufacturing and coating processes (from the initial melting stage through the application of coatings) must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America.

   The exemption of the iron and steel manufacturing and coating processes Buy America requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project.

2. Manufactured Product

   All manufactured products (as defined in CMM 228.5) are covered under a previous waiver from 1983 and are currently exempt from Buy America.

3. Construction Material

   All construction materials (as defined in 88 FR 57750 (2 CFR part 184 and 200) and as referenced in CMM 228.5) must comply with Buy America. All manufacturing process of construction materials must occur in the United States.

88 FR 55817 (DOT-OST-2022-0124) allows a limited waiver of Buy America requirements for de minimis costs and small grants.

- The Total value of the non-compliant products is no more than the lesser of $1,000,000 or 5% of total applicable costs for the project[1]; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below $500,000[2]

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Buy America provision.

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project, certify to the engineer, in writing using department form DT4567 that all iron and steel, manufactured products, and construction materials conform to this Buy America provision.

Form DT4567 is available at: https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Attach a list of iron or steel and construction material exemptions and their associated costs to the certification form.

1 The de minimis public interest waiver does not apply to iron and steel subject to the requirements of 23 U.S.C. 313 on financial assistant administered by FHWA. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for iron and steel.
2 The small grant portion of the waiver does not apply to iron, steel, and manufactured goods subject to the requirements of 49 U.S.C. 22905(a).

CARGO PREFERENCE ACT REQUIREMENT

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) 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 (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses.* "Use of United States-flag vessels: The contractor 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.

(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 Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS FOR PROJECTS WITH FEDERAL AID

I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. Itis the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH_Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

"General Decision Number: WI20240010 07/05/2024

Superseded General Decision Number: WI20230010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2024

1	01/26/2024
2	02/02/2024
3	02/16/2024
4	03/15/2024
5	05/24/2024
6	06/21/2024
7	06/28/2024
8	07/05/2024

BRWI0001-002 06/01/2023

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER	$ 40.18	25.88

BRWI0002-002 06/01/2023

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER	$ 47.10	25.16

BRWI0002-005 06/01/2023

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 39.97	25.02

BRWI0003-002 06/01/2023

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER	$ 40.00	26.06

BRWI0004-002 06/01/2023

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER	$ 44.50	26.96

BRWI0006-002 06/01/2023

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes

BRICKLAYER.....$ 40.08 25.98

BRWI0007-002 06/01/2023

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER	$ 40.95	26.80

BRWI0008-002 06/05/2023

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER	$ 44.96	25.67

BRWI0011-002 06/01/2023

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER	$ 40.00	26.06

BRWI0019-002 06/01/2023

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER	$ 39.32	26.74

BRWI0034-002 06/01/2023

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER	$ 41.56	26.19

CARP0068-011 05/02/2022

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen	$ 41.19	27.05

CARP0264-003 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER	$ 41.91	29.72

CARP0310-002 06/05/2023

ADAMS, ASHLAND, BAYFIELD (Eastern 2/3), FOREST, IRON, JUNEAU, LANGLADE, LINCOLN, MARATHON, ONEIDA, PORTAGE, PRICE, SHAWANO (Western Portion of the County), TAYLOR, VILAS, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER	$ 38.86	27.06
Piledriver	$ 39.43	27.02

CARP0314-001 06/05/2023

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, JEFFERSON, LAFAYETTE, RICHLAND, ROCK, SAUK, AND WALWORTH COUNTIES

	Rates	Fringes
CARPENTER	$ 38.86	27.06
Piledriver	$ 39.43	27.02

CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER	$ 36.15	20.43

CARP0731-002 06/05/2023

CALUMET (Eastern Portion of the County), FOND DU LAC (Eastern Portion of the County), MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
CARPENTER	$ 38.86	27.06
Piledriver	$ 39.43	27.02

CARP0955-002 06/05/2023

CALUMET (Western Portion of the County), FOND DU LAC (Western Portion of the County), GREEN LAKE, MARQUETTE, OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO

	Rates	Fringes
CARPENTER	$ 38.86	27.06
PILEDRIVER	$ 39.43	27.02

CARP1056-002 06/01/2023

ADAMS, ASHLAND, BARRON, BAYFIELD , BROWN, BUFFALO, BURNETT ,CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK,

SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX (E. of Hwy. 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
MILLWRIGHT	$ 40.00	27.77

CARP1074-002 06/05/2023

BARRON, BURNETT, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65), RUSK, SAWYER, ST. CROIX (E. of Hwy. 65), AND WASHBURN

	Rates	Fringes
CARPENTER	$ 38.86	27.06
PILEDRIVER	$ 39.43	27.02

CARP1143-002 06/05/2023

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU AND VERNON COUNTIES

	Rates	Fringes
CARPENTER	$ 38.86	27.06
PILEDRIVER	$ 39.43	27.02

CARP1146-002 06/05/2023

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, MENOMINEE, OCONTO, AND SHAWANO (Western Portion of the County) COUNTIES

	Rates	Fringes
CARPENTER	$ 38.86	27.06
PILEDRIVER	$ 39.43	27.02

CARP2337-009 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA

	Rates	Fringes
PILEDRIVERMAN	$ 39.22	34.01

ELEC0014-002 05/26/2024

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:	$ 42.73	23.99

ELEC0014-007 05/26/2024

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer		
Installer/Technician	$ 30.27	19.11

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2023

KENOSHA COUNTY

	Rates	Fringes
Electricians:	$ 46.05	30%+13.15

ELEC0158-002 05/30/2021

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 36.14	29.75%+10.26

ELEC0159-003 05/30/2021

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 43.38	23.13

ELEC0219-004 06/01/2019

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over $180,000	$ 33.94	21.80
Electrical contracts under		

$180,000	$ 31.75	21.73

ELEC0242-005 05/30/2021

DOUGLAS COUNTY

	Rates	Fringes
Electricians:	$ 41.37	69.25%

ELEC0388-002 06/01/2023

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:	$ 38.74	26%+11.76

ELEC0430-002 06/01/2023

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:	$ 46.70	25.02

ELEC0494-005 05/28/2023

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:	$ 47.75	26.72

ELEC0494-006 05/28/2023

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:	$ 41.40	23.90

ELEC0494-013 05/28/2023

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	$ 34.65	18.36
Technician	$ 34.65	18.36

Installation, testing, maintenance, operation and servicing

of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

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ELEC0577-003 06/01/2023

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:	$ 38.94	29.50%+10.00

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* ELEC0890-003 06/01/2024

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:	$ 43.65	25.95%+12.26

ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman	$ 47.53	21.43
(2) Heavy Equipment Operator	$ 42.78	19.80
(3) Equipment Operator	$ 38.02	18.40
(4) Heavy Groundman Driver	$ 33.27	16.88
(5) Light Groundman Driver	$ 30.89	16.11
(6) Groundsman	$ 26.14	14.60

ENGI0139-005 06/01/2023

	Rates	Fringes
Power Equipment Operator		
Group 1	$ 43.77	27.40
Group 2	$ 43.27	27.40
Group 3	$ 42.77	27.40
Group 4	$ 42.51	27.40
Group 5	$ 42.22	27.40

Group 6.....$ 36.32 27.40

HAZARDOUS WASTE PREMIUMS:
EPA Level ""A"" protection - $3.00 per hour
EPA Level ""B"" protection - $2.00 per hour
EPA Level ""C"" protection - $1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminious paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender, day light machine

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2023

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER	$ 41.73	30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER	$ 43.40	30.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/02/2024

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER	$ 42.00	31.93

IRON0498-005 06/01/2023

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER	$ 45.18	47.08

IRON0512-008 04/30/2023

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER	$ 43.00	34.11

IRON0512-021 04/30/2023

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER	$ 39.14	34.00

LABO0113-002 06/03/2024

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1	$ 35.61	25.01
Group 2	$ 35.76	25.01
Group 3	$ 35.96	25.01
Group 4	$ 36.11	25.01
Group 5	$ 36.26	25.01
Group 6	$ 32.10	25.01

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LABO0113-003 06/03/2024

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1	$ 34.86	25.01
Group 2	$ 34.96	25.01
Group 3	$ 35.01	25.01
Group 4	$ 35.21	25.01
Group 5	$ 35.06	25.01
Group 6	$ 31.95	25.01

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LABO0113-011 06/03/2024

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1	$ 34.67	25.01
Group 2	$ 34.82	25.01
Group 3	$ 35.02	25.01
Group 4	$ 34.99	25.01
Group 5	$ 35.52	25.01
Group 6	$ 31.81	25.01

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LABO0140-002 06/03/2024

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT,

CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1	$ 40.57	19.45
Group 2	$ 40.67	19.45
Group 3	$ 40.72	19.45
Group 4	$ 40.92	19.45
Group 5	$ 40.77	19.45
Group 6	$ 37.20	19.45

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LABO0464-003 06/03/2024

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1	$ 40.85	19.45
Group 2	$ 40.95	19.45
Group 3	$ 41.00	19.45
Group 4	$ 41.20	19.45
Group 5	$ 41.05	19.45
Group 6	$ 37.20	19.45

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler;

Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

PAIN0106-008 05/06/2024

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller	$ 36.16	26.27
Spray, Sandblast, Steel	$ 36.76	26.27
Repaint:		
Brush, Roller	$ 34.66	26.27
Spray, Sandblast, Steel	$ 35.26	26.27

PAIN0108-002 06/01/2023

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller	$ 41.04	21.95
Spray & Sandblast	$ 42.04	21.95

PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER	$ 24.11	12.15

PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
PAINTER	$ 22.03	12.45

PAIN0781-002 06/01/2024

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge	$ 41.39	24.92
Brush	$ 40.64	24.92
Spray & Sandblast	$ 41.39	24.92

PAIN0802-002 06/01/2024

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush	$ 36.35	20.87

PREMIUM PAY:
Structural Steel, Spray, Bridges = $1.00 additional per hour.

PAIN0802-003 06/01/2024

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER	$ 36.35	20.87

PAIN0934-001 06/01/2022

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush	$ 36.70	24.69
Spray	$ 37.70	24.69
Structural Steel	$ 36.85	24.69

PAIN1011-002 06/02/2024

FLORENCE COUNTY

	Rates	Fringes
Painters:	$ 29.95	15.89

PLAS0599-002 06/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area A	$ 45.17	27.27
Area B	$ 39.97	25.02

Area C	$ 40.40	25.25
Area D	$ 41.16	24.49
Area E	$ 40.50	25.14
Area F	$ 36.98	28.67

AREA DESCRIPTIONS

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST. CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA F: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2024

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles	$ 37.57	27.41
3 or more Axles; Euclids, Dumptor & Articulated, Truck Mechanic	$ 37.72	27.41

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on 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. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R ◆1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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 National Office because National Office has 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"

NOTICE TO BIDDERS
WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least $1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.

Proposal Schedule of Items

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	10.000 STA	_____.____	_____.____
0004	201.0205 Grubbing	6.000 STA	_____.____	_____.____
0006	203.0250 Removing Structure Over Waterway Remove Debris (structure) 01. B-10-0378	1.000 EACH	_____.____	_____.____
0008	204.0165 Removing Guardrail	311.000 LF	_____.____	_____.____
0010	205.0100 Excavation Common	432.000 CY	_____.____	_____.____
0012	206.1001 Excavation for Structures Bridges (structure) 01. B-10-0398	1.000 EACH	_____.____	_____.____
0014	208.0100 Borrow	3,970.000 CY	_____.____	_____.____
0016	210.1500 Backfill Structure Type A	640.000 TON	_____.____	_____.____
0018	213.0100 Finishing Roadway (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0020	305.0110 Base Aggregate Dense 3/4-Inch	231.000 TON	_____.____	_____.____
0022	305.0120 Base Aggregate Dense 1 1/4-Inch	1,638.000 TON	_____.____	_____.____
0024	415.0060 Concrete Pavement 6-Inch	32.000 SY	_____.____	_____.____
0026	415.0410 Concrete Pavement Approach Slab	110.000 SY	_____.____	_____.____
0028	450.4000 HMA Cold Weather Paving	271.000 TON	_____.____	_____.____
0030	455.0605 Tack Coat	77.000 GAL	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	465.0105 Asphaltic Surface	271.000 TON	_____.____	_____.____
0034	502.0100 Concrete Masonry Bridges	801.000 CY	_____.____	_____.____
0036	502.3200 Protective Surface Treatment	1,825.000 SY	_____.____	_____.____
0038	502.3210 Pigmented Surface Sealer	274.000 SY	_____.____	_____.____
0040	503.0146 Prestressed Girder Type I 45W-Inch	1,872.000 LF	_____.____	_____.____
0042	505.0400 Bar Steel Reinforcement HS Structures	51,530.000 LB	_____.____	_____.____
0044	505.0600 Bar Steel Reinforcement HS Coated Structures	153,580.000 LB	_____.____	_____.____
0046	506.2605 Bearing Pads Elastomeric Non-Laminated	36.000 EACH	_____.____	_____.____
0048	506.4000 Steel Diaphragms (structure) 01. B-10-0398	30.000 EACH	_____.____	_____.____
0050	509.5100.S Polymer Overlay	421.000 SY	_____.____	_____.____
0052	513.4061 Railing Tubular Type M	700.000 LF	_____.____	_____.____
0054	514.0445 Floor Drains Type GC	1.000 EACH	_____.____	_____.____
0056	514.2625 Downspout 6-Inch	4.000 LF	_____.____	_____.____
0058	516.0500 Rubberized Membrane Waterproofing	24.000 SY	_____.____	_____.____
0060	550.0500 Pile Points	20.000 EACH	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	550.1120 Piling Steel HP 12-Inch X 53 Lb	700.000 LF	_____.____	_____.____
0064	606.0300 Riprap Heavy	1,170.000 CY	_____.____	_____.____
0066	612.0406 Pipe Underdrain Wrapped 6-Inch	230.000 LF	_____.____	_____.____
0068	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.____	_____.____
0070	614.2500 MGS Thrie Beam Transition	157.600 LF	_____.____	_____.____
0072	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.____	_____.____
0074	615.0100 Guard Fence Timber Rail	148.000 LF	_____.____	_____.____
0076	618.0100 Maintenance and Repair of Haul Roads (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0078	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0080	624.0100 Water	19.000 MGAL	_____.____	_____.____
0082	625.0100 Topsoil	2,740.000 SY	_____.____	_____.____
0084	628.1504 Silt Fence	2,660.000 LF	_____.____	_____.____
0086	628.1520 Silt Fence Maintenance	2,660.000 LF	_____.____	_____.____
0088	628.1905 Mobilizations Erosion Control	3.000 EACH	_____.____	_____.____
0090	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0092	628.2008 Erosion Mat Urban Class I Type B	2,740.000 SY	_____.____	_____.____
0094	628.6005 Turbidity Barriers	790.000 SY	_____.____	_____.____
0096	628.7570 Rock Bags	30.000 EACH	_____.____	_____.____
0098	629.0210 Fertilizer Type B	2.200 CWT	_____.____	_____.____
0100	630.0120 Seeding Mixture No. 20	40.000 LB	_____.____	_____.____
0102	630.0160 Seeding Mixture No. 60	11.000 LB	_____.____	_____.____
0104	630.0200 Seeding Temporary	10.000 LB	_____.____	_____.____
0106	630.0500 Seed Water	65.000 MGAL	_____.____	_____.____
0108	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	1.000 EACH	_____.____	_____.____
0110	637.2210 Signs Type II Reflective H	5.000 SF	_____.____	_____.____
0112	638.2102 Moving Signs Type II	10.000 EACH	_____.____	_____.____
0114	638.2602 Removing Signs Type II	4.000 EACH	_____.____	_____.____
0116	642.5001 Field Office Type B	1.000 EACH	_____.____	_____.____
0118	643.0300 Traffic Control Drums	500.000 DAY	_____.____	_____.____
0120	643.0420 Traffic Control Barricades Type III	2,882.000 DAY	_____.____	_____.____
0122	643.0705 Traffic Control Warning Lights Type A	3,200.000 DAY	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	643.0900 Traffic Control Signs	19,842.000 DAY	_____.____	_____.____
0126	643.0920 Traffic Control Covering Signs Type II	6.000 EACH	_____.____	_____.____
0128	643.1000 Traffic Control Signs Fixed Message	36.000 SF	_____.____	_____.____
0130	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0132	645.0111 Geotextile Type DF Schedule A	72.000 SY	_____.____	_____.____
0134	645.0120 Geotextile Type HR	2,240.000 SY	_____.____	_____.____
0136	646.1005 Marking Line Paint 4-Inch	2,560.000 LF	_____.____	_____.____
0138	650.4500 Construction Staking Subgrade	427.000 LF	_____.____	_____.____
0140	650.5000 Construction Staking Base	371.000 LF	_____.____	_____.____
0142	650.6501 Construction Staking Structure Layout (structure) 01. B-10-0398	1.000 EACH	_____.____	_____.____
0144	650.7000 Construction Staking Concrete Pavement	56.000 LF	_____.____	_____.____
0146	650.9911 Construction Staking Supplemental Control (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0148	650.9920 Construction Staking Slope Stakes	427.000 LF	_____.____	_____.____
0150	690.0150 Sawing Asphalt	186.000 LF	_____.____	_____.____
0152	715.0502 Incentive Strength Concrete Structures	4,806.000 DOL	1.00000	4,806.00

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0154	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0156	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	1,500.000 HRS	5.00000	7,500.00
0158	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	990.000 HRS	5.00000	4,950.00
0160	SPV.0035 Special 01. Excavation, Hauling, and Disposal of Dredged Soil	350.000 CY	_____.____	_____.____
0162	SPV.0060 Special 01. Temporary Emergency Action Plan	1.000 EACH	_____.____	_____.____
0164	SPV.0060 Special 02. Emergency Response	1.000 EACH	_____.____	_____.____
0166	SPV.0060 Special 03. Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 48-inch	6.000 EACH	_____.____	_____.____
0168	SPV.0060 Special 04. Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-inch	6.000 EACH	_____.____	_____.____
0170	SPV.0060 Special 05. Temporary Construction Access	1.000 EACH	_____.____	_____.____
0172	SPV.0090 Special 01. Treated Timber Rub Rail	174.000 LF	_____.____	_____.____
0174	SPV.0090 Special 02. Drilled Shaft Foundation 48-Inch	291.000 LF	_____.____	_____.____
0176	SPV.0195 Special 01. Select Crushed Material for Travel Corridor	588.000 TON	_____.____	_____.____

Section: 0001 **Total:** _____.____

Total Bid: _____.____

PLEASE ATTACH ADDENDA HERE

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

August 2, 2024

NOTICE TO ALL CONTRACTORS:

Proposal #16: 7840-03-73, WISC 2024421
Black River Bridge B-10-0398
USH 10 - Greenwood
CTH G
Clark County

Letting of August 13, 2024

This is Addendum No. 01, which provides for the following:

Special Provisions:

Revised Special Provisions	
Article No.	Description
26	QMP Drilled Shafts.

Added Special Provisions	
Article No.	Description
28	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 54-Inch, Item SPV.0060.06.
29	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch, Item SPV.0060.07.
30	Drilled Shaft Foundation 54-Inch, Item SPV.0090.03.

Deleted Special Provisions	
Article No.	Description
21	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 48-Inch, Item SPV.0060.03.
22	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch, Item SPV.0060.04.
25	Drilled Shaft Foundation 48-Inch, Item SPV.0090.02.

Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
502.0100	Concrete Masonry Bridges	CY	801	17	818
505.0400	Bar Steel Reinforcement HS Structures	LB	51,530	10,930	61,920

628.1504	Silt Fence	LF	2660	-710	1950
628.1520	Silt Fence Maintenance	LF	2660	-710	1950

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Quantity Added	Proposal Total After Addendum
SPV.0060.06	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 54-Inch	EACH	0	6	6
SPV.0060.07	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch	EACH	0	6	6
SPV.0090.03	Drilled Shaft Foundation 54-Inch	LF	0	294	294

Deleted Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
SPV.0090.02	Drilled Shaft Foundation 48-Inch	LF	291	291	0
SPV.0060.03	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 48-Inch	EACH	6	6	0
SPV.0060.04	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 48-Inch	EACH	6	6	0

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
20	Miscellaneous Quantities
23	Miscellaneous Quantities
76	General Plan & Elevation
77	Cross Section (Change column/drilled shaft diameter)
78	General Notes & Quantities (Change quantities and drilled shaft items in general notes)
80	Subsurface Exploration (Changed column/drilled shaft diameter)
81	Subsurface Exploration (Changed column/drilled shaft diameter)
93	Pier 1 (Drilled Shaft and Column Diameter)
94	Pier 1 Details (Updated Bill of Bars and Shaft Cross Section)
95	Pier 2 (Drilled Shaft and Column Diameter)
96	Pier 2 Details (Updated Bill of Bars and Shaft Cross Section)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

7840-03-73

August 2, 2024

Special Provisions

21. DELETED

22. DELETED

25. DELETED

26. QMP Drilled Shafts.

Replace section titled **A General** *with the following:*

A General

This special provision describes performing work conforming to standard spec 501, 502, 701, 710, and 715 (conform to QMP Concrete Structures) except as deleted or additionally stipulated herein. This specification applies to all drilled shaft concrete placed under the following bid item:

SPV.0090.02	Drilled Shaft Foundation 54-Inch

28. Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 54-Inch, Item SPV.0060.06.

A Description

A.1 General

This special provision describes providing specialized equipment and trained testing personnel and to perform Crosshole Sonic Log (CSL) testing of drilled shafts according to the plans and as hereinafter provided. CSL testing is required for shaft foundations for Structure B-10-398.
Crosshole Sonic Logging, (CSL), is a nondestructive testing method that measures the time for an ultrasonic pulse to travel from a signal source inside an access tube to a receiver inside another access tube and evaluates the integrity of drilled shafts.

A.2 CSL Testing Personnel Requirements

Provide a CSL testing expert to direct and perform all aspects of the CSL testing and provide interpretation of results. The CSL testing expert shall be a professional engineer licensed in the State of Wisconsin, be employed by an independent testing agency, and have experience on a minimum of 5 projects performing CSL testing of drilled shafts. The independent testing agency shall have a minimum of 3 years of experience in performing CSL testing of drilled shafts. Submit the qualifications of the proposed CSL testing expert to the engineer for approval prior to beginning drilled shaft installation.

B (Vacant)

C Construction

C.1 CSL Testing Coordination

Schedule and coordinate drilled shaft construction with the CSL testing expert. Alter normal construction procedures as necessary to facilitate the CSL testing procedure. This includes providing suitable and safe

access to the site and specific locations of drilled shafts to be tested and aiding the CSL expert to facilitate the CSL testing.

C.2 CSL Testing

Perform CSL testing and analysis on each completed drilled shaft. Conduct CSL testing according to ASTM D 6760. Notify the engineer of the date and time of each CSL test at least 48 hours prior to the scheduled test. Perform CSL testing after the drilled shaft concrete has cured at least 72 hours and after the concrete compressive strength reaches or exceeds 2,500 psi.

Pull the CSL probes simultaneously, starting from the bottoms of the access tubes, over an electronic depth measuring device. Perform the CSL tests with the source and receiver probes in the same horizontal plane. Continuously record CSL signals at depth intervals of 2.5 inches or less from the bottom of the tubes to the top of each shaft. Perform CSL testing on every possible tube combination.
Immediately report potential local defects indicated by testing to the engineer.
Grout the access tubes after testing is complete, at the direction of the engineer. Place the grout with a pump, starting at the bottom of each access tube.

C.3 CSL Evaluation

Evaluate the concrete in the shaft using the following classification on each CSL profile:

- Satisfactory:
    - FAT increase 0% to 20%, and;
    - Energy reduction less than or equal to 9 decibels
- Defect:
    - FAT increase greater than 20%, or;
    - Energy reduction greater than 9 decibels

C.4 CSL Testing Reports

Within three working days of completion of CSL testing and receipt of shaft construction record, submit a CSL Testing Report for each tested drilled shaft to the engineer summarizing CSL testing results. At a minimum the CSL testing reports must include:

1. A description of the testing equipment, the date and location of test, and the number of days between concrete placement and CSL testing.
2. The CSL ultrasonic profiles with analyses of the following all tube pair combinations tested:
    a. First pulse arrival time (FAT) versus depth.
    b. Relative pulse energy / amplitude versus depth.
    c. A presentation of the nested signal peak as a function of time plotted versus depth (waterfall diagram).
    d. Note all shaft-specific construction information (e.g. elevations of the top of shaft, bottom of casing, bottom of shaft, etc.), on all pertinent graphical displays.
3. Indication of size and location along the depth of the shaft of all defects.
4. A discussion and assessment of the data quality and integrity of the tested drilled shaft, including a discussion of all interpretations in conflict with the evaluation criteria in subsection C.3, as well as a discussion of all other unusual results.
5. Conclusions or recommendations concerning the acceptability of the drilled shaft based on the interpretation of the CSL testing results against the evaluation criteria in subsection C.3.

D Measurement

The department will measure Crosshole Sonic Log (CSL) Testing pay items by the unit for each drilled shaft tested, acceptably completed, regardless of the number of access tubes in the shaft.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 54-Inch	EACH

Payment is full compensation for furnishing testing equipment and performing CSL testing; evaluating and interpreting results; and for providing test reports.

The department will pay separately for furnishing and installing CSL access tubes under drilled shaft bid items in the contract.

29. Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch, Item SPV.0060.07.

A Description

A.1 General

This special provision describes providing specialized equipment and trained testing personnel and to perform Thermal Integrity Profiler (TIP) testing of drilled shafts continuously during concrete placement and curing according to ASTM D7949 “Standard Test Methods for Thermal Integrity Profiling of Concrete Deep Foundations”, as the plans show, and as hereinafter provided. TIP testing is required the drilled shaft foundations for Structure B-10-398.

TIP testing records temperature of curing concrete (hydration energy) along the length of a drilled shaft to assess the quality of drilled shaft foundations hereinafter referred to as “drilled shafts”. Data will be acquired using Thermal Wires™, hereinafter referred to as “thermal wires”, tied to the reinforcement bar cage and installed prior to concreting. The expected temperature at any location is dependent on the shaft diameter, mix design, time of measurement and distance to the center of the shaft. TIP measurements are used to estimate the shape of the shaft along the length of the shaft. These estimates are compared with concreting logs to assess the overall quality of the shaft.

TIP testing can be performed using embedded thermal wires or using probes lowered into embedded tubes. This special provision specifies the thermal wire method.

A.2 TIP Testing Personnel Requirements

Provide a TIP testing expert to direct and perform all aspects of the TIP testing and provide interpretation of results. The TIP testing expert must be a professional engineer licensed in the State of Wisconsin. The TIP testing expert shall be employed by an independent testing agency with documented and approved experience in TIP testing. Submit the qualifications of the proposed TIP testing expert to the engineer for approval prior to beginning drilled shaft installation.

B Materials

Provide a TIP testing data acquisition system consisting of multiple thermal wires embedded in the drilled shaft concrete to be TIP tested and connected to a computer-based data recorder. The data collection system shall be capable of automatically collecting temperature verses time after casting data along the length of the drilled shaft at intervals of 15 minutes. The thermal wires and TIP testing data acquisition system shall be as manufactured by:

Pile Dynamics Incorporated
30725 Aurora Road
Cleveland Ohio 44139
Phone: (216) 831-6131
Web Page: www.pile.com

Provide equipment with the following minimum requirements:

a. A computer-based TIP Data Acquisition System to monitor and download temperature versus time after casting.

b. Ability to automatically collect data at user defined time intervals (typically 15 minutes).

C Construction

C.1 TIP Testing Coordination

Schedule and coordinate drilled shaft construction with the TIP testing expert. Alter normal construction procedures as necessary to facilitate the TIP testing procedure. This includes providing suitable and safe access to the site and specific locations of drilled shafts to be tested and providing assistance to the TIP expert to facilitate the TIP testing.

C.2 Thermal Wire Installation

Install thermal wires as shown in the plans the full length of drilled shafts and according to the procedures and recommendations of the TIP expert. For the initial installation of thermal wires in the contract, the TIP expert shall be on site to provide guidance and training on the installation and hookup of the thermal wires.

For the drilled shafts indicated on the plans to be TIP tested, install the number of thermal wires that is equal to or greater than the shaft diameter. For example, a drilled shaft diameter of 4.5 feet shall have minimum 5 thermal wires evenly spaced around the perimeter of the reinforcement cage and as shown in the plans. The minimum number of thermal wires for any shaft diameter shall be 5.

Align and attach the thermal wires to the main longitudinal reinforcement of the drilled shaft spaced approximately equally around the perimeter of the drilled shaft reinforcement cage. Stretch the thermal wires to minimize the wire slack and tie vertically at a maximum of every 3 feet to the main longitudinal reinforcement. Locate the thermal wire on the main longitudinal reinforcement bar such that it is 90º to the line connecting the reinforcement to the center of the shaft.

Extend the TIP wires from the bottom of the drilled shaft to at least 3 feet above the top of the drilled shaft, or 2 feet above the ground or water surface, whichever is higher, for shafts with cut-off below the ground surface. TIP wires extending beyond the top of the drilled shaft shall be attached to a CSL tube or similarly rigid support at frequent and regular intervals. Connect the thermal wires to the Thermal Access Port, acquire and analyze data as detailed in this special provision.

C.3 TIP Testing

Connect the thermal wires to a Thermal Access Port (TAP) prior to or immediately following drilled shaft concrete placement. Care shall be taken to record the position of each cable in the cage by serial number. The exact timing and duration of data measurement will be determined by the contractor's TIP testing expert. Collect data at time intervals of 15 minutes for the duration of time sufficient to reach and record the peak heat of hydration temperature, but for a minimum of 48 hours or longer minimum duration as recommended by the TIP expert or as directed by the engineer. After completion of the data collection period, connect the TAP to the main TIP data acquisition unit and download the data files for inspection and evaluation of temperatures versus time for depth along the length of the drilled shaft.

Potential local defects indicated by locally low temperatures relative to the average temperature at that depth, or average temperatures significantly lower than the average temperatures at other depths, shall be immediately reported to the engineer.

C.4 TIP Testing Reports

Within five working days of completion of TIP testing and receipt of shaft construction record, submit a TIP Testing Report for each drilled shaft tested to the engineer, summarizing TIP testing results. At a minimum the TIP testing reports must include:

1. Shaft-specific construction information (e.g., elevations of the top of shaft, bottom of casing, bottom of shaft, etc.) should be noted on all pertinent graphical displays so that the temperature plots are adjusted for end effects.
2. Graphical displays of temperature measurements in each thermal wire versus depth at peak temperature.

3. Indication of unusual temperatures, particularly significantly cooler local deviations of the average at any depth from the overall average over the entire length, in either probe or thermal wire measurements.
4. The overall average temperature at peak temperature. This temperature is proportional to the average radius computed from the actual total concrete volume installed. Radius at any point can then be determined from the temperature at that point compared to the overall average temperature.
5. A depiction of the shaft radius vs. depth including the concrete cover at peak temperature. Variations in temperature between wires (at each depth) which in turn correspond to variations in cage alignment should be noted.
6. The cage alignment or offset from center should be noted.
7. Conclusions or recommendations concerning the acceptability of the drilled shaft based on the interpretation of the TIP testing results obtained.

D Measurement

The department will measure Thermal Integrity Profiler (TIP) Testing pay items by the unit for each drilled shaft tested, acceptably completed, regardless of the number of thermal wire strings in the shaft.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch	EACH

Payment is full compensation for furnishing and installing the thermal wires and data collection unit; evaluating and interpreting results; and for providing test reports.

30. Drilled Shaft Foundation 54-Inch, Item SPV.0090.03.

A Description

This special provision describes installing drilled foundation shafts for bridge foundations as shown on the plans.

Do not start work on any drilled foundation shafts until acceptance of the Drilling Contractor Qualification submittal and the acceptance of the Drilled Foundation Shaft Installation Plan.

A.1 Qualifications of the Contractor

A.1.1 Drilling Contractor Qualification Submittal

Submit the drilling contractor's qualifications, staff experience records, and equipment cut sheets and descriptions that will perform the work in this special provision at the preconstruction meeting or 21 calendar days prior to the start of drilled shaft construction, whichever date is earlier. The engineer will accept or reject the drilling contractor's qualifications, staff experience records, and equipment descriptions within 7 calendar days after receipt of the submission.

The drilling contractor performing the work described in these special provisions must have drilled foundation shaft project(s) successfully completed similar to those that the plans show using equipment meeting the requirements in subsection B.2 within the last five years. Submit a list outlining the drilling contractor's experience on at least five projects where they have successfully completed drilled foundation shaft construction, including one project completed within the last five years. A separate shaft project is defined as a project with at least 120 linear feet of total shaft length. Include in the project experience at least one project completed in soil and groundwater conditions similar to that anticipated for this project. Include in the project experience advancing drilled shafts with a shaft size at least as large as the plans show to a depth of at least 30 feet below the original ground surface. Show in at least one project evidence of permanence with a five-year minimum age. Include in the project experience documentation for each project a brief project description, detail the size of the shafts, construction methods used during installation, methods used for

shaft stabilization, local soil conditions, actual construction time and contact information consisting of an individual's name and current phone number. Contacts must be capable of verifying project participation.

A.1.2 Staff Experience

Submit contractor staff experience records of the on-site engineer, on-site supervisors, crew chiefs and drill operators, who will be assigned to the project. Provide for each staff record a summary of each individual's experience that is complete enough for the engineer to determine whether each individual has satisfied the following qualifications. Do not use consultants or manufacturer's representatives in order to meet the requirements of this section.

- On-site engineer - Assign an individual as principal in charge and the contractor's main contact who has at least five years of drilled shaft experience, at least one year of which is as an employee of the contractor in good standing, and who has completed at least one successful drilled foundation shaft project using a shaft size at least as large as the plans show.
- On-site supervisor - Assign an individual to supervise the work who has at least five years of drilled shaft experience, at least one year of which is as an employee of the contractor in good standing, and who has completed at least three successful drilled foundation shaft projects using shaft sizes at least as large as the plans show. Include at least one project completed in soil and groundwater conditions similar to those anticipated for this project.
- Crew chiefs and drill operators - Assign crew chiefs and drill operators who have at least five years of drilled shaft experience using equipment meeting the requirements in subsection B.2, at least one year of which is as an employee of the contractor in good standing. Include at least one project completed in soil and groundwater conditions similar to those anticipated for this project.

List, as a minimum for each of the above individuals, three references of owners or engineers familiar with their work and provide address, phone, and e-mail contact information for each reference.

A.1.3 Equipment Requirements

Submit equipment cut sheets and descriptions to perform the work in this special provision that meet the requirements in subsection B.2.

A.2 Substitutions

The contractor may submit his own organization, staff and equipment to fulfill the requirements of subsections A.1.1, A.1.2, and A.1.3, as the drilling contractor or he may sublet to subcontractor. However, the organization approved that fulfills the requirements of subsection A.1.1 shall be the organization that performs the work in this special provision.

Request in writing to the engineer to provide substitute drilling contractor, staff or equipment not identified in the contractor's accepted drilling contractor qualification submittal. Substitute drilling contractor, staff or equipment must be equivalently or better qualified as determined by the engineer. Provide the experience and qualification information for the proposed substitute drilling contractor, staff or equipment as was originally provided in the drilling contractor's qualification submittal. The substitute drilling contractor, staff or equipment will not be permitted to start or continue any drilled foundation shaft work until the engineer confirms their qualifications and accepts the proposed drilling contractor, staff or equipment to work on the project.

Expect suspension by the engineer of drilled foundation shaft work if the contractor substitutes unqualified drilling contractor for accepted drilling contractor, unqualified personnel for accepted personnel, or unqualified equipment for accepted equipment, during construction. If work is suspended due to the substitution of unqualified drilling contractor, personnel, or equipment, the adjustment in contract time resulting from the suspension of work will not be allowed.

B Materials

B.1 General

Concrete, drilling fluid, reinforcement and formwork shall be in accordance to the requirements of QMP Drilled Shafts, standard specifications, as shown on the plans, and as hereinafter provided.
In the event that the provisions of other specification clauses cause ambiguity or conflict with these special provisions, the stricter requirement shall apply unless otherwise accepted by the engineer.

B.2 Equipment
Equipment used for excavation, drilling, and cleaning operations shall have adequate capacity including power, torque, and down thrust to excavate a hole to a depth equal to the maximum depth of the drilled shafts shown in the plans plus 15 feet, or plus 20 percent of their maximum depth, whichever is greater. Anticipate and make available at the job site all equipment necessary and essential to penetrate soft and hard soils, as well as obstructions, during the construction of the drilled shafts.

Where hard soils, or other material including natural or man-made obstructions are encountered and cannot be drilled using conventional earth or rock augers, drilling buckets, and/or over reaming tools; provide drilling equipment including, but not limited to rock core barrels, rock tools, down the hole hammers, chisels, air tools, or any other equipment necessary to construct the drilled shaft excavation to the depth and size as shown on the plans.
When applicable, or required by the engineer, provide equipment that produces a stable slurry suspension, mechanical agitation, and a pipeline or other safe methods of transporting the slurry to the drilled shaft and means of removing slurry for recovery and recirculation.

B.3 Casing

B.3.1 Left-In-Place Casing
Left-in-place casing shall be steel that minimally conforms to ASTM A36. Substitution of steel material with properties meeting or exceeding ASTM A36 may be used if approved by the engineer. Supply casing of the minimum length to achieve the length shown on the plans. Left-in-place casing shall be rigid, smooth, clean, watertight, and of ample strength to withstand both handling and installation stresses and the pressure of both concrete and the surrounding earth materials. The outside diameter of casing shall not be less than the specified size of the drilled shaft. All casing diameters shown on the plans refer to O.D. dimensions.
If a temporary casing is used in addition to a left-in-place casing, any annular spacing between the casings shall be filled with grout.

B.4 Reinforcing Steel and Spacers
Deformed reinforcing bars shall comply with the size, dimension, spacing, and details shown on the plans. In addition, they shall conform to AASHTO M31, Grade 60, and all the pertinent requirements of standard spec 505. Non-corrosive wheel type spacers and boots shall be used to properly position the reinforcing steel. All reinforcing steel shall be 100% wire tied between the vertical reinforcement and ties.

B.5 Crosshole Sonic Logging (CSL) Tubes
Access tubes for CSL testing shall be 2 inches I.D. schedule 40 steel pipe conforming to ASTM A 53, Grade A or B, Type E, F, or S. Pipes shall have a round, regular internal diameter, free of defects or obstructions; including any defect at the pipe joints, to permit the free unobstructed passage of source and receiver probes. Each tube or steel pipe shall be fitted with a watertight shoe onto the bottom and a removable cap at the top. Both, the shoe and cap shall be watertight and free from corrosion. The internal and external faces of the CSL tubes shall be clean to ensure passage of the probes and produce a good bond with the concrete.

Furnish neat cement grout for filling the access tubes at the completion of the CSL tests. Use grout that is a homogeneous mixture of water and Portland cement Type I/II or Type 1 L (MS). Do not exceed a water-cement ratio of 0.45. Provide grout with an unconfined compressive strength equal to the required compressive strength of the drilled shaft at 28 days when tested in accordance with ASTM C 1107.

B.6 Template

Provide a steel plate template at each drilled shaft foundation location to accurately locate and maintain the position of the shaft as shown on the plans. Provide concrete, reinforcement and formwork for the template according to the requirements of standard spec 501, 502 and 505 and as hereinafter provided.

B.7 Thermal Integrity Profiler (TIP) Wires
Install wires and provide other accessories described in bid item Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch elsewhere in these special provisions.

C Construction

C.1 Drilled Foundation Shaft Installation Plan

C.1.1 General
Prepare a Drilled Shaft Installation Plan and submit it at the preconstruction meeting or at least 30 calendar days prior to beginning drilled shaft foundation construction, whichever date is earlier. Submit the Drilled Shaft Installation Plan to the engineer for review. The engineer will accept the plan as submitted or return the plan with requested revisions. Do not start any drilled shaft installation until the engineer accepts the Drilled Shaft Installation Plan. Acceptance of the installation plan does not relieve the contractor of responsibility for successful completion of the drilled shafts.

C.1.2 Subsurface Conditions
The contractor is strongly advised to obtain and review the Geotechnical Exploration and Foundation Evaluation Report for the bridge structure for which the drilled foundation shafts are being constructed. The contractor is encouraged to consider rock core drilling described in subsection C.3.6.7 prior to excavation of shafts socketed into rock. If not completed already, the contractor shall complete test cores at each shaft to confirm rock conditions and tip depths. Account for rock variability described in the geotechnical report and construction schedule concerns in making this determination.

C.1.3 Submittals
The Drilled Foundation Shaft Installation Plan shall include the following:

a. **Job Site Visit**. Acknowledge that the job site was visited to verify the site conditions with regard to entrance, access, overhead lines, subsurface features, clearing and grubbing, permitting, and collecting all information necessary to plan and execute the installation of the drilled shafts.
b. **Plan to Protect Existing Structures**. Outline the steps to be taken during drilled shaft installation to protect adjacent or nearby structures and utilities.
c. **Details of Environmental Control Procedures**. Provide plan to prevent loss of slurry or concrete into waterways, project areas, or protected areas. Detail method to ensure the compliance with state and federal environmental regulations during drilled shaft construction.
d. **List of Proposed Equipment**. Include details of proposed templates; number and sizes of cranes; number and size of oscillators; number and sizes of drills, include rotary torque, crowd force drills, and maximum drilling depth; diameter, length, and reach of augers, bailing buckets, guide walls, templates, and roller bits; cleaning equipment including cleaning buckets, submersible pumps, or air-lifted pumps; size of de-sanding equipment and slurry pumps; soil/rock-coring sampling equipment; inspecting drilled shaft apparatus; length and diameter of tremie or size of concrete pumps; size, length, and thickness of casings; over reaming equipment; and all relevant equipment necessary to complete the drilled shaft installation. Acceptance of the installation plan by the department does not relieve the contractor responsibility to provide other equipment, if necessary, to achieve satisfactory shaft installations meeting the requirements of this special provision.
e. **Details of Sequence of Drilled Shaft Installation and Time for Construction Operations**. Include a layout of the drilled shaft installation sequence. Provide a sequential list of installation steps and a time table of operations for installing casing, sealing casing, excavation and/or drilling time, drilled shaft cleaning, rock coring, drilled shaft inspection, concrete placement. Consider the effect of construction operations of one drilled shaft onto the adjacent drilled shaft(s) and utilities and avoid construction conflicts that will affect the quality or integrity of the completed work. Indicate when and what construction sequence modifications shall be performed under atypical situations, i.e, weekend or holiday shutdowns, unanticipated shutdowns due to equipment issues, etc.

f. **Proposed Drilled Shaft Installation Procedure(s)**. Provide details of the proposed shaft installation procedures, including coring or drilling boulders, rock, obstructions or steep sloping surfaces, when required, and meeting the minimum installation requirements set forth in subsection C.3. Provide method for identification of the competent or bearing material before finalizing the excavation. Provide method for monitoring verticality of the drilled shaft walls during excavation, and details of proposed corrective measures to be implemented for shafts out of tolerance. Provide details of the methods and means of preventing displacement of the casing and/or drilled shaft during installation.
g. **Details of Slurry Operations.** Provide details of slurry type, methods to mix, circulate, de-sand, and test the slurry to comply with this special provision. Include details of procedures to prevent loss of slurry or concrete into waterways, sewers, and other areas to be protected. Provide slurry handling and disposal plan that complies with applicable state and federal regulations, as well as permit requirements.
h. **Inspection and Cleaning**. Provide methods to clean and inspect the drilled shaft excavation prior to reinforcement placement.
i. **Crosshole Sonic Logging (CSL).** Provide methods to install and secure the CSL pipes to the reinforcing cage or steel core, along with the proposed selection of pipe and size.
j. **Details of Reinforcement Steel Placement During Construction**. Include methods to ensure cage centering and cover; proper cage orientation, cage integrity while lifted during placement, number of cranes, number of lift points, and number of spreader bars; number and location of bottom and side spacers; cage support; and tie downs during concrete placement.
k. **Concrete Placement Plan**. The purpose of the Concrete Placement Plan is to ensure that a sufficient quantity of concrete is at the job site or in transit to the job site so that the entire pour can be done without delay. Include location of the concrete plant, number of trucks, estimated delivery times, estimated time between trucks, and number of trucks at the site before placement begins. Indicate the use of tremie or concrete pump lines and details of the seal to be used at the bottom end of the tremie or concrete pump line. Breakdowns of concrete plants, trucks, or traffic problems shall be considered under this Concrete Placement Plan. The contractor shall be aware of, and account for, batch, travel, and concrete placement times. Include an estimate of the concrete placement time per drilled shaft. When applicable, detail excavation to grade and finishing of the drilled shafts.
l. **Methods of Handling and Disposal of Spoil Excavation, Waste Slurry, Waste Concrete, and Drilled Shaft Cutoffs**. Present sufficient details to the engineer to evaluate the adequacy and compliance of the contractor's methods of disposal with the standard specifications, including all related environmental permits and local regulations.
m. **Other Information** requested on the plans or by the engineer.
n. **Reinforcing Steel Assembly and Installation Plan.** For shafts with a 4'-6" minimum nominal diameter and 40'-0" minimum length, prepare and submit the reinforcing steel assembly and installation plan. Reinforcing steel shop drawings, details of reinforcement placement, including bracing, centering, and lifting methods, and the method to assure the reinforcing cage position is maintained during construction, including use of bar boots and/or rebar cage base plates, and including placement of rock backfill below the bottom of shaft elevation shall comply with the pertinent requirements of the specifications.

   The reinforcing steel assembly and installation plan shall include:
   - Procedure and sequence of steel reinforcing bar cage assembly.
   - The tie pattern, tie types and tie wire gages for all ties on permanent reinforcing and temporary bracing.
   - Number and location of primary handling steel reinforcing bars used during lifting operations.
   - Type and location of all steel reinforcing bar splices.
   - Details and orientation of all internal cross-bracing, including a description of connections to the steel reinforcing bar cage.
   - Description of how temporary bracing is to be removed.
   - Location of support points during transportation.
   - Cage weight and location of the center of gravity.
   - Number and location of pick points used for lifting for installation, and for transport (if assembled off-site).

- Crane charts and a description and/or catalog cuts for all spreaders, blocks, sheaves and chockers used to equalize or control lifting loads.
- The sequence and minimum inclination angle at which intermediate belly rigging lines (if used) are released.
- Pick point loads at 0, 45, 60 and 90 degrees and at all intermediate stages of inclination where rigging lines are engaged or slackened.
- Methods and temporary supports required for cage splicing.
- For picks involving multiple cranes, the relative locations of the boom tips at various stages of lifting, along with corresponding net horizontal forces imposed on each crane.

C.1.4 Acceptance
The department will evaluate the Drilled Shaft Installation Plan for conformance with the requirements of these special provisions. Within 14 calendar days after receipt of the Drilled Shaft Installation Plan, the engineer will notify the contractor of the acceptance of the plan, or of additional information and/or changes required. Any unacceptable part of the Drilled Shaft Installation Plan will require resubmission. The contractor must resubmit the Drilled Shaft Installation Plan for evaluation and review with the necessary changes or additional information provided. The engineer will provide a written notice of acceptance or rejection of contractor's resubmitted Drilled Shaft Installation Plan within 14 calendar days after its receipt. The accepted contractor's Drilled Shaft Installation Plan will be subjected to trial and satisfactory performance in the field, and the engineer will grant final acceptance of the plan after its satisfactory field performance.
After assessment or reassessment of the Drilled Shaft Installation Plan has been made and the engineer has granted its acceptance, do not make any changes to the plan without written consent of the engineer.

C.3 Drilled Shaft Installation

C.3.1 General
Carry out the work in accordance to the accepted Drilled Foundation Shaft Installation Plan. The resulting installation plan shall include length of left-in-place casing, use of any temporary casing with grouting procedures, details of the constituent materials of any drilling fluid or means used for stabilization of the bottom of the excavation, the details of rock socket construction, the method of inspection, details of the concrete design mix, concreting method, the anticipated time to complete one shaft, and the pattern of construction.

Ensure that damage does not occur to the completed shafts through their working methods. Submit to the engineer a drilled shaft installation sequence. The proposed sequence and timing of shaft installation shall be such that the installation work shall not cause any damage to adjacent shafts. The shaft installation shall not commence until acceptance of the engineer has been obtained.

C.3.2 Temporary Working Surface
Use a temporary working surface to provide a level surface at the top of shafts for drilling where needed.

C.3.3 Forcible Correction
Where shafts have not been positioned within the specified limits no method of forcible correction will be permitted.

C.3.4 Records
Keep a record of all shafts installed. Give a copy of the record of the work done each day to the engineer within 24 hours of that day's work being completed. The engineer will accept the record form before drilled shaft works commence. Incorporate any comment by the engineer into the record form. Note all unexpected drilling or installation conditions in the records.

C.3.5 Method of Drilled Shaft Installation

C.3.5.1 General
The wet method shall be used to produce a sound and durable structure foundation free of defects.

Advance permanent casing through the unstable condition(s) and to the projected depth by twisting, drilling, or vibrating. Obtain prior approval from the engineer for vibrating the casing. After the casing is in place, excavate inside the casing to the projected shaft tip elevation using the wet excavation techniques described below. Clean the bottom of the excavation; test the drilling fluid for compliance with these special provisions, if applicable.

C.2.5.2 Wet Method

Use the wet installation method, or the casing installation method, for all drilled shaft locations. When using the wet method below the groundwater table, all drilled shaft operations shall be accomplished while maintaining a positive head of fluid above the water table.

When using the wet installation method, follow the following steps:

a. Drill the excavation and keep the drilled shaft always filled with fluid such as water, natural slurry, or slurry. Maintain a sufficient head of not less than 5 ft and maintain stability against heave and blow-in in the bottom of the excavation.
b. During excavation, test the properties of the fluid for compliance with these specifications, clean or desand the fluid as applicable.
c. Clean the bottom of the excavation with a bailing bucket, an airlift, a submersible pump, or other devices after the excavation is completed.
d. Just before lowering the reinforcing cage, test the fluid for conformance with the specifications.
e. Pour the concrete with a tremie pipe or a pump line extending to bottom of the excavated shaft to displace the fluid up and out of the shaft.

C.3.6 Excavations

C.3.6.1 General

Excavations required for the drilled shafts shall be performed through whatever materials encountered, of the dimensions and to the elevations shown in the plans, or as directed by the engineer. The excavation and installation method shall be suitable for the intended results and materials encountered. Blasting is not permitted.

Maintain a construction log during the drilled shaft excavation. Include on the construction log information such as ground elevation, groundwater elevation, sequence number, method of installation, machines and tools employed, drilling fluids employed, drilling times, excavated materials and their particular elevations, soil/rock-cores samples and their particular elevations, rock sockets and their elevation, bells plus their size and elevations, and all other information relevant to the excavation process that will assist the engineer in evaluating the foundation. Information shall also include proposed methods for disposal of excavated material and slurry conforming to state and local environmental regulations, codes and ordinances, the standard specifications, or as directed by the engineer.

C.3.6.2 Protection of Existing Structures

Take all reasonable precautions to prevent damage to existing structures and utilities. These measures shall include, but are not limited to, vibration monitoring or subsidence control during installation of casings, sheets, or drilling operations.

C.3.6.3 Drilled Shaft Excavation

Provide the necessary equipment to remove and dispose of all materials encountered in forming the drilled shaft excavation to the dimension and elevation as shown on the plans, or as directed by the engineer. Contractor's equipment may include, but are not limited to, augers and rotary drills. Unless otherwise shown on the plans, the drilled shaft excavations in overburden materials shall be vertical bored holes extending from the ground surface down to design tip elevation or the competent soil material, whichever is greater, where competent soil material is defined as the soil that will provide support and satisfactory performance to the structure.

In case of groundwater or severe seepage condition, with the flow of water very difficult to control, take appropriate measures including excavation with drilling fluid or excavation through a casing as indicated in the Drilled Shaft Installation Plan.

C.3.6.4 Lost Tools

Drilling tools that are lost in the excavation shall not be considered obstructions and shall be promptly removed. All costs due to removal of lost tools shall be borne by the contractor including costs associated with hole degradation during removal operations or time while the hole remains open.

C.3.6.5 Inspections and Cleanliness of Excavation

Provide the details of drilled shaft inspection and cleanliness within the Drilled Foundation Shaft Installation Plan, required by subsection C.1.3 of this specification. Provide equipment and tools for checking the dimensions and alignment of each drilled shaft excavation, and coordinate schedules for inspection of the excavation with the engineer. Determine dimensions, alignment, and final depth of the drilled shafts after final cleaning. When applicable, provide visual confirmation with a camera or safe access and egress to the engineer for inspection of the drilled shaft excavation prior to placement of the rebar cage and concrete. After the drilled shaft excavation has been prepared for inspection, notify the engineer. The cleanliness and the bearing surface of the drilled shafts will be evaluated and accepted by the engineer. Unless the engineer specifies otherwise, the contractor's cleaning operation shall be considered sufficient when no more that 50 percent of the bottom area of each shaft has less than 1/2-inch of sediment or debris at the time of hole acceptance just prior to steel positioning and concrete placement. The maximum depth of sediment or any debris at any location on the bottom of the shaft shall not exceed 1 1/2-inch at the time of concrete placement.

C.3.6.6 Safety

Do not permit any worker to enter the drilled foundation shaft excavation for any reason unless a suitable casing has been installed, the water level has been lowered and stabilized below the level to be occupied, and suitable safety equipment and procedures have been provided to the personnel entering the excavation which includes OSHA certification for confined-entry-space.

C.3.6.7 Test Core

At each drilled shaft, once the excavation is completed to the required minimum shaft embedment, clean the drilled shaft of any mud, loose soils and rock. Level the shaft bottom and eliminate any protuberance of rock into the limits of the shaft. Collect a test core of the rock (beginning at the drilled shaft base level) with a core diameter of not less than 2.125-inches (NQ core) and core length of not less than 10 feet and according to ASTM D2113.

The department will verify that this rock core has a recovery of at least 50 percent throughout the length cored. If the core does not meet the above requirements, extend the core as directed by the engineer. Subsequently, extend the drilled shaft embedment to the engineer-directed level.
Rock core drilling may be performed prior to excavation of the drilled shaft provided it is extended to the necessary depths and meets the recovery requirements outlined above or as directed by the engineer. The contractor is encouraged to review the geotechnical report listed in subsection C.1.2 in order to make this determination.

Competent bedrock is defined as bedrock having an overall core recovery of at least 90% and a rock quality designation (RQD) of at least 50%. After the shaft bearing level is established by the engineer, immediately grout the test core hole.

C.3.6.8 Record Information

Provide to the department the drilled shaft excavation records and report any unusual observation to the engineer within 8 hours of discovery. Submit a draft of this form for each completed drilled shaft within 24 hours of shaft completion and submit the final form within 2 weeks. Submit relevant information on a daily basis, or more frequently when variations occur, or as otherwise required by the engineer.
Report the drilled shaft construction progress in accordance with “Records and Forms” Drilled Shafts: Publication No. FHWA-NHI 18-024, GEC 010 (September 2018), Chapter 15 and Appendix E.

C.3.7 Placement of Reinforcing Steel Cage

Prior to placement of the reinforcing steel and concrete, if slurry fluid was employed during the installation of the drilled shaft, test the slurry for compliance with this specification as described in the QMP Drilled Shafts special provision. Slurry Tests shall be performed along the shaft and at the bottom of the shaft. Adjust the slurry properties as necessary to meet the specifications.
Prior to placement of the reinforcing steel and concrete, ensure that the C.3.6.5 cleanliness requirements are met.
Concrete or non-corrosive spacers shall be used at sufficient intervals not exceeding 10 feet along the reinforcement cage or the steel core. A minimum of 6 spacers shall be spaced evenly around the circumference of any shaft with a maximum space around the shaft circumference of 30 inches between any spacer (i.e. at any given level a 54-inch diameter shaft shall have 6 spacers). The first spacers shall be placed 1.5 feet from the bottom of the shaft with successive spacers at maximum intervals of 10 feet along the shaft. Spacers shall be of an appropriate diameter wheel to provide minimum clearance shown on the plans between the shaft excavation walls and the steel reinforcement.

C.3.8 CSL Access Tube Installation
Drilled shafts must be fitted with CSL test tubes to evaluate their integrity as shown on the plans.
Install the access tubes or pipes as nearly parallel and far as possible from the longitudinal bars. The number of tubes to be installed per each drilled shaft diameter is as indicated in the table below:

Drilled Shaft Diameter	Number of CSL Tubes	Tube Spacing
54-inches	5 minimum	As shown on plans

Securely attach the tubes to the interior of the reinforcement cage with a minimum concrete cover of three inches. The tubes may be attached to the exterior of the cage when accepted by the engineer provided the minimum cover requirement of 3-inches over the tubes shall be maintained. In all cases, the tubes shall be as near to vertical and parallel as possible.

Extend the tubes from the bottom of the drilled shaft to at least 3-feet above the top of the drilled shaft, or 2-feet above the ground surface for shafts with cut-off below the ground surface. The tubes must be watertight and capped to prevent concrete or debris from entering during manipulation of the cage and concreting. Care must be taken during lifting and lowering the steel reinforcement so as not to damage the tubes. Fill the CSL tubes with potable water prior to concrete placement. For production shafts and upon completion of the CSL tests, remove all the water from the access tubes or drilled holes and fill them with an approved grout.

C.3.9 TIP Wire Installation
Drilled shafts must be fitted with TIP wires to evaluate their integrity as shown on the plans. Install wires and provide other accessories described in bid item Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch included in these special provisions.

C.3.10 Concrete Placement

C.3.10.1 General
Do not prime pump within the drilled shaft. Place concrete continuously once concrete placement is started. No intermediate construction or cold joints are permitted within a single drilled foundation shaft.
Test the concrete delivered to the job site for compliance with the QMP Drilled Shafts special provisions, the standard specifications and these special provisions. Record the actual volume of concrete placed against the theoretical volume vs depth at depth intervals not exceeding the shaft diameter.
C.3.10.2 Concrete Placement Time

Ensure excavation inspection occurs no later than 24 hours after excavation is complete. Place concrete within three hours after excavation inspection and approval unless otherwise directed by the engineer. If the concrete is not placed within this time frame, the excavation must be re-inspected and accepted by the engineer prior to concrete placement.

C.3.10.3 Concrete Placement by Free Fall
Concrete placement within drilled shafts by free fall is not permitted.

C.3.10.4 Concrete Placement by Tremie Pipes
Use tremie pipes to place the concrete inside the excavation. Keep the discharge end of the tremie a minimum of 7-feet below the level of the fresh concrete already placed inside the excavation to maintain a seal. The concrete shall flow into position by pressure through a steel tremie with a minimum diameter of 10-inches. Seal the bottom of the tremie using one way flap valve, before it is lowered into the wet excavation. If water/slurry enters the tremie pipe after concrete pouring has started, the tremie must be withdrawn, cleaned, resealed, and pouring restarted. If for some reason, the tremie is raised out of the fluid concrete or the concrete inside the drilled shaft drops down contaminating the tremie, completely remove and clean the tremie, then replace the seal at the bottom of the tremie and lower the tremie back as far below as possible into the already placed concrete.

C.3.10.5 Concrete Placement by Concrete Pumps
Concrete pumps and concrete lines can be used to place concrete in drilled shafts rapidly or to deliver the concrete from a distant location. However, due to the need to disassemble the pump line to allow the removal of casing sections and potential air pockets, disruption in concrete flow, the concrete pump placement directly within the shaft is not permitted on this project. The pump must discharge the concrete into a minimum 10-inch diameter steel tremie with a bottom one way flap valve.

All pump lines and connections shall be watertight and must guide the concrete to the discharge point at the center of the rebar cage or steel core and drilled shaft excavation. The pump line may be flexible; however, inside the shaft use a minimum 10-inch diameter steel tremie pipe that can deliver the concrete in an uninterrupted manner. Keep the bottom of the tremie or discharge orifice 7-feet below the surface of fluid concrete already placed to avoid sudden jumping of the pump line out of the excavation. Concreting shall continue until over pouring is evident at the top of the drilled shaft and until dark gray concrete (acceptable concrete) can be distinguished from the drilling fluid.

C.3.10.6 Casting Level
Over pour concrete above the top of shaft cut-off level to ensure that all concrete at and below cut-off level is homogeneous and free of laitance and deleterious materials. Account for room and access requirements when cut-off level is below grade to adequately perform this task and protect adjacent ground from caving in.

C.3.11 Construction Tolerances for Individual Shafts
Drilled foundation shaft excavations or completed drilled foundation shafts constructed out of the tolerance will not be accepted. The contractor is responsible for correcting to the satisfaction of the engineer all unacceptable work. Materials, construction, work, engineering analysis, and redesign necessary to complete corrections to out-of-tolerance excavations or completed drilled shafts shall be furnished to the department without either cost or time extension for the project. Comply with the following construction tolerances:

a. The final, as constructed position of the drilled shaft shall be within a maximum of 2 inches in any direction from the theoretical position shown on the plans, unless otherwise permitted by the engineer prior to construction.
b. The vertical alignment of the drilled shaft excavation shall not vary by more than 1/16 inch per foot from plumb vertical.
c. The diameter of the installed drilled shaft shall not be less than the diameter of the drilled shaft shown on the plans. Any conflicts due to a casing that is greater in diameter than the plan shaft diameter shall be remedied by the contractor. No additional compensation or schedule time shall be granted to the contractor for resolving any conflicts due to oversized casings. Employ equipment and methods of excavation to complete the drilled shaft excavation to a planar bottom, and the cutting edges of the equipment used during the excavation shall be normal to equipment's vertical axis within a tolerance of 3/8-inch per foot. The bottom of the drilled shaft excavation shall be normal to the axis of the drilled shaft within ¾ inch per foot.
d. Tolerances outlined in sections a. to c. herein shall be checked and finally met by the contractor prior to placement of the reinforced rebar cage or steel core inside the shaft hole. Ensure the drilled shaft casing avoids conflicting with the reinforced rebar cage in adjacent shafts by ensuring that the provisions of C.3.10.b are never violated. If these provisions are violated, rectify the shaft in accordance with subsection C.3.12.

f. After the concrete is poured, the top elevation of the installed drilled shaft shall be within 1-inch of the top elevation of the corresponding drilled shaft on the plans, and the top of the reinforcing steel cage shall be within the positional tolerance shown on the plans. The center of the reinforcing cage shall be the center of the drilled shaft.

C.3.12 Non Destructive Testing Program

Perform CSL and TIP testing as specified elsewhere in the special provisions, and as directed by the engineer.

C.3.13 Acceptance for Constructed Drilled Shafts

C.3.13.1 General

Any drilled foundation shafts that are not constructed and installed in accordance to these special provisions will be rejected by the engineer. Rejected shafts shall be replaced or rectified by the contractor using methods and procedures subject to the acceptance of the engineer before beginning replacement or rectification. If required to rectify rejected shafts, shaft replacement, shaft repair, or the cost of constructing additional shafts, will be at no additional cost to the department and no additional time will be added to the contract.

In the event that a shaft or shafts are rejected, work on remaining drilled shafts in the contract cannot continue until the contractor re-visits and re-submits a revised drilled shaft installation plan and the revised plan is accepted by the engineer. The revised plan must address any construction issues that resulted in or contributed to the reason(s) for which the deficient shaft(s) were rejected. No additional time will be added to the contract for the time required to revise and accept the revised drilled shaft installation plan.

C.3.13.2 Based on Specifications

The department will only accept drilled foundation shafts that conform to these special provisions. Drilled foundation shafts and related work constructed in any manner that disregards any specified requirement will not be accepted. This includes:

a. Drilled foundation shaft excavations constructed out-of-tolerance, as specified in this specification. When repair to an out-of-tolerance shaft is possible as determined by the engineer, fix the drilled shaft to meet the tolerances before the contractor is permitted to proceed further with any drilled shaft construction. All repairs must be acceptable to the engineer before the contractor may resume the drilled shaft work.

b. Excavation of a drilled foundation shaft with slurry not conforming to the QMP Drilled Shafts special provision.

c. Drilled foundation shafts exhibiting cuttings from slurry at the drilled shaft bottom; showing soft, incomplete, or unclean bottoms; or presenting side sloughing and sedimentation at the bottom.

d. Drilled foundation shafts with honeycomb intrusions or concrete in which the fines have been washed out or water channels in concrete.

e. Horizontal discontinuity or necking in the drilled foundation shaft concrete.

f. Quarter-moon-shaped soil intrusions on the sides of a drilled foundation shaft.

g. Folded-in debris inside a drilled foundation shaft.

h. Drilled foundation shafts for which the mix design has been altered without the acceptance of the engineer, including the unauthorized addition of water to a mix design to bring it to a certain slump.

i. Drilled foundation shafts constructed in a manner where concrete placement has failed to meet the required time requirements, placement tolerances, or the methods of installation did not have the engineer’s acceptance.

j. Drilled foundation shafts constructed with concrete not meeting the minimum 28-day compressive strength requirement shown on the plans.

C.3.13.3 Based on the CSL or TIP Tests

Reports for the various tests performed elsewhere in the special provisions will be reviewed by the engineer. If the reports indicate significant anomalies or defects, the engineer will direct the contractor to core the shaft(s) at the location(s) of the defect or anomaly. The coring shall be a minimum of NX sized double tube core barrel. The engineer will determine the number of cores, length(s), location(s), and testing methodology. If the coring or core sample testing results confirm the presence of significant anomalies or defects, the drilled shaft will be determined to be unacceptable and rejected by the engineer. Upon rejection of the shaft(s), submit a remedial action plan to the engineer for correcting the rejected work. The remedial action plan shall include detailed shaft repair or replacement procedures if necessary and will be subject to acceptance by the engineer. Any modifications to the drilled shaft, load transfer mechanisms, and elements affected by the proposed remedial actions will require calculations and working drawings and shall be made and stamped by a professional engineer, registered in the state of Wisconsin.

In the event that the engineer directs the contractor to core through the concrete and the coring and associated core sample tests confirm the presence of anomalies or defects, the cost of coring, hole closure, core sample tests, and all labor and materials to perform the accepted remedial actions shall be provided at no additional cost to the department and with no extension of the contract time originally granted.

In the event that the engineer directs the contractor to core through the concrete and the core or core sample tests do not confirm the presence of anomalies or defects, the cost of the coring, hole closure and associated testing shall be borne by the department.

Frequent defects as determined by the engineer will result in a re-evaluation of the contractor's installation procedure and, depending on the frequency and type of defect, the engineer may require the contractor to change or modify his procedure.

D Measurement

The department will measure Drilled Foundation Shaft (diameter) of individual shafts by the linear foot, acceptably completed. Longer shafts, larger shaft diameters, additional excavation, and additional concrete placed beyond the limits of the plan dimensions will not be measured for payment unless authorized and agreed to in advance of placement by the engineer.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Drilled Shaft Foundation 54-Inch	LF

Payment is full compensation for preparing all submittals, including the Drilled Foundation Shaft Installation Plan; furnishing, and installing full depth permanent casing, templates, placing and removing temporary working surfaces, drilling fluids, documentation, clearing or removal of surface obstructions, clearing or removal of known man-made or natural obstructions; drilling the shafts, handling and disposal of the excavated, augered and cored soils, and any drilling fluids; lifting and positioning the reinforcement steel cage, including any required wheel type spacers, boots, internal bracing of the reinforcement steel cage, and any other temporary lifting supports; furnishing and placing the concrete for the Drilled Foundation Shafts to the dimensions and elevations as shown on the plans, including removal of over pour concrete; and furnishing, installing and closing the crosshole logging tubes.

Reinforcement bars are measured and paid under the bid item Bar Steel Reinforcement HS Bridges.

Schedule of Items
Attached, dated August 2, 2024, are the revised Schedule of Items Pages 1 – 7.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 20, 23, 76, 77, 78, 80, 81, 93-96

END OF ADDENDUM

CLEARING & GRUBBING

CAT.		STATION	-	STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	ROADWAY	6+50	-	9+25	3	3
0010	ROADWAY	10+75	-	13+00	3	3
CATEGORY 0010 SUBTOTAL					**6**	**6**
0030	RECREATIONAL LANE	6+38	-	9+15	3	---
0030	RECREATIONAL LANE	11+36	-	11+86	1	---
CATEGORY 0030 SUBTOTAL					**4**	**0**
PROJECT TOTAL					**10**	**6**

REMOVING GUARDRAIL

CAT.		STATION	-	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
0010	ROADWAY	7+78	-	8+56	RT	79
0010	ROADWAY	7+80	-	8+56	LT	76
0010	ROADWAY	11+44	-	12+22	RT	78
0010	ROADWAY	11+44	-	12+21	LT	78
CATEGORY 0010 SUBTOTAL						311
PROJECT TOTAL						**311**

EARTHWORK

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (CY) (1) CUT (2)	EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW (CY)
CTH G - WEST	6+07.00/8+42.15		210	0	70	140	1,979	2,474	-2,334	0	2,334
CTH G - EAST	11+72.00/13+34.00		222	0	53	169	94	118	52	52	0
Cat. 0010	SUBTOTAL COMMON EXC		432		123	309	2,073	2,591	-2,282	52	2,334
	TOTAL COMMON EXC CAT. 0010		432								2,334
CTH G - WEST REC LANE	6+07.00/8+42.15		0	0	0	0	1,086	1,358	-1,358	0	1,358
CTH G - EAST REC LANE	11+72.00/13+34.00		0	0	0	0	223	279	-279	0	279
Cat. 0030	SUBTOTAL COMMON EXC		0		0	0	1,309	1,636	-1,636	0	1,636
	TOTAL COMMON EXC CAT. 0030		0								1,636
	PRJOECT TOTAL		432								3,970

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNUSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

Addendum No. 01
ID 7840-03-73
Revised Sheet 20
August 2, 2024

EROSION CONTROL MOBILIZATION

CATEGORY		628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
0010	ROADWAY	2	1
CATEGORY 0010 SUBTOTAL		**2**	**1**
0030	RECREATIONAL LANE	1	1
CATEGORY 0030 SUBTOTAL		**1**	**1**
PROJECT TOTAL		**3**	**2**

EROSION CONTROL

CAT.		STATION	-	STATION	OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.6005 TURBIDITY BARRIERS SY	628.7570 ROCK BAGS EACH
0010	ROADWAY	5+80	-	8+80	RT/LT	670	670	---	---
0010	ROADWAY	10+75	-	13+40	RT/LT	480	480	---	---
0010	ROADWAY	8+80	-	10+05	RT/LT	---	---	420	---
0010	ROADWAY	10+25	-	11+30	RT/LT	---	---	370	---
CATEGORY 0010 TOTAL						**1,150**	**1,150**	**790**	**0**
0030	RECREATIONAL LANE	6+75	-	8+80	LT	300	300	---	---
0030	RECREATIONAL LANE	10+75	-	13+40	LT	250	250	---	---
0030	RECREATIONAL LANE	8+50	-		LT	---	---	---	15
0030	RECREATIONAL LANE	9+00	-		LT	---	---	---	15
0030	RECREATIONAL LANE	10+75	-	13+40	LT	250	250	---	---
CATEGORY 0030 TOTAL						**800**	**800**	**0**	**30**
PROJECT TOTAL						**1,950**	**1,950**	**790**	**30**

PERMANENT SIGNING

CAT.		STATION	OFFSET	SIGN MESSAGE	SIGN CODE	SIZE IN X IN	634.0814 POSTS TUBULAR STEEL 2x2-INCH 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	REMARKS
0010	ROADWAY	7+95	RT	WEIGHT LIMIT 20 TONS	R12-1	X	---	---	---	1	SAME POLE
0010	ROADWAY	7+95	RT	ATV 10 MPH	--	X	---	---	1	---	
0010	ROADWAY	7+98	LT	13'-6" CLEARANCE	W12-2	X	---	---	---	1	
0010	ROADWAY	8+10	RT	SPEED LIMIT 30	R2-1	24 X 30	1	5.00	1	---	
0010	ROADWAY	8+35	RT	ATV ROUTE CITY OF GREENWOOD	--	X	---	---	1	---	SAME POLE
0010	ROADWAY	8+35	RT	NO FISHING FROM BRIDGE	R9-55	X	---	---	---	---	
0010	ROADWAY	8+55	LT	BRIDGE HASH MARKS	W5-52L	X	---	---	1	---	
0010	ROADWAY	8+55	RT	BRIDGE HASH MARKS	W5-52R	X	---	---	1	---	
0010	ROADWAY	11+45	LT	BRIDGE HASH MARKS	W5-52L	X	---	---	1	---	
0010	ROADWAY	11+45	RT	BRIDGE HASH MARKS	W5-52R	X	---	---	1	---	
0010	ROADWAY	11+67	LT	NO FISHING FROM BRIDGE	R9-55	X	---	---	1	---	
0010	ROADWAY	11+67	LT	ATV/UTV ROUTE	--	X	---	---	1	---	SAME POLE
0010	ROADWAY	11+67	LT	ATV/SNOWMOBILE 10 MPH	--	X	---	---	---	---	
0010	ROADWAY	12+08	LT	WEIGHT LIMIT 20 TONS	R12-1	X	---	---	---	1	
0010	ROADWAY	12+08	RT	13'-6" CLEARANCE	W12-2	X	---	---	---	1	
CAT. 0010 SUBTOTAL							**1**	**5.00**	**9**	**4**	
0030	RECREATIONAL LANE	11+67	LT	SNOWMOBILE SPEED LIMIT 10	--	X	---	---	1	---	
CAT. 0030 SUBTOTAL							**0**	**0.00**	**1**	**0**	
PROJECT TOTAL							**1**	**5.00**	**10**	**4**	

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ID 7840-03-73
Revised Sheet 23
August 2, 2024

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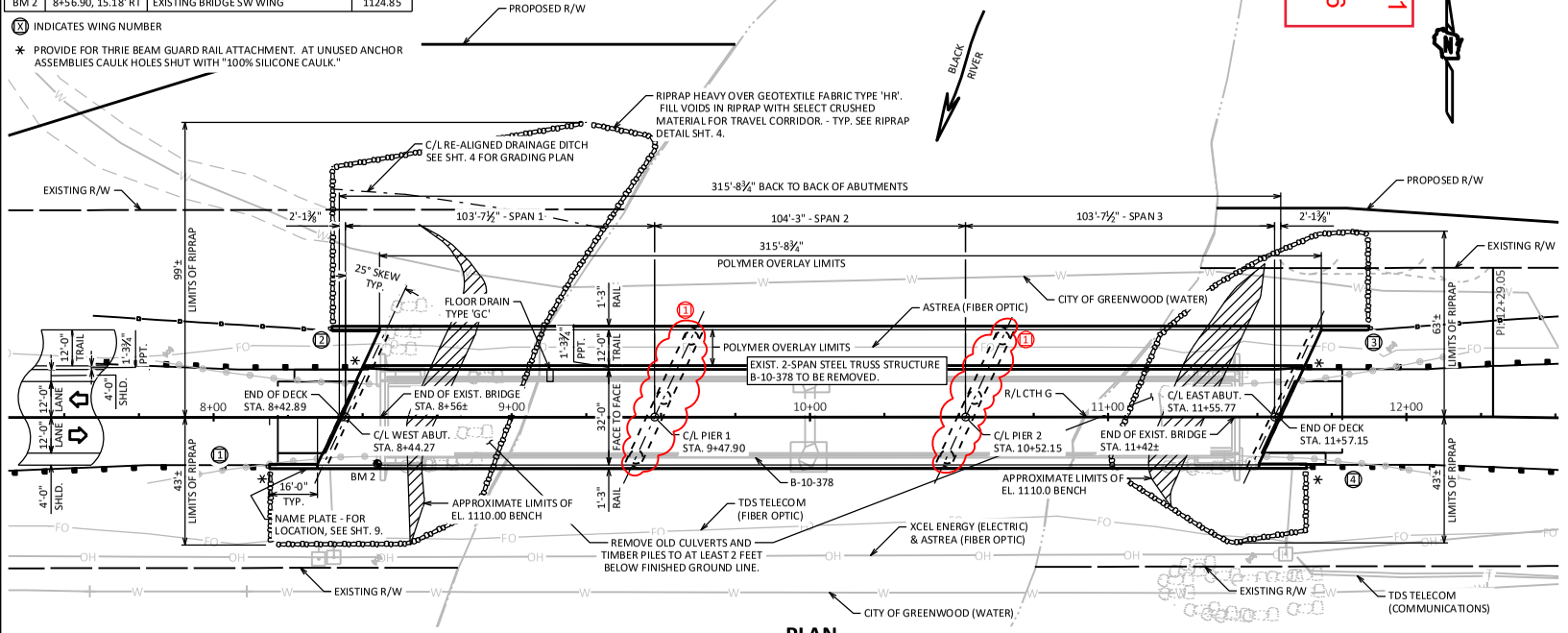
Revised Sheet 76
August 2, 2024

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
BM 2	8+56.90, 15.18' RT	EXISTING BRIDGE SW WING	1124.85

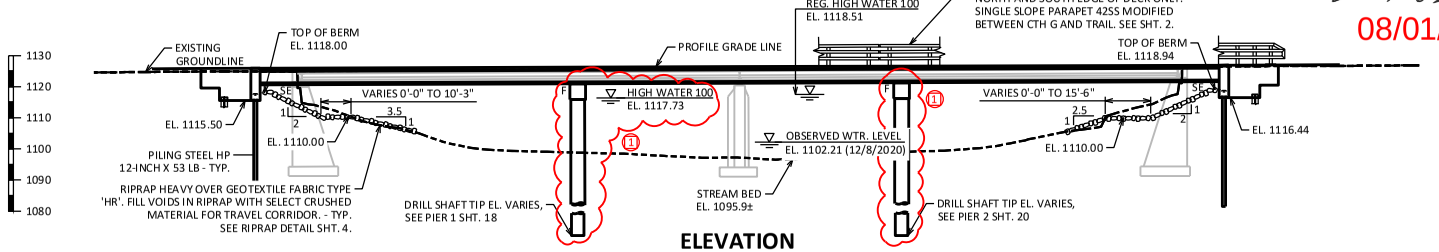
(X) INDICATES WING NUMBER

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."



PLAN

3-SPAN 45W" PRESTRESSED GIRDERS



ELEVATION

(LOOKING UPSTREAM)

LIST OF DRAWINGS:

STATE PROJECT NUMBER
7840-03-73

SDR
08/01/24

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/30/2024
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-10-398

CTH G OVER BLACK RIVER

COUNTY	CITY
CLARK	GREENWOOD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
DCH	JRD	DCH	JRD

GENERAL PLAN & ELEVATION

SHEET 1 OF 33

76

I.D. 7840-03-03 DATE: APR 2024

SCALE =

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.11
OPERATING RATING: RF = 1.58
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI
ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

45W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'_c = 8,000 PSI
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12-INCH X 53 LB PILING (WITH PILE POINTS) DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 210 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35'-0" LONG.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

PIERS CONSISTING OF DRILLED SHAFTS TO BE SUPPORTED ON SOUND ROCK WITH A MINIMUM FACTORED END BEARING RESISTANCE OF 150,000 PSF***. A GEOTECHNICAL ENGINEER WILL DETERMINE THE MINIMUM FACTORED RESISTANCES BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE DRILLED SHAFTS.

***THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

HYDRAULIC DATA

(1)

100-YEAR FREQUENCY:
Q_{100}= 33,000 C.F.S.
V_{100}= 8.8 F.P.S.
HW_{100}= EL 1117.73
WATERWAY AREA = 3759 SQ. FT.
DRAINAGE AREA = 527 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:
Q_2= 8990 C.F.S.
V_2= 4.8 F.P.S.
HW_2= EL. 1109.39

TRAFFIC DATA

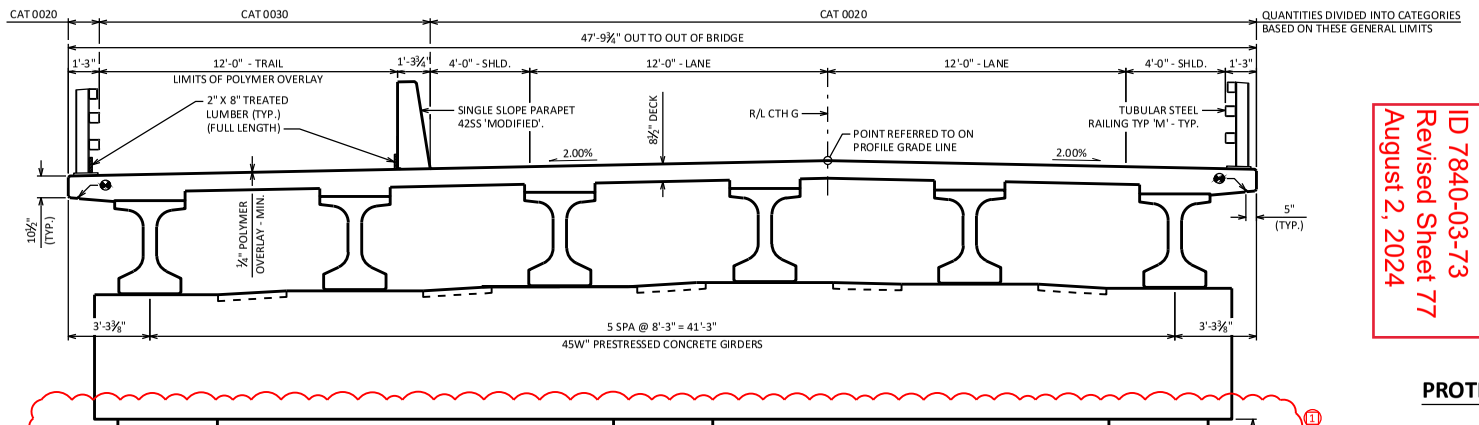
FEATURE ON CTH G:
ADT = 1430 (2023)
ADT = 1570 (2043)
R.D.S. = 30 MPH

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261

CONSULTANT
JAMES RHOAD-DROGALIS (608) 828-8166

STATE PROJECT NUMBER
7840-03-73



Addendum No. 01
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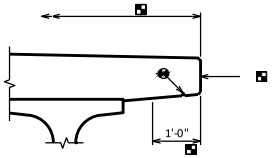
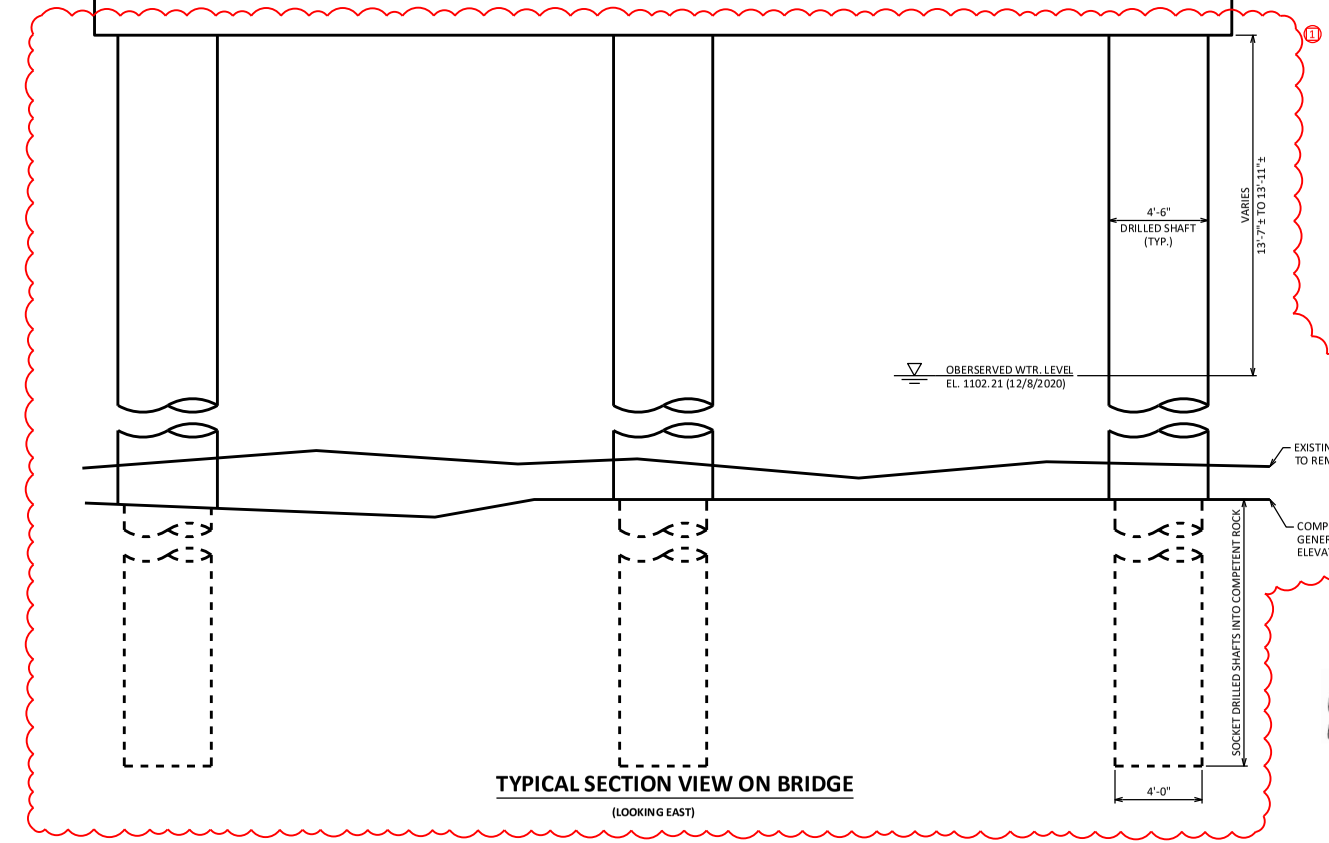
August 2, 2024



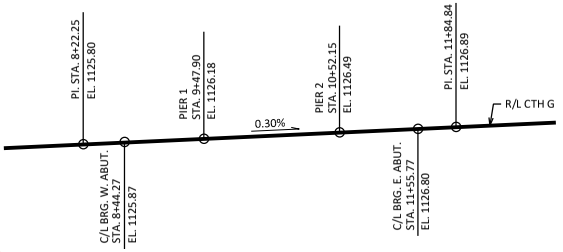
PROTECTIVE SURFACE TREATMENT DETAIL

(DECK REINFORCEMENT NOT SHOWN)



TYPICAL SECTION VIEW ON BRIDGE

(LOOKING EAST)



PROFILE GRADE LINE - CTH G

SDR

08/01/24

NOTES

1. ¾" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUTMENT DIAPHRAGM.
2. PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP, SIDE AND BOTTOM OF DECK AS SHOWN.

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/29/2024
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY DCH | PLANS CK'D JRD

CROSS SECTION

SHEET 2 OF 33

77

SCALE =

8

8

STATE PROJECT NUMBER

7840-03-73

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	WEST ABUT.	PIER 1	PIER 2	EAST ABUT.	TOTALS	CATEGORY 0020	CATEGORY 0030
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-10-0378	EACH	---	---	---	---	---	1	1	---
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-10-0398	EACH	---	---	---	---	---	1	1	---
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	320	---	---	320	640	460	180
502.0100	CONCRETE MASONRY BRIDGES	CY	578.4	51.7	67.9	68.5	51.5	818	555	263
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1775	25	---	---	25	1825	1361	464
502.3210	PIGMENTED SURFACE SEALER	SY	274	---	---	---	---	274	---	274
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	1872	---	---	---	---	1872	1248	624
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	3150	30260	25360	3150	61920	44011	17909
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	149280	2150	---	---	2150	153580	104344	49236
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	36	---	---	---	---	36	24	12
506.4000	STEEL DIAPHRAGMS B-10-0398	EACH	30	---	---	---	---	30	18	12
509.5100.S	POLYMER OVERLAY	SY	421	---	---	---	---	421	---	421
513.4061	RAILING TUBULAR TYPE M	LF	632	34	---	---	34	700	700	---
514.0445	FLOOR DRAIN TYPE GC	EACH	1	---	---	---	---	1	---	1
514.2625	DOWNSPOUT 6-INCH	LF	4	--	--	--	--	4	--	4
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	12	---	---	12	24	19	5
550.0500	PILE POINTS	EACH	---	10	---	---	10	20	16	4
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	---	350	---	---	350	700	560	140
606.0300	RIPRAP HEAVY	CY	---	389	---	---	781	1170	908	262
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	115	---	---	115	230	201	29
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	---	---	---	---	4	4	---
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	36	---	---	36	72	49	23
645.0120	GEOTEXTILE TYPE HR	SY	---	1480	---	---	760	2240	1732	508
SPV.0060.03	CROSSHOLE SONIC LOG (CSL) TESTING, DRILLED SHAFT FOUNDATION 54-INCH	EACH	---	---	3	3	--	6	6	--
SPV.0060.04	THERMAL INTEGRITY PROFILER (TIP) TESTING, DRILLED SHAFT FOUNDATION 54-INCH	EACH	---	---	3	3	--	6	6	--
SPV.0090.02	DRILLED SHAFT FOUNDATION 54-INCH	LF	---	--	165	129	--	294	177	117
SPV.0195.01	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	---	392	--	--	196	588	455	133
	NON-BID ITEMS									
	FILLER	SIZE	---	---	---	---	---	½"	---	---

1

Addendum No. 01
ID 7840-03-73
Revised Sheet 78
August 2, 2024

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-10-0398" SHALL BE THE EXISTING GROUNDLINE.

THE EXISTING STRUCTURE (B-10-0378) IS A STEEL TRUSS BRIDGE, 286.5' LONG X 25' WIDE, TO BE REMOVED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK, VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS, TOP AND EXTERIOR EXPOSED FACES OF WINGS, AND THE END 1'-0" OF THE FRONT FACE OF THE ABUTMENT.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE, BACK FACE AND THE TOP OF THE SINGLE SLOPE PARAPET 42SS MODIFIED.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP, SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR, AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET OR AS DIRECTED BY THE ENGINEER.

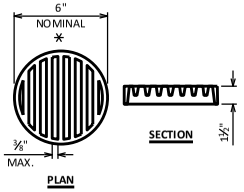
THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W" PRESTRESSED GIRDER DETAILS 2" SHEET.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

ALL REQUIRED REMOVAL OF THE EXISTING SUBSTRUCTURE IS INCLUDED IN THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-10-0378". BID ITEM ALSO INCLUDES THE REMOVAL OF OLD CULVERT PIPES AND TIMBER PILES UNDER THE EXISTING BRIDGE TO AT LEAST 2 FEET BELOW THE FINISHED GROUND LINE.

EXCAVATION REQUIRED UNDER THE BID ITEM "EXCAVATION FOR STRUCTURES B-10-0398" IS NOT USED TO BALANCE EARTHWORK.

1 BAR STEEL REINFORCEMENT INCLUDED WITHIN THE LIMITS OF "DRILLED SHAFT FOUNDATION 54-INCH" IS PAID FOR UNDER THE "BAR STEEL REINFORCEMENT HS STRUCTURES" BID ITEM. CONCRETE INCLUDED WITHIN THE LIMITS OF "DRILLED SHAFT FOUNDATION 54-INCH" AS SHOWN ON SHEET 18 AND 20 IS PAID FOR UNDER BID ITEM "DRILLED SHAFT FOUNDATION 54-INCH".

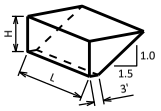


RODENT SHIELD DETAIL

✳ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

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08/01/24

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY DCH | PLANS CK'D JRD

GENERAL NOTES & QUANTITIES

SHEET 3 OF 33

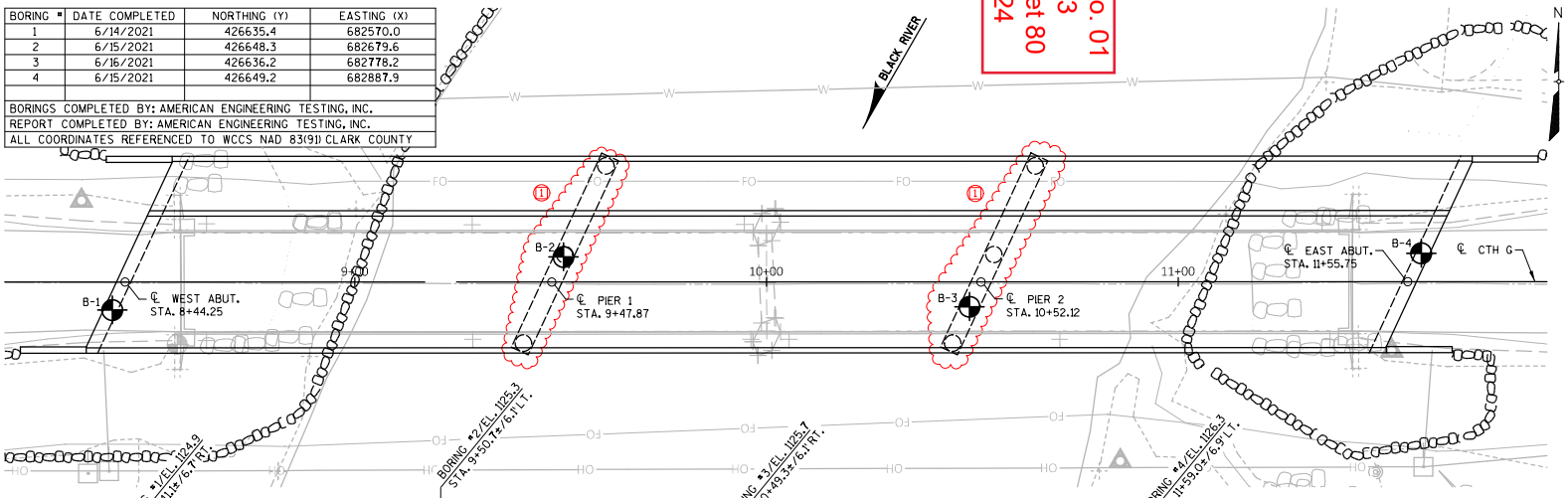
78

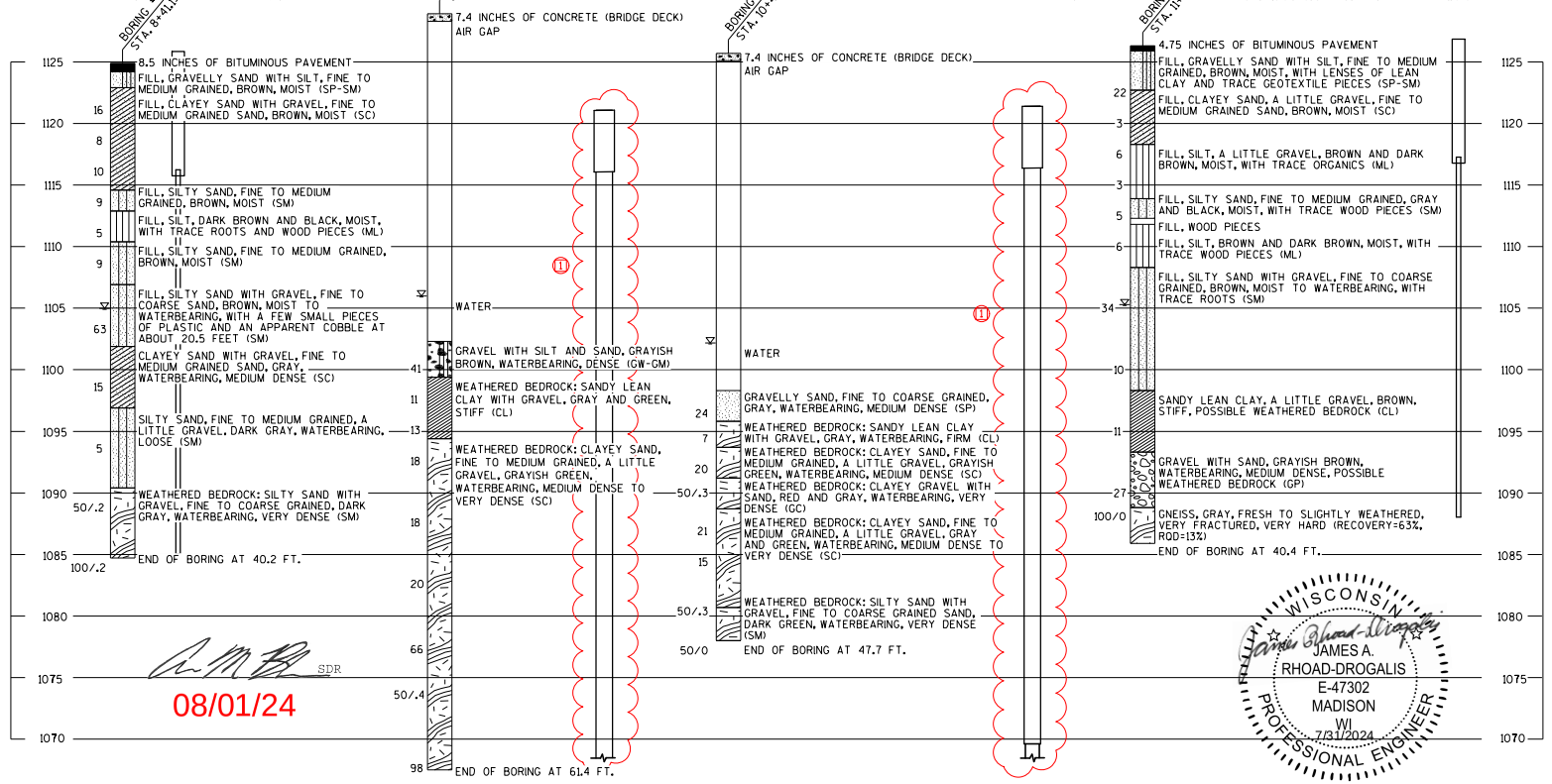
SCALE =

Addendum No. 01
ID 7840-03-73
Revised Sheet 80
August 2, 2024

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	6/14/2021	426635.4	682570.0
2	6/15/2021	426648.3	682679.6
3	6/16/2021	426636.2	682778.2
4	6/15/2021	426649.2	682887.9

BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) CLARK COUNTY





SDR
08/01/24

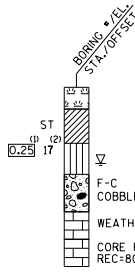
WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/31/2024
PROFESSIONAL ENGINEER

STATE PROJECT NUMBER
7840-03-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION
- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS
F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY: MES | PLANS CK'D.: JRD

SUBSURFACE EXPLORATION

SHEET 5 OF 33

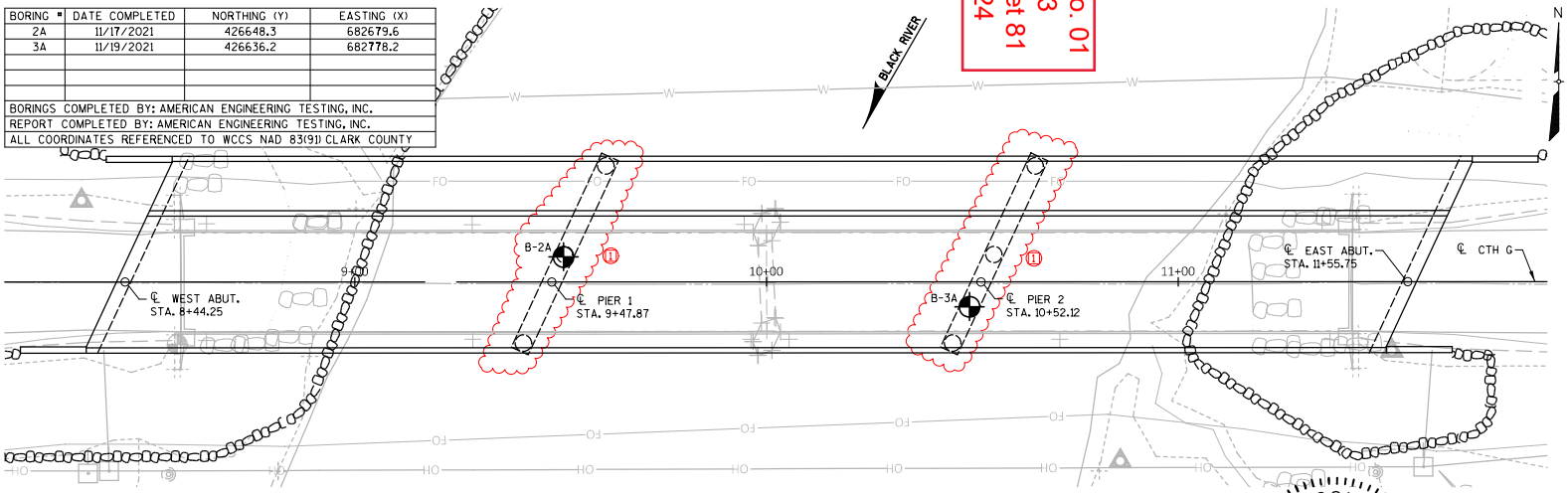
80

SCALE =

Addendum No. 01
ID 7840-03-73
Revised Sheet 81
August 2, 2024

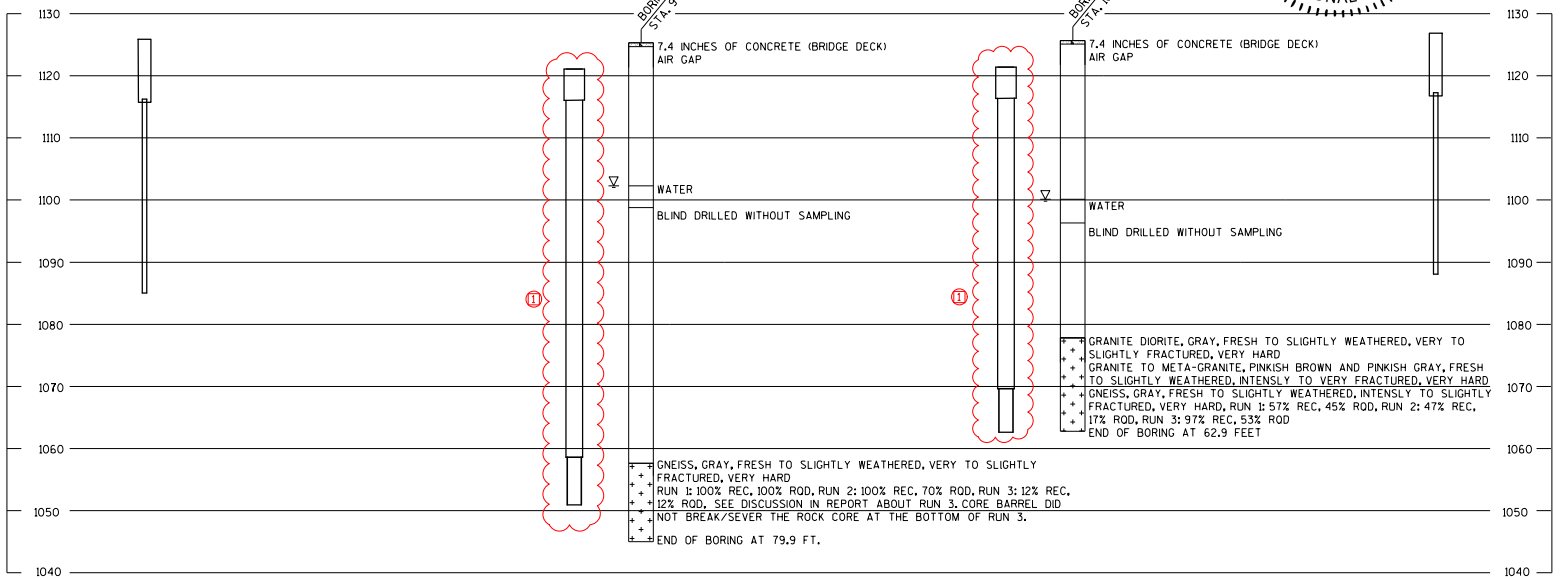
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
2A	11/17/2021	426648.3	682679.6
3A	11/19/2021	426636.2	682778.2

BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) CLARK COUNTY



SDR
08/01/24

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/30/2024
PROFESSIONAL ENGINEER



STATE PROJECT NUMBER
7840-03-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
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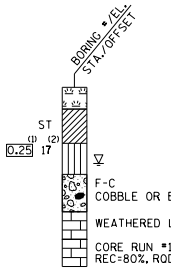
LEGEND OF BORING



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GROUND WATER ELEVATION
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ABBREVIATIONS
F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY MES | PLANS CK'D. JRD

SUBSURFACE EXPLORATION

SHEET 6 OF 33

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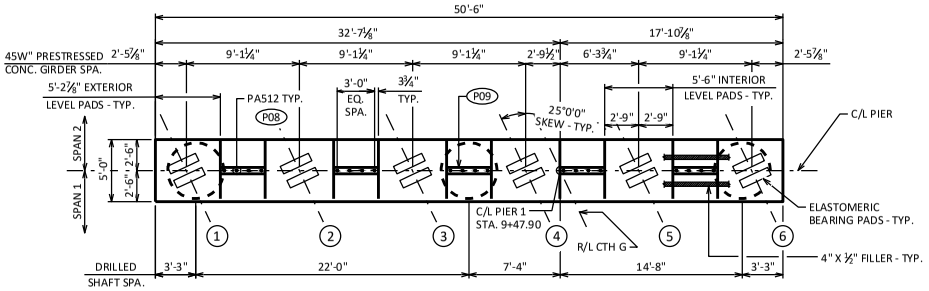
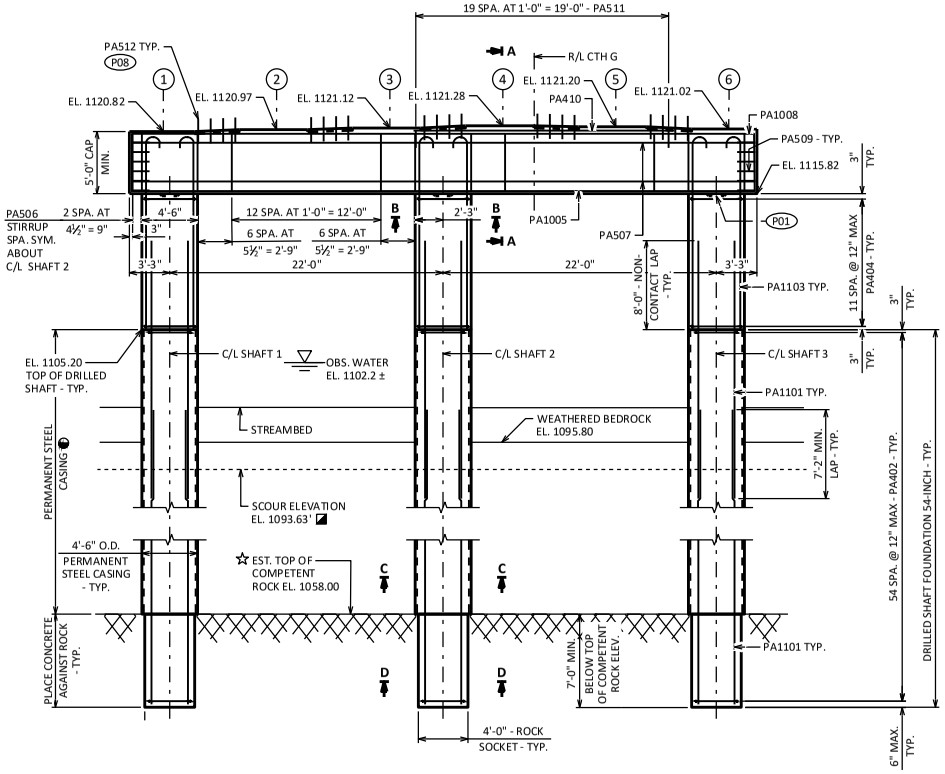
SCALE =

STATE PROJECT NUMBER

7840-03-73

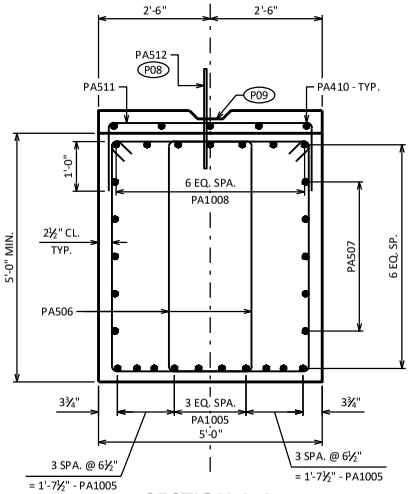


PLAN



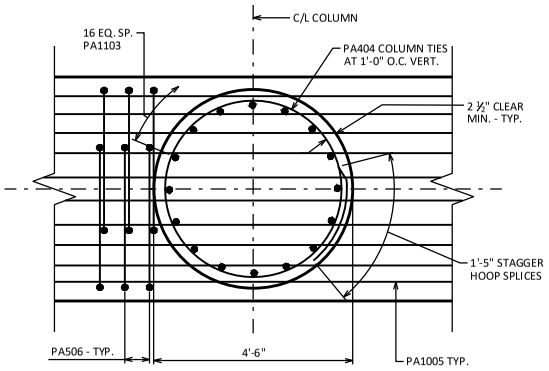
ELEVATION

(LOOKING EAST)



SECTION A-A

SECTION THROUGH PIER CAP.



SECTION B-B

SECTION THROUGH COLUMN

- ◪ SCOUR ELEVATION IS BASED ON HYDRAULIC ANALYSIS.
- ☆ COMPETENT ROCK ELEVATIONS ARE BASED ON SUBSURFACE EXPLORATION DATA. GEOTECHNICAL ENGINEER TO VERIFY COMPETENT ROCK ELEVATION.
- ◐ ESTIMATED PERMANENT STEEL CASING LENGTH
  - SHAFT 1 47'-0" ±
  - SHAFT 2 47'-0" ±
  - SHAFT 3 47'-0" ±
- (P01) 1'-3" X 1'-3" X 2" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY AT EACH SHAFT.
- (P08) PA512 BARS AT 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) KEYED CONSTRUCTION JOINT - FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS.

Addendum No. 01
ID 7840-03-73
Revised Sheet 93
August 2, 2024

SDR
08/01/24

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/29/2024
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY JAC | PLANS CK'D JRD

PIER 1

SHEET 18 OF 33

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1

STATE PROJECT NUMBER
7840-03-73

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS						TOTAL WEIGHT = 30,260	
PA1101		96	34-7			SHAFT	VERT.
PA402		165	12-2	X		SHAFT	HORIZ.
PA1103		48	16-9	X		COLUMN	VERT.
PA404		36	14-3	X		COLUMN	HORIZ.
PA1005		10	50-1			PIER CAP - BOT. LONG. BARS	HORIZ.
PA506		112	16-0	X		PIER CAP - STIRRUP BARS	VERT.
PA507		10	50-1			PIER CAP - LONGITUDINAL BARS	HORIZ.
PA1008		7	58-8	X		PIER CAP - TOP LONG. BARS	HORIZ.
PA509		12	7-1	X		PIER CAP - END BARS	HORIZ.
PA410		5	19-0			PIER CAP - ADDITIONAL TOP LONG. BARS	HORIZ.
PA511		20	7-3	X		PIER CAP - ADDITIONAL TOP U-BARS	VERT.
PA512		20	2-0			PIER CAP - DOWEL BARS	VERT.

(1)

Addendum No. 01
ID 7840-03-73
Revised Sheet 94
August 2, 2024

SDR
08/01/24

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
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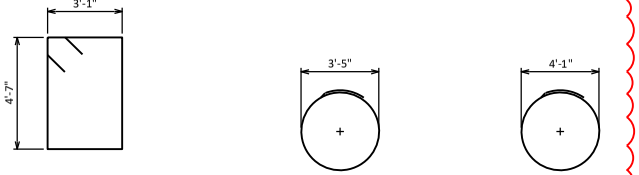
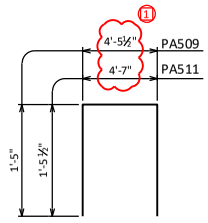
PROFESSIONAL ENGINEER

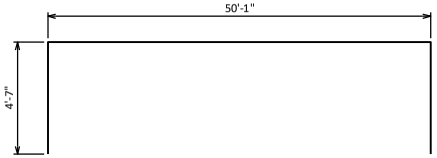
(1)



PA506 PA402 PA404



PA509, PA511



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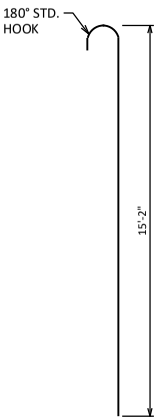

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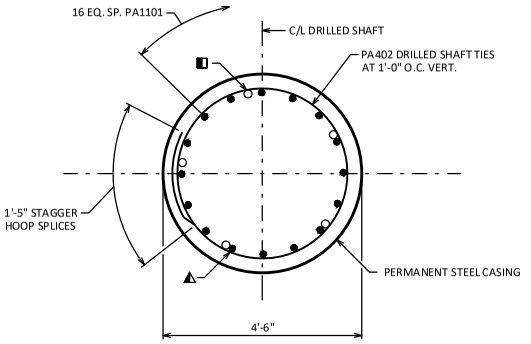
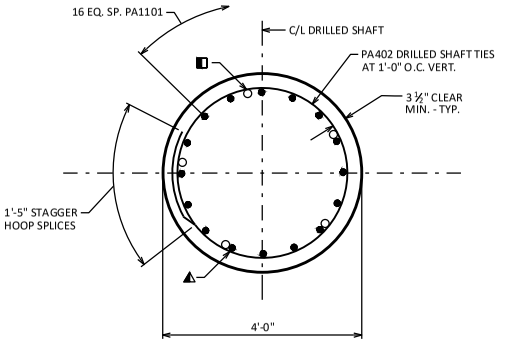


SECTION C-C

SECTION THROUGH DRILLED SHAFT



SECTION D-D

SECTION THROUGH ROCK SOCKET

◧ (5)-2" DIA. CSL TUBES FULL LENGTH OF SHAFT TIED INSIDE AND EVENLY SPACED AROUND THE PERIMETER OF REINFORCEMENT. EXTEND CSL TUBES 3'-0" ABOVE TOP OF SHAFT. REMOVE CSL TUBES DOWN TO TOP OF SHAFT AFTER TESTING IS COMPLETE.

⚠ 5-THERMAL WIRES FOR TIP TESTING. DISTRIBUTE WIRES EVENLY AROUND THE PERIMETER OF THE REINFORCEMENT TIED TO VERTICAL BARS.

NO.	DATE	REVISION	BY
(1)	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY JAC | PLANS CK'D JRD

PIER 1 DETAILS

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8

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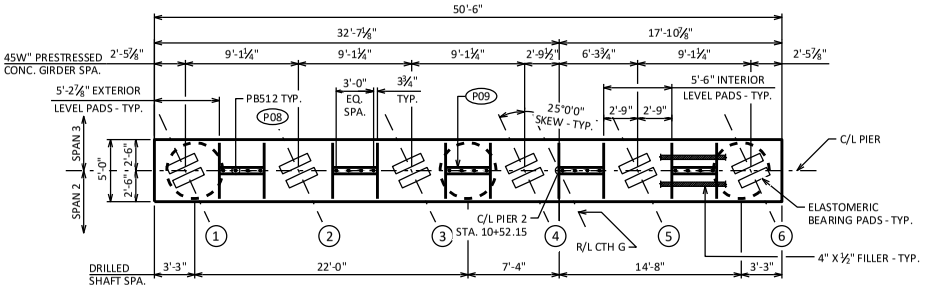
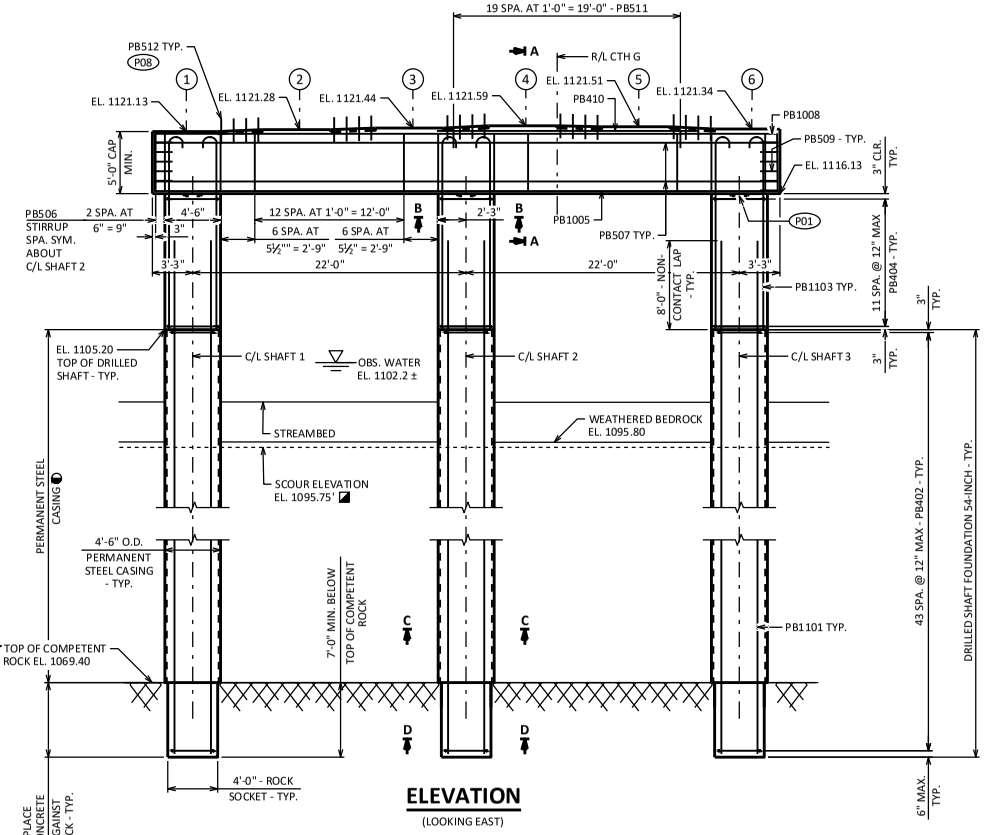
STATE PROJECT NUMBER

7840-03-73

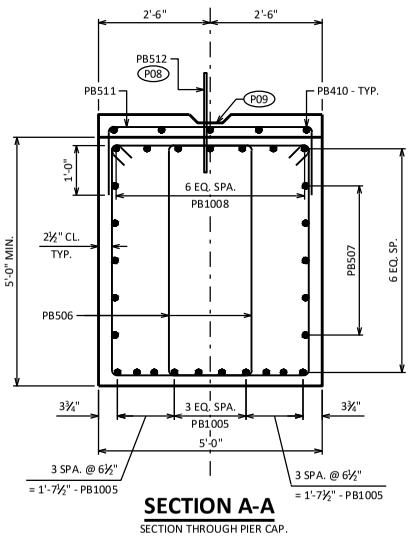


PLAN



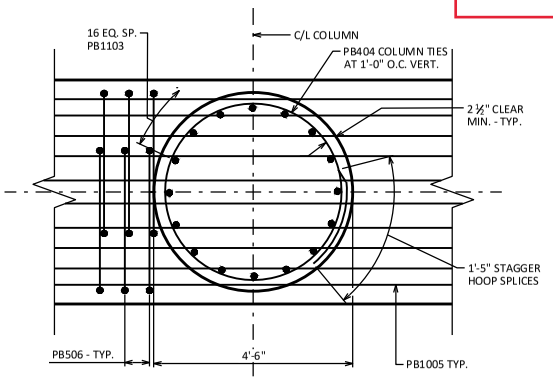
ELEVATION

(LOOKING EAST)



SECTION A-A

SECTION THROUGH PIER CAP.



SECTION B-B

SECTION THROUGH COLUMN

- ◪ SCOUR ELEVATION IS BASED ON HYDRAULIC ANALYSIS.
- ☆ COMPETENT ROCK ELEVATIONS ARE BASED ON SUBSURFACE EXPLORATION DATA. GEOTECHNICAL ENGINEER TO VERIFY COMPETENT ROCK ELEVATION.
- ◐ ESTIMATED PERMANENT STEEL CASING LENGTH
  - SHAFT 1 35'-9" ±
  - SHAFT 2 35'-9" ±
  - SHAFT 3 35'-9" ±
- (P01) 1'-3" X 1'-3" X 2" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY AT EACH SHAFT.
- (P08) PB512 BARS AT 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) KEYED CONSTRUCTION JOINT - FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS.

Addendum No. 01
ID 7840-03-73
Revised Sheet 95
August 2, 2024

SDR
08/01/24

WISCONSIN
JAMES A. RHOAD-DROGALIS
E-47302
MADISON
WI
7/29/2024
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY JAC | PLANS CK'D JRD

PIER 2

SHEET 20 OF 33

95

STATE PROJECT NUMBER
7840-03-73

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS						TOTAL WEIGHT = 25,360	
PB1101		48	50-8			SHAFT	VERT.
PB402		132	12-2	X		SHAFT	HORIZ.
PB1103		48	17-1	X		COLUMN	VERT.
PB404		36	14-3	X		COLUMN	HORIZ.
PB1005		10	50-1			PIER CAP - BOT. LONG. BARS	HORIZ.
PB506		112	16-0	X		PIER CAP - STIRRUP BARS	VERT.
PB507		10	50-1			PIER CAP - LONGITUDINAL BARS	HORIZ.
PB1008		7	58-8	X		PIER CAP - TOP LONG. BARS	HORIZ.
PB509		12	7-1	X		PIER CAP - END BARS	HORIZ.
PB410		5	19-0			PIER CAP - ADDITIONAL TOP LONG. BARS	HORIZ.
PB511		20	7-3	X		PIER CAP - ADDITIONAL TOP U-BARS	VERT.
PB512		20	2-0			PIER CAP - DOWEL BARS	VERT.

Addendum No. 01
ID 7840-03-73
Revised Sheet 96
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SDR
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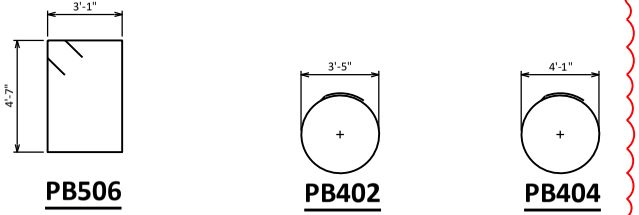
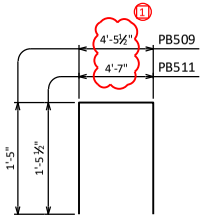
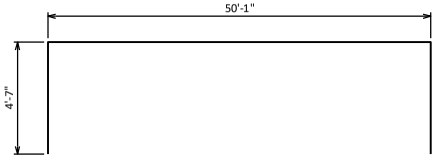


PB506 **PB402** **PB404**



PB509, PB511



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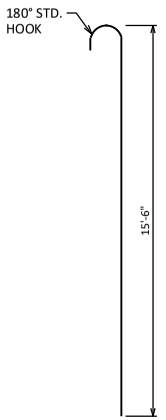

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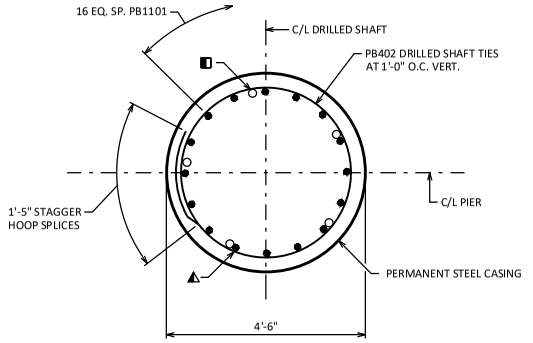
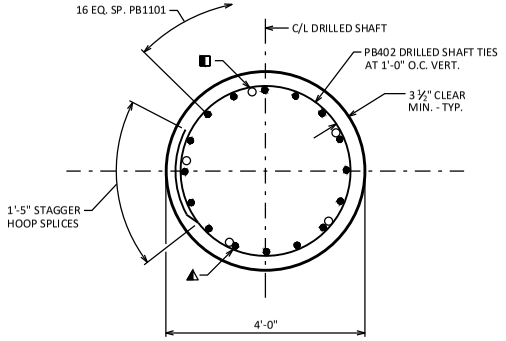


SECTION C-C
SECTION THROUGH DRILLED SHAFT



SECTION D-D
SECTION THROUGH ROCK SOCKET

◧ (5)-2" DIA. CSL TUBES FULL LENGTH OF SHAFT TIED INSIDE AND EVENLY SPACED AROUND THE PERIMETER OF REINFORCEMENT. EXTEND CSL TUBES 3'-0" ABOVE TOP OF SHAFT. REMOVE CSL TUBES DOWN TO TOP OF SHAFT AFTER TESTING IS COMPLETE.

⚠ 5-THERMAL WIRES FOR TIP TESTING. DISTRIBUTE WIRES EVENLY AROUND THE PERIMETER OF THE REINFORCEMENT TIED TO VERTICAL BARS.

NO.	DATE	REVISION	BY
1	07/24	COLUMN & SHAFT DIAMETER	UD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-10-398

DRAWN BY JAC | PLANS CK'D JRD

PIER 2 DETAILS

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8 8

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	10.000 STA	_____.____	_____.____
0004	201.0205 Grubbing	6.000 STA	_____.____	_____.____
0006	203.0250 Removing Structure Over Waterway Remove Debris (structure) 01. B-10-0378	1.000 EACH	_____.____	_____.____
0008	204.0165 Removing Guardrail	311.000 LF	_____.____	_____.____
0010	205.0100 Excavation Common	432.000 CY	_____.____	_____.____
0012	206.1001 Excavation for Structures Bridges (structure) 01. B-10-0398	1.000 EACH	_____.____	_____.____
0014	208.0100 Borrow	3,970.000 CY	_____.____	_____.____
0016	210.1500 Backfill Structure Type A	640.000 TON	_____.____	_____.____
0018	213.0100 Finishing Roadway (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0020	305.0110 Base Aggregate Dense 3/4-Inch	231.000 TON	_____.____	_____.____
0022	305.0120 Base Aggregate Dense 1 1/4-Inch	1,638.000 TON	_____.____	_____.____
0024	415.0060 Concrete Pavement 6-Inch	32.000 SY	_____.____	_____.____
0026	415.0410 Concrete Pavement Approach Slab	110.000 SY	_____.____	_____.____
0028	450.4000 HMA Cold Weather Paving	271.000 TON	_____.____	_____.____
0030	455.0605 Tack Coat	77.000 GAL	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	465.0105 Asphaltic Surface	271.000 TON	_____.____	_____.____
0034	502.0100 Concrete Masonry Bridges	818.000 CY	_____.____	_____.____
0036	502.3200 Protective Surface Treatment	1,825.000 SY	_____.____	_____.____
0038	502.3210 Pigmented Surface Sealer	274.000 SY	_____.____	_____.____
0040	503.0146 Prestressed Girder Type I 45W-Inch	1,872.000 LF	_____.____	_____.____
0042	505.0400 Bar Steel Reinforcement HS Structures	61,920.000 LB	_____.____	_____.____
0044	505.0600 Bar Steel Reinforcement HS Coated Structures	153,580.000 LB	_____.____	_____.____
0046	506.2605 Bearing Pads Elastomeric Non-Laminated	36.000 EACH	_____.____	_____.____
0048	506.4000 Steel Diaphragms (structure) 01. B-10-0398	30.000 EACH	_____.____	_____.____
0050	509.5100.S Polymer Overlay	421.000 SY	_____.____	_____.____
0052	513.4061 Railing Tubular Type M	700.000 LF	_____.____	_____.____
0054	514.0445 Floor Drains Type GC	1.000 EACH	_____.____	_____.____
0056	514.2625 Downspout 6-Inch	4.000 LF	_____.____	_____.____
0058	516.0500 Rubberized Membrane Waterproofing	24.000 SY	_____.____	_____.____
0060	550.0500 Pile Points	20.000 EACH	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	550.1120 Piling Steel HP 12-Inch X 53 Lb	700.000 LF	_____.____	_____.____
0064	606.0300 Riprap Heavy	1,170.000 CY	_____.____	_____.____
0066	612.0406 Pipe Underdrain Wrapped 6-Inch	230.000 LF	_____.____	_____.____
0068	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.____	_____.____
0070	614.2500 MGS Thrie Beam Transition	157.600 LF	_____.____	_____.____
0072	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.____	_____.____
0074	615.0100 Guard Fence Timber Rail	148.000 LF	_____.____	_____.____
0076	618.0100 Maintenance and Repair of Haul Roads (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0078	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0080	624.0100 Water	19.000 MGAL	_____.____	_____.____
0082	625.0100 Topsoil	2,740.000 SY	_____.____	_____.____
0084	628.1504 Silt Fence	1,950.000 LF	_____.____	_____.____
0086	628.1520 Silt Fence Maintenance	1,950.000 LF	_____.____	_____.____
0088	628.1905 Mobilizations Erosion Control	3.000 EACH	_____.____	_____.____
0090	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0092	628.2008 Erosion Mat Urban Class I Type B	2,740.000 SY	_____.____	_____.____
0094	628.6005 Turbidity Barriers	790.000 SY	_____.____	_____.____
0096	628.7570 Rock Bags	30.000 EACH	_____.____	_____.____
0098	629.0210 Fertilizer Type B	2.200 CWT	_____.____	_____.____
0100	630.0120 Seeding Mixture No. 20	40.000 LB	_____.____	_____.____
0102	630.0160 Seeding Mixture No. 60	11.000 LB	_____.____	_____.____
0104	630.0200 Seeding Temporary	10.000 LB	_____.____	_____.____
0106	630.0500 Seed Water	65.000 MGAL	_____.____	_____.____
0108	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	1.000 EACH	_____.____	_____.____
0110	637.2210 Signs Type II Reflective H	5.000 SF	_____.____	_____.____
0112	638.2102 Moving Signs Type II	10.000 EACH	_____.____	_____.____
0114	638.2602 Removing Signs Type II	4.000 EACH	_____.____	_____.____
0116	642.5001 Field Office Type B	1.000 EACH	_____.____	_____.____
0118	643.0300 Traffic Control Drums	500.000 DAY	_____.____	_____.____
0120	643.0420 Traffic Control Barricades Type III	2,882.000 DAY	_____.____	_____.____
0122	643.0705 Traffic Control Warning Lights Type A	3,200.000 DAY	_____.____	_____.____

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	643.0900 Traffic Control Signs	19,842.000 DAY	_____.____	_____.____
0126	643.0920 Traffic Control Covering Signs Type II	6.000 EACH	_____.____	_____.____
0128	643.1000 Traffic Control Signs Fixed Message	36.000 SF	_____.____	_____.____
0130	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0132	645.0111 Geotextile Type DF Schedule A	72.000 SY	_____.____	_____.____
0134	645.0120 Geotextile Type HR	2,240.000 SY	_____.____	_____.____
0136	646.1005 Marking Line Paint 4-Inch	2,560.000 LF	_____.____	_____.____
0138	650.4500 Construction Staking Subgrade	427.000 LF	_____.____	_____.____
0140	650.5000 Construction Staking Base	371.000 LF	_____.____	_____.____
0142	650.6501 Construction Staking Structure Layout (structure) 01. B-10-0398	1.000 EACH	_____.____	_____.____
0144	650.7000 Construction Staking Concrete Pavement	56.000 LF	_____.____	_____.____
0146	650.9911 Construction Staking Supplemental Control (project) 01. 7840-03-73	1.000 EACH	_____.____	_____.____
0148	650.9920 Construction Staking Slope Stakes	427.000 LF	_____.____	_____.____
0150	690.0150 Sawing Asphalt	186.000 LF	_____.____	_____.____
0152	715.0502 Incentive Strength Concrete Structures	4,806.000 DOL	1.00000	4,806.00

Proposal ID: 20240813016 **Project(s):** 7840-03-73

Federal ID(s): WISC 2024421

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0154	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0156	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	1,500.000 HRS	5.00000	7,500.00
0158	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	990.000 HRS	5.00000	4,950.00
0160	SPV.0035 Special 01. Excavation, Hauling, and Disposal of Dredged Soil	350.000 CY	_____.____	_____.____
0162	SPV.0060 Special 01. Temporary Emergency Action Plan	1.000 EACH	_____.____	_____.____
0164	SPV.0060 Special 02. Emergency Response	1.000 EACH	_____.____	_____.____
0170	SPV.0060 Special 05. Temporary Construction Access	1.000 EACH	_____.____	_____.____
0172	SPV.0090 Special 01. Treated Timber Rub Rail	174.000 LF	_____.____	_____.____
0176	SPV.0195 Special 01. Select Crushed Material for Travel Corridor	588.000 TON	_____.____	_____.____
0178	SPV.0060 Special 06. Crosshole Sonic Log (CSL) Testing, Drilled Shaft Foundation 54-Inch	6.000 EACH	_____.____	_____.____
0180	SPV.0060 Special 07. Thermal Integrity Profiler (TIP) Testing, Drilled Shaft Foundation 54-Inch	6.000 EACH	_____.____	_____.____
0182	SPV.0090 Special 03. Drilled Shaft Foundation 54-Inch	294.000 LF	_____.____	_____.____

Section: 0001 **Total:** _____.____

Total Bid: _____.____