HIGHWAY WORK PROPOSAL

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



HIGHWAY

COUNTY STATE PROJECT FEDERAL

Ozaukee

1229-04-75

WISC 2023548

I-43 North South Freeway; Meguon Rd IH 043 Interchange

PROJECT DESCRIPTION

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: \$1,000,000.00 Payable to: Wisconsin Department of Transportation		Attach Proposal Guaranty on back of this PAGE.
Bid Submittal		Firm Name, Address, City, State, Zip Code
Date: July 11, 2023 Time (Local Time): 11:00 am		SAMPLE
Contract Completion Time		NOT FOR BIDDING PURPOSES
June 30, 2025		This contract is subject to federal successful
Assigned Disadvantaged Business Enterprise Goal	8%	This contract is subject to 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)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

Type of Work:

For Department Use Only

Grading, Base, Asphalt Pavement, Concrete Pavement, Bridge Construction, Box Culvert Construction, Storm Sewer, Curb and Gutter, Sidewalk, Guardrail, Concrete Barrier, Chain Link Fence, Signs, Sign Structures, Pavement Markings, Street Lighting, Traffic Signals, Noise Barrier Wall.

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 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 ExpressTM on-line bidding exchange at <u>http://www.bidx.com/</u>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 ExpressTM 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: <u>mailto:customer.support@bidx.com</u>

- (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 ExpressTM web site.
 - 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 - 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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 ExpediteTM 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 ExpressTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is not the same on each page.
 - 2. The check code printed on the printout of the ExpediteTM 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

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, a	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 p	ayment to be made; we jointly and severally bind ourselves, our
heirs, executors, administrators, successors and assigns. The con	dition of this obligation is that the Principal has submitted a bid
proposal to the State of Wisconsin acting through the Department o	f 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)	(Name of Surety) (Affix Seal)
(Company Name)	(Signature of Attorney-in-Fact)
(Signature and Title)	
NOTARY FOR PRINCIPAL	NOTARY FOR SURETY
(Date)	(Date)
State of Wisconsin)	State of Wisconsin)
) ss. County)) ss. County)
On the above date, this instrument was acknowledged before me by the named person(s).	On the above date, this instrument was acknowledged before me by the named person(s).
(Signature, Notary Public, State of Wisconsin)	(Signature, Notary Public, State of Wisconsin)
(Print or Type Name, Notary Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)
(Date Commission Expires)	(Date Commission Expires)
Notary Seal	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

DT1305 8/2003

ime Period Valid (From/To)
ame of Surety
lame of Contractor
ertificate 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)

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.

<u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered</u> <u>Transactions</u>

- 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.

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STSP'S Revised January 13, 2023 SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1229-04-75, I-43 North South Freeway, Mequon Rd Interchange, IH-43, Ozaukee 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, 2023 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 (20230113)

2. Scope of Work.

The work under this contract shall consist of removals, grading, base aggregate, concrete pavement, asphaltic pavement, concrete curb and gutter, concrete barrier, erosion control, storm sewer, permanent signing, traffic control, pavement marking, restoration, structures, lighting, signals, FTMS and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

Structures:

<u>Bridges</u>					
B-45-112	B-45-113	B-45-116			
Noise Barriers					
N-45-3					
Sign Structures	<u>5</u>				
S-45-6	S-45-7	S-45-219	S-45-220	S-45-221	S-45-222
S-45-402					
<u>Culverts</u>					
C-45-18					
104-005 (200909	901)				

3. Non-mandatory Pre-Bid Meeting.

Add the following to standard spec 102.3.1 as paragraph three:

⁽³⁾ Prospective bidders are invited to attend a non-mandatory pre-bid meeting on June 22, 2023 at 9:00 am. The meeting link is shown below and will also be published on the HCCI website.

Join on your computer, mobile app or room device

Click here to join the meeting

Meeting ID: 216 887 316 890 Passcode: a7GZjD

Download Teams | Join on the web

Join with a video conferencing device

493366865@t.plcm.vc

Video Conference ID: 116 292 274 3

Or call in (audio only)

<u>+1 469-214-8538, 777970995#</u> United States, Dallas

Phone Conference ID: 777 970 995#

Find a local number | Reset PIN

4. **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.

Furnish a written request for a conditional notice to proceed to the engineer for approval to begin work prior to September 1, 2023. The request for a conditional notice to proceed shall be specific and include description of work, work zones, schedule, haul routes and traffic impacts. The conditional notice to proceed will not affect the completion date. All construction equipment, traffic impacts and activities utilized or mobilized prior to September 1, 2023 shall not disrupt the ongoing construction contracts listed in the Other Contracts section of the specifications.

The completion date is based on an expedited work schedule and may require extraordinary forces and equipment; work on Saturdays and Sundays; and work at night.

Cold weather work, grading, excavation of frozen ground, high ground water, and dewatering may be experienced during the duration of the project. Expect early spring and late fall weather work for clearing and grubbing, grading/excavation of frozen ground and high ground water. Costs for dewatering during those months, and mitigation efforts for high water table elevations shall not be considered adverse weather delays to construction. Cost for dewatering is considered incidental to construction unless covered under bid items. Anticipate cold weather in early spring and late fall to perform concrete masonry, concrete paving and ancillary concrete work (curb, median barrier, etc.) during early spring and late fall seasons. Plan to heat aggregates and water for mixes, and that the heating of the aggregate and water is considered incidental to those concrete items. Anticipate frozen grade/subgrade. Rework, heat, blanket, cover, compact, remove/replace such that the grade/subgrade is not frozen prior to constructing and backfilling storm sewer and culvert pipes. Technique to mitigate frozen grade/subgrade shall be approved by the engineer. Cost to mitigate frozen grade/subgrade is considered incidental to the applicable items of work.

Indicate on the proposed schedule of operations that a large force and adequate equipment will be needed to ensure that the work will be completed within the established contract time.

Be advised that there will be multiple mobilizations and/or remobilizations to complete construction operations. No additional payment will be made, by the department, for additional mobilizations.

Provide seven day advanced notice to the department prior to removing freeway structures.

After written notice to proceed, and prior to Final Acceptance of the work, assist with maintenance of existing roadways and bridges as specified in standard spec 104.6.1. This assistance may include performance of work covered under pay items or accommodating local repair forces within the work zones. Maintain all newly constructed work as specified in standard spec 104.6.1.

Place topsoil in all graded areas as designated by the engineer immediately after grading has been completed. Fertilize, seed and mulch or fertilize and sod all areas within five calendar days after placement of topsoil.

Clear debris and buildup at temporary precast concrete barrier scuppers and openings as directed by the engineer to ensure proper drainage is maintained. Cost of clearing debris and buildup from scuppers is incidental to the concrete barrier temporary precast bid items.

Special consideration for Drain Tile Exploration should be taken. Communicate drain tile locations, material, elevation, and size to engineer immediately upon location. Engineer to coordinate with the designer to validate storm sewer and drain tile design. Do not construct any ditch, or any storm sewer elements (including placing orders) until field tile exploration is complete and storm sewer and drain tile design is validated. Drain tile exploration locations are identified under miscellaneous quantities.

A. CPM Progress Schedule

Refer to the Baseline CPM Progress Schedule items elsewhere in these special provisions.

B. Schedule of Operations

Traffic shifts shown in a given stage may occur at different times during that stage depending on the controlling elements for a given traffic movement. Do not move to the next stage until all work in the current stage is completed or as approved by the engineer. The department anticipates that the schedule for each stage shall be as follows:

Stage 1 Construction:

- Construct temporary widening along SB I-43 inside shoulder.
- Construct partial width of proposed SB I-43 Bridge (B-45-113).
- · Construct stream relocation along Ramp B.

Stage 2A Construction:

- Demo existing NB I-43 bridge (B-45-19).
- Construct 3 travel lanes and outside shoulder of proposed NB I-43. Gap of lane 1 required from 1439+00 to 1454+40.
- · Construct box culvert extension C-45-18.
- · Construct remaining portion of B-45-113.
- Construct B-45-112.
- · Construct S-45-6 and S-45-220.
- Construct MNA and MNB.
- Construct east half of Mequon Road from approximately 33+00 to 40+62.
- Construct east half of B-45-116 (culvert) under I-43 NB.

Stage 2B Construction:

- Construct median shoulder of NB I-43 and lane 1 from 1439+00 to 1454+40.
- Construct median portions of B-45-116 (culvert)
- Install temporary traffic signal at the intersection of STH 57/167 (Mequon Rd) & CTH W (Port Washington Rd). Refer to the Temporary Traffic Signal Plans for further instruction.

Stage 3A Construction:

- Construct west half of B-45-116 (culvert) under I-43 SB.
- Demo existing SB bridge (B-45-20).
- · Construct all proposed SB I-43 pavement.
- Construct MNC and MND.
- Construct both ponds.
- · Construct median and inside lane of Mequon Road.
- Construct S-45-402, S-45-219, S-45-221, S-45-222, S-45-7.
- Construct N-45-3.

Stage 3B Construction:

- · Construct remaining portion of Mequon Road.
- Construction continues for mainline and ramps.
- Just before end of stage, overlay B-45-113 with Thin Polymer Overlay (TPO).

Stage 3C Construction:

- · Overlay B-45-112 with Thin Polymer Overlay (TPO).
- Grade, place shoulder aggregate, install guardrail, restripe, and restore crossover area to the north.
- · Construct barrier in the crossover area to the south.

C. Nightly Freeway Shoulder Restoration

When working on the IH 43 SB shoulder without the protection of concrete barrier temporary precast, no open excavation or storing of materials and equipment within the clear zone (20' from edge of traveled way) and no vertical drop-offs greater than two-inches adjacent to the travel lanes will be permitted during Peak Hours and Off Peak Hours with no lane closures. At the end of every Off Peak and nighttime closure, fill all excavated areas, restore the shoulders with base aggregate dense as shown on the plans, and remove all materials and equipment from the clear zone (20' from edge of traveled way). Provide shoulder cross slopes with an 8% maximum rollover with the adjacent travel lanes for Peak Hour and Off Peak Hour freeway traffic operations providing two lanes in each direction. Before opening to two lanes of traffic, place traffic control drums at the inside edge of shoulder as shown on the plans. Nightly freeway shoulder restoration will be paid for under the Base Aggregate Dense 1 ¼-Inch bid item. Removal of excess material will be paid for under the bid item Prepare Foundation for Asphaltic Shoulders.

In Stage 1, when placing HMA pavement lower layers per the layers and gradations shown on the plans, no vertical drop-offs greater than two inches will be permitted where the shoulder abuts the adjacent travel lanes for Peak Hour and Off Peak Hour freeway traffic operations providing two lanes in each direction. Before opening to two lanes of traffic, place traffic control drums at the inside edge of shoulder as shown on the plans.

D. Contractor Coordination

Provide at least one individual to serve as the contractor's sole point of contact for field utility coordination, traffic closure coordination, and communication for the duration of the project.

Obtain prior acceptance from the engineer and the TMP Team Lead for Full Freeway Closures. Notify local emergency and police agencies seven calendar days prior to freeway closure.

Notify the engineer and all businesses within a 1000' radius of the Mequon Road project limits five business days in advance of roadway closures, ramp closures, or access restrictions to their business.

Attend weekly scheduling meetings to discuss the near-term schedule activities, address any long-term schedule issues, and discuss any relevant technical issues. Develop a rolling three-week schedule identifying the previous week worked and a two week "look ahead". Provide sufficient detail to include actual and planned activities and all the subcontractors for offsite and construction activities, addressing all activities including ramp and lane closure schedules to be performed and identifying issues requiring engineering action or input.

E. Ramp Closures

All long-term ramp closures will occur when mainline traffic is bidirectional. In stage 2A, when traffic is bidirectional on existing I-43 SB and temporary widening, all existing NB ramps shall be closed. In stage 3A and 3B when traffic is bidirectional on completed NB pavement, all existing SB ramps shall be closed.

F. Portable Changeable Message Signs

Obtain acceptance from the engineer regarding the wording of all messages on portable changeable message signs prior to placing the message.

G. Freeway and Service Ramp Work Restrictions

Definitions

The following definitions apply to this contract for freeway and service ramp work restrictions:

Freeway No Closures (Peak Hours)

5:30 AM – 8:30 PM	Monday, Tuesday, Wednesday, Thursday
5:30 AM – 10:00 PM	Friday
9:00 AM – 10:00 PM	Saturday
9:00 AM – 8:30 PM	Sunday

Freeway Single Lane Closure Hours (Off Peak Hours)

8:30 PM – 5:30 AM	Monday PM to Friday AM
10:00 PM – 9:00 AM	Friday PM to Saturday AM
10:00 PM – 9:00 AM	Saturday PM to Sunday AM
8:30 PM – 5:30 AM	Sunday PM to Monday AM

Service Ramp Closure Hours

8:00 PM – 6:00 AM	Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM
9:30 PM – 9:30 AM	Friday PM to Saturday AM, Saturday PM to Sunday AM
Full Freeway Closure Hours	

11:00 PM – 4:30 AM	Sunday PM to Monday AM, Monday PM to Tuesday AM,
	Tuesday PM to Wednesday AM, Wednesday PM to Thursday
	AM, Thursday PM to Friday AM
11:00 PM – 6:30 AM	Friday PM to Saturday AM, Saturday PM to Sunday AM

Enhanced coordination is anticipated with adjacent projects for lane closures and full freeway closures. See Article 9, Other Contracts for adjacent projects.

Do not close freeway lanes or shoulders (including service ramps) and ensure that the freeways are entirely clear for traffic during Weekday Peak Hours and Weekend Peak Hours, except as shown in the traffic control plans. Provide a minimum of one lane in each direction of the freeway that is entirely clear for traffic during Weekday Off-Peak Hours and Weekend Off-Peak Hours except as allowed during full closure. Provide a minimum of one lane in each direction of the freeway that is entirely clear for traffic during Nighttime Hours except as allowed during full closure. Close service ramps only during Service Ramp Closure Hours, unless otherwise specified in the plan, or unless otherwise approved by the engineer for safety or operational reasons associated with other adjacent lane or freeway closures.

Follow plan details for closures. Lane restrictions of the freeway beyond that shown on the traffic control plans are subject to lane rental assessments and must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer. Once approved, allow at least three business days prior to the closure of roadway, lane, and ramp as identified in Contractor Coordination.

Do not, at any time, conduct construction operations in the median area and adjacent outside shoulder area of the freeway at the same time without obtaining prior permission of the engineer, beyond that shown on the traffic control plans.

Provide gaps in the work zone as needed to maintain ingress and egress of construction operations.

Do not, at any time, store equipment or materials in the median area without the protection of concrete barrier temporary precast or within the clear zone (20' from edge of traveled way). Obtain prior permission of the engineer, beyond that shown on the traffic control plans.

H. Rolling Closure

Short term freeway mainline and service ramp rolling closures may be allowed for a maximum of 15 minutes for the removal and erection of sign structures, equipment moves across the road, or other required work as determined by the engineer. The department will allow short term rolling closures only between 2 AM and 4 AM, and they may only be performed by freeway law enforcement.

Obtain approval from the engineer before coordinating these closures with freeway law enforcement. Coordinate 14 calendar days before closure. Present the scheduled time for the short term rolling closure at the weekly traffic meeting a minimum of one week before the closure.

sef-108-031 (20170406)

I. Closure Restrictions

General

Full closure and detouring of freeway roads will be restricted to Full Freeway and Service Ramp Closure/Hours unless otherwise specified. A full freeway closure is defined as one direction of the freeway. The freeway may be closed to facilitate the installation of major pipe and culvert crossings, to perform work related to major traffic shifts and other work approved by the engineer. Provide signed detour routes, as shown in the plans, fully open and free of construction during all full roadway and system ramp closures.

Coordinate with adjacent projects to ensure that no consecutive service ramp closures occur simultaneously.

Submit requests for closures beyond extended hours up to 20 hours 30 calendar days prior to the closure event. For closures greater than 20 hours, submit requests 45 calendar days prior to the planned closure event. Obtain prior approval from the engineer and the TMP Team Lead for said closures.

Submit requests for extended nighttime closure hours 14 calendar days prior to the planned closure events. Obtain prior approval from the engineer and the TMP Team Lead for said closures. Notify local emergency and police agencies 7 calendar days prior to closures.

J. Work Zone Ingress/Egress

All locations of work zone egress or ingress for construction vehicles are subject to approval from the engineer. Submit to the engineer locations for freeway access into and out of the work zone for each stage and plans, for approval, that include signage and parallel deceleration and acceleration lanes for each freeway access into and out of the work zones. Submit the locations and plans 14 calendar days prior to each stage for approval by the engineer. This will be an official submittal as defined in section 103.10.2.4 of the Contract Award and Execution located elsewhere in these Special Provisions.

At the weekly traffic meetings, provide updated information to the Work Zone Access Plan, as approved by the engineer, to direct emergency responders accessing a median barrier restricted work zone. Access for emergency responders shall be maintained at all times and not restricted by vehicles, equipment or the storage of equipment, vehicles or materials.

Access into the work zones is not allowed directly from the freeway during peak hours except where appropriate acceleration and deceleration lanes and traffic control are provided, as approved by the engineer. Access into the work zones from the freeway will be allowed at other times, subject to approval by the engineer, if operations can be safely accomplished and do not result in non-construction traffic entering the work zones. Exiting work zones directly onto the freeway is only allowed when operations do not obstruct or slow traffic on the freeway. All construction vehicles shall yield to all through traffic at all locations.

SEF Rev. 13_0425_revised

K. Local Street Closure Restrictions

Definitions

The following definitions apply to this contract for local street work restrictions:

Peak Hours

6:00 AM – 9:00 PM	Monday, Tuesday, Wednesday, Thursday, Friday
11:00 AM – 8:00 PM	Saturday
1:00 PM – 5:00 PM	Sunday

Off Peak Hours (Night Time Closure Hours)

9:00 PM – 6:00 AM	Monday PM to Tuesday AM, Tuesday PM to Wednesday AM,
	Wednesday PM to Thursday AM, Thursday PM to Friday AM
9:00 PM – 11:00 AM	Friday PM to Saturday AM

8:00 PM – 6:00 AM	Saturday PM to Sunday AM
5:00 PM – 6:00 AM	Sunday PM to Monday AM
Full Closure Hours	
9:00 PM – 5:00 AM	Sunday PM to Monday AM, Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM
9:00 PM – 8:00 AM	Friday PM to Saturday AM, Saturday PM to Sunday AM

Do not close local street traffic lanes or intersections and ensure that the local street traffic lanes are entirely clear for traffic during Peak Hours, except as shown in the traffic control plans. One local street traffic lane and/or the shoulder may be closed but maintain at least one local street traffic lane open to traffic, during Off-Peak Hours. Close intersections only during Off-Peak Hours, unless otherwise specified in the plan, or unless otherwise approved by the engineer for safety or operational reasons associated with other adjacent local street closures.

Full closure and detouring of Mequon Road will be restricted to Full Closure Hours unless otherwise specified. A full closure is defined as one direction of Mequon Road. Mequon Road may be closed to facilitate the demolition and construction of mainline bridges. Provide signed detour routes, as shown in the plans, fully open and free of construction during all full roadway closures.

Coordinate with adjacent projects to ensure that no two consecutive east-west local roads that cross I-43 are closed simultaneously.

Follow plan details for closures. Lane restrictions beyond that shown on the traffic control plans must be approved by the engineer. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer for approval. Once approved, allow at least five business days prior to the closure of local roadway and/or intersection as identified in Contractor Coordination.

Do not begin or continue any work that closes local street traffic lanes or intersections outside the allowed time periods specified in this contract. If the contractor fails to open local roadway lanes of traffic and/or intersections to traffic by the specified times, assessments shown in the article Lane Rental Assessment will be placed upon the contractor based on the hourly rental rate that the non-compliant closure occurs. The total assessment to the contractor will be the summation of the separate assessments for each local street traffic lane and local street intersection closure violation.

Permitting the contractor to continue to finish the work or any part of it after the time designated for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the department of any of its rights under the contract.

Keep sidewalks open unless otherwise shown on the plans or as approved by the engineer. Provide adequate temporary sidewalk and bridging over obstructions in the sidewalk area, as directed by the engineer.

Existing trees, street light poles, and other utility poles are to remain in place during construction unless otherwise noted in the plan. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between the trees, poles and construction equipment. No additional compensation will be made.

Mequon Road

Mequon Road may be closed from the existing SB ramps to the east project limits, as shown in Stage 2A for a one-time period not to exceed 60 consecutive calendar days, to allow for the construction of the proposed roadway, the C-45-18 extension, B-45-112, and remainder of B-45-113. This closure will only be allowed after traffic on I-43 has been shifted to the temporary widening along the existing I-43 SB shoulder. Ensure that Highland Road and Donges Bay Road are fully open to traffic before closure of Mequon Road as these are the defined detour routes.

L. All Work Restrictions

Excavation material and cleared and grubbed material should be stockpiled on upland areas an adequate distance away from wetlands, storm sewer inlets, floodplains, and the waterways as determined by engineer. In addition, stockpiled material should not be within the clear zone (20' from edge of traveled way) or without the protection of concrete barrier temporary precast.

Provide the Wisconsin State Patrol and Ozaukee County Highway Maintenance with a 24-hour emergency contact number for when maintenance is required.

Replace standard spec 108.10.2.2(2) with the following:

Include requests for severe weather delays in the Monthly CPM Progress Schedule Updates. Indicate the number of adverse weather days that occurred during that month. Provide CPM progress schedule documentation as required under Section 108.4.7 of the Baseline CPM Progress Schedule/Monthly CPM Progress Schedule Updates special provision to show that the controlling item of work was delayed. Show that the delay was beyond the control of the contractor. The engineer will assess the contractor's submittal and indicate how many adverse weather days are confirmed.

Replace standard spec 108.10.2.2(3) with the following:

For each calendar month, the engineer will grant a severe weather day for each confirmed adverse weather day that exceeds the number of anticipated adverse weather days 108.10.2.2(1) shows. When the contractor requests severe weather days, the engineer will give the contractor a monthly written statement showing the number of days credited for severe weather. The engineer will only extend time for interim and contract completion dates for severe weather days that have been validated through an accepted CPM Progress Schedule Update.

M. Interim Completions

Supplement standard spec 108.11 as follows.

M.1 Interim Completion of Work: Mequon Road (60 Calendar Days)

Complete Stage 2A work necessary to reopen Mequon Road within the 60 consecutive calendar days.

If the contractor fails to complete the work necessary to fully reopen Mequon Road to traffic within 60 calendar days, the department will assess the contractor \$3,500 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 60 calendar days. 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.

M.2 Interim Completion of Work: Stage 2A NB Mainline and NB Ramps, August 1, 2024

Complete Stage 2A work necessary to shift NB I-43 traffic to completed NB mainline pavement and reopen NB ramps.

If the contractor fails to complete all work necessary to shift traffic to completed NB mainline pavement and reopen NB ramps by August 1, 2024, the department will assess the contractor \$7,000 in interim liquidated damages per day for each calendar day after 12:01:00 AM on August 1, 2024 that NB mainline and NB ramps are not open to traffic. An entire calendar day will be charged for any period of time within a calendar day that the NB mainline and NB ramps are not open to traffic beyond 12:01 AM.

N. Enhanced Final Liquidated Damages

Replace standard spec 108.11 paragraph (3) as follows:

The department will assess \$10,000 in daily liquidated damages. These liquidated damages reflect the cost of engineering, supervision, and a portion of road user costs.

O. Maintenance

After written notice to proceed, and prior to Final Acceptance of the work, assist with maintenance of existing roadways and bridges as specified in standard spec 104.6.1. This assistance may include performance of work covered under pay items or accommodating local repair forces within the work zones. Maintain all newly constructed work as specified in standard spec 104.6.1.

P. Winter Maintenance

Ozaukee County will perform snow removal operations for freeway, ramp lanes, shoulders and county highways that are open to traffic. Provide for snow removal in those areas closed to traffic as required to facilitate safe construction operations and stage changes and as required to eliminate snow melt run-off from crossing active roadways. Provide Ozaukee County Highway Maintenance and Ozaukee County Sheriff's Department with a 24-hour emergency contact number for when maintenance is required.

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Q. Fish Spawning

There shall be no instream disturbance of waterways (tributary to Milwaukee River running along Ramp A and B to C-45-18 and running East-West through B-45-116), 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 fish.

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, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR. Regardless of timeframe, culvert pipe checks for pipes at these waterways shall be removed immediately after completion of the pipework.

R. 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.

S. Rusty Patched Bumble Bee (Bombus affinis)

The rusty patched bumble bee (Bombus affinis) was listed as endangered by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act, effective March 21, 2017. Construction activities such as grading outside the mowed shoulder area have the potential to impact ground nests and wildflowers that may serve as a food source for the bee. Flowering seeding mixture (Seeding Mixture 90A) is used to mitigate habitat loss, see "Construction Details – Rusty Patched Bumble Bee Habitat Restoration" pages in the plan set for locations. If an active rusty-patched bumblebee nest is encountered in construction areas, contact the WisDOT Regional Environmental Coordinator, who will coordinate with USFWS.

T. Migratory Birds

Swallow or other migratory bird nests have been observed on the following structures; however, deterrent is not needed because (1) construction activities that may affect the underside or interior of structure(s) will not occur during the migratory bird nesting season, or (2) it has been determined that anticipated construction activities on the structure will not disturb active nests. If it is later determined during construction that the nests will be disturbed 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-45-19
- B-45-20

U. Little Brown Bat

The little brown bat has been identified to roost within the project limits. It roosts in sheltered places during the day. These roosts can include human structures or natural structures such as tree hollows, wood piles, rocky outcrop. To the extent practicable, no tree clearing shall occur from June 1 to August 15 in the area between Mequon Road and Highland Road.

V. Tributary to the Milwaukee River

Do not stockpile roadway excavation material along the east side of I-43 or Ramp B, where the tributary to the Milwaukee River runs parallel to the roadway. The tributary runs along Ramp B through C-45-18 and runs East-West through B-45-116.

5. Lane Rental Fee Assessment.

A General

The contract designates some lane closures to perform the work. The contractor will not incur a Lane Rental Fee Assessment for closing lanes during the allowable lane closure times. The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the allowable lane closure times. If a lane is obstructed at any time due to contractor operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

The allowable lane closure times are shown in the Prosecution and Progress article.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule.

Coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project. If other projects are in the vicinity of this project, coordinate lane closures to run concurrent with lane closures on adjacent projects when possible. When lane closures on adjacent projects extend into the limits of this project, Lane Rental Fee Assessments will only occur if the closure facilitates work under this contract.

B Lane Rental Fee Assessment

The Lane Rental Fee Assessment incurred for each lane closure, each ramp closure, and each full closure of a roadway, per direction of travel, is as follows:

- IH 43 Off Peak Lane Closure During and/or Extending into Weekday Peak Hours
 - 2 lanes to 1 lane: \$6,000 per lane, per direction of travel, per hour broken into 15 minute increments
- IH 43 Off Peak Lane Closure During and/or Extending into Weekend Peak Hours
 - 2 lanes to 1 lane: \$3,000 per lane, per direction of travel, per hour broken into 15 minute increments

Local Road Off Peak Lane Closure During and/or Extending into Peak Hours

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments
- IH 43 Service Ramp
 - \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments
- IH 43 Full Freeway Closure
 - 4:30 AM to 5:30 AM: \$1,500 per lane, per direction of travel, per hour broken into 15 minute increments
 - After 5:30 AM: \$6,000 per lane, per direction of travel, per hour broken into 15 minute increments

Mequon Road Full Closure

- \$2,000 per lane, per direction of travel, per hour broken into 15 minute increments

The Lane Rental Fee Assessment represents a portion of the cost of the interference and inconvenience to the road users for each closure. All lane, roadway, or ramp closure event increments 15 minutes and less will be assessed as a 15-minute increment.

The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents or emergencies not initiated by the contractor.

The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance. If interim completion time or contract time expires before the completion of specified work in the contract, additional liquidated damages will be assessed as specified in standard spec 108.11 or as specified within this contract.

stp-108-070 (20161130)

6. Traffic.

General

Keep IH 43, and all service ramps open to through traffic at all times for the duration of this project except as noted below and in the Prosecution and Progress article in these special provisions.

The construction sequence, including the associated traffic control, shall be substantially accomplished as detailed in the Traffic Control Plans, and as described herein.

Unless detailed in the plans, do not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval of the engineer.

Maintain emergency vehicle access at all times.

Prior to any traffic control being placed, provide the engineer, Wisconsin State Patrol and Ozaukee County Highway Maintenance with the name and telephone number of a local person responsible for the emergency maintenance of traffic control.

Coordinate all traffic handling with the engineer. Place roadway signing as detailed on the plans and in conformance with the Manual on Uniform Traffic Control Devices (MUTCD), latest edition.

Employ such flag persons, signs, barricades, and drums as may be necessary to safeguard or protect hazards in the work zone, such as exposed manholes or drop-offs for vehicles and direct traffic at locations where construction operations may interfere or restrict the smooth flow of traffic. Make arrangements and be responsible for the prompt replacement of damaged or dislocated traffic control or guidance signs, day or night.

Traffic requirements under this contract shall be coordinated with other adjacent and concurrent Department of Transportation or local municipality projects. The contractor shall be responsible for implementing and coordinating with other contractors all traffic control as shown on the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

Residential and Business Property Access

Maintain access to the property along Mequon Road. Maintain and keep open the access to the driveway and parking lots where alternative access is not available at all times by closing one driveway at a time or building half the driveway at a time.

Schedule of Operations

Traffic shifts shown in a given stage may occur at different times during that stage depending on the controlling elements for a given traffic movement as approved by the engineer. The department

anticipates that the schedule of major freeway traffic shifts and roadway openings and closings for each stage shall be as follows, unless approved by the engineer:

Stage 1 Traffic:

- During Freeway Single Lane Closure Hours (Off Peak Hours), close inside lanes of both Northbound and Southbound I-43.
- Close inside lanes on Mequon Road for B-45-113 construction. A full closure of Mequon Road is anticipated for girder erection. Detour to Donges Bay Road and/or Highland Road. See details of closure in prosecution and progress.

Stage 2A Traffic:

- Close Mequon Road from existing SB ramps to RR tracks. Open to local traffic only. Detour to Donges Bay Road. See details of closure in prosecution and progress.
- · Close existing NB ramps at Mequon Road. Detour to Highland Road.
- Shift NB mainline traffic to temporary widening and partially constructed SB bridge (B-45-113). Utilize existing crossovers just north and south of construction limits.
- Permanent existing traffic signals at the intersections of IH 43 SB Ramps & STH 57/167 (Mequon Rd) and IH 43 NB Ramps & STH 57/167 (Mequon Rd) can be deactivated after Mequon Rd and the NB Ramps have been closed and the engineer approves.
- At the conclusion of Stage 2A, the proposed permanent traffic signal at the intersection of IH 43 NB Ramps & STH 57/167 (Mequon Rd) shall be operational.

Stage 2B Traffic:

- Ramps MNA and MNB open.
- Mequon Road open.
- Maintain SB traffic on existing SB I-43.
- · Shift NB I-43 traffic to completed pavement.

Stage 3A Traffic:

- · Shift all traffic to completed NB I-43. Traffic will be in this configuration over the winter.
- Close existing SB ramps at Mequon Road. Detour at Highland Road or to County Line Road.
- · Reduce traffic to single lane in each direction along Mequon Road within construction zone.
- The temporary traffic signal at the intersection of STH 57/167 (Mequon Rd) & CTH W (Port Washington Rd) shall be operational. Refer to the Temporary Traffic Signal Plans for further instruction.
- The permanent existing traffic signal at the intersection of STH 57/167 (Mequon Rd) & CTH W (Port Washington Rd) can be deactivated when the temporary traffic signal is operational, and the engineer approves.

Stage 3B Traffic:

- Switch Mequon Road traffic to completed inside lanes
- All traffic on mainline and ramps remain in 3A configuration
- The temporary traffic signal at the intersection of STH 57/167 (Mequon Rd) & CTH W (Port Washington Rd) shall be operational. Refer to the Temporary Traffic Signal Plans for further instruction.
- At the conclusion of Stage 3B, the proposed permanent traffic signals at the intersections of IH 43 SB Ramps & STH 57/167 (Mequon Rd) and STH 57/167 (Mequon Rd) & CTH W (Port Washington Rd) shall be operational.

Stage 3C Traffic:

• Using SDD 15d12-a "Traffic control, lane closure" maintain 2 lanes of traffic to complete restoration at the north and south limits.

 Over multiple nights reduce I-43 to 1 lane during off-peak hours using SDD 15d14 "Traffic control, two lane closure on freeway or expressway, short term (less than 24 hours)" to complete TPO on B-45-112.

Wisconsin Lane Closure System Advance Notification

Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥ 16 feet)	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

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Notify the engineer and TMP Team Lead, if there are any changes in the schedule, early completions, or cancellations of scheduled work.

7. Holiday and Special Event Work Restrictions.

Do not perform work nor haul materials of any kind and entirely clear the traveled way and shoulders of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, September 1, 2023 to 6:00 AM Tuesday, September 5, 2023 for Labor Day;
- From noon Wednesday, November 22, 2023 to 6:00 AM Monday, November 27, 2023 for Thanksgiving;
- From noon Friday, December 22, 2023 to 6:00 AM Tuesday, January 2, 2024 for Christmas and New Year's Day;
- From noon Friday, May 24, 2024 to 6:00 AM Tuesday, May 28, 2024 for Memorial Day;
- From noon Wednesday, July 3, 2024 to 6:00 AM Monday, July 8, 2024 for Independence Day;
- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day;
- From noon Wednesday, November 27, 2024 to 6:00 AM Monday, December 2, 2024 for Thanksgiving.
- From noon Friday, December 20, 2024 to 6:00 AM Thursday, January 2, 2025 for Christmas and New Year's 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.

Long term ramp and roadway closures shown on the plans may remain in place during holiday work restrictions. New long-term closures of ramps and roadways must be coordinated with the holiday work restrictions.

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Freeway Special Event Restrictions

During Summerfest scheduled for the years 2024 and 2025, keep open the following roadways until one hour after the event closes each night:

Two open lanes on northbound and southbound IH 43

During Green Bay Packer home games, no lane closures will be allowed from four hours prior to the event until four hours after the event in both directions.

During the Republican National Convention (RNC), no lane closures will be allowed between noon Friday, July 12, 2024 to 6:00 PM Friday July 19, 2024 in both directions.

Special event work restrictions do not apply to roadways or ramps already closed long term during construction as shown on the plans. New long-term closures of ramps and roadways must be coordinated with the special event work restrictions.

These restrictions also apply to hauling of materials and equipment.

8. Utilities.

This contract comes under the provisions of Wisconsin Administrative Code Chapter TRANS 220.

Additional information regarding recently relocated utility facilities may be available on permits issued to the utility companies. Permits for IH 43 and STH 57/167 (Mequon Road) can be viewed at the Region Office during normal working hours. Contact WisDOT SE Freeways Utility Supervisor Mike Birschbach at (414) 750-2532 for further information.

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per state statute.

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

Contact utility companies listed in the plans prior to preparing bids to obtain current information on existing utility locations and the status of any new utility relocation work.

There may be discontinued utility facilities within the project limits. If a conflict with a discontinued utility facility is encountered, contact the appropriate utility owner/representative to coordinate construction activities and proper removal and disposal of said facility as necessary.

Utility working days shown herein are as defined in Wisconsin Administrative Code Chapter Trans 220.

All utility timelines are based on an anticipated start of construction of the project on September 1, 2023.

Known utilities in the project area are as follows:

IH 43 Corridor

AT&T Wisconsin has existing underground communications facilities in the following locations:

- An existing underground communication line located on private property beginning at Station 1398MNC+47, 63'LT running northerly and parallel to and behind the westerly right-of-way of IH 43 to a pedestal located at Station 31MNE+11, 28'RT. No conflicts anticipated.
- An existing underground communication line beginning at a pedestal at Station 1414MNC+43, 136'LT running northerly and parallel to the westerly right-of-way of IH 43 to a pedestal located at Station 31MNE+80, 75'RT where it turns northwesterly to a pedestal at Station 31MNE+11, 28'RT. No conflicts anticipated.
- An existing underground communication line beginning at Station 1410MNC+75, 58'LT and running easterly, crossing IH 43 at Station 1410+24, to Station 1410MNB+02, 22'RT where it

turns northerly running along and parallel to the easterly right-of-way of IH 43 to Station 38MNE+93, 45'RT. From there it turns easterly running along the southerly right-of-way of Mequon Road to beyond the project limits. No conflicts anticipated.

An existing underground communication line located on private property beginning beyond the westerly project limits running easterly to Station 1463+55, 125'LT where it turns running northerly and parallel to and behind the westerly right-of-way of IH 43 to a pedestal located at Station 1470+90, 123'LT and then turning westerly to beyond the project limits. No conflicts anticipated.

CenturyLink Communications has existing underground fiber optic communications facilities within the project limits running northerly along a line easterly of and parallel to the existing westerly IH 43 right-of-way for the entire length of the project and continuing to beyond the northerly project limits. No conflicts anticipated.

Mequon, City of - Sewer has existing underground sanitary facilities in the following locations:

- An existing underground sanitary line beginning at a manhole in Mequon Road at Station 31MNW+18, 27'LT and running northerly and parallel to and behind the westerly right-of-way of IH 43 to a manhole at Station 1471+22, 140'LT. No conflicts anticipated.
- An existing underground sanitary line beginning beyond the westerly project limits at a manhole at Station 1444+29, 128'LT and running easterly, crossing IH 43 at Station 1444+45, and continuing beyond the easterly project limits. No conflicts anticipated.
- An existing underground sanitary line beginning beyond the westerly project limits running easterly along the centerline of Glen Oaks Road, crossing IH 43 at Station 1471+22, and continuing beyond the easterly project limits. No conflicts anticipated.

Spectrum has existing overhead and underground communications facilities in the following locations:

- An existing overhead communication line on We Energies poles beginning beyond the westerly project limits running easterly along the northerly right-of-way of Donges Bay Road, crossing IH 43 at Station 1365+11, and continuing beyond the easterly project limits. No conflicts anticipated.
- An existing underground communication line located on private property beginning at Station 1398MNC+43, 57'LT running northerly and parallel to and behind the westerly right-of-way of IH 43 to a pedestal at Station 31MNE+16, 34'RT and then to a We Energies' pole located at Station 31MNE+09, 34'RT. No conflicts anticipated.

We Energies – Electric has existing overhead and underground electric facilities in the following locations:

- An existing overhead electric line beginning beyond the westerly project limits running easterly along the northerly right-of-way of Donges Bay Road, crossing IH 43 at Station 1365+11, and continuing beyond the easterly project limits. No conflicts anticipated.
- An existing underground electric line located on private property beginning at Station 1398MNC+78, 77'LT running northerly and parallel to and behind the westerly right-of-way of IH 43 to Station 1411MNC+69, 73'LT where it turns westerly to beyond the project limits. No conflicts anticipated.
- An existing underground electric line located on private property beginning at Station 1412MNC+40, 94'LT running northerly and parallel to and behind the westerly right-of-way of IH 43 to a pole located at Station 31MNE+09, 34'RT. No conflicts anticipated.
- An existing overhead electric line beginning beyond the westerly project limits beginning at a pole at Station 1471+51, 127'LT and running easterly, crossing IH 43 at Station 1471+45, and continuing beyond the easterly project limits. No conflicts anticipated.

We Energies – Gas has existing underground gas facilities in the following locations:

- An existing discontinued underground gas line beginning beyond the westerly project limits running easterly along the southerly right-of-way of Donges Bay Road, crossing IH 43 at Station 1364+09, and continuing beyond the easterly project limits.
- An existing underground gas line beginning beyond the westerly project limits running easterly along the northerly right-of-way of Donges Bay Road, crossing IH 43 at Station 1365+02, and continuing beyond the easterly project limits. No conflicts anticipated.

An existing underground gas line located on private property beginning at Station 1401MNC+48, 69'LT running northerly and parallel to and behind the westerly right-of-way of IH 43 to Station 1411MNC+59, 66'LT where it turns westerly to beyond the project limits. No conflicts anticipated.

WisDOT has existing communications facilities within the project limits. Construct, reconstruct, relocate, remove, discontinue and leave in place portions of communication facilities as shown in the plans and bid items.

WisDOT has existing light poles and associated underground electric lighting facilities within the project limits. Construct, reconstruct, relocate, remove, discontinue and leave in place portions of lighting facilities as shown in the plans and bid items.

WisDOT has existing traffic signal facilities within the project limits. Construct, reconstruct, relocate, remove, discontinue and leave in place portions of traffic signal facilities as shown in the plans and bid items.

Mequon Road

AT&T Wisconsin has existing underground and overhead communications facilities in the following locations:

- An existing underground communication line beginning beyond the westerly project limits at a handhole located at Station 27MNE+74, 61'RT and running easterly, crossing Port Washington Road, and running behind the existing southerly curb of Mequon Road to a pedestal at Station 31MNE+11, 28'RT and then continuing easterly crossing under IH 43 to Station 38MNE+93, 44'RT. From there it jogs northerly to Station 38MNE+97, 29'RT and then turns easterly running along the southerly right-of-way of Mequon Road to a pedestal at 40MNE+56, 22'RT and then continuing easterly to beyond the project limits.
- Prior to and during construction AT&T Wisconsin will remove the existing pedestal at Station 31MNE+11, 28'RT. AT&T Wisconsin will install three 4-inch conduits from an existing handhole at Station 31MNE+78, 75'RT northwesterly on an arc to approximately Station 31MNE+00, 15'RT, continuing westerly to approximately Station 27MNE+95, 15'RT, where they will expose approximately 30 feet of existing conduits coming from a manhole at Station 28MNE+07, 361'RT and connect the new conduits. AT&T Wisconsin will then discontinue the existing line between Station 27MNE+95, 44'RT and 40MNE+56, 22'RT. The remainder of the line to the east of Station 40MNE+56, 22'RT will remain in place without adjustment.

CenturyLink Communications has existing underground fiber optic communications facilities within the project limits as previously noted in **IH 43 Corridor** section and crossing Mequon Road at Station 31MNE+80. No conflicts anticipated.

Mequon, City of - Sewer has existing underground sanitary facilities in the following locations:

- An existing underground sanitary line beginning beyond the westerly project limits running easterly in the westbound lanes of Mequon Road, crossing Port Washington Road, and continuing to a manhole at Station 31MNW+18, 27'LT. No conflicts anticipated with the existing underground sanitary line. Adjust and reconstruct manholes as shown in the plans and bid items.
- An existing underground sanitary line beginning at a manhole at Station 31MNW+18, 27'LT and running southerly to Station 31MNE+18, 29'RT where it is capped. No conflicts anticipated with the existing underground sanitary line. Adjust and reconstruct manholes as shown in the plans and bid items.

Spectrum has existing overhead and underground communications facilities in the following locations:

- An existing overhead communication line on We Energies poles beginning beyond the westerly project limits running easterly along the southerly right-of-way of Mequon Road, crossing Port Washington Road, to a pole at Station 31MNE+09, 34'RT where it turns southeasterly to a pole at Station 33MNE+23, 74'RT.
- Prior to and during construction Spectrum will relocate their facilities to new We Energies' poles beginning at Station 27MNE+73, 51'RT and running easterly, crossing Port Washington Road, and continuing along the southerly right-of-way of Mequon Road to a new pole at Station 31MNE+26, 44'RT. Spectrum will remove the existing overhead wires from Station 27MNE+73, 51'RT to 33MNE+23, 74'RT.

- An existing underground communication line beginning at a We Energies pole located at Station 33MNE+23, 74'RT and running northerly to Station 33MNE+09, 16'RT where it turns easterly passing under IH 43 to Station 36MNE+90, 15'RT and turning southerly to a We Energies pole at Station 36MNE+91, 64'RT.
- Prior to and during construction Spectrum will relocate their facilities beginning at a new We Energies' pole located at Station 31MNE+26, 44'RT and running easterly to Station 33MNE+21, 54'RT where it jogs northeasterly to Station 33MNE+43, 5'RT. From there it turns easterly passing under IH 43 to Station 39MNE+05, 19'RT where it jogs southeasterly to a new We Energies' pole at Station 39MNE+15, 31'RT. The existing underground line will be discontinued in place.
- An existing overhead communication line on We Energies poles beginning at Station 36MNE+91, 74'RT running northeasterly to a pole at Station 39MNE+37, 25'RT where it turns easterly to a pole at Station 40MNE+53, 22'RT and continues to beyond the project limits.
- Prior to and during construction Spectrum will relocate their overhead facilities to new We Energies' poles beginning at Station 39MNE+15, 31'RT running easterly to an existing pole at Station 40MNE+53, 22'RT. Spectrum will remove the existing overhead wires from Station 36MNE+91, 74'RT to Station 40MNE+53, 22'RT.

Verizon Business has existing underground communications facilities in the following locations:

- An existing underground communication line beginning beyond the westerly project limits running easterly along the southerly sidewalk of Mequon Road and crossing Port Washington Road to a handhole located at Station 30MNE+07, 30'RT where it turns northerly crossing Mequon Road to a handhole at Station 30MNW+07, 40'LT. From there it turns westerly to Station 29MNW+18, 40'LT and curves northwesterly around the corner and then runs northerly along the easterly right-of-way of Port Washington Road continuing to an existing handhole located beyond the project limits.
- Prior to and during construction Verizon will relocate their facilities beginning at a new handhole at Station 27MNE+38, 32'RT running easterly crossing Port Washington Road to a new handhole located at Station 29MNE+94, 39'RT where it turns northerly crossing Mequon Road to a new handhole at Station 29MNW+94, 50'LT. From there it turns westerly to Station 29MNW+03, 47'LT and curves northwesterly around the corner and then runs northerly along the easterly right-ofway of Port Washington Road tying into an existing handhole located beyond the project limits. The existing line and handholes will be discontinued in place.
- An existing underground communication line beginning at an existing handhole located at Station 30MNE+07, 30'RT where it runs westerly to Station 29MNE+40, 36'RT and then curves southwesterly around the corner to an existing handhole located at Station 29MNE+02, 55'RT.
- Prior to and during construction Verizon will relocate their facilities beginning at a new handhole at Station 29MNE+94, 39'RT where it runs westerly to Station 29MNE+33, 40'RT and then curves southwesterly around the corner to a new handhole located Station 29MNE+00, 74'RT. The existing line and handholes will be discontinued in place.

We Energies - Electric has existing overhead and underground electric facilities in the following locations:

- An existing overhead electric line beginning beyond the westerly project limits running easterly along the southerly right-of-way of Mequon Road, crossing Port Washington Road, to a pole at Station 31MNE+09, 34'RT where it turns southeasterly to a pole at Station 33MNE+23, 74'RT. From there it turns easterly, crossing IH 43 at Station 1416+74, to a pole at Station 36MNE+91, 74'RT where it turns northeasterly to a pole at Station 39MNE+37, 25'RT. From there it turns easterly to a pole at Station 40MNE+53, 22'RT and continues to beyond the project limits.
- Prior to and during construction We Energies will relocate their overhead facilities beginning at the existing pole at Station 27MNE+73, 51'RT and running easterly, crossing Port Washington Road, and continuing along and behind the southerly right-of-way of Mequon Road to a new pole at Station 31MNE+26, 44'RT where it turns southeasterly to a pole at Station 33MNE+51, 161'RT. From there it turns easterly, crossing IH 43 at Station 1415+89, to a pole at Station 36MNE+24, 157'RT where it turns northeasterly to a pole at Station 39MNE+15, 31'RT. From there it turns easterly to a pole at Station 40MNE+53, 22'RT and continues to beyond the project limits. The overhead lines and poles between Station 27MNE+73, 51'RT and Station 40MNE+53, 22'RT will be removed. The remainder of the overhead line to the west of Station 27MNE+73, 51'RT and to the east of Station 40MNE+53, 22'RT will remain in place without adjustment.

- An existing overhead guy wire beginning at a pole at Station 29MNE+19, 31'RT and running northerly crossing Mequon Road to a guy pole at Station 29MNW+26, 40'LT.
- Prior to and during construction We Energies will remove the guy pole and the overhead guy wire.
- An existing underground electric line beginning at a pole located at Station 30MNE+82, 34'RT running northerly crossing Mequon Road to a pedestal at Station 31MNW+08, 43'LT and continuing northeasterly and then northerly to beyond the project limits.
- Prior to and during construction We Energies will construct a new transformer located at Station 31MNE+12, 51'RT with an underground line running northerly crossing Mequon Road to Station 31MNW+12, 53'LT and then jogging northeasterly and then northerly to a new transformer at Station 31MNW+28, 83'LT. The existing underground line will be discontinued in place.
- Prior to and during construction We Energies will construct a new temporary underground line beginning at the new transformer located at Station 31MNE+12, 51'RT running easterly to serve an existing signal cabinet located at Station 31MNE+36, 43'RT. Once the signal cabinet is taken out of service this line will be discontinued in place.
- An existing underground electric line beginning at a pole located at Station 36MNE+91, 74'RT running northeasterly to an existing signal cabinet located at Station 37MNE+35, 26'RT.
- Prior to and during construction We Energies will construct a new temporary underground line beginning at a new pole at Station 38MNE+39, 61'RT running westerly to serve an existing signal cabinet located at Station 37MNE+35, 26'RT. After the temporary line is installed the existing underground service line will be discontinued in place. Once the signal cabinet is taken out of service this temporary line will be discontinued in place.
- An existing overhead guy wire beginning at a pole at Station 39MNE+37, 25'RT and running northerly crossing Mequon Road to a guy pole at Station 39MNW+18, 52'LT.
- Prior to and during construction We Energies will construct a new pole at Station 39MNE+15, 31'RT and guy wire running northerly crossing Mequon Road to a new guy pole at Station 39MNW+03, 46'LT. We Energies will remove the existing guy pole and the overhead guy wire.
- An existing overhead electric line beginning at a pole at Station 40MNE+53, 22'RT and running northerly crossing Mequon Road to a pole at Station 40MNW+55, 41'LT. No conflicts anticipated.

We Energies - Gas has existing underground gas facilities in the following locations:

- An existing underground gas line beginning beyond the westerly project limits running easterly behind the northerly curb line of Mequon Road to a tee located at Station 28MNW+08, 33'LT.
- Prior to and during construction We Energies Gas will relocate their facilities teeing into the existing main at Station 27MNW+13, 32'LT and running northerly to Station 27MNW+13, 43'LT where it turns easterly and tees into the existing main at Station 27MNW+81, 43'LT. The existing main from Station 27MNW+13, 32'LT to Station 28MNW+08, 33'LT will be discontinued in place.
- An existing underground gas line beginning beyond the southerly project limits running northerly in the southbound median lane of Port Washington Road to Station 28MNW+08, 39'LT where it turns westerly to Station 27MNW+81, 39'LT and then turns northerly running along the westerly curb line of Port Washington Road and continuing to beyond the project limits.
- Prior to and during construction We Energies Gas will relocate their facilities teeing into the existing main at Station 28MNE+12, 129'RT and running easterly to Station 28MNE+73, 129'RT. From there it turns running northerly in the northbound lanes of Port Washington Road to Station 28MNW+87, 210'LT where it turns westerly and tees into the existing main at Station 27MNW+78, 210'LT. The existing main from Station 28MNE+12, 129'RT to Station 27MNW+81, 39'LT will be discontinued in place.
- An existing underground gas line beginning at a tee located at Station 28MNE+12, 12'LT and running easterly along the eastbound median lane of Mequon Road crossing under IH 43 and continuing to beyond the project limits.

Prior to and during construction We Energies - Gas will relocate their facilities beginning at a tee located at Station 28MNE+94, 6'LT and running easterly along the eastbound median lane of Mequon Road crossing under IH 43 and continuing to Station 40MNE+26, 12'RT where it turns northerly and tees into the existing main at Station 40MNE+26, 9'RT. The existing gas line from Station 28MNE+12, 12'LT to Station 40MNE+26, 9'RT will be discontinued in place.

Relocations anticipated to occur from March 15, 2023 through December 1, 2023.

9. Other Contracts.

Coordinate work according to standard spec 105.5.

Modifications to the traffic control plan may be required by the engineer to be safe and consistent with the adjacent work by others.

Coordinate activities, detours, work zone traffic control, roadway and lane closures, and other work items as required with other contracts.

It is expected that routine maintenance by the city and county personnel may be required at certain times concurrently with the work being done under this contract.

The following contracts are anticipated to be under construction within the time period of this contract, unless otherwise indicated:

<u>2023 - 2024</u>

I-43 N-S Freeway Mainline Construction:

- · ID 1229-04-72, Union Pacific RR Bridge B-40-921, Milwaukee County
- · ID 1229-04-73, Bender Road to W Brown Deer Road, Milwaukee County
- · ID 1229-04-76, I-43 Highland Road to STH 60, Ozaukee County
- · ID 1228-22-71, Capitol Drive to 2100 Feet N of Hampton Avenue, Milwaukee County
- · ID 1228-22-70, Brown Street to Capitol Drive, Milwaukee County

N Port Washington Road:

· ID 1229-04-71, Bender Road to Daphne Road, Milwaukee County

<u> 2024 - 2025</u>

I-43 N-S Freeway Mainline Construction:

· ID 1229-04-73, Bender Road to W Brown Deer Road, Milwaukee County

10. Work by Others

The Mequon Police Department has License Plate Reader Cameras installed within the project limits on Mequon Road more specifically located at:

Station 30+29.1 MNE, 27' RT

Station 31+59.7 MNW, 37.1' LT

The removal of the License Plate Reader Cameras will be performed by the Mequon Police Department. The contractor should provide the Mequon Police Department a 2 month in advance of Stage 3 for the removal of the License Plate Readers.

The contact for the Mequon Police Department is Police Chief Patrick Pryor, 262-242-7242.

11. Available Documents.

The department will make its information available to bidding contractors. The list of documents that are available for contractors' information includes:

- Design Study Report
- Environmental Document
- Traffic Management Plan

These documents are available from Steve Hoff at 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-6718. Email: <u>steve.hoff@dot.wi.gov</u>.

Reproduction costs will be applied to all copies requested.

sef-102-005 (20170310)

12. Geotechnical Investigation Information.

Replace standard spec 102.5(3) 2 with the following:

Available information relative to subsurface exploration, borings, soundings, water levels, elevations, or profiles are available for review at the department's Regions office. Contact Steve Hoff at 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-6718.

Geotechnical Report for IH 43 - Silver Spring to CTH Q Geotechnical Report for IH 43 - Milwaukee County Line to STH 60

Additional geotechnical information is available from studies and analyses that have been performed by HNTB for the department for other aspects of this project. Review the available information to determine if it is of use. The use or not of the geotechnical information does not relieve performing the work conforming to the plans and specifications.

sef-102-010 (20170310)

13. Contract Award and Execution.

Add the following to standard spec 103 as subsections 103.9 and 103.10:

103.9 Bid Escrow Documentation

- (1) The department will require the lowest responsible bidder to submit documentation to be placed in escrow at a document storage facility. Bid Escrow Documentation (BED) consists of writings, working papers, computer printouts, charts, and data compilations that contain or reflect information, data, calculations, or assumptions used by the bidder to determine the proposal submitted. If the apparent low bid is withdrawn or rejected, the second low bidder will provide the required documents as specified in this special provision within 72 hours of written notification by the department.
- (2) The BED shall clearly itemize the contractor's estimated costs of performing the scope of work defined in the contract.
- (3) The BED shall include, but not be limited to, all quantity takeoffs, rate schedules for the direct costs of craft labor, construction (expendable materials), construction equipment ownership costs, construction equipment operating costs, permanent materials, subcontractors and insurance. Also include development of rates of production including, where appropriate: estimate of crews, construction materials, construction equipment, and construction sequence and duration. Submit the BED for each subcontractor whose total subcontract costs exceed \$500,000.
- (4) Identify the allocation of construction plant and equipment, time and non-time related indirect costs (including if applicable joint venture fees), home office overhead, contingencies and margin applicable to each bid item. Further, documentation shall include consultant's reports, final estimate adjustment calculations, and all other information used by bidders to arrive at the estimate.
- ⁽⁵⁾ All manuals standard to the industry used by the bidder in determining the proposal are also considered part of the BED. These manuals may be included in the proposal documentation by reference and shall show the name and date of the publication and the publisher.

- (6) It is not necessary to include documents provided by the department for the bidder's use in the preparation of the proposal.
- (7) The low bidder shall present authentic copies of their BED at the department's office by July 14, 2023 (subject to change) 72 hours/3 days after let, at 10:00 AM.
- (8) At the time of submittal, only designated representatives of the apparent low bidder and the department will jointly examine the apparent low bidder's bid documentation to determine if it is authentic, legible, and generally meets the requirements of this special provision. The department will not share the BED information with, or in any other way divulge the contents of, the apparent low bidder's BED to, their subcontractors or any other party.
- (9) The department, if requested by apparent low-bidder subcontractors, will also independently examine the BED submitted by the apparent low bidder's subcontractors in the same manner as the apparent low bidder's BED was examined. Only designated representatives of the individual subcontractor and the department will be present during this examination. The department will not share the BED information with, or in any other way divulge the contents of, a subcontractor's BED to, the apparent low bidder or any other party.
- (10) The department's examination of the BED will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions, or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The department will determine if the BED complies with this special provision within 4 hours after the time the BED is submitted. If the BED does not meet the requirements of this special provision, the department may reject the bid.
- (11) If the BED of the apparent low bidder meets the requirements of this special provision, the department and bidder will jointly deposit the BED at an agreed document storage facility. Place the BED in a sealed envelope or container clearly marked with the bidder's name and address, date of submittal, project name and identification number. Representatives of the department and the bidder will deliver all bid escrow documentation and the original affidavit directly to a document storage facility, to be placed in escrow.
- (12) If the apparent low bid is withdrawn or rejected, the designated representative of the second low bidder and the department will examine and inventory the bid documentation of the second low bidder and their subcontractors in the manner specified in this section, then seal and deposit in escrow. If a subcontractor with a subcontract exceeding \$500,000 is replaced, the contractor shall submit new BED for examination and escrow before the engineer will authorize the substitution.
- (13) The department will pay for the costs of the escrow document storage facility and will provide escrow instructions to the document facility consistent with this special provision.
- (14) The department acknowledges that the bidder considers that the BED constitutes trade secrets or proprietary information. This acknowledgment is based upon department's understanding that the information contained in the BED is not known outside each bidder's business, is known only to a limited extent and by a limited number of employees of bidder, is safeguarded while in bidder's possession, and may be valuable to bidder's construction strategies, assumptions and intended means, methods and techniques of design and construction. Except as set forth in the contract or as required by applicable Law, the department acknowledges that the BED will always remain in the possession of the Escrow Agent and will at no time be received by, or become the property of, the department.
- ⁽¹⁵⁾ Submit a copy of the affidavit in this special provision, signed under oath before a Notary Public by a representative of the bidder authorized to execute proposals. Department representatives will sign the affidavit after reviewing the BED.
- (16) The BED will remain in escrow until one or more of the following occurs:
 - 1. The bidder and the department mutually agree to release of the BED;
 - 2. A court orders the department to provide the BED;
 - 3. A dispute is referred to the claims review panel; or
 - 4. Either party seeks judicial review of a dispute.
- (17) If any of the events numbered 1-4 in this section occurs, the department will take possession of all relevant portions of the BED, as determined by the department, until complete resolution of the issue for which the request was made or the court order was issued. In absence of these actions, and provided the bidder signs an appropriate release, the unopened BED will be released to the bidder upon final acceptance and the expiration of all warranty periods provided by this contract.

BID ESCROW DOCUMENTATION CERTIFICATION

Using this BID ESCROW DOCUMENTATION CERTIFICATION, the bidder certifies that the material submitted in this special provision constitutes all the documentary information used in preparation of the bid and that said bidder has fully examined the contents of the container and that they are complete. The undersigned Wisconsin Department of Transportation representatives have reviewed the BED for compliance.

BIDDER	WITNESS
(Name of Bidder)	(Name of Witness)
Ву:	Ву:
By:(Signature*)	By:(Signature*)
Title	Date:
Date	
WISCONSIN DOT	WISCONSIN DOT
(Name of Department Representative)	(Name of Department Representative)
Ву:	Ву:
(Signature*)	(Signature*)
Title	Title:
Date	Date:
(END OF BID ESCROW DOCUMENTS)	

103.10 Mobilization Workshops

103.10.1 Workshop Schedule

- (1) After contract award, attend the following workshops. Each workshop is described within this special provision and will include the following topics:
 - 1. Project Kickoff and Initial Work Plan
 - 2. Cost Reduction Incentives
 - 3. Utility Coordination
 - 4. Submittals
 - 5. CPM Scheduling
 - 6. Leadership Partnering (Initial Session)
 - 7. Work Force Opportunities
 - 8. Incident Crisis Communications Plan
 - 9. Culvert Construction and Maintaining flow
- (2) The workshop dates will be scheduled after contract award.
- (3) If necessary, the engineer may modify the workshop schedule to ensure attendance by the necessary department and contractor personnel; however, all workshops will be completed before issuing the Notice to Proceed.

103.10.2 Workshops

103.10.2.1 Project Kickoff and Initial Work Plan

103.10.2.1.1 General

- (1) The Project Kickoff and Initial Work Plan Workshop will provide a forum to discuss and answer questions relative to the proposal, bid schedule, and other questions in the Project Questionnaire described in section 103.10.2.1.2. The Initial Work Plan Workshop will include:
 - 1. Contractor responses to the attached Project Questionnaire.
 - 2. Department presentation of the use of CPM scheduling on the project and presentation of the department's Master Schedule to the contractor.
 - 3. Contractor presentation of its conceptual work plan for the project.

4. Department and contractor discussion of the level of detail and features in the Initial Work Plan and the Baseline CPM Progress Schedule.

103.10.2.1.2 Project Questionnaire

(1) Provide the following information in the order shown in this special provision. This information will constitute the "Project Questionnaire."

General Information

If a Joint Venture, provide information for each member of the Joint Venture.

Provide the following information about the company:

Firm Name

Address

Telephone and facsimile numbers; e-mail address

Contracting Specialties

Years performing work in contracting specialties

Geographic areas served

Total Management Employees and years of service

Project Managers

General Superintendents

Craft Superintendents

Engineers

Estimators

CPM Schedulers

Construction Engineering

Provide/attach a copy of your Construction Project Manager's resume indicating the manager's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

Provide (if applicable) your third-party construction engineering firms.

Provide plan for Construction surveying

Subcontractors

Attach the list of all subcontractors that are intended for this project and the items of work they shall perform.

Permanent Material Suppliers

Attach the list of all permanent material suppliers that are intended for the project.

Quality Control (where applicable)

Provide the name of your Construction Quality Control firm and qualifications indicating the firms' experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

Provide/attach a copy of your Construction Quality Control Manager's resume indicating the manager's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

List the major elements and Table of Contents of your Construction Quality Management Program (QMP).

Provide the name of your Independent Quality Control Testing firm (Construction Quality Control Lab) and qualifications indicating the firm's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

Organization Chart

Provide a functional and personnel Organization Chart showing the authority and responsibilities of each individual identified.

Work Rules

Provide the plan for hours per day, days per week, and number of shifts for key elements of work; i.e. sewer tunnels, retaining wall construction, roadway excavation, bridge structures, and roadway structural section activities.

Maintenance of Traffic

Provide the name of your Traffic Control Manager and qualifications indicating the firm's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

Include an outline of your approach to the maintenance of traffic and how you shall stage the construction to meet the substantial completion schedule including planned locations for local street and freeway access into and out of the work zones for each stage of construction.

Attach a copy of your Preliminary Schedule indicating your approach to achieving the substantial completion schedule.

Construction

Provide the approach (type of equipment, number of crews, and where required ground support systems) for the following activities.

- 1. Retaining wall construction by type of work
- 2. Bridge demolition
- 3. Roadway structural section
- 4. Roadway excavation
- 5. Office and yard facilities

103.10.2.2 Cost Reduction Incentives

(1) The Cost Reduction workshop will identify value enhancing opportunities and consider modifications to the plans and specifications that will reduce either the total cost, time of construction, or traffic congestion. These modifications shall not impair the essential functions or characteristics of the project. These include:

Service life Economy of operation Ease of maintenance Benefits to the traveling public Desired appearance Design and safety standards

- (2) Submit recommendations resulting from the workshop for approval by the engineer as cost reduction incentive proposals in conformance with standard spec 104.10 "Cost Reduction Incentive".
- ⁽³⁾ The department and the contractor may be able to complete the CRI Concept process, as specified in 104.10.2, during the CRI workshop.
- (4) Submit CRIs after the CRI workshop that were not introduced at the CRI workshop as CRI concepts, per 104.10.2.

103.10.2.3 Utility Coordination

- (1) The Utility Coordination Workshop will define the scope and schedule of utility relocation work and the corresponding roles and responsibilities of the project team.
 - 1. At a minimum, the following key personnel will attend the Utility Coordination Meeting.
 - 1.1. Department's Utility Coordinator.
 - 1.2. Contractor's Utility Coordinator.
 - 1.3. Designer Team's Utility Coordinator.
 - 1.4. Key Utility Company Representative(s)
 - 2. At a minimum, the Utility Coordination Meeting will include a review of the following:
 - 2.1. Summary of all required utility relocations on the project.
 - 2.2. Special provisions addressing utility work.
 - 2.3. Sharing of contact information.
 - 2.4. Scheduling of work for utility relocation including critical milestones and staging for the work.

103.10.2.4 Submittals

- (1) The Submittal Workshop will identify the key required submittals for the project, categorize submittals into functional areas, and develop a schedule for submittals and submittal reviews. The Workshop participants will at a minimum:
 - 1. Review the project special provisions.
 - 2. Categorize submittals into functional areas including:
 - 2.1 MSE Retaining Walls
 - 2.2 Temporary Shoring
 - 2.3 Falsework and Formwork
 - 2.4 Girder Shop Drawings
 - 2.5 Steel Transportation, Delivery and Erection
 - 2.6 Structure Demolition Plans

- 2.7 Pile Hammers and High Capacity Piling
- 2.8 Concrete/ Asphalt
- 2.9 Materials
- 2.10 ITS / Lighting
- 2.11 Traffic Signals
- 2.12 Sanitary Sewer and Water
- 2.13 Permits
- 3. Develop a schedule for submittals.

103.10.2.5 CPM Schedule

See specification Baseline CPM Progress Schedule.

103.10.2.6 Leadership Partnering Meetings Monthly

The department will implement mandatory monthly leadership partnering meetings. Unless the department and contractor agree otherwise, the contractor management level personnel, project design engineers, project level supervisory personnel, and department management level personal shall meet monthly from project start until the contractor accepts the tentative final estimate. The contractor and department may also invite the following as needed:

- FHWA
- Key project personnel of the contractor's principal subcontractors and suppliers
- Local government representatives
- Environmental regulators
- Emergency service personnel
- Utility companies
- Impacted business and property owners
- Other stakeholders

This meeting will facilitate a cooperative team environment that clearly defines roles and responsibilities, determines common goals and objectives, and provides a platform to build trust and accountability. Meeting topics may include:

- Issue and risk management
- Dispute resolution procedures
- Safety
- Public outreach
- Traffic management
- Cost reducing incentives
- Claim resolution
- Scheduling issues
- Quality control

All mobilization workshop costs are incidental to the contract work.

sef-108-030 (20171004)

103.10.2.9 Work Force Opportunities

After contract award, attend the Work Force Opportunities workshop. The workshop will take place on the same day and in the same location as the pre-construction meeting.

The Work Force Opportunities workshop will provide a venue for contractors to have meaningful dialogue with Transportation Alliance for New Solutions (TrANS) providers regarding the hiring of TrANS graduates. Reference ASP-1 for additional information regarding TrANS. The prime contractor and the nine largest subcontractors according to let value of work shall provide staff with hiring authority to participate in a job-matching session during this workshop. Workshop participants will, at a minimum:

- Review contractor hiring processes for general labor positions.
- Listen to a presentation provided by TrANS providers regarding the TrANS training program, including details regarding how contractors can hire TrANS graduates.
- Review TrANS graduate availability for working on the project.

- Meet one-on-one for two minutes with each TrANS graduate in attendance at the meeting. sef-108-036 (20180627)

103.10.2.10 Incident Crisis Communications Plan

(1) The Incident Crisis Communications Plan workshop will include a "dry run" of the Crisis Communication Plan to coordinate the response to an incident within the work zone or on the freeway by the contractor, Police, Fire, EMS and other responders. Ensure that representatives of subcontractors also participate in this meeting if requested by the engineer.

14. Contractor Notification.

Replace standard spec 104.2.2.2(2) with the following:

(2) If the contractor discovers the differing condition, provide a written notice of the specific differing condition before further disturbing the site and before further performing the affected work.

Replace standard spec 104.3.2 with the following:

104.3.2 Contractor Initial Written Notice

- (1) If required by 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, the contractor must promptly provide a written notification to the engineer. At a minimum, provide the following:
 - 1. A written description of the nature of the issue.
 - 2. The time and date of discovering the problem or issue.
 - 3. If appropriate, the location of the issue.
- (2) Provide the additional information as specified in 104.3.3 to assist the engineer in the timely resolution of an identified issue. The engineer will not require, in subsequent submissions, duplication of information already provided.

15. Eliminated Work.

Replace standard spec 104.2.2.5 with the following:

104.2.2.5 Change Orders for Eliminated Work

- (1) The department has the right to partially eliminate or completely eliminate work the engineer finds to be unnecessary for the project. If the department eliminates work, the engineer will send a Work Authorization Form (WAF) directing the contractor to eliminate the work. If the engineer partially eliminates or completely eliminates work, the engineer will issue a contract change order for a fair and equitable amount as specified in 109.5.
- (2) If the department executes an equalizing change order for the purpose of matching the authorized quantity to the amount of units measured and paid for any bid item, this shall not be considered eliminated work.

Replace standard spec 109.5 with the following:

109.5 Eliminated Work

- (1) If the department partially eliminates or completely eliminates work as specified in 104.2.2.5, the department will pay the direct costs incurred as of the date the work was eliminated. The department will not pay for bidding costs or other non-allowable charges specified in 109.4.6.
- (2) The department may pay for, and take ownership of, materials or supplies the contractor has already purchased.
- (3) Submit a certified statement, including paid invoices, covering all direct costs, incurred as of the date the work was eliminated. The department will execute a change order as follows:
 - 1. For incurred direct costs that have no value to other contract work, the department will reimburse the contractor in full for those costs.
 - 2. For incurred direct costs that are distributed over the other contract work, the department will prorate reimbursement based on the value of the eliminated work compared to the total value of associated contract work.

- 3. Restocking and cancellation charges.
- 4. A markup for unrecoverable overhead paid as 7 percent of the contract price of the work eliminated, except for the items in noted in 109.5(3)5. The engineer will issue a contract change order based on the net value of the eliminated work and any replacement work included in the change order.
- 5. If the following bid items are not used at all for the prosecution of the work, the department will eliminate them with a WAF and a contract change order. A markup for applicable overhead and other indirect costs will be paid as 2 percent of the contract price of the bid item for the work eliminated:
 - a. 390.0203 Base Patching Asphalt
 - b. 450.1100.S Asphaltic Mixture for Extreme Conditions
 - c. 450.4000 HMA Cold Weather Paving
 - d. 495.1000.S Cold Patch
 - e. 501.1000.S Ice Hot Weather Concreting
 - f. 628.1905 Mobilization Erosion Control
 - g. 628.1910 Mobilization Emergency Erosion Control
 - h. SPV.0060.0120 Mobilizations Emergency Pavement Repair
 - i. SPV.0060.0940 Emergency Response to Traffic Incident Involving Concrete Barrier Temporary
 - j. SPV.0060.0945 Emergency Response to Traffic Incident Involving Crash Cushions
 - k. SPV.0195.0001 HMA Longitudinal Joint Repair
 - I. SPV.0195.0002 HMA Transverse Joint Repair

16. Municipality Acceptance of Sanitary Sewer Construction.

Both the department and the City of Mequon personnel will inspect the construction of sanitary sewer items located in the City of Mequon under this contract. Final acceptance of the sanitary sewer construction will be by the City of Mequon.

17. Contractor Document Submittals.

This special provision describes minimum requirements for submitting project documents to the department. This special provision does not apply to shop drawing submittals.

Provide one electronic copy of all documents requiring department review, acceptance, or approval. Attach a completed engineer-provided transmittal sheet to each email submittal. The department will reject submittals with incomplete transmittal sheets and require re-submittal.

The department will return one reviewed or accepted original to the contractor. Additional return originals can be requested. Submit an additional original for each additional return original requested.

Submit electronic copies in PDF format via email to accounts the engineer determines. If possible, create PDFs from original documents in their native format (e.g. Word, Excel, AutoCAD, etc.). Scan other documents to PDF format with a minimum resolution of 600 dpi.

All costs for contractor document submittals are incidental to the contract.

sef-105-010 (20150619)

18. Hauling Restrictions.

Replace standard spec 107.2 with the following:

⁽¹⁾ Present to the department, five business days before proposed hauling, a proposed haul route plan detailing haul routes that are not part of the state trunk highway system. Include the months, days of

the week, time of day, number of trucks, types of trucks and maximum loads of trucks anticipated to accomplish the project work in the haul route submittal.

(2) The department will review the submittal and provide a letter identifying any areas of concern along the route within five business days of its receipt. The department will subsequently survey the existing condition of that haul route to establish a baseline for assessing damage that the contractor's hauling operations might cause.

⁽³⁾ At all times, conduct operations in a manner that will cause a minimum of disruption to traffic on existing roadways.

sef-107-015 (20170310)

19. Railroad Insurance and Coordination - Union Pacific Railroad Company.

A Description

Comply with standard spec 107.17 for all work affecting Union Pacific Railroad Company property and any existing tracks.

A.1 Railroad Insurance Requirements

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Union Pacific Railroad Company.

Notify evidence of the required coverage, and duration to David C. LaPlante, Senior Manager-Real Estate-Special and Public Projects, 1400 Douglas St. STOP 1690, Omaha, NE 68179; Telephone: (402) 544-8563; E-mail: <u>dclaplante@up.com</u>.

Also send a copy to the following: Jason Kazmierski, SE Region Railroad Coordinator, 141 N. Barstow Street, Waukesha, WI 53188; Telephone (262) 548-6700; E-mail jason.kazmierski@dot.wi.gov.

Include the following information on the insurance document:

- Project ID: 1229-04-75
- Work Performed: Traffic Control, Roadway Resurface

#	Route Name	City/County	Crossing ID	RR Subdivision	RR Milepost
1	West Donges Bay Road	Mequon/Ozaukee	180113A	Shoreline Sub	0109.650
2	West Mequon Road	Mequon/Ozaukee	180114G	Shoreline Sub	0110.650

A.2 Train Operation

#	Passenger Train Volume	Passenger Train Speed	Freight Train Volume	Freight Train Speed	Frequency	Switch Train Comment*
1	N/A	N/A	2	25	Daily	No switch trains
2	N/A	N/A	2	25	Daily	No switch trains

Switch trains are in addition to freight and passenger trains.

A.3 Names and Addresses of Railroad Representatives for Consultation and Coordination

Construction Contact

Chris T. Keckeisen, Manager Special Projects - Industry & Public Projects Engineering Department; 1400 Douglas, MS 0910, Omaha, NE, 68179; Telephone (402) 5445131; E-mail <u>ctkeckei@up.com</u> or Richard Ellison, Project coordinator, 207 Powell Avenue, Labadie, MO, 63055; Telephone (847) 323-7197; E-mail <u>richardellison@up.com</u> for consultation on railroad requirements during construction.

Amend standard spec 108.4 to include the railroad in the distribution of the initial bar chart, and monthly schedule updates. The bar chart shall specifically show work involving coordination with the railroad.

Flagging Contact

See Construction Contact. If more than 30 days of flagging is required contact UP 30 days prior to needing a flagger on site. Reference the Wisconsin Milepost and Subdivision located in A.1.

Cable Locate Contact

In addition to contacting Diggers Hotline, contact the UP Call Before You Dig line at (800) 336-9193 at least five working days before the locate is needed. Normal business hours are 6:30 AM to 6:30 PM, Central Time, Monday through Friday, except holidays and are subject to change. Calls will be routed at all times in case of an emergency. Reference the Wisconsin Milepost and Subdivision located in A.1.

UP will only locate railroad owned cable buried in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions, and will be accomplished without cost to the contractor. None.

A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

stp-107-026 (20230113)

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

The department has obtained an individual Section 404 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 Steve Hoff at (262) 548-6718, <u>steve.hoff@dot.wi.gov</u>.

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.

stp-107-054 (20230113)

21. 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 Steve Hoff, (262) 548-6718, <u>steve.hoff@dot.wi.gov</u>. Post the permit certificate in a conspicuous place at the construction site.

22. 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 (>104° 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)

23. Dust Control Implementation Plan.

A Description

This special provision describes developing, updating, and implementing a detailed Dust Control Implementation Plan (DCIP) for all land-disturbing construction activities and associated impacts both within the project site boundaries and outside the project site boundaries. Incorporate contract bid items that this article specifies into the DCIP.

B (Vacant)

C Construction

C.1 General

Control dust on the project as specified in standard spec 107.18. Minimize dust emissions resulting from land disturbing activities. Do not generate excessive air borne particulate matter (PM) or nuisance dust conditions. Control dust at all times during the contract.

Submit a DCIP to the engineer for review at least 14 calendar days before the preconstruction conference. Coordinate with the department, if requested, to resolve DCIP related issues before the preconstruction conference. The department will either approve the DCIP or request revisions. Do not initiate land-disturbing activities without the department's approval of the DCIP.

C.2 DCIP Contents

Develop a DCIP tailored to the specific needs of the project. Consider potential impacts to businesses and residences adjacent to the job site. Describe in detail all land disturbing, dust generating activities.

Identify strategies to prevent, mitigate, and collect excess dust. Establish clear lines of communication with the engineer to ensure that all dust control issues can be dealt with promptly.

Include all of the following:

- 1. A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Provide:
 - Name, firm, address, and working-hours phone number.
 - Non-working-hours phone number.
 - Email address.
- A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where employing various dust control or prevention strategies.
- 3. A matrix, or plan, for each anticipated land disturbing, dust generating activity, showing the following:
 - Preventive measures that shall be employed.
 - The applicable contact person.
 - The contractor's timetable and surveillance measures used to determine when remediation is required.
 - The specific dust control and remediation measures that shall be employed. Identify the specific contract bid items that shall be used for payment. Indicate costs and practices that are incidental to the contract.
 - Both maintenance and cleanup schedules and procedures.
 - Excess and waste materials disposal strategy.
- 4. A description of monitoring and resolving off-site impacts.

C.3 Updating the DCIP

Update the DCIP during the contract or as the engineer directs. Obtain the engineer's approval for all DCIP alterations. Also obtain the engineer's approval for routine DCIP adjustments for weather, job conditions, or emergencies that will have an impact on payment under the bid items listed in the approved DCIP.

C.4 Dust Control Deficiencies

Coordinate with engineer to determine deadlines for resolving dust control deficiencies. Deficiencies include actions or lack of actions resulting in excessive dust, non-compliance with the contractor's DCIP or associated special provisions, and not properly maintaining equipment.

D Measurement

The department will measure the various bid items associated with dust control as specified in the applicable measurement subsections of either the standard specs or other contract special provisions. The department will not measure work performed under a DCIP alteration unless the engineer specifically approves that alteration.

Measurement under the DCIP includes the contract bid items listed in this special provision:

624.0100 Water 628.7560 Tracking Pads SPV.0075.0601 Pavement Cleanup Project 1229-04-75

The department will measure work completed under other existing contract bid items if approved as a part of the DCIP. The department will consider new bid items to the contract if proposed under the DCIP. The department will not measure work required under the DCIP that is not included in contract bid items.

E Payment

All costs associated with the development and updating of the DCIP are incidental to the contract. The department will pay separately for the work required to implement the actions approved in the DCIP under the contract bid items approved as a part of the DCIP. All other costs associated with work approved under the DCIP are incidental to the contract.

sef-107-005 (20170323)

24. Erosion Control.

Add the following to standard spec 107.20:

Erosion control best management practices (BMP's) the plans show are at suggested locations. The actual locations shall be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP shall supplement information the plans show and not reproduce it. The ECIP shall identify how to implement the project's erosion control plan. ECIP shall demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of topsoil to minimize the exposure to possible erosion.

Additional devices may be needed based on sequence of operations and field conditions. A 'staged' ECIP may be required for this project, as new areas are disturbed. Each new 'stage' of the ECIP needs to be submitted to the project staff and the WDNR liaison for review as an amendment to the ECIP with a standard 14-day review period. Work should not commence in new areas until the project staff and WDNR has reviewed and concurred with the corresponding ECIP amendment.

Provide the ECIP 14 days before the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison Kristina Betzold, (414) 263-8517, <u>Kristina.betzold@wisconsin.gov</u>. Do not implement the ECIP until department approval and perform all work conforming to the approved ECIP.

Maintain Erosion Control BMP's until permanent vegetation is established or until the engineer determines that the BMP is no longer required.

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Install perimeter silt fence protection around stockpiles within a timeframe acceptable to the engineer. If stockpiled materials will be left for more than 14 days, install temporary seed and mulch or other temporary erosion control measures the engineer orders. Show the proposed stockpile locations in the ECIP.

Re-apply topsoil on graded areas, as designated by the engineer, within a timeframe acceptable to the engineer after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 days after placement of topsoil. If graded areas outside of the roadbed area are left not completed and exposed for more than 14 days, seed those areas with temporary seed and mulch.

Do not allow excavation for; structures, utilities, grading, maintaining drainage that requires dewatering(mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the worksite or discharge to a stormwater conveyance system without sediment removal treatment. Before each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, conforming to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Do not house any dewatering technique in a wetland or floodplain.

All dewatering, including treatment to remove suspended solids, not covered under bid items is incidental to the contract.

The project team may identify 'sensitive' areas in the field that require additional temporary stabilization to protect resources from being contaminated by sediment-laden water discharging from the worksite. Any 'release' of sediment-laden water from the work site that enters a wetland or waterway should be reported to the WDNR liaison within 24 hours.

The contractor shall restrict the removal of vegetative cover and exposure of bare ground to the minimum amounts necessary to complete construction. Restoration of disturbed soils should take place as soon as conditions permit. If sufficient vegetative cover will not be achieved because of late-season construction, the site must be properly winterized. A plan for 'over-wintering' the project or a specific project area should be compiled and submitted to the project staff and WDNR for review in an amendment to the ECIP.

The DOT Select Site process must be adhered to for clean fill or any other material that leaves the worksite. The project staff and the WDNR liaison will review all proposed select sites and a site visit may

be required. Filling of wetlands, waterways or floodplain is not allowed under the select site process unless the site owner has proof of required local/state/federal permits. No new impermeable surfaces can be left at a select site (including gravel roads or pads) unless the site owner attains required permits. Contaminated materials leaving the site need to adhere to the Hazardous Material Management Plan.

Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1 (800) 943-0003.

Construction of structures over navigable waterways shall be completed as quickly as possible in order to minimize disruption. Construction shall minimize the removal of shoreline vegetation below the ordinary highwater mark (OHWM) unless otherwise directed by the WDNR Transportation Liaison. Construction equipment should not operate on the bed of the stream or below the OHWM, except for that which is necessary for the placement of the structure. The contractor must provide a means of separating the live flow channel of the waterway from disturbed areas (cofferdam, turbidity barrier, etc.). Any plan for diverting the flow of a navigable waterway (listed under Fish Spawning provision) needs to be submitted as part of the ECIP or as an ECIP Amendment, reviewed and approved by the project staff.

If erosion mat is used along stream banks, DNR recommends that biodegradable non-netted mat be used (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animals to become entrapped while moving in and out of the stream. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

When performing concrete or asphalt saw cutting operations, the slurry shall be squeegeed off to the shoulder gravel or shoveled into the gravel behind curbs and not allowed into storm sewers, ditches, waterways or wetlands.

25. 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)

26. Permanent Restoration.

Place topsoil in all graded areas as designated by the engineer immediately after grading has been completed. Fertilize, seed and mulch or fertilize and sod all areas within five calendar days after placement of topsoil.

Place topsoil and permanently restore fill slopes as the height of the fills progress. Show the timing of all topsoil and restoration mobilizations as part of proposed schedule in the ECIP.

Fill slopes less than 10 feet in height shall be topsoiled and permanently restored out to the slope intercept when the fill slope reaches the subgrade shoulder point.

Fill slopes greater than 10 feet in height shall be topsoiled and permanently restored out to the slope intercept as the fill slope reaches 10 feet in height. The remainder of the fill slope shall be topsoiled and permanently restored when the fill slope reaches the subgrade shoulder point.

27. Material and Equipment Staging.

Submit a map showing all proposed material stockpile and equipment storage locations to the engineer 14 calendar days before either the preconstruction conference or proposed use, whichever comes first. Identify the purpose; length, width and height; and duration of material stockpile or equipment storage at each location. Obtain written permission and necessary permits from the property owner and local

governments/agencies and submit two copies to the engineer. Do not stockpile material or store equipment until the engineer approves. Do not stockpile or store materials or equipment on wetlands.

SER-107-011 (20181019)

28. Maintaining Drainage.

Maintain drainage at and through worksite during construction conforming to standard spec 107.22, 204, 205 and 520.

Use existing storm sewers, existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps are considered incidental to the project.

Dewatering (Mechanical Pumping) for Bypass Water (sediment-free) Operations

If dewatering bypass operations are required from one pipe structure to another downstream pipe structure or from the upstream to downstream end of a culvert and the bypass flow is not transporting sediments (sand, silt, and clay particles) from a tributary work site area, bypass pumping operations will be allowed provided that the department has been made aware of and approves operation. When pumping bypass flows, the discharge location will need to be stable and not produce erosion from the discharge velocity that would cause release of sediment downstream.

Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations

If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to article Erosion Control in these special provisions for additional requirements.

sef-107-016 (20170310)

29. Construction Over or Adjacent to Navigable Waters.

The unnamed tributaries to the Milwaukee River are classified as a state navigable waterway under standard spec 107.19.

stp-107-060 (20171130)

30. Health and Safety Requirements for Workers Remediating Petroleum Contamination.

Add the following to standard spec 107.1(2):

Soil contamination with gasoline, diesel fuel, fuel oil, or other petroleum related products may be encountered during excavation activities. Prepare a site-specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Before the start of remediation work, submit to the engineer a site-specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusions zones for each contaminated site location pursuant to 29 CFR 1910.120.

stp-107-115 (20150630)

31. Subletting the Contract.

Replace standard spec 108.1.1 (3) with the following:

If proposing to have a party other than a subcontractor perform work, notify the engineer and submit details of this arrangement in writing. The engineer will determine if that arrangement constitutes subcontracting. Submit copies of all other agreements between any parties regarding the performance of work under the contract with the Request to Sublet.

sef-108-035 (20171004)

32. Environmental Protection – Waste

Conduct construction activities in an environmentally sound manner, including the proper disposal of all demolition material that cannot be recycled.

The excavation management plan for this project has been designed to minimize the off-site disposal of impacted material. Follow the requirements for the off-site management of petroleum-and metals-contaminated soil (bioremediation at a landfill) and reuse of foundry sand and low-level petroleum-contaminated soil as indicated in these special provisions. If subsurface contamination or other signs of non-exempt (NR 500.08) solid waste including buried containers, industrial fill, stained soils, noxious odors, etc., are unexpectedly encountered elsewhere on the project during excavation, terminate excavation in the area and notify the engineer immediately. Work with the department's environmental consultant to properly manage the waste following the WisDOT-WDNR materials management options as indicated in the table below. Contact Andrew Malsom (WisDOT) at (262) 548-6705 or Andrew.Malsom@dot.wi.gov to arrange for environmental consultant coordination. The environmental consultant will perform waste characterization and coordinate with the WDNR for an appropriate handling and disposal.

Management of Material Excavated During Highway Construction

Classification	Characterization of Material	Material Management
1. Common Excavation (NR 500.08(2) Unregulated or Exempt Material)	 Native soil Fill soils that have no obvious visual or olfactory contamination and may not have been analyzed for contaminants. Clean unpainted or untreated wood, brick, concrete, cured asphalt, and trace amounts of glass. 	Contractor-selected sites approved through Erosion Control Implementation Plan (ECIP) review process, or on-site reuse
2. Special Excavation (NR 500.08(4) Solid Waste Low Hazard Exemption)	 Soil with low levels of petroleum contamination or contaminant metals within the site fill plan criteria. Trace amounts (<25% volume of the excavation equipment's bucket load) of foundry sand, cinders, and fly ash. 	WisDOT selected site or on-site reuse with WDNR concurrence. Sites must meet the location criteria of 504.04 (3) (c) and (4) (a) to (f). Fill plans are also approved through ECIP review process.
3. Contaminated Soil and Fill Material	 Lead painted or treated wood Petroleum contaminated soil Significant amounts (>25% volume of the excavation equipment's bucket load) of foundry sand, cinders, or fly ash. 	Contaminated material disposed at a WDNR-licensed solid waste disposal facility. Petroleum contaminated material shall be treated at a bioremediation facility (biopile) prior to disposal at the landfill. Direct disposal of contaminated material at landfills without such pre-treatment must be pre-authorized by the WisDOT.
4. Asbestos-containing Waste	Asbestos-containing material	Landfill at a WDNR–licensed solid waste landfill with approval to accept asbestos- containing material.
<u>5. Hazardous Waste</u>	RCRA Subtitle C (NR 600) contaminated media (hazardous waste)	Disposed or treatment under State's hazardous waste disposal contract with Veolia. Significant quantities should be evaluated for potential treatment to render non-hazardous to reduce disposal costs.
6. Potentially contaminated material	Potentially contaminated material with unusual visual, olfactory, or other characteristics	Temporary stockpile with appropriate environmental controls constructed per NR 718.05. Temporary stockpiling at solid waste landfill may be alternative with WDNR & Landfill's approvals.

33. Notice to Contractor – Existing Topographic Mapping.

The topographic mapping shown in the plans may not represent current field conditions due to previous work on the Work Zone Prep project (1229-04-70) and work on the County Line Road Project (1229-04-74) and the North End I-43 Project (1229-04-76) currently under construction.

34. Notice to Contractor - Contamination Beyond Construction Limits.

The Phase 2.5 Investigation report identified petroleum-contaminated soil and groundwater beyond the construction limits. The contractor should control construction activities in these areas to ensure that

excavations do not extend beyond the proposed limits. If work does advance into this area, the DNR concurs that work shall be temporarily stopped while the engineer is notified. The impacted areas are:

- IH 43 Mainline Station 1368+50 to 1370+00, beyond project limits left (EIS/Fabrico, 10448 North Port Washington Road, No. WDNR BRRTS No., In Use Diesel AST & Adhesive Manufacturer).
- West Mequon Road Station 27EB+00 to 28EB+00, beyond project limits right (Former Mequon Total Service/Curros Amoco Food Shop, 11147 North Port Washington Road, WDNR BRRTS No. 03-46-000965, Closed LUST Site).
- West Mequon Road Station 28EB+50 to 29EB+50, beyond project limits right (Mequon Road & North Port Washington Road, WDNR BRRTS No. 03-46-002535, 04-46-042261, 04-46-037305, 04-46-040640, 04-46-040761, 04-46 043513, Closed LUST Site).
- West Mequon Road Station 39EB+60 to 40+60, beyond project limits right (Tsang Acupuncture & Wellness Center, 909 West Mequon Road, No WDNR BRRTS No., Fuel Oil UST).
- IH 43 Ramp MND 1425MND+00 to 1430MND+00, beyond project limits left (Former Gronik Property, 11270 & 11300 North Port Washington Road, WDNR BRRTS No. 02-46-000262, Closed ERP Site, Historic Fill).

35. Notice to Contractor – Personnel Identification Program.

All contractor personnel will be required to register in the program prior to performing work. Valid photo identification which includes unexpired driver's license, government issued identification cards, military identification, passport, or other identification approved by the department will be required to register. All personnel registered will be issued a hard hat sticker with an identification number by the department. Stickers shall be placed in a visible location on the hard hat.

Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to standard spec 108.6.

36. Notice to Contractor – Sensitive Plant Species.

A sensitive plant species is located within the project limits and should be salvaged at the beginning of construction to avoid impact. See construction detail for salvage locations. In these locations salvage and relocate 4-inch of topsoil to new adjacent right-of-way where similar habitat will be present. The size and extent of the new habitat area will be determined in consultation with DNR. This soil shall be kept separate from other soil for the duration of the project and will be kept in a location where it will not wash away. Salvage and relocation of the sensitive plant species is considered incidental to the contract.

37. Notice to Contractor – Existing Section Corner.

An existing section corner is located in the middle of the Port Washington Road/Mequon Road intersection. Please take care to ensure this section corner remains undisturbed during construction.

38. Notice to Contractor – Media Relations.

- a) The contractor shall not disseminate or publicize this Agreement, information relating to this Agreement, their work responsibilities, or generally comment about the entire project without prior written consent from one of the department's designated Project Communications Leaders listed under Section (d).
- b) The contractor shall refer all information requests or interview requests made by external parties, including media sources, to all of the department's designated Project Communications Leaders listed under Section (d).
- c) The contractor agrees to coordinate with the department as to the form, content and timing of any public announcement of this Agreement.

- d) The Project Communications Leaders for the department shall be:
 - i. The department's project manager
 - ii. Daniel Sellers
 141 NW Barstow Street
 P.O. Box 798
 Waukesha, WI 53188
 Phone: (262) 548-5902
 Email: daniel.sellers@dot.wi.gov
- e) Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to Wisconsin Department of Transportation standard spec 108.6 applicable under the contract.
- f) Notwithstanding anything to the contrary contained herein, no provision of this Agreement shall be interpreted to impede the contractor, or any individual, from reporting possible violations of state or federal law to any governmental agency or entity, or from making other disclosures under the whistleblower provisions of state or federal law. The contractor does not need the prior authorization of the department to make any such reports or disclosures and the contractor shall not be required to notify the department that such reports or disclosures have been made.

39. Notice to Contractor – Safety.

All workers shall wear OSHA and ANSI compliant safety head protection, safety glasses, safety-toe protective footwear, and a ANSI 107-2015 Type R, Class 2 safety vest and at all times while within the project footprint. ANSI 107-2015 Type R, Class E safety pants will be required from dusk until dawn while in the project footprint.

The contractor and respective subcontractors shall provide a copy of their current Company Safety Plans to the department at the preconstruction meeting. All workers shall comply with the Safety Plans of their employer. The department will not issue a notice to proceed until all safety plans have been submitted.

Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to standard spec 108.6 applicable under the contract.

40. Notice to Contractor – Ozaukee County Transit System.

The Ozaukee County Transit System operates the I-43 bus route within the construction limits. Invite Ozaukee County Transit to all coordination meetings between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. The Ozaukee County Transit contact is:

Ozaukee County Transit 741 West Oakland Avenue PO Box 994 Port Washington, WI 53074 (262) 238-8108 transit@co.ozaukee.wi.us

41. Notice to Contractor – Maintenance of Eruv Boundary.

An Eruv is a 'symbolic wall' for the Jewish community that is an uninterrupted boundary comprised mostly of fences and utility lines. The Mequon Eruv is near the project limits. Eruv's are generally described as follows:

The Mequon Eruv boundary is located on WE Energies overhead facilities along the west side of Port Washington Road. The project does not anticipate any impacts to the WE Energies poles.

Once in construction, however, if any activities do impact the eruv boundary located on the WE Energies poles, contact Rabbi Moshe Rapoport Ten days prior to removal of any poles, wires, etc. that comprise the Eruv boundary:

Rabbi Moshe Rapoport <u>moshe@chabadmequon.org</u> Cell: (414) 403-4318

Provide information to Rabbi Moshe Rapoport highlighting the timing, scope of work, and any relevant information that will assist the Jewish community with determining whether they would need to move the Eruv to a new location due to the construction work.

Notification and coordination with the Mequon Eruv during construction is considered incidental to the contract.

42. Work Zone Ingress – Egress.

Any initial set-up and/or changes to the Work Zone Ingress – Egress construction detail in the plan or location(s) should be submitted a minimum of 10 working days before use and are subject to approval by the engineer and the Construction Program Work Zone Engineer, Keegan Dole, at (414) 640-1148.

ser-643-005 (20180131)

43. Traffic Meetings and Traffic Control Scheduling.

Every Wednesday by 10:00 AM, submit a detailed proposed 2-week look-ahead traffic closure schedule to the engineer. Type the detailed proposed 2-week look-ahead closure schedule into an Excel spreadsheet provided by the engineer. Enter information such as closure dates, duration, work causing the closure and detours to be used. Also enter information such as ongoing long-term closures, emergency contacts and general 2-month look-ahead closure information into the excel spreadsheet.

Meet with the engineer between 11:30 AM - 12:00 PM on Wednesdays at the project field office to discuss and answer questions on the proposed schedule. Edit, delete and add closures to the detailed proposed 2-week look-ahead schedule, as directed by the engineer, so that proposed closures meet specification requirements. Other edits, deletions or additions unrelated to meeting specification requirements may also be agreed upon with the engineer during the 11:30 AM meeting.

Every Wednesday at 2:00 PM, or as scheduled by the engineer, attend a weekly traffic meeting. The meeting will bring local agencies, project stakeholders, owner managers, owner engineers, contractors, document control and construction engineering personnel together to discuss traffic staging, closures and general impacts. Upon obtaining feedback from the meeting attendees, edit, delete and add information to the detailed 2-week look-ahead closure schedule, as needed. Submit the revised 2-week look-ahead to the engineer.

Obtain approval from the engineer for any mid-week changes to the closure schedule. Revise the 2-week look-ahead as required and obtain engineer approval.

sef-643-040 (20150319)

44. Public Involvement Meetings.

Participate in department-sponsored public involvement meetings as the engineer requests. Ensure that representatives of subcontractors also participate in those meetings if the engineer requests. Participation in public involvement meetings is considered incidental and no separate payment will be made of participating in public involvement meetings.

sef-999-040 (20160915)

45. Intelligent Transportation Systems (ITS) – Control of Materials.

Standard spec 106.2 – Supply Source and Quality

Add the following to standard spec 106.2:

The department will furnish a portion of equipment to be installed by the contractor. This departmentfurnished equipment includes the following:

Department-Furnished Items
Microwave Vehicle Detectors
72-Count Fiber Optic Cable
6-Count Fiber Optic Cable
Fiber Optic Termination Panels
Fiber Optic Splice Enclosures
CCTV Cameras
CCTV Camera Poles
Microwave Vehicle Detectors
Ethernet Switches
Pole-Mounted Cabinets
Solar Power Systems
Dynamic Message Sign

Pick-up small department-furnished equipment, such as communications devices, cameras, and controllers, from the department's Statewide Traffic Operations Center (STOC), 433 W. St. Paul Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the department's STOC at (414) 227-2166 to coordinate pick-up of equipment.

Large department-furnished equipment, such as poles will be delivered by the supplier to a contractorcontrolled site within Milwaukee or Ozaukee County. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation. Provide location details and a contact for delivery coordination upon receiving the contract's Notice to Proceed.

Transportation of the equipment between the electric shop and the field or interim location(s) shall be the responsibility of the contractor.

Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

Design/Shop Drawings

Prior to the purchase and/or fabrication of any of the components listed herein, and for any non-catalog item shown on the Material and Equipment List specified above, and no more than 30 days after notice to proceed, submit five copies of design drawings and shop drawings, as required, to the department for review. The items and the drawings that represent them shall meet the requirements of the standard specifications.

Design drawing submissions shall consist of signed and certified designs, design drawings, calculations, and material specifications for required items.

Shop drawings will be required for, but not limited to the following:

- 1. Mounting assemblies for the vehicle speed and classification sensors, including their attachment to the structure.
- 2. Mounting LED warning signs to the sign structure.
- 3. Mounting detail for dynamic message signs.
- 4. Any contractor-designed structure or foundation.

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again.

670-005 (20150630)

46. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

This contract includes furnishing and installing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as shown on the plans.

Unusual aspects of this project include:

- The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Statewide Traffic Operations Center (STOC). Interruption of this service is not expected to perform this work. If an interruption is determined necessary, it must be done on a weekend, and must be done in a way that minimizes communication outages for the existing equipment. Notify the department's STOC at least 48 hours in advance of the planned interruption.
- 2. The department will furnish some of the equipment to be installed. Make a reasonable effort to discover defects in that equipment prior to installing it.

A.2 Surge Protection

Equip every ungrounded conductor wire entering or leaving any equipment cabinet with a surge protector. For purposes of this section, multiple cabinets on a single pole or foundation are considered a single cabinet.

B Materials

B.1 General

Only furnish equipment and component parts for this work that are new and have high quality workmanship. All controls, indicators, and connectors shall be clearly and permanently labeled in a manner approved by the engineer. All equipment of each type shall be identical.

All electrical equipment shall conform to the standards and requirements of the Wisconsin Electrical Code, the National Electrical Manufacturers Association (NEMA), National Electric Safety Council (NESC), Underwriter's Laboratory Inc. (UL) or the Electronic Industries Association (EIA), when applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code (NEC), Rural Electrification Administration (REA), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the plans these special provisions, the standard specifications, and to any other codes, standards, or ordinances that may apply. All system wiring, conduit, grounding hardware and circuit breakers shall be in conformance with the National Electrical Code. Whenever reference is made to any of the standards mentioned, the reference shall be considered to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

B.2 Outdoor Equipment

All conductive connectors, pins (except pins connected by soldering), and socket contacts shall be gold plated. Acrylic conformal coating shall protect each circuit board side that has conductive traces. Except for integrated circuits containing custom firmware, all components shall be soldered to the printed circuit board.

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use

a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

B.3 Custom Equipment

Equipment that is not part of the manufacturer's standard product line, or that is made or modified specifically for this project, shall conform to the following requirements:

Where practical, electronics shall be modular plug-in assemblies to facilitate maintenance. Such assemblies shall be keyed to prevent incorrect insertion of modules into sockets.

All components shall be available from multiple manufacturers as part of the manufacturers' standard product lines. All must be clearly labeled with the value, part number, tolerance, or other information sufficient to enable a technician to order an exact replacement part.

Lamps used for indicator purposes shall be light-emitting diodes.

The printed circuit boards shall be composed of "two-ounce" copper on 1/16-inch thick fiberglass epoxy or equivalent type construction. Holes that carry electrical connections from one side of the boards to the other shall be completely plated through. Multilayer printed circuit boards shall not be used. The name or reference number used for the board in the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

All components shall be mounted so that the identifying markings are visible without moving or removing any part, if practical.

B.4 Environmental Conditions

Equipment shall continue to operate as specified under the following ranges of environmental conditions, except as noted in the specifications for individual pieces of equipment.

- 1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
- 2. Duty Cycle: Continuous
- 3. Electromagnetic Radiation: The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.
- 4. Electrical Power:
 - a. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, singlephase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
 - b. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
 - c. Line voltage transients: The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.
- 5. Temperature and Humidity:
 - a. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
 - b. Equipment in Controlled Environments shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

B.5 Patch Cables and Wiring

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

B.6 Surge Protection

Low-voltage signal pairs, including twisted pair communication cable(s) entering each cabinet shall be protected by two-stage, plug-in surge protectors and shall be installed on both ends of camera control cables. The protectors shall meet or exceed the following minimum requirements:

- 1. The protectors shall suppress a peak surge current of up to 10k amps.
- 2. The protectors shall have a response time less than one nanosecond.
- 3. The protector shall clamp the voltage between the two wires at a voltage that is no more than twice the peak signal voltage, and clamp the voltage between each wire and ground at 50 volts.
- 4. The first stage of protection shall be a three-element gas discharge tube, and the second stage shall consist of silicon clamping devices.
- 5. The protector shall also contain a resettable fuse (PTC) to protect against excessive current.
- 6. There shall be no more than two pairs per protector.
- 7. It shall be possible to replace the protector without using tools.

Cables carrying power to curve signs shall be protected at the cabinet by grounded metal oxide varistors of appropriate voltages. The varistors must be at least 0.8 inch in diameter.

C Construction

C.1 Thread Protection

Provide rust, corrosion, and anti-seize protection at all thread assemblies of metallic parts by coating (non-spray) the mating surfaces with an approved compound. Failure to use an approved compound will result in no payment for the items to which coating was to have been applied.

C.2 Cable Installation

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

C.3 Wiring

Every conductor, except a conductor contained entirely within a single piece of equipment, must terminate either in a connector or on a terminal block. Provide and install the connectors and terminal blocks where needed, without separate payment. Use approved splice kits instead of connectors and terminal blocks for underground power cable splices.

Permanently label and key connectors to preclude improper connection. Obtain prior engineer approval for the labeling method(s) prior to use.

Terminal blocks must be affixed to panels that permanently identify the block and what wire connects to each terminal. This may be accomplished by silk screening or by installing a laminated printed card under the terminal block, with the labels on portions of the card that extend beyond the block. Installation of terminal blocks by drilling holes in the exterior wall of the cabinet is not acceptable.

Use barriers to protect personnel from accidental contact with all dangerous voltages.

Do not install conductors carrying AC power in the same wiring harness as conductors carrying control or communication signals.

Arrange wiring, including fiber optic pigtails, so that any removable assembly can be removed without disturbing wiring that is not associated with the assembly being removed.

Communication and control cables may not be spliced underground, except where indicated on the plans.

Cables in the Statewide Traffic Operations Center or in communication hubs, which are not contained within a single cabinet, shall have at least 10 feet of slack.

C.4 System Operations

If the contractor's operations unexpectedly interrupt Intelligent Transportation Systems (ITS) service, notify the engineer immediately and restore service within 24 hours. Repair all damaged facilities to the condition existing before the interruption. If service is not restored within 24 hours, the department may restore service to any operating device and deduct restoration costs from payments due the contractor.

C.5 Surge Protection

Arrange the equipment and cabinet wiring to minimize the distance between each conductor's point of entry and its protector. Locate the protector as far as possible from electronic equipment. Ensure that all wiring between the surge protectors and the point of entry is free from sharp bends.

D Measurement

No separate measurement will be made for the work described in this article.

E Payment

No separate payment will be made for the work described in this article. All work described in this article shall be included under the ITS items in the contract.

670-010 (20100709)

47. Pavement Breaking Equipment.

Use only hydraulic pavement breaking equipment for breaking pavement within 300 feet of any structure. Do not use guillotine, drop hammer, falling weight, gravity impact breakers or equivalent equipment. A multi-head hydraulic drop hammer is allowed unless a structure is within 50 feet of the roadway.

48. Storm Sewer.

Supplement standard spec 204.5.1 with the following:

QMP sampling, testing and documentation if applicable is incidental to removing storm sewer bid item and no separate payment will be made.

Supplement standard spec 608.2 with the following:

Two weeks prior to start of storm sewer construction, provide a shoring design and installation sequence for each location where shoring is to be used. Have a professional engineer, currently registered in the State of Wisconsin and knowledgeable of the specific site conditions and requirements, verify the adequacy of the design. Submit one electronic copy in portable document format of each shoring design, signed and sealed by the same professional engineer verifying the design, to the engineer for incorporation into the permanent project record.

Supplement standard spec 608.3.1 with the following:

(1) Incorporate excavated material in the work to the extent practicable. Use materials with suitable engineering properties for embankment.

(2) Dispose of surplus or unsuitable material as specified in standard spec 205.3.12.

Supplement standard spec 608.3.4 with the following:

Place rubber gasket joints over the spigot end or tongue of the entering pipe for all round storm sewer pipes horizontal and elliptical pipes with a rise less than or equal to 40-inches. Clean the gasket and the ends of the pipe from sand and gravel. If the gasket provided is neither factory lubricated nor self-lubricating, lubricate the outside of the gasket and the inside of the bell or groove of the last pipe with

an engineer - approved vegetable lubricant immediately before making the joint. Place the spigot or tongue of the pipe being laid with the gasket in place into the bell or groove end of the previously laid pipe. Set pipe carefully to line and grade, and push or jack home. The engineer may order the use of ajack or "come-along" if deemed necessary to ensure that the joints are completely tight.

For horizontal elliptical pipe rise greater than 40-inches use mastic joint compound. Where factory lubricated rubber gasket joints are not available, clean the ends of the pipe from sand and gravel. Place engineer-approved mastic joint sealer on both the spigot and bell ends of the pipe being laid. Apply additional mastic around each joint exterior and wrap each joint with Geotextile Fabric Type DF laid flat meeting requirements of standard spec 645. Wrap each joint so that the Geotextile Fabric overlaps each joint a distance of approximately ½ of the pipe diameter.

Replace standard spec 608.5(2) with the following:

Payment for the Storm Sewer Pipe bid items is full compensation for providing all materials, including all special Y's, mitered sections, elbows and connections required; for all submittals; for excavating and wasting excess material, except rock excavation; for providing rubber gaskets; Lubrication of rubber gaskets; mastic joint sealer; for supporting utilities in storm sewer trench; for shoring design, providing a signed and sealed copy of the design; for installation, monitoring, and removal of shoring; for forming foundation; for laying pipe; for sealing joints and making connections to new or existing features, bedding material; for backfilling and granular backfill material; for QMP sampling, testing and documentation; for cleaning out; and absent the pertinent contract bid items, for restoring the work site.

49. Removing Old Culverts and Bridges

Add the following to standard spec 203.3.1:

203.3.1.1 Structure Removal Site Safety Plan

(1) Prepare a Structure Removal Site Safety Plan covering all structure removal work included in the contract. Maintain posted copies of the Structure Removal Site Safety Plan at the site in the project field office. Provide two copies of the Structure Removal Site Safety Plan to the engineer at least four weeks before beginning removal work.

203.3.1.2 Structure Removal Plans

(1) Prepare a structure specific removal plan for each of the following existing structures indicating the methods and sequence of demolition:

Existing Structure	Structure Type	Feature On	Feature Under
B-45-19	Bridge	I-43	Mequon Road
B-45-20	Bridge	I-43	Mequon Road
C-45-19	Culvert	I-43	Tributary

This table does not include all the structure removals included in the contract. It is a list of existing structure removals included in the contract for which a structure specific detailed removal plan is required to be submitted.

Examine the existing structure plans and visit the site before preparing and submitting the structure removal plan(s). The contractor is responsible for the methods and sequence of demolition, including effects on the overall stability of each structure being removed. At a minimum, each removal plan shall include:

- 1. The name of the professional engineer, registered in the state of Wisconsin who will be on site and monitoring the removal of existing structures as required in this specification.
- 2. The name of the contractor's on-site-employee designated in responsible charge of all removal operations.
- 3. The removal method and sequence of removal for each individual structure, including the staging of bridge removals.

- 4. Analysis of the stability of the structure based on the methods and sequence of demolition proposed, to ensure that the structure is demolished in a safe and controlled manner. The analysis computations shall be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
- 5. Design and details of temporary supports, shoring or temporary bracing, if required to stabilize portions of partially remaining structures during the removal sequence or support partially remaining structures after staged removals. Include design computations and detail drawings for all temporary supports, shoring and bracing that indicate the exact placement of the temporary supports, shoring or bracing; verification of design loads; attachment details; and methods for the safe transfer of loads from existing structural elements to be removed to the temporary supports, shoring, or bracing. Temporary support, shoring, or bracing design computations and drawings details are to be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
- 6. Design and details of temporary support foundations. Include in the foundation design the evaluation of expected foundation settlement and the effect that this will have on the structure being supported. Temporary support foundation design computations and drawing details are to be prepared, signed and sealed by a professional engineer registered in the State of Wisconsin.
- 7. Equipment type and locations of equipment on the structure(s) or adjacent roadways during the removal operations
- 8. Locations and type of work to be performed directly adjacent to traffic.
- Details and locations of protective covers and other measures to ensure that people, property and improvements will not be endangered or damaged as a result of the removal operations. Include methods for protecting any pavement surfaces including shoulders, concrete barriers, and other highway features.
- 10. Methods of removal, hauling and disposal, including haul routes and disposal destination.
- 11. A schedule of anticipated roadway and lane closures to accommodate removal operations. Include the timing of individual lane or temporary roadway closures and the nature of removal operations that will be performed during the lane or roadway closures.
- 12. Acknowledgement that the contractor and removal design engineer responsible for preparing the removal plan have visited the site and reviewed the existing structure plans in preparing the removal plan.

Structure Pre-Removal Meetings

After submission of the Structure Removal Site Safety Plan and required Structure Removal Plan(s), schedule and conduct structure pre-removal meetings at a time agreed to by the engineer. Hold structure pre-removal meetings at least three working days before beginning structure removal activities. If the engineer agrees before, multiple structure removals can be combined and discussed at one structure pre-removal meeting. Otherwise, schedule and conduct a separate structure pre-removal meeting for each structure to be removed.

Supplement standard spec 203.3.2.1 with the following:

Perform structure removals conforming to the submitted Structure Removal Site Safety Plan and applicable Structure Removal Plan(s)

Supplement standard spec 203.5.1(2) with the following:

Payment includes preparation and submittal of a Structure Removal Site Safety Plan; preparation and submittal of Structure Removal Plan(s) and performing all structure removal work conforming to the submitted plans.

50. Removing Concrete Barrier.

Add the following to standard spec 204.3.2.2.1 as paragraph fourteen:

⁽¹⁴⁾ Under the Removing Concrete Barrier bid item, remove barrier and footing, unless specified in the plans, at the locations the plans show. Removal includes all required sawing conforming to standard spec 690.

Add the following to standard spec 204.5.1(2) as paragraph two:

(2) Payment for Removing Concrete Barrier is full compensation for all required sawing and removal of existing barrier and footing, and sludge removal.

sef-204-025 (20180104)

51. Removing or Abandoning Miscellaneous Structures.

Replace standard spec 204.5.1(3) with the following:

When backfilling with Backfill Granular as specified in this special provision article or as directed by the engineer, the item Backfill Granular is considered incidental to the appropriate bid item.

At locations where Backfill Granular is not specified, contractor may choose to use either Backfill or Backfill Granular, and no separate payments will be made for using Backfill Granular.

Supplement standard spec 204.3.2.2 with the following:

Backfill existing storm sewer or existing storm sewer structure locations shown for removal or abandonment outside the new traveled way with native backfill immediately after completing the sewer work. Backfill according to standard spec 209 within the traveled way.

All backfill, including native material, provided for removal or abandonment of existing storm sewer structures and pipes is considered incidental to the appropriate bid item.

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52. Preparing Roadway Foundation.

Replace standard spec 205.3.2(5) with the following:

Completely remove pavement, asphaltic surface, and rigid base from within the roadbed slopes and underlying proposed embankments.

53. Roadway Excavation.

Add the following to standard spec 205.5.2(1):

Provide the department with an earth flow diagram within 30 calendar days of receiving the contract Notice to Proceed.

Identify all excavation required for the project, all sources of roadway embankment fill including offsite material, shrinkage and swell factors, proposed stockpile material, structure excavation (if used in embankments), waste, and fills anticipated to be treated with a soil drying agent. Provide start and finish dates for each grading area within the division. These dates should correspond to the dates shown on the project schedule.

Any deviation from the sequencing shown in the earth flow diagram will require approval from the engineer and will require an update to the earth flow diagram.

Attend biweekly earthwork meetings scheduled by the engineer to discuss earth flows, borrow sites, soil drying and strengthening, and other upcoming earthwork activities and technical issues.

Replace standard spec 205.3.13(3) with the following:

The engineer will evaluate cuts and shallow fills to determine if corrective work, EBS Excavation/EBS Backfill is required. If the engineer requests, provide loaded trucks and run the grade as the engineer directs to confirm yielding areas. Perform EBS Excavation/EBS Backfill in yielding areas as the engineer directs.

Add the following to standard spec 205.5.2(2):

The department will not pay EBS to remove frost from embankments or cut sections unless the work is directed by the engineer. It is the contractor's responsibility to stage construction so that exposed

subgrades do not freeze or to provide adequate frost protection. Any work necessary to remove and replace frozen materials from newly constructed embankments or exposed cut sections is considered incidental to the excavation bid items.

54. Right-of-Way Fencing.

Remove existing right-of-way fencing, as shown in the plans, to allow for construction operations. A quantity of the Removing Fence, Item 204.0170 has been included in the contract for this purpose. Install new chain link fence within 30 calendar days of the removal of the existing fence. Provide temporary connections between existing and proposed fencing as needed to maintain continuous right-of-way fencing at all times. A quantity of the Fence Safety item has been included in the contract for this purpose. Where buried facilities or subsurface conditions do not permit driving posts for the safety fence, support posts by other means that will provide stability comparable to driven posts.

At no time leave a site where the fencing is inadequate to protect the general public.

55. Project Site Air Quality.

Because fine particulate matter levels for Milwaukee, Racine and Kenosha Counties are typically close to PM_{2.5} limits and the project is in a non-attainment area for the federal 8-hour ozone standard, contributions from construction activities can have a major impact well beyond the project limits. Take practical measures to mitigate the impact of operating construction equipment on the air quality in and around the project site.

Voluntarily establishing the staging zones for trucks waiting to load and unload is encouraged by the department. Locate staging zones where idling of diesel-powered equipment will have minimal impact on abutting properties and the general public. The department will make signs available to help identify these zones. Have truckers queue up in these zones whenever it is practical. The department further encourages drivers to shut down diesel trucks as soon as it appears likely that they will be queued up for more than ten minutes. Notify employees and sub-contractors about fueling and engine idling.

Portable Concrete Crusher Plants

Portable concrete crusher plants may need a NR 440 Concrete Crusher Plant Air Permit for air emissions. Please contact Wisconsin Department of Natural Resources to request additional information and permit application materials. Complete permit applications may take 3 months to process.

sef-999-039 (20160929)

56. Abatement of Asbestos Containing Material B-45-19, Item 203.0211.S.0001; Abatement of Asbestos Containing Material B-45-20, Item 203.0211.S.0002;

A Description

This special provision describes abating asbestos containing material on structures.

B (Vacant)

C Construction

B-45-19

John Roelke, License Number All-119523, inspected Structure B-45-19 for asbestos on March 14, 2013. Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: The gaskets under the railing attachment plates on the concrete parapets. The RACM material is estimated at 12 square feet and is classified as non-friable.

B-45-20

John Roelke, License Number All-119523, inspected Structure B-45-20 for asbestos on March 14, 2013. Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: The gaskets under the railing attachment plates on the concrete parapets and the caulk around the bolts in the attachment plates. The RACM material is estimated at 12 square feet and is classified as non-friable.

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is available from Steve Hoff, WisDOT SE Region Project Manager, (262) 548-6718. Email: <u>steve.hoff@dot.wi.gov</u> According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), 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 and the abatement report to Andrew Malsom, WisDOT SE Region Hazmat Program Environmental Engineer, (262) 548-6705 and via email to <u>dothazmatunit@dot.wi.gov</u> or via US 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:

B-45-19

- Site Name: Structure B-45-019, IH 43 NB-STH 32 NB over STH 57-STH 167-MEQUON RD
- Site Address: 3.0 MI N JCT STH 100
- Ownership Information: WisDOT Transportation SE Region, 141 NW Barstow St., PO Box 798, Waukesha, WI 53187-0798
- Contact: Thomas Erdmann
- Phone: (414) 750-2216
- Age: 57 years. This structure was constructed in 1966.
- Area: 6,069 SF of deck

B-45-20

- Site Name: Structure B-45-020, IH 43 SB-STH 32 SB over STH 57-STH 167-MEQUON RD
- Site Address: 7.0 MI S JCT STH 60
- Ownership Information: WisDOT Transportation SE Region, 141 NW Barstow St., PO Box 798, Waukesha, WI 53187-0798
- Contact: Thomas Erdmann
- Phone: (414) 750-2216
- Age: 57 years. This structure was constructed in 1966.
- Area: 6,069 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.

D Measurement

The department will measure Abatement of Asbestos Containing Material (Structure #) by each structure, 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
203.0211.S.0001	Abatement of Asbestos Containing Material B-45-19	EACH
203.0211.S.0002	Abatement of Asbestos Containing Material B-45-20	EACH

Payment is full compensation for submitting necessary forms; removing all asbestos; and for properly disposing of all waste materials.

stp-203-005 (20220628)

57. Abandoning Sewer, Item 204.0291.S.

A Description

This special provision describes abandoning existing sewer by filling it with cellular concrete according to the pertinent requirements of standard spec 204 and standard spec 501, as shown in the plans, and as hereinafter provided.

B Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3 Provide water meeting the requirements of standard spec 501.2.4.

C Construction

Fill the abandoned sewer pipe with cellular concrete as directed by the engineer. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

D Measurement

The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
204.0291.S	Abandoning Sewer	CY	

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.

stp-204-050 (20080902)

58. Removing Advance Flasher Assemblies Type 1, Item 204.9001.S.

A Description

This special provision describes removing advance flasher assemblies from the locations the plans show. Rewire and disconnect wiring in the control cabinet as necessary and properly dispose of materials conforming to standard spec 204.3.1.3.

B Materials

Dispose of all materials resulting from removing the Advance Flasher Assemblies including but not limited to poles, break-a-way bases, signal assemblies, bulbs, and wire off the job site.

C Construction

Do not remove existing advance flasher assemblies until proper disconnects and wiring changes in the controller cabinet have been made.

Where an existing advance flasher assembly is mounted to a light pole, remove all signal hardware including wire, conduit, signal assemblies and mounts. Where existing conduit has been installed under concrete sidewalk or roadway, do not remove buried conduit unless directed otherwise by the engineer or unless it is not possible to install new wire through the existing conduit.

D Measurement

The department will measure Removing Advance Flasher Assemblies (Type) by the unit, acceptably removed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
204.9001.S	Removing Advance Flasher Assemblies, Type 1	EACH	

Payment is full compensation for removing advanced flasher assemblies; for rewiring, as necessary; for disconnecting wiring as necessary in the controller cabinet; and for properly disposing of all materials.

Removal of concrete bases and signs associated with this item will be measured and paid for separately.

stp-204-060 (20170615)

59. Removing Barricade Rack and Barricades, Item 204.9060.S.0001.

A Description

This special provision describes removing barricade rack and barricades according to the pertinent provisions of standard spec 204 and as hereinafter provided.

- B (Vacant)
- C (Vacant)

D Measurement

The department will measure removing barricade rack and barricades as each individual unit, acceptably removed, measured individually for each required plan location.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.0001	Removing Barricade Rack and Barricades	EACH

Payment is full compensation for removing, hauling and disposing of materials.

204-025 (20041005)

60. Removing Lighting Units, Item 204.9060.S.1001.

A Description

This special provision describes the removing lighting units as the plans show, conforming to standard spec 204, and as follows.

B Materials

All removed material shall become the property of the contractor and be disposed off the project site, except for LED and HPS light fixtures and bulbs. LED and HPS light fixtures and bulbs are considered hazardous material, disposal shall be done by the contractor utilizing STSP 659-500 Lamp, Ballast, LED, Switch Disposal by Contractor.

C Construction

Remove lighting units consisting of pole, arm, luminaire, lamp, wires, breakaway device, and associated hardware and appurtenances.

No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

D Measurement

The department will measure Removing Lighting Units by each individual unit removed, 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	
204.9060.S.1001	Removing Lighting Units	EACH	
SER-204.15 (20220214)			

1229-04-75

61. Removing Distribution Center, Item 204.9060.S.1002.

A Description

This special provision describes removing an existing highway lighting distribution center and electrical service pedestal as shown on the plans, according to the pertinent provisions of standard spec 204, and as hereinafter provided.

B (Vacant)

C Construction

Remove the lighting distribution center and the electrical service pedestal and dispose off the project site.

The department will issue the demolition request to WE-Energies. Coordinate with the utility for disconnection of services. The department will pay any fees charged by the utility.

Removal of the concrete base will be paid under a separate bid item.

D Measurement

The department will measure Removing Distribution Center by each individual unit; acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.1002	Removing Distribution Center	EACH

Payment is full compensation for removal of the distribution center, electrical service pedestal, and for utility coordination for the services.

stp-204-025 (20150630)

62. Remove Traffic Signals STH 57/167 & CTH W, Item 204.9060.S.3401; Remove Traffic Signals IH 43 SB Ramps & STH 57/167, Item 204.9060.S.3402; Remove Traffic Signals IH 43 NB Ramps & STH 57/167, Item 204.9060.3403.

A Description

This special provision describes removing existing traffic signals at the intersection of STH 57/167 & CTH W, IH 43 SB Ramps & STH 57/167, and IH 43 NB Ramps & STH 57/167 according to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans.

B (Vacant)

C Construction

Arrange for the de-energizing of the traffic signals with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of the equipment.

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the department.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, monotube arms, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand-hole doors and all associated hardware remain intact. Remove the traffic signal cabinet from the concrete footing. Dispose of the underground signal cable, internal wires and street lighting cable off the right-of-way. Deliver the remaining materials, except for traffic signal LED and luminaire lamp, switch, and ballasts, to the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 at least five (5) working days prior to delivery to make arrangements. Traffic signal LED and luminaire lamp, switch, and ballast disposal shall be paid for as a separate item.

D Measurement

The department will measure Remove Traffic Signals [Location] as each individual 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
204.9060.S.3401	Remove Traffic Signals STH 57/167 & CTH W	EACH
204.9060.S.3402	Remove Traffic Signals IH 43 SB Ramps & STH 57/167	EACH
204.9060.S.3403	Remove Traffic Signals IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for removing, disassembling traffic signals, scrapping of some materials, disposing of scrap material, for delivering the requested materials to the department.

63. Remove Loop Detector Wire and Lead-in Cable STH 57/167 & CTH W, Item 204.9060.S.3404;

Remove Loop Detector Wire and Lead-in Cable IH 43 SB Ramps & STH 57/167, Item 204.9060.S.3405;

Remove Loop Detector Wire and Lead-in Cable IH 43 NB Ramps & STH 57/167, Item 204.9060.3406.

A Description

This special provision describes removing loop detector wire and lead-in cable at the intersections of STH 57/167 & CTH W, IH 43 SB Ramps & STH 57/167, and IH 43 NB Ramps & STH 57/167. Removal will be according to standard spec 204, as shown in the plans, and as hereinafter provided.

B (Vacant)

C Construction

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the loop detector wire and lead-in cable.

Remove and dispose of detector lead-in cable including loop wire for abandoned loops off the right-of-way.

STH 57/167 & CTH W:

Remove loop detector wire at Loops 11-12, 21, 31-34, 51-55, and 82-87. Remove lead-in cable at all loop detector locations.

IH 43 SB Ramps & STH 57/167:

Remove loop detector wire and lead-in cable at all loop detector locations.

IH 43 NB Ramps & STH 57/167:

Remove loop detector wire and lead-in cable at all loop detector locations.

D Measurement

The department will measure Remove Loop Detector Wire and Lead-in Cable [Location] as each individual 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
204.9060.S.3404	Remove Loop Detector Wire and Lead in Cable STH 57/167 & CTH W	EACH
204.9060.S.3405	Remove Loop Detector Wire and Lead in Cable IH 43 SB Ramps & STH 57/167	EACH
204.9060.S.3406	Remove Loop Detector Wire and Lead in Cable Remove Traffic Signals IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for removing, scrapping, and disposing of material.

64. Removing Underdrain, Item 204.9090.S.0001.

A Description

This special provision describes removing Underdrain according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B Materials

Furnish Backfill Granular materials according to the pertinent requirements of standard spec 209.

C (Vacant)

D Measurement

The department will measure Removing Underdrain by the linear foot, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.0001	Removing Underdrain	LF

Payment is full compensation for excavating, removing, furnishing and placing all materials, backfilling and compacting.

stp-204-025 (20150630)

65. Removing Drain Tile, Item 204.9090.S.0002.

A Description

This special provision describes removing drain tile according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B Materials

Furnish Backfill Granular materials according to the pertinent requirements of standard spec 209.

C (Vacant)

D Measurement

The department will measure Removing Drain Tile by the linear foot, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.0002	Removing Drain Tile	LF

Payment is full compensation for excavating, removing, furnishing and placing all materials, backfilling and compacting.

stp-204-025 (20150630)

66. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility or landfill. The closest DNR approved bioremediation facility or landfill is:

Waste Management Orchard Ridge Landfill W124 N9355 Boundary Road Menomonee Falls, WI 53051 (866) 909-4458

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 contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Locations

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following locations the plans show:

1. Station 28+00 to 29+70 from 25 feet RT of MNW to 80 feet LT of MNW.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For further information regarding previous investigation and remediation activities at these sites contact:

Name:Andrew MalsomAddress:141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798Phone:(262) 548-6705Fax:(262) 548-6891E-mail:andrew.malsom@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation Address: 150 N. Patrick Blvd., Ste. 180, Brookfield, WI 53045 Contact: Bryan Bergmann Phone: (262) 901-2126 office, (262) 227-9210 cell Fax: (262) 879-1220 E-mail: bbergmann@trccompanies.com

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying contaminated soils to be hauled to the bioremediation facility or landfill;
- 3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility or 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 areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days before beginning excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility or landfill that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days before beginning excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility or landfill. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements

Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer before the start of work.

B (Vacant)

C Construction

Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation or landfilling to the DNR approved bioremediation facility or landfill. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Before transport, sufficiently dewater soils designated for off-site bioremediation or landfilling so as not to contain free liquids.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the bioremediation facility or landfill as documented by weight tickets generated by the bioremediation facility or landfill.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION205.0501.SExcavation, Hauling, and Disposal of Petroleum Contaminated SoilTON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation, or landfilling of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils before transport, if necessary.

stp-205-003 (20230113)

67. Prepare Foundation for Asphaltic Shoulders.

Add the following to standard spec 211.3.1:

Excavate and remove Base Aggregate Dense 1 ¼-Inch installed in a previous sequence for nightly freeway shoulder restoration to ensure no vertical drop-offs greater than 2-inches adjacent to the travel lanes and to provide shoulder cross slopes with an 8% maximum rollover with the adjacent travel lanes for Peak Hour and Off Peak Hour freeway traffic operations providing two lanes in each direction.

Add the following to standard spec 211.5.1:

Payment for the Prepare Foundation for Asphaltic Shoulders bid item is full compensation for excavating, removing, hauling, and disposing of Base Aggregate Dense 1 ¼-Inch installed in a previous sequence for nightly freeway shoulder restoration to ensure no vertical drop-offs greater than 2-inches adjacent to the travel lanes and to provide shoulder cross slopes with an 8% maximum rollover with the adjacent travel lanes for Peak Hour and Off Peak Hour freeway traffic operations providing two lanes in each direction.

68. QMP Subgrade.

A Description

This special provision describes requirements for subgrade materials within the roadway foundation as defined in standard spec 101.3. Conform to standard spec 207 as modified in this special provision for all work within the roadway foundation at the following locations:

- IH 43 mainline
- IH 43 ramps
- Cross roads
- Local roads

Provide and maintain a quality control program. A quality control program is defined as all activities, including process control inspection, sampling and testing, documentation, and necessary adjustments in the process that are related to the construction of subgrade which meets all the requirements of this provision.

Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

B Materials

B.1 Quality Control Plan

Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not perform grading work before the engineer reviews and accepts the plan. Construct the project as the plan provides.

Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:

- An organizational chart with names, telephone numbers, current certifications or titles, and roles and responsibilities of QC, QV, and IA personnel.
- The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
- An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
- Location of the QC laboratory, retained sample storage, and control charts and other documentation.

- A summary of the locations and calculated quantities to be tested under this provision.
- An explanation regarding the basis of acceptance for material that cannot be tested by nuclear methods due to a high percentage of oversized particles.

B.2 Personnel

Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians. Have a grading technician certified under HTCP at level I (or ACT Grading Technician under the direction of a certified technician) present at the site during all subgrade preparation, fill placement, compaction, and nuclear testing activities. Have a nuclear density technician certified under HTCP at level I perform field density and field moisture content testing.

B.3 Laboratory

Perform quality control testing in a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Laboratory 3502 Kinsman Boulevard Madison, Wisconsin 53704-2583 Telephone: (608) 246-7938

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

B.4 Equipment

Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

Furnish nuclear gauges from the department's approved product list at:

http://www.atwoodsystems.com/.

Ensure that the gauge manufacturer or an approved calibration service calibrates the gauge within 12 months before using it on the project. Retain a copy of the calibration certificate with the gauge. Nuclear density gauge calibration verification is required daily when earthwork construction operations require testing under this special provision article. This calibration verification shall be performed using the departments "Validator" apparatus which is located at the field office. Establish a standard gauge reading for the "Validator" using the ten test average method. The source emitter depth for calibration verification, in the direct transmission mode, will be determined by the engineer. This procedure will establish the "Validator" apparatus, as the contractor's project reference site.

Conform to ASTM D 2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter or direct transmission position. Perform each test for 1 minute of nuclear gauge count time.

B.5 Soil Source Study

Conduct and submit a soil source study before beginning of grading operations. Ensure that this study identifies each distinct soil type on the project within the top 15 feet of cut areas and all borrow material. Provide the in-bank natural moisture content for each soil. Develop moisture-density curves for each identified soil type by utilizing AASHTO T 99 Method A or Method C based on gravel content, with a minimum of 5 individual points, and a zero air voids curve at a specific gravity of 2.65. If a different specific gravity is used perform a specific gravity test. Determine the maximum density and corresponding optimum moisture level for each soil type. Develop a site-specific family of Proctor curves for this contract from the completed soil source study and submit to the engineer for review and acceptance.

Perform characterization tests on each of the soil types selected for the soil source study. The tests for roadway include AASHTO T 89, AASHTO T 90, AASHTO T 27 or AASHTO T88 (without hydrometer), and AASHTO T 11. Classify each soil type selected according to the AASHTO soil classification system based on the characterization tests. Do not begin grading operations until the engineer accepts the soil source study.

Use the soil types identified in the soil source study with corresponding maximum densities and optimum moisture values to determine the compaction compliance on the project. Continue the soil source study in those areas of cuts greater than 15 feet that were not accessible during the initial study. Include data on

additional soil types if project conditions change. Ensure that tests of additional soil types are complete and the engineer accepts the results before incorporating the material into the roadway foundation.

Split each Proctor sample and identify so as to provide comparison with the department's test results. Unless the engineer directs otherwise, retain the QC split samples for 14 calendar days and promptly deliver the department's split samples to the field office.

Retain and identify two representative samples of each Proctor. Submit one sample to the engineer. Retain one sample on site for use when performing textural identification.

B.6 Quality Control Documentation

B.6.1 Control Charts

Maintain separate control charts for the field density and field moisture content of each grading area. Designate grading areas within the project as follows:

- Embankment portions of the project, except within 200 feet of bridge abutments.
- Embankment within 200 feet of bridge abutments.
- Subgrade cut portions of the project.
- Embankment in pipe culvert, sewer and waterline trenches.
- Structure and granular backfill placed at bridge abutments.
- Embankments of the project where embankments are 20 feet or higher regardless of location to be known as special compaction area.

Ensure that all tests are recorded and become part of the project records. Plot required test results on the control charts. Include random and engineer-requested testing but only include the contractor's randomly selected QC test results in the 4-point running average. The contractor may plot other contractor-performed process control or informational tests on the control charts, but do not include them in 4-point running averages.

Post control charts in an engineer-approved location and update daily. Ensure that the control charts include the project number, the test number, each test element, the applicable control limits, the contractor's individual test results, the running average of the last 4 data points, and the engineer's quality verification test data points. Use the control charts as part of a process control system for identifying potential problems and assignable causes. Format control charts according to the CMM.

Submit control charts to the engineer in a neat and orderly manner within 10 business days after completing subgrade construction.

B.6.2 Records

Document all observations, inspection records, and adjustments to fill placement procedures, soil changes, and test results daily. Note the results of the observations and inspection records as they occur in a permanent field record.

Provide copies of the field density and field moisture running average calculation sheets, records of procedure adjustments, and soil changes to the engineer and QV personnel daily.

Submit original testing records to the engineer in a neat and orderly manner within 10 business days after completing subgrade construction.

B.7 Contractor Testing

B.7.1 General

Have a grading technician certified under HTCP at level I (or ACT Grading Technician under the direction of a certified technician) present during all subgrade preparation, fill placement, compaction, and testing. Have a nuclear density technician certified under HTCP at level I perform the testing for field density and field moisture content. During subgrade construction, use sampling and testing methods identified in the CMM to perform the required tests at randomly selected locations at the indicated minimum frequency for each grading area.

Determine the cubic yards for testing based on a total load count system the engineer and contractor agree to.

For each test, provide the cubic yards represented and the test location to within 2 feet horizontally and 0.5 feet vertically. Use project stationing to determine horizontal location and grade stakes to determine vertical location.

Test areas of suspect compaction or areas which appear to be nonconforming as determined by the engineer.

B.7.2 Field Density and Field Moisture

Perform the field density and field moisture tests using the nuclear density meter method according to AASHTO T 310. Ensure that each field density test material is related to one of the specific soil types identified in the soil source study in determining the percent compaction. Use textural identification as the primary method of establishing this relationship. Use the representative samples retained from the soil source study when performing the textural identification. Use a coarse particle correction according to AASHTO T 224.

If field density and field moisture tests cannot be performed by the nuclear density method due to a high percentage of oversized particles as determined according to AASHTO T 99 for highway embankments, observe the placement of the embankment and document the basis of acceptance. Document daily quantities of untested embankment and locations where untested embankment is placed and keep a cumulative quantity of untested embankment material during the project. Include the daily documentation and a summary of the cumulative quantity of untested embankment material with the project records.

B.7.3 Testing Frequency

B.7.3.1 Subgrade Embankment portions of the project, except within 200 Feet of bridge abutments

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 2,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.3.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 1,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.3.3 Subgrade Cut

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 1,000 linear feet of cut or one test per cut area whichever yields the most tests. The testing will be completed at the finished subgrade elevation.

B.7.3.4 Subgrade Embankment in Pipe Removals, Pipe Culvert, Sewer and Waterline Trenches

Perform the required tests at the following minimum frequencies per trench run between structures. Test trenches individually at the frequency listed in this section. For example, lateral lines and trunk lines are to be considered individual trenches:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 100 CY of backfill placed per lift or one test per day whichever yields the most tests.

B.7.3.5 Structure and Granular Backfill at Bridge Abutments

Perform the required tests at the following minimum frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 2 feet of vertical backfill height per abutment.

B.7.3.6 Embankments of the project 20 feet or higher regardless of location to be known as special compaction area

Perform the required tests at the following minimum frequencies but exclude MSE wall backfill:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 2,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.4 Control Limits

B.7.4.1 Field Density

B.7.4.1.1 General Conditions

The lower control limit for field density measurements is a minimum of 95.0 percent of the maximum dry density as determined by AASHTO T 99 or T 272 for the 4-point running average and a minimum of 94.0 percent of the maximum dry density for any individual test.

B.7.4.1.2 Embankments of the project 20 feet or higher regardless of zone to be known as special compaction area excluding MSE wall backfill

The lower control limit for field density measurements in the special compaction area is a minimum of 98.0 percent of the maximum dry density as determined by AASHTO T 99 or T 272 for the 4-point running average and a minimum of 95.0 percent of the maximum dry density for any individual test.

B.7.4.2 Field Moisture Content

The upper control limit for the field moisture content is 105.0 percent of the optimum moisture as determined by AASHTO T 99 or T 272 for the 4-point running average.

The lower control limit for the field moisture content is 65.0 percent of the determined optimum moisture for the 4-point running average. There is no lower control limit for the field moisture of material having less than 5 percent passing the No. 200 sieve.

B.7.5 Corrective Action

Notify the engineer if an individual field density test falls below the individual test control limit. The subgrade in this area is unacceptable. Perform corrective actions, acceptable to the engineer to improve the density of the subgrade material. After corrective action, perform a randomly located retest within the represented quantity to ensure that the material is acceptable.

Notify the engineer if the field density or field moisture running average point falls below the running average control limit for field density or outside the control limits for field moisture. The subgrade in this area is unacceptable. Perform corrective actions, acceptable to the engineer to improve the quality of the material represented by the running average point. Retest each corrected area at a new random location within its represented quantity and determine a new 4-point running average. If the new running average is not acceptable, perform further corrective actions and retest at new random locations.

If the contractor's control data is proven incorrect resulting in a field density or field moisture point falling below the control limit for field density or outside the control limits for field moisture, the subgrade is unacceptable. Employ the methods described in this special provision for unacceptable material.

B.8 Department Testing

B.8.1 General

The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all verification and independent assurance personnel for the project.

The department will provide field density and field moisture test results to the contractor on the day of testing. Test results from Proctor split samples will be provided to the contractor within 7 business days after the sample has been received by the department.

B.8.2 Verification Testing

The department will have an HTCP technician, or ACT under the direction of a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified for contractor testing personnel for each test being verified. The department will notify the contractor before testing so the contractor can observe QV testing.

The department will test field density and field moisture randomly at locations independent of the contractor's QC work. The department will use split samples for verification of Proctor testing. In all cases, the department will conduct the verification tests in a separate laboratory and with separate equipment from the contractor's QC tests.

The department will perform verification testing as follows:

- The department will conduct verification tests on Proctor split samples taken by the contractor. These samples may be from the Soil Source Study or sample locations chosen by the engineer from anywhere in the process. The minimum verification testing frequency is one per 90,000 cubic yards, with at least one for each soil type identified in the Soil Source Study.
- 2. The engineer may select any contractor-retained sample for verification testing.
- 3. The department will conduct at least one verification test for field density and field moisture per 20,000 cubic yards.

Plot verification tests on the contractor's quality control charts as specified in B.6.1. Do not include verification tests in the 4-point running average.

If verification tests are within specified control limits, no further action is required. If verification tests are not within specified control limits, the engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's sampling and testing procedures and equipment. Both parties will document all investigative work.

Correct all deficiencies. If the contractor does not respond to an engineer request to correct a deficiency or resolve a testing discrepancy, the engineer may suspend grading work until action is taken. Resolve disputes as specified in B.9.

B.8.3 Independent Assurance Testing

Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program, which may include one or more of the following:

- 1. Split sample testing.
- 2. Proficiency sample testing.
- 3. Witnessing sampling and testing.
- 4. Test equipment calibration checks.
- 5. Reviewing required worksheets and control charts.
- 6. Requesting that testing personnel perform additional sampling and testing.

Plot the independent assurance tests on the contractor's quality control charts as specified in B.6.1. Do not include independent assurance tests in the 4-point running average.

If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or cooperate in resolving identified deficiencies, the engineer may suspend grading work until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party tests to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B.10 Acceptance

The department will accept the material tested under this provision based on the contractor QC tests unless it is shown through verification testing or the dispute resolution process that the contractor's test results are in error.

- C (Vacant)
- D (Vacant)
- **E** Payment

Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor does not perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

69. Base Aggregate Dense 1 1/4-Inch for Lower Base Layers.

Replace standard spec 305.2.2.1(2) with the following:

(2) Unless the plans or special provisions specify otherwise, do the following:

- 1. Use 1 1/4-inch base throughout the full base depth.
- 2. Use 3/4-inch base in the top 3 inches of the unpaved portion of shoulders. Use 3/4-inch base or 1 1/4-inch base elsewhere in shoulders.

stp-305-020 (20080902)

70. Asphaltic Mixture For Extreme Conditions, Item 450.1100.S.

A Description

This special provision describes assigning responsibility for extreme weather paving to the department.

This special provision applies only to work done under standard spec 450 through 490 that the contract requires to be performed within the following prescribed times:

- In the northern asphalt zone: between November 1 and April 15 inclusive.
- In the southern asphalt zone: between November 15 and April 1 inclusive.
- When ambient temperatures are less than 36 F for upper layers, 32 F for lower layers, and the contractor is asked to pave.

CMM 4-53 figure 2 defines asphalt zones.

This special provision applies only to following work:

DESCRIPTION	LOCATION
EMERGENCY PAVEMENT REPAIR	IH 43

B Materials

Conform to the materials requirements of standard spec 450 through 490 as modified in other contract special provisions for work specified in A.

C Construction

Conform to the construction requirements of standard spec 450 through 490 as modified in other contract special provisions for work specified in A, and as follows:

Delete standard spec 450.3.2.1.1(1) and 450.5.2(3).

Replace standard spec 450.3.2.1.2.2(2) with the following:

⁽²⁾ Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for the quality of HMA pavement placed in cold weather except as specified in E.

D Measurement

The department will measure Asphaltic Mixture For Extreme Conditions by the ton placed for work specified in A. The department will only measure work performed under standard spec 460, 465, and related special provision bid items if that work conforms to an engineer-accepted cold weather paving plan.

E Payment

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

450.1100.S	Asphaltic Mixture For Extreme Conditions	TON

Payment for Asphaltic Mixture For Extreme Conditions is full compensation for additional materials and equipment required for operations in extreme conditions for work specified in A.

The department will not assess disincentives for density or ride deficiencies the engineer attributes to cold weather paving. The department is responsible for damage or defects the engineer attributes to temperature or other extreme conditions. The department will pay separately for repairing this damage or these defects as extra work.

The department will pay separately for work done under standard spec 450 through 490 and associated special provisions. The department will not pay separately for the HMA Cold Weather Paving bid item for work specified in A.

stp-450-010 (20170615)

71. QMP HMA Pavement Nuclear Density.

A Description

Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 except as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
 - 1. Selection of test sites.
 - 2. Testing.
 - 3. Necessary adjustments in the process.
 - 4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures.

https://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/

B Materials

B.1 Personnel

(1) Nuclear gauge owners and personnel using nuclear gauges shall comply with WisDOT requirements according to 460.3.3 and CMM 8-15.

B.2 Testing

⁽¹⁾ Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Conform to CMM 8-15.10.4 for test duration and gauge placement.

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges according to CMM 8-15.2.
- (2) Furnish nuclear gauges from the department's approved product list at

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

B.3.2 Comparison of Nuclear Gauges

B.3.2.1 Comparison of QC and QV Nuclear Gauges

(1) Compare QC and QV nuclear gauges according to CMM 8-15.7.

B.3.2.2 Comparison Monitoring

(1) Conduct reference site monitoring for both QC and QV gauges according to CMM 8-15.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.1.
- (3) Determine random testing locations according to CMM 8-15.10.3.

B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.2.
- (3) Determine random testing locations according to CMM 8-15.10.3.

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

- (1) Calculate the average sublot densities using the individual test results in each sublot.
- (2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.
- ⁽³⁾ If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay as specified in standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.2.2 Width of 5 Feet or Less

- (1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- (2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming

material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.4 Documentation

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- ⁽²⁾ The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be as specified in standard spec 105.3.
- ⁽⁵⁾ Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.
- (6) If two consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.
- (2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft³ of the QC sublot average, use the QC tests for acceptance.
- ⁽⁵⁾ If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft³ each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft³, use the original QC tests for acceptance.
- (6) If the QV and QC sublot averages differ by more than 1.0 lb/ft³ after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures,

and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.
- (2) The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- ⁽³⁾ If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

- (1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.
 - C (Vacant)
 - D (Vacant)
 - E Payment

E.1 QMP Testing

⁽¹⁾ Costs for all sampling, testing, and documentation required under this special provision 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. The department will administer pay reduction under the Non-performance of QMP administrative item.

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives as specified in standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

(1) The department will administer density incentives as specified in standard spec 460.5.2.3.

stp-460-020 (20181119)

72. Cold Patch, Item 495.1000.S.

A Description

This special provision describes furnishing cold patch and filling potholes and other voids in existing pavement surfaces as the engineer directs.

B Materials

Furnish a mixture of course aggregate, natural sand, and MC-250 bituminous material designed to have a workability range of 15-100° F without heating. Ensure that the mixture:

- Adheres to wet surfaces.
- Resists damage from water, salt, and deicing products.
- Requires no mixing or special handling before use.
- Supports traffic immediately after placement and compaction.

Conform to the following gradation:

SIEVE SIZE	PERCENT PASSING (by weight)
1/2-inch (12.5 mm)	100
3/8-inch (9.5 mm)	90 - 100
No. 4 (4.75 mm)	90 max
No. 8 (2.38 mm)	20 - 65
No. 200 (0.074 mm)	2 - 10
Bitumen	4.8 - 5.4

The department will accept cold patch based primarily on the engineer's visual inspection. The department may also test for gradation.

C Construction

Stockpile cold patch on site on a smooth, firm, well-drained area cleared of vegetation and foreign material. Cover the stockpile and ensure that it is easily accessible. Replenish the stockpile throughout the project duration but limit the size at any given time to 10 tons on site unless the engineer approves otherwise. Dispose of unused material at project completion unless the engineer directs otherwise.

Place cold patch by hand. Remove ponded water and loose debris before placement. Compact flush with a tamper, roller, or vehicle tire after placement.

Refill patched areas as necessary to maintain a flush pavement surface until project completion.

D Measurement

The department will measure Cold Patch by the ton, acceptably stockpiled on site.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
495.1000.S	Cold Patch	TON

Payment for Cold Patch is full compensation for providing and maintaining patches; for furnishing and replenishing stockpiled material on-site; and for disposing of excess material at project completion.

stp-495-010 (20160607)

73. Ice Hot Weather Concreting, Item 501.1000.S.

Conform to standard spec 501.3.8.2 except the department will pay for ice at the contract unit price under the Ice Hot Weather Concreting bid item. This special provision only applies to work done under the following contract bid items:

Concrete Masonry Bridges	Concrete Masonry Retaining Walls
Concrete Masonry Bridges HES	Concrete Masonry Retaining Walls HES
Concrete Masonry Culverts	Concrete Masonry Endwalls
Concrete Masonry Culverts HES	Concrete Masonry Overlay Decks
Concrete Barrier Single-Faced 32-Inch	Concrete Barrier (S42 Special, S56 Special)
Concrete Barrier Double-Faced 32-Inch	Concrete Barrier Transition (G1, G2)
Concrete Barrier Transition Section 32-Inch	Concrete Barrier Transition (M1, M2, M3, M4)

Replace standard spec 501.4 and 501.5 with the following:

501.4 Measurement

(1) The department will measure Ice Hot Weather Concreting by the pound acceptably completed, measured only if the conditions prescribed in standard spec 501.3.8.2 are met.

501.5 Payment

(1)	The department will p	ay for measured quantities at the contract unit price under the following bid i	tem:
	ITEM NUMBER	DESCRIPTION	UNIT
	501.1000.S	Ice Hot Weather Concreting	LB

- (2) Payment for Ice Hot Weather Concreting is full compensation for ice used to cool concrete placed in hot weather as specified in standard spec 501.3.8.2.
- (3) The department will not pay directly for the concrete specified under this section. Concrete is incidental to the various bid items using it. Payment under those bid items includes providing all materials, including aggregates and associated aggregate source testing, cement, fly ash, slag, and admixtures; and for preparing, transporting, storing, protecting and curing concrete.
- (4) If required to remove and replace any concrete damaged by lack of proper protection. Perform this work at no expense to the department.

stp-501-010 (20210708)

74. Concrete Maturity Testing.

A Description

This special provision requires using concrete maturity testing to determine strength for project control of concrete pavement, falsework removal, and structural concrete under the designated standard specs as follows:

Duration of the curing period	
Duration of the cold weather protection period	
Opening to service	
Removing falsework	
Duration of the required curing period	
Duration of the cold weather protection period	
Opening to service	

The requirement for determining strength by the concrete maturity testing method supersedes all provisions for strength determination by other methods or provisions based on equivalent days within those designated subsections. The concrete maturity testing requirement also applies to all other provisions referencing strength determination under these designated subsections.

B Materials

Provide a maturity testing system that uses data-encrypted sensor devices permanently embedded in the field-placed concrete. Data-encrypted sensors have a chip that records both temperature and time information that can be downloaded to a reading device not permanently attached to those sensors.

Provide the department with a maturity reading device for each maturity testing system used on the project. Devices provided for the department use will become department property under the contract.

C Construction

Perform concrete maturity testing conforming to standard spec 502.3.10.1.3.3. Develop a strength/maturity relationship for each concrete mix design used under the contract. Base that relationship on strength results of cylinders from pavement, appurtenant construction, ancillary concrete, or structural masonry units incorporated into the work and using those same mixes.

D (Vacant)

E Payment

No additional payment will be made by the department for maturity testing.

sef-502-005 (20170310)

75. Concrete Masonry Structures.

A Description

A.1 General

Work under this item applies to cast in place concrete for structures. Conform to standard spec 501, 502, 504, 701, 710 and 715 and as modified in this special provision. Apply this special provision to all cast in place concrete placed under the following bid items:

502.0100 Concrete Masonry Bridges

531.1100 Concrete Masonry Ancillary Structures Type NS

A.2 Concrete Masonry Bridges

Work under the item Concrete Masonry Bridges applies to cast in place concrete for bridge substructures, which includes abutments and piers. Cast in place concrete for bridge superstructures, which includes bridge decks, raised medians, sidewalks, and parapets, is covered under the special provision item HPC Masonry Structures.

B (Vacant)

C Construction

Replace standard spec 501.3.8.2 with the following:

The contractor is responsible for the quality of the concrete placed in hot weather. Submit a written temperature control plan at or before the pre-pour meeting. In that plan, outline the actions taken to control concrete temperature if the concrete temperature at the point of placement exceeds 80 F. Do not place concrete without the engineer's written acceptance of that temperature control plan. Perform the work as outlined in the temperature control plan.

If the concrete temperature at the point of placement exceeds 90 F, do not place concrete under the following bid items:

- Concrete Masonry Bridges
- Concrete Masonry Retaining Walls
- Concrete Masonry Soldier Pile Footings

Notify the engineer whenever conditions exist that might cause the temperature at the point of placement to exceed 80 F. If project information is not available, obtain information from similar mixes placed for other nearby work.

Any additive or action taken to control the temperature of the Concrete Masonry to within the limits of this special provision, excluding the addition of ice to the concrete mix, is considered incidental to the work and will not be measured or paid for separately.

Add the following to standard spec 501.3 as subsection eleven:

501.3.11 Slip Forming

Do not place concrete by the slip-form method for any item covered by this special provision.

D (Vacant)

E (Vacant)

sef-504-005 (20180104)

76. Concrete Curing Materials.

Supplement standard spec 501.2.9 with the following:

The liquid curing compound shall have a color equal to or lighter than Gardner Color Standard No. 2 when tested according to ASTM C 1315 8.7.6 Yellowing Resistance.

77. Backfill Slurry.

This special provision describes furnishing and placing backfill slurry for, but not limited to, removing and abandoning utility pipes and structures, installation of storm sewer, sanitary sewer and water pipes and structures, and exposing existing utility items as shown on the plans.

Use fine aggregate according to standard spec 501.2.7.4.2, number 1, and coarse aggregates conforming to standard spec 501.2.5.4.1 number 1 and number 2, and water conforming to standard spec 501.2.4 in the backfill slurry mix. Provide a combined aggregate gradation for the backfill slurry mix conforming to standard combined gradation according to table 501-4. Weigh aggregates at a batch plant suitable for batching concrete masonry. Mix and deliver to the project site using a truck mixer. Add enough water to enable the mixture to flow readily. Submit a mix design for the engineers review prior to placement. Backfill Slurry is considered a class III concrete mix and the department will accept the mix by certification and will follow the QMP process per standard spec 716. Mix acceptance and testing in the field is not required.

Prior to placement of backfill slurry provide for positive drainage of the area to be backfilled. Discharge from the truck in a manner to prevent segregation. Consolidation or compaction effort will not be required. Twelve hours shall elapse before paving over the backfill.

Material placed within the roadway foundation as defined in standard spec 101.3 is subject to the quality control for the zone that the material is located in and shall conform to QMP Subgrade article listed elsewhere in this special provision document. Non-conforming slurry will be replaced at no additional cost to the department.

Include backfill slurry used for, but not limited to, removing and abandoning utility pipes and structures, installation of storm sewer, sanitary sewer and water pipes and structures, and exposing existing utility items under appropriate bid items. No separate payment will be made for providing positive drainage of the area to be backfilled; for providing mix design; for furnishing, mixing, transporting and placing backfill slurry, and for QMP certification.

78. Bar Steel Reinforcement HS Stainless Structures, Item 505.0800.S.

A Description

This special provision describes furnishing and placing stainless steel reinforcing bars and associated stainless steel bar couplers.

Conform to standard spec 505 as modified in this special provision.

B Materials

B.1 General

Furnish stainless steel reinforcing bars conforming to ASTM A955 and to one of the following Unified Numbering System (UNS) designations: S31653, S31803, S32205, or S32304. Supply grade 60 bars, all of the same UNS designation. Conform to the chemical composition specified for the given UNS designation in ASTM A276 table 1.

Supply bars that are free of dirt, mill scale, oil, and debris by pickling to a bright or uniform light finish. The department may reject bars displaying rust/oxidation, questionable blemishes, or lack of a bright or uniform pickled surface.

Furnish chairs or continuous supports made of stainless steel or recycled plastic to support high-strength stainless bar steel reinforcement subject to the plastic chair restriction stated in standard spec 505.3.4(1).

Furnish couplers made from one of the UNS alloys allowed for bar steel.

Furnish tie wire made from one of the UNS alloys allowed for bar steel or from an engineer-approved plastic or nonmetallic material. Ensure that stainless steel tie wire is dead soft annealed.

B.2 Fabrication

Before fabrication, supply test results from an independent testing agency certifying that the reinforcement meets the requirements of Annex A1 of ASTM A955.

Bend bars conforming to standard spec 505.3.2 and according to ASTM A955. Bend and cut bars using equipment thoroughly cleaned or otherwise modified to prevent contamination from carbon steel or other contaminants. Use tools dedicated solely to working with stainless steel.

B.3 Control of Material

Identify reinforcement bars delivered to the project site with tags bearing the identification symbols used in the plans. Include the UNS designation, heat treat condition, heat number, grade corresponding to minimum yield strength level, and sufficient documentation to track each bar bundle to a mill test report.

Provide samples for department testing and acceptance according to CMM 8-50 Exhibit 1 requirements for concrete masonry reinforcement for uncoated bar steel.

Provide mill test reports for the project that do the following:

- 1. Verify that sampling and testing procedures and test results conform to ASTM A955, ASTM A276 table 1, and these contract requirements.
- 2. Include a chemical analysis with the UNS designation, heat lot identification, and the source of the metal.
- 3. Include tensile strength, yield strength, and elongation tests results conforming to ASTM A955 for each size furnished.
- 4. Certify that the bars have been pickled to a bright or uniform light finish.

C Construction

C.1 General

Ship, handle, store, and place the stainless steel reinforcing as follows:

- 1. Separate from regular reinforcement during shipping. Pad points of contact with steel chains or banding, or secure with non-metallic straps.
- 2. Store on wooden cribbing separated from regular reinforcement. Cover with tarpaulins if stored outside.
- 3. Handle with non-metallic slings.
- 4. Do not flame cut or weld. Protect from contamination when cutting, grinding, or welding other steel products above or near the stainless steel during construction.
- 5. Place on plastic or stainless steel bar chairs. If placing stainless steel chairs on steel beams, use chairs with plastic-coated feet.
- 6. Tie with stainless steel wire or an engineer-approved plastic or nonmetallic material.

Do not tie stainless steel reinforcing bars to, or allow contact with, uncoated reinforcing bars or galvanized steel. Maintain at least 1 inch clearance between stainless steel bars or dowels and uncoated or galvanized steel. Where 1 inch clearance is not possible, sleeve bars with a continuous polyethylene or nylon tube at least 1/8 inch thick extending at least 1 inch in each direction and bind with nylon or polypropylene cable ties. Sleeves are not required between stainless steel bars and shear studs. Stainless steel bars can be in direct contact with undamaged epoxy-coated bars.

Cut flush with the top flange or remove uncoated fasteners, anchors, lifting loops, or other protrusions into a bridge deck before casting the deck on prestressed concrete beams.

C.2 Splices

Splice as the plans show. Provide stainless steel couplers conforming to the minimum capacity, certification, proof testing, and written approval requirements of standard spec 550.3.3.4. The contractor may substitute stainless steel couplers for lap slices the plans show if the engineer approves in writing.

If increasing or altering the number or type of bar splices the plans show, provide revised plan sheets to the engineer showing the reinforcement layout, type, length, and location of revised bar splices and revised bar lengths. Obtain engineer approval for the location of new lap splices or substitution of mechanical bar couplers before fabrication. Ensure that new lap splices are at least as long as those the plans show.

D Measurement

The department will measure Bar Steel Reinforcement HS Stainless Structures by the pound, acceptably completed, computed from the nominal weights of corresponding sizes for carbon steel deformed bars in AASHTO M31 regardless of stainless steel alloy provided. The department will not measure extra material used if the contractor alters the reinforcement layout as allowed under C.2, extra material for splices or couplers the plans do not show, or the weight of devices used to support or fasten the steel in position.

The department will measure the Bar Couplers Stainless bid items as each individual coupler, 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
505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB

Payment for Bar Steel Reinforcement HS Stainless Structures is full compensation for furnishing and placing stainless steel reinforcing bars, including supports. Where the plans specify bar couplers, the department will pay for the length of bars as detailed with no deduction or increase for installation of the coupler.

Payment for the Bar Couplers Stainless bid items is full compensation for providing couplers; including bar steel that is part of the coupler and not detailed in the plan; for threading reinforcing bars; for installing and coating the splice; and for supplying and testing 3 couplers.

stp-505-005 (20190618)

79. 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:

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

Aggregate Properties

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

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

Gradation

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 manufacture 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:

<u>Polymer Binder</u>: 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. <u>Aggregates</u>: 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:

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

<u>Pre-Installation Meeting</u>: 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).

<u>Manufacturer's Representative</u>: 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.

<u>Material Storage</u>: 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 manufacture'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	50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-99						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	

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 w/revision)

80. Noise Barriers Double-Sided Sound Absorptive N-45-3, Item 541.0300.S.

A Description

This special provision describes designing, fabricating, transporting, and erecting composite concrete double-sided sound absorptive noise barriers as the plans show and conforming to department-approved installation specifications.

B Noise Wall System

B.1 System Pre-Qualification and Selection

The noise wall system supplied must be pre-qualified by the department. The department maintains a list of pre-qualified systems which can be viewed online at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

SY

Systems eligible for use on this project shall be pre-qualified before the award of this contract.

Provide the name of the selected system, and the intended fabricator to the engineer within 25 days after award of the contract. Schedule a pre-design meeting with the engineer subsequent to award of the contract and before beginning design of the noise barrier. A representative of the fabricator of the noise barrier components shall attend this meeting.

B.2 Design

B.2.1 Structural and Foundation Design

The structural and foundation design of the noise barrier system shall conform to the current edition of "AASHTO LRFD Bridge Design Specifications" published by the American Association of State Highway and Transportation Officials (AASHTO), 444 North Capitol Street, NW, Suite 225, Washington, DC 20001, with the following exceptions:

The minimum design wind pressure shall be 35 pounds per square foot (Strength III) for ground mounted noise barriers and 40 pounds per square foot (Strength III) for structure mounted noise barriers, unless specified otherwise on the plans. For ground and structure mounted noise barriers, the minimum Service I design wind pressure shall be 15 pounds per square foot. All wind loads shall be applied perpendicular to the barrier, alternately in each direction.

Design drilled shaft foundations using the Broms Method or the p-y Method. Ignore the top 1 foot of supporting soil in the design of ground-mounted barrier foundations.

In addition to wind loads, design the bottom noise barrier panel to support the dead load (weight) of the panels directly above it and its own dead load. Assume this dead load to be distributed uniformly across the bottom panel acting as a simple beam supported at the posts.

Bottom noise barrier panels shall have a minimum amount of perimeter reinforcement of a #4 bar which shall be continuous around the corners. Reinforcing steel in the concrete core of noise barrier panels shall have a minimum clear cover of 1 inch. Clear cover does not include sound absorptive material. Design the reinforced concrete core to resist the loads without considering any composite action from other material in the panel.

Provide a neoprene bearing pad or equivalent material of 1/4 inch minimum thickness between the foundation and the bottom panels. The allowable bearing stress shall not exceed 900 psi. Precast concrete pedestals placed between the foundation and bottom panels shall be reinforced if over 1'-0" high. The bearing pads shall be preformed EPDM rubber conforming to ASTM D-2000, Grade 2, Type A, Class A with a minimum Durometer Hardness of 80.

B.2.2 Fire Hose Access Openings

Design fire hose access openings, at locations the plans show, with additional reinforcement and clear cover around the opening as necessary to maintain structural integrity. Detail drawings shall show the additional reinforcement and method for attaching the Fire Hydrant Location Signs to the barrier panel.

B.2.3 Barrier Profile

Unless the plans show or the engineer approves otherwise, design the top of the noise barrier to be horizontal and at or above the acoustic elevation line the plans show. The bottom elevation of the noise barrier shall be as the plans show. Changes in elevation shall be accomplished by stepping sections at posts. Steps shall not exceed 3-feet in height. All joints shall be horizontal or vertical and shall be aligned with the adjacent panels.

B.2.4 Panel Orientation

Design the panels to prevent entrapment and ponding of water. Avoid inadvertently providing areas for perching, nesting of birds or collecting of dirt and debris in the design of the noise barrier system.

B.2.5 Sound Transmission Loss (TL)

Design the noise barrier panel material to achieve a transmission loss equal to or greater than 20 decibels in all test frequency bands, as referenced in ASTM E90.

B.2.6 Noise Reduction Coefficient (NRC)

Design the noise barrier system so that the highway sides of the noise barrier panels have a minimum NRC of 0.80 and the residential sides have a minimum NRC of 0.70 as referenced in ASTM C423.

B.2.7 Design Coordination

Design the noise barrier post spacing so as not to interfere with the existing utility and drainage facilities.

Design the noise barrier post spacing so as not to interfere with proposed utility and drainage facilities the plans show. This includes proposed roadway lighting and ITS facilities.

For noise barriers mounted behind or near proposed retaining walls, coordinate and design the noise barrier post spacing so as to not interfere with embedded portion of the proposed retaining walls, including MSE wall soil reinforcement and tieback anchors on soldier pile and timber lagging retaining walls.

For noise barriers mounted on proposed bridges and retaining walls, coordinate and design the noise barrier post spacing to coincide with noise barrier post and embedded noise barrier anchor assembly spacing shown on the bridge and retaining wall plans. Coordinate any required changes to the noise barrier post spacing and embedded noise barrier anchor assembly locations shown on the bridge and retaining wall plans, if required for the design of the noise barrier.

B.2.8 Weep Hole Openings

Design panels such that weep hole openings in noise wall to allow water to drain can be field installed per C.3 at locations the plans show.

B.2.9 Maintenance Doors

Design maintenance doors and door portals in noise walls, at locations the plans show, with additional reinforcement and clear cover around the opening as necessary to maintain structural integrity per B.2.1.

B.3 Materials

Required material certifications and testing are the responsibility of the contractor. All certifications and test reports shall carry the name and address of the fabrication facility where the specific material was produced.

B.3.1 Concrete Masonry

Provide grade A concrete conforming to standard spec 501 as modified in standard spec 716 for concrete posts and the core component of composite concrete sound absorbing panels. Provide QMP for class II ancillary concrete as specified in standard spec 716.

B.3.2 Materials Testing General

All test reports shall carry the name and address of the laboratory where testing was performed, and the name of the person in responsible charge of the specific tests for which data is presented. Materials tested shall be representative of materials manufactured for this specific contract. Panels tested or from which samples will be taken will be selected and appropriately marked by the engineer either at the manufacturer's plant or from panels delivered to the project at the engineer's option.

Testing as detailed below is required for each lot of material not to exceed 100,000 SF of noise barrier produced. Conduct testing on panels within the first 30,000 SF of production of each lot not exceeding 100,000 SF. For projects that do not exceed 100,000 SF, a minimum of two lots of material will represent the project, each lot representing equivalent square footage. The first set of tests conducted for projects that do not exceed 100,000 SF shall be within the first third of the total square footage of the project. Provide the shipping record of the samples to the laboratory within five days of sampling. Begin testing as soon as practicable after sampling.

Test all materials as fabricated, including any specified finishing.

B.3.2.1 Noise Reduction Coefficient (NRC)

Test noise barrier panels according to ASTM C423, and placed according to ASTM E795, mounting type A, to determine the noise reduction coefficient (NRC) of the material. Submit to the engineer an independent laboratory test report that shows that the noise barrier panels achieve an NRC as specified in B.2.6 for the highway side of the barrier.

B.3.2.2 Long-term Durability

Test all sound absorbing composite concrete and composite concrete components for long-term durability according to ASTM C672 and the following modifications and/or requirements:

B.3.2.2.1 Test Specimens

Three specimens of a full cross section of the composite panel at least 144 square inches in face area will be selected at random from the provided composite panel as defined in B.3. Sample specimens shall be representative of the manufacturer's continuous production operation, as selected and marked by the engineer. Specimens shall be 2D-symmetric and shaped according to the testing laboratory's accommodations.

Prepare the surfaces of the sample specimens for testing as follows. Brush the surfaces of the sample to remove any loose particles. Before testing, submerge the test specimens be submerged in water for a period of 24 hours before testing. Immediately following this, cover the specimens with the sodium chloride solution as stated below.

B.3.2.2.2 Test Procedure

Place samples in a 5 sided water tight container, fully submerged in a solution of sodium chloride (concentration 3% by mass). Maintain 1/4 inch of sodium chloride solution above the top surface of the fully submerged specimen within the container.

Subject the submerged specimens to continuous freeze-thaw cycles as follows:

After each five cycles, remove the salt solution and particles of deteriorated concrete from the slab and collect in a watertight container. The operation is best accomplished by tilting the slab in a funnel approximately 20 inches in diameter and washing the surface of the slab with a 3% sodium chloride solution. Continue this washing until all loose particles are removed from the sample. Strain the solution through a filter and dry the residue at 221 degrees Fahrenheit to a constant mass condition. Cumulatively weigh the residue after each five cycles. The dry residue is defined as the loss of mass. Calculate the loss of mass to the nearest 0.01 pounds per square foot, not including the exposed surface of any core material on the cast or cut edges. Visually rate the surfaces according to 10.1.5 of ASTM C672 including any delamination of the sound absorbing material from the concrete core for composite concrete materials. After each washing of each sample, re-establish the initial submerged condition with a new solution of 3% sodium chloride before continuing with freeze-thaw cycling.

Continue the test until 30 freeze-thaw cycles have been completed.

During the test position and support each specimen to allow free circulation of the test solution under, around, and over test pieces. Support the bottom of the specimens on blocks in a manner to facilitate movement of moisture through and around the test specimens.

B.3.2.2.3 Test Report

Submit to the engineer an independent testing laboratory test report which shows that all solid and composite concrete products meet or exceed the following criteria:

- 1. After 30 freeze-thaw cycles the test specimens shall not exhibit excessive deterioration in the form of cracks, spalls, aggregate disintegration, delamination or other objectionable features.
- 2. Compliance with the test requirements is based upon a loss of mass of not more than 0.2 pounds per square foot from the surface after 30 cycles of freezing and thawing.
- 3. The report shall include the following:
 - 3.1. Name of manufacturer.
 - 3.2. Location of production.
 - 3.3. Production description.
 - 3.4. Date product sample was cast.
 - 3.5. Date testing began.
 - 3.6. Specimen identification.
 - 3.7. 5x7-inch color photographs of the test specimens before and after the 30 cycles of freeze-thaw test showing both sound absorbing faces and at least one representative side view of a cut (not cast) face, and any defects.
 - 3.8. A graph of the cumulative mass loss of each specimen plotted against the number of freeze-thaw cycles for 5, 10, 15, 20, 25, and 30 freeze-thaw cycles.
 - 3.9. Visual rating according to ASTM C672 Section 10.1.5, including report of any delamination of the sound absorbing material from the concrete core for composite concrete components.

B.3.3 Materials Certification - General

Provide certification of compliance or sample fabrications as noted below. All material certifications shall reference the specific facility manufacturing the material and this contract. Certification is required for

each lot of material not to exceed 100,000 SF of noise barrier produced and shall include dates of fabrication for the lot being certified. For projects that do not exceed 100,000 SF, a minimum of two lots of material will represent the project, each lot representing equivalent square footage.

B.3.3.1 Color and Surface Texture

Supply and deliver to the engineer a 3 foot x 5 foot minimum test panel for each panel type with the specified pattern and colors. Obtain the engineer's acceptance of the panel's pattern and color before production of the panels required for the contract. The accepted pattern and color test panels shall remain on the project site in a readily accessible location for the duration of the project. The accepted pattern and color sample panels will be the standard for all noise barriers on the project.

Manufacture noise barrier posts of the same materials throughout the project. Shop apply coating and coloring of the post and panels.

Unless otherwise shown and provided for in the plans, wall pattern shall contain textures with relief features of sufficient depth and quantity to be distinguishable at an observation distance of 500-feet. The colors and textures chosen will be within the following parameters; however, at the discretion of the engineer, a single color and/or a single texture may be selected for either side of the noise barrier.

	FREEWAY SIDE	RESIDENTIAL SIDE
Number of colors	2	2
In the proportion of	75:25 (+/- 5%)	75:25 (+/-5%)
Number of textures	2	2
In the proportion of	75:25 (+/- 5%)	75:25 (+/- 5%)

Noise barrier wall panels are to be plain concrete with no stain or paint.

The engineer will visually inspect panels for color consistency upon arrival at the project. The panels shall have no substantial variation in color from the accepted sample panel submitted for the project. All panels with substantial color variation will be rejected and shall be removed from the project.

B.3.3.2 Structural Steel

Submit to the engineer certification of compliance, including mill certifications and heat numbers, that structural steel conforms to the properties required on the plans and shop drawings, and is galvanized after fabrication by the hot-dip process according to ASTM A123. Galvanize all steel hardware and threaded fasteners, bolts, nuts, and washers according to ASTM A153.

Shop coat all steel galvanized surfaces exposed to view with a department-approved paint system. Clean galvanizing surfaces to be painted according to SSPC-SP1 to remove, chlorides, sulfates zinc salts, oil, dirt, organic matter and other contaminants. Brush Blast clean the surfaces according to SSPC-SP7 to create a slight angular surface profile (1.0 - 1.5 mils suggested) for adhesion. Do not fracture the galvanized finish or remove any dry film thickness during these processes.

After cleaning, provide a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface. The tie coat shall etch the galvanized surface and prepare the surface for the top coat. Apply a top coat matching the finished color specified in B.3.2. Use a pre-approved top coat that is resistant to the effects of the sun, and is suitable for use in a marine environment. Exercise care so as not to damage the painted surfaces during shipment and erection of the noise barriers.

Use one of the qualified paint sources and products given below. An equivalent system may be used with the written approval of the engineer. Supply the engineer with the product data sheets before applying any coating. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, the minimum drying time for shop applied coats, and the recommended procedures for coating galvanized bolts, nuts, and washers.

Producer	Coat	Products	Dry Film Minimum Thickness (mils)	Minimum Time Between Coats (hours)
Sherwin Williams Co.	Tie	Recoatable Epoxy Primer B67-5 Series/B67V5	2.0 to 4.0	6
(847) 330-1250	Тор	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carboline Co.	Tie	Rustbond Penetrating Sealer FC	1	36
(314) 644-1000	Тор	Carboline 133 LH	4	NA
Wasser Corp.	Tie	MC-Ferrox B 100	3.0 to 5.0	8
(253) 850-2967	Тор	MC-Luster 100	2.0 to 4.0	NA

B.3.3.3 Sound Transmission Loss (TL)

Submit to the engineer certification of compliance that the sound transmission loss of the panel material, when tested according to ASTM Standard E90, achieves a transmission loss as specified in B.2.5.

B.3.3.4 Accelerated Weathering

Submit to the engineer certification of compliance that all coatings on barrier components, with the exception of structural steel and wood components comply with the following requirements when tested according to ASTM Standard G155, G153, or G152 after 2400 hours of exposure on a cement-based test specimens:

- 1. No checking when rated according to ASTM D660.
- 2. No cracking when rated according to ASTM D661.
- 3. No blistering when rated according to ASTM D714.
- 4. No difference in adhesion between the unexposed control sample and an exposed sample when tested according to ASTM D3359, Method A.
- 5. No chalking less than #7 rating when rated according to ASTM D4214.
- 6. No color change greater than 5 NBS units when measured according to ASTM D2244, using illuminant D65 and the 1964 10-degree standard observer.

B.3.3.5 Corrosion Resistance (Salt Fog Exposure)

Submit to the engineer certification of compliance that all coated steel components, with the exception of structural steel, has a coating system that has been tested for corrosion resistance according to ASTM B117 and comply with the following requirements:

- 1. No checking when rated according to ASTM D660.
- 2. No blistering when rated according to ASTM D714.
- 3. No loss of adhesion when tested according to ASTM D3359 with no evidence of corrosion along the edges of the samples or along the score lines or both or other defects.

B.4 Project Submittal Requirements

Furnish required submittals according to the following:

B.4.1 Pre-Construction Submittals

A minimum of 14 days before beginning any shop or field work, submit the following documents to the engineer conforming to standard spec 105.2 with electronic submittal to the fabrication library under standard spec 105.2.2.

- 1. Structural and foundation design calculations
- Design calculations shall be on 8 1/2 x 11-inch sheets, neatly bound with a title sheet listing the complete project identification number and sound barrier designation. Structural and foundation calculations shall be signed, sealed, and dated by a professional engineer licensed in the State of Wisconsin.

- 3. Detailed design/shop drawings.
- 4. Design/shop drawings shall conform to the contract plans and the requirements of these special provisions. The design/shop drawings shall consist of plan and profile sheets, details, explanatory notes, erection diagrams, aesthetic treatments, and other working plans. All dimensions, sizes of material, material information and other information necessary for the complete fabrication and construction of the noise barrier shall be designated on the appropriate sheets. The design/shop drawings shall be drawn to an appropriate scale on reproducible sheets 11 x 17 inches including borders. Each sheet shall carry the complete project identification number and noise barrier designation. Design/shop drawings shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.
- 5. Specifications regarding installation requirements and sequence of construction, including a detailed bill of materials.
- 6. Detailed color plan of the aesthetic treatments and finishes for the entire noise barrier.
- 7. Shipping, handling, and storage plan identifying methods or practices to limit post production damage.

Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.

B.4.2 Pre-Installation Submittals

Supply and deliver to the engineer the sample panel required under Section B.3.3.1 at least 14 calendar days before beginning production and/or installation of job materials. Acceptance of the sample panel will be by: Heather Sackman at (414) 750-3233. If the panel is not acceptable, a second panel shall be produced and submitted for acceptance. Sample panel to be representative of quality for precast panel work after acceptance. Deliver test panels to project's construction field office, for comparison purposes during production of project panels.

B.4.3 Payment Submittals

Submit certifications and test data as required under B.3 for all materials, including trade name of the products along with the name and address of the manufacturers.

B.4.4 Submittal Review

The engineer's review and acceptance of the drawings, calculations, and related material, submitted by the contractor, is for compliance with design intent only, and does not relieve the contractor from responsibility in regard to errors or omissions on said submittals.

The final accepted design documents and/or shop drawings will become a part of the contract. Any substitution of materials or dimensions contemplated by the contractor's submitted documents, different from materials or dimensions shown on the contract plans, shall be made only when approved by the engineer, and in such case, additional costs resulting from such substitution shall be borne by the contractor.

Ordering materials before department acceptance of submittals is at the contractor's risk.

C Construction

C.1 General

Construct the noise barriers at the locations the plans show, according to the contract specifications and design drawings and/or as the engineer directs. Deliver all sound absorbing composite concrete components to the project site as a finished component. A sound absorbing composite concrete system, which has the sound absorbing material glue-laminated or alternately affixed by a secondary adhesion method on the project site, will not be allowed.

Provide a minimum ten day notice to the engineer of the date that the fabrication of the noise barrier material will begin.

Inspect all materials delivered to the construction site for proper dimensions, honeycombing, cracks, voids, surface defects, consistency in color and texture, and any other damage or imperfections, before installation.

If any part of the noise barrier material fails to comply with any requirements of the contract specification, the component shall either be corrected, permanently marked as unacceptable and be disposed of by the

contractor or accepted at a reduced price. The decision will be made by the engineer and is dependent on the severity of the specification deviation.

Erect noise barriers to avoid conflict with any existing facilities or utilities to remain in place. Any damage caused by construction activities shall be repaired by the contractor at no cost to the department.

C.2 Fire Hydrant Location Signs

Attach fire hydrant location signs to the noise barrier at each location the plans show by a method the department's approved drawings show. The signs shall conform and be of the type specified in the department's sign plate book, plate D9-54 and/or D9-54A.

Compensation for furnishing and placing the fire hydrant location signs shall be included in the contract price for Noise Barriers Double-Sided Sound Absorptive and no additional compensation therefore will be allowed.

C.3 Weep Hole Openings

Provide weep hole openings for drainage at the locations and sized as noted on the plan. Install weep holes by drilling through the wall after erection of the noise barrier. Use 6" PVC Schedule 40 pipe sleeve conforming to ASTM D-1785. Epoxy 6" PVC Schedule 40 pipe sleeve into bored weep hole. PVC pipe sleeve shall fit snugly in cored hole through wall. Epoxy PVC pipe sleeve into bored weep hole in noise barrier. Locate and construct weep holes according to the plans and as the engineer directs. Place weep holes at locations the plans show unless the engineer approves adjusting locations to fit field conditions. The engineer will field verify the height and location of the weep hole for positive drainage.

C.4 Name Plates

Provide name plates conforming to the requirements of standard spec 506.2.4. Install one name plate on each noise barrier at the location the plans show. Rigidly attach each plate to the barrier by a means approved by the engineer.

Compensation for furnishing and placing of name plates shall be included in the contract price for Noise Barriers, Double-Sided Sound Absorptive Structure and no additional compensation therefore will be allowed.

C.5 Structure Mounted Noise Barriers

Do not erect noise barriers mounted to bridge or retaining wall structures until after the concrete for bridge decks and parapets or retaining wall moment slabs and parapets have attained their specified 28-day strength.

For noise barriers mounted to moment slabs and parapets on top of MSE retaining walls, erection of the noise barrier is limited to two-thirds the height of the noise barrier acoustical line the plans show before placement of earth fill or pavement over the top of the moment slab as the plans show. Erection of the noise barrier in excess of two-thirds its height to the full height of the noise barrier acoustical line the plans show may not occur until after the earth fill or pavement structure over the top of the moment slab the plans show is complete.

C.6 Construction Tolerances

Install the posts and panels comprising the noise barrier plumb within 1/2 inch in 15-feet. Locate the posts to the line and grades as the plans show to within +/- 3/4 inch. Align horizontal joints of adjacent panels to a vertical tolerance of 1/4 inch. Where vertical adjustments are required for alignment, use a mortar base or steel shims. Galvanize and prime coat steel shims according to B.3.3.2.

D Measurement

The department will measure Noise Barriers Double-Sided Sound Absorptive (Structure #) by the square foot, acceptably completed, as the area the original plans show plus engineer-approved modifications to the plan quantity caused by plan corrections or revisions.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION541.0300.S.Noise Barriers Double-Sided Sound Absorptive N-45-3SF

Payment is full compensation for providing noise barrier including coloring and aesthetic treatment on panels, preparing the design drawings and calculations, furnishing and delivering sample and test panels,

materials testing, furnishing materials test reports and certifications, excavation, preparing the site, constructing foundations, erecting posts and panels, and disposing of waste materials.

stp-541-010 (20230113)

81. Driven Piles Using Pile Dynamic Analyzer

Where indicated in the structure plans, replace standard spec 550.3.6 with the following:

550.3.6 Driving Resistance

(1) Drive piles to the depths necessary to obtain the required driving resistance per the driving resistance determination method called for in the plans.

(2) Driving resistance will be developed from Pile Dynamic Analyzer (PDA) testing performed on the designated piles at each substructure unit as shown on the plans. The driving criteria will be given as blows per foot with hammer stroke and minimum penetration of the pile or as directed by the engineer.

The PDA test piles at each substructure unit are designated on the plans and will be monitored using a PDA. Pile installation for these test piles will be controlled by the PDA testing and the engineer per the Pile Dynamic Analyzer (PDA) Testing and Restrike Special Provision within this contract.

For the PDA driving resistance determination method, pile restrikes will be required per the PDA Testing and Restrike Special Provision, or as directed by the engineer. Accommodate a time delay in the pile driving sequence as defined in the PDA Testing Special Provision to allow the engineer time to develop the production pile driving criteria.

(3) If the required driving resistance is not met at the minimum tip elevation, driving shall continue until it is achieved. If the required driving resistance is achieved above the minimum tip elevation, driving shall continue until both the minimum tip elevation and required driving resistance criteria are met. If practical pile refusal is encountered prior to the minimum tip elevation, the engineer will determine if driving can be halted.

Where indicated in the structure plans, delete standard spec 550.3.7.

BOS (201901)

82. Catch Basins, Manholes, and Inlets.

Supplement standard spec 611.3.1 with the following:

Use a Grade "A" concrete for final adjustment of manhole cover. Provide a butyl rubber gasket or butyl rubber rope for joints of precast reinforced concrete manhole sections. Butyl Rubber gasket joint used for manholes conforms to 8.41.6 of the Standard Specification for Sewer and Water Construction in Wisconsin, latest Edition. Provide non-rocking covers for all drainage structures subject to traffic loading.

Submit shop drawings for all drainage structures. For structures where WisDOT standard detail drawings are not available, provide shop drawings prepared, verified and stamped by a professional engineer currently registered in the State of Wisconsin. Submit one electronic copy of shop drawings in portable document format for engineer's review two weeks before fabrication. Show clearly on shop drawings information for all pipe connections to the structure. The contractor is responsible for all errors of detailing and fabrication. The omission from the shop drawings of any pipe connection shall not relieve contractor of the responsibility of providing such materials, even though the shop drawings may have been reviewed and accepted by the engineer.

Supplement standard spec 611.3.2 with the following:

Conform to storm sewer structural concrete collar detail for storm sewer pipes to structure connections as the plans show.

Supplement standard spec 611.3.3 with the following:

Use monolithic concrete shimming as the plan shows for final adjustment of drainage structures located within the concrete pavement, concrete shoulders, concrete curb and gutter and concrete barrier wall.

Supplement standard spec 611.3.7 with the following:

Construct height adjustments of 4-inches or more with concrete grade rings. Never use grade rings less than 2-inches thick.

Replace standard spec 611.5.2 (1) with the following:

Payment for Catch Basins, Manholes, and Inlets bid items is full compensation for providing all submittals; materials, including all masonry, and concrete bricks, for Grade "A" concrete adjustments and monolithic concrete shimming; adjusting rings; conduit and sewer connections, steps, and other fittings; for providing and installing butyl rubber joints; for furnishing backfill, backfilling; all excavating, disposing of surplus material, and for cleaning out and restoring the work site; except that the department will pay for covers, including frames, grates and lids separately.

Cost of non-rocking covers for all drainage structures subject to traffic loading is incidental to new cover on proposed structure or reconstructing/adjusting manholes or inlets on existing structure.

83. Cover Plates Temporary, Item 611.8120.S.

A Description

This special provision describes furnishing, installing and removing a steel plate to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

B Materials

Provide a 0.25-inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

C (Vacant)

D Measurement

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONUNIT611.8120.SCover Plates TemporaryEACH

Payment is full compensation for furnishing, installing, and removing the cover plates.

The steel plates shall become the property of the contractor when no longer needed in the contract work. stp-611-006 (20151210)

84. Pipe Grates 18-Inch, Item 611.9850.S.0001.

A Description

This special provision describes providing pipe grates for pipe apron endwalls as detailed in the plans.

B Materials

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish pipe grates galvanized according to ASTM A123.

Furnish angles and brackets galvanized according to ASTM A123.

Furnish required hardware galvanized according to ASTM A153.

C Construction

Repair pipes, rods, angles and brackets on which the galvanized coating has been damaged according to the requirements of AASHTO M36.

D Measurement

The department will measure Pipe Grates in units of work, where one unit is one grate, completed and accepted.

E Payment

The department will p	pay for measured quantities at the contract unit price under the following bid	item:
ITEM NUMBER	DESCRIPTION	UNIT
611.9850.S.0001	Pipe Grates 18-Inch	EACH

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting grates to apron endwalls.

stp-611-010 (20230113)

85. Fence Safety, Item 616.0700.S.

A Description

This special provision describes providing plastic fence at locations the plans show.

B Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh Opening:	1 inch min to 3 inch max
Resin/Construction:	High density polyethylene mesh
Tensile Yield:	Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate Tensile Strength:	Avg. 3000 lb per 4 ft. width (ASTM D638)
Elongation at Break (%):	Greater than 100% (ASTM D638)
Chemical Resistance:	Inert to most chemicals and acids

C Construction

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap two rolls at a post and secure with wire ties.

D Measurement

The department will measure Fence Safety by the linear foot along the base of the fence, center-to-center of posts, 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	
616.0700.S	Fence Safety	LF	

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion.

stp-616-030 (20160607)

86. Silt Fence Heavy Duty, Item 628.1530.S; Silt Fence Heavy Duty Maintenance, Item 628.1535.S.

A Description

This special provision describes furnishing, installing, maintaining, repairing, and removing heavy duty silt fence as the plans show, as directed by the engineer, and as hereinafter described.

B Materials

Provide Silt Fence Heavy Duty consisting of a composite of fence posts, fence fabric, geotextile fabric, sand bags or rock bags, and fasteners to be assembled by the contractor.

Furnish new or salvaged notched conventional metal "T" or "U" shaped fence posts with a length of 8 feet and minimum weight of 1.25 lb/ft.

Furnish new fence fabric, or salvaged fence fabric that is free of rust or other structural defects, conforming to standard spec 616.2.2.1 or 616.2.3.2, or one of the following alternatives:

- Woven wire fence Standard field fence type, minimum 14-¹/₂ gauge wire, maximum mesh spacing of 6 inches, and a height of 4 feet.
- Chain link fence minimum 12-½ gauge, maximum 2.5-inch diamond pattern, and a height of 4 feet.
- Welded wire fence minimum 14 gauge, maximum mesh spacing of 4 inches, and a height of 4 feet.

Furnish Geotextile Fabric Type HR according to standard spec 645.2.2.7.

Furnish sand bags according to standard spec 628.2.8 or rock bags according to standard spec 628.2.13.

Furnish wire ties, nylon zip ties, or other engineer approved materials.

C Construction

Complete the installation prior to any ground disturbing activities within the drainage area adjacent to the required location. Construct according to the plan details and as described below.

Install posts with a minimum embedment of 2 feet and as necessary to provide a stable fence system.

Attach fence fabric to posts with at least three ties on each post (top, middle, bottom).

Attach geotextile fabric to fence fabric and/or posts at a maximum spacing of every 2 feet along the top and additionally as necessary to prevent displacement or damage by wind and wave actions. Overlap joints in the geotextile fabric by a minimum of 12 inches. Excess geotextile fabric may be cut or draped over the backside of the fence system.

Secure the bottom of the geotextile fabric by either of the following methods:

- For installation in wet conditions, anchor the lower flap of the geotextile fabric to the ground using a continuous line of sand bags or rock bags. The lower flap shall be a minimum width of 1 foot.
- For installation in dry conditions, bury the bottom edge in a trench that is a minimum of 4 inches wide and 6 inches deep. Fold material to fit trench and backfill and compact trench with excavated soil.

Maintain the fence throughout construction and until removal. Repair or replace fence materials as necessary. Remove sediment whenever it accumulates to approximately one-half the original fence height and as directed by the engineer. Remove all sediment prior to final stabilization.

Keep system in place until the site is permanently vegetated and is ordered for removal by the engineer. Clean up and restore the surface after removal.

D Measurement

The department will measure Silt Fence Heavy Duty by the linear foot, acceptably completed, measured along the base of the fence, center-to-center of end post, for each section of fence.

The department will measure Silt Fence Heavy Duty Maintenance by the linear foot, acceptably completed, measured along the base of the fence, end-to-end of the section maintained, for each time a section of fence is cleaned and repaired.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
628.1530.S	Silt Fence Heavy Duty	LF
628.1535.S	Silt Fence Heavy Duty Maintenance	LF

Payment for Silt Fence Heavy Duty is full compensation for erecting fence, including excavating or trenching, posts, geotextile fabric, sand bags or rock bags, backfilling, removal, restoration, and disposal.

Payment for Silt Fence Heavy Duty Maintenance is full compensation for required cleaning and repairing; for removing and disposing sediment or spreading accumulated sediment to form a surface suitable for seeding; and for replacing fence and damages caused by overloading sediment material or ponding water adjacent to fence.

stp-628-005 (20220628)

87. Soil Stabilizer Type B

Replace standard spec. 628.3.12.3(1) with the following:

(1) Apply soil stabilizer with conventional hydraulic seeding equipment at the manufacturer's recommended rate unless the engineer directs otherwise.

88. Fertilizer Type B

Replace standard spec 629.2.1.3 with the following:

⁽¹⁾ Fertilizer Type B Special will conform to the following requirements:

Nitrogen, not less than 24% with 6% percent of the nitrogen being slow release.

Phosphorus, not less than 15%

Potash, not less than 9%

⁽²⁾ The total nitrogen, phosphorus, and potash shall equal at least 48 percent.

Replace standard spec 629.3.1.3 with the following:

⁽¹⁾ Apply fertilizer containing at least 48 percent total nitrogen, phosphorus, and potash at 5 pounds per 1,000 square feet unless otherwise directed by the engineer. For Fertilizer Type B Special that contains a different percentage of components, determine the new application rate by multiplying the specified rate by a dimensionless conversion factor determined as follows:

Conversion Factor = 48 / New Percentage of Components

Replace standard spec 629.4(1):

⁽¹⁾ The department will measure Fertilizer Type B, Special by the hundred pounds (CWT), acceptably completed, measured based on the application rate of 5 pounds per 1,000 square feet. The department will not measure fertilizer used for the bid items under 632. The measured quantity equals the number of hundred-weight (CWT) of material determined by multiplying the actual number of cwt. of material incorporated by the ratio of the actual percentage of fertilizer components used to 48 percent for Fertilizer Type B Special.

SER-629-001 (20230109)

89. Signs Type I and II.

Furnish and install mounting brackets per approved product list for type II signs on overhead sign supports incidental to sign. For type II signs on sign bridges use aluminum vertical support beams noted above incidental to sign.

Supplement standard spec 637.2.4 with the following:

Use stainless steel bolts, washers and nuts for type I and type II signs mounted on sign bridges or type I signs mounted on overhead sign supports. Use clips on every joint for Sign Plate A 4-6 when mounted on a sign bridge or overhead sign support. Inspect installation of clips and assure bolts and nuts are tightened to manufacturers recommended torque values.

Use aluminum vertical sign support beams that have a 5-inch wide flange and weigh 3.7 pounds per foot, if the L-brackets are 4 inches wide then use 4 inch wide flange beams weighing 3.06 pounds per foot. Contractor shall measure the width of the L-brackets on existing structures of determine the width needed for sign support beams.

Use beams a minimum of six feet in length or equal to the height of the sign to be supported, whichever is greater. Use U-bolts that are made of stainless steel, one-half inch diameter and of the proper size to fit the truss cords of each sign bridge. Install vertical sign support beams on each sign and use new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss.

For type II signs on overhead sign supports follow the approved product list for mounting brackets.

Replace standard spec 637.3.3.2(2) with the following:

(2) Install Type I Signs at the offset stated in the plan, which shall be the clear distance between the edge of mainline pavement right edgeline and the near edge of the sign.

Supplement standard spec 637.3.3.3(3) with the following:

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type I or Type II Signs and Type I signs on overhead sign supports incidental to sign.

Add the following to standard spec 641.2:

Submit shop drawings for sign bridges and overhead sign supports to SE Region Traffic Operations Engineer, Tom Heydel and Bureau of Structures Design.

SER-637-001 (20170621)

90. Covering Signs.

Replace standard spec 643.2.3.3(2) with the following:

(2) Ensure that covers are flat black, blank, and opaque.

Add the following to standard spec 643.3.4.1 as paragraph four:

(4) If multiple messages on a single sign are required to be covered, minimize the number of holes created by covering the sign with a single rectangular shaped covering. Multiple coverings on a single sign is only permissible where necessary to avoid covering necessary content or as directed by the engineer. Submit sign covering plans to the engineer for single signs requiring multiple coverings 3 days before performing work. Obtain engineer approval before covering signs. Remove sign coverings before placing fixed messages signs unless otherwise directed by the engineer.

sef-643-005 (20180104)

91. Blue Specific Service Signs.

Add the following to standard spec 638.3.4:

Do not remove or move blue specific service signs or their associated posts. Specific service signs are signs with logos that identify commercial entities providing gas, food, lodging, camping, or attractions. A separate contractor, Interstate Logos - Wisconsin, is responsible for these signs. Contact Interstate Logos - Wisconsin at (608) 579-1570 a minimum of 14 calendar days in advance to coordinate removing, moving, or re-installation of these signs.

The contractor is responsible for damage done to these signs due to contractor operations.

92. Pond Liner Clay, Item 640.1303.S.

A Description

This special provision describes furnishing and installing clay liner in areas shown on the plans.

B Materials

For each source, prior to excavating and hauling the clay liner to the project, submit the results of the laboratory source screening tests described in Table 1. Laboratory test results of the clay must meet or exceed the requirements before placing material.

Submit source screening test results to the engineer for review, two weeks prior to clay placement.

C Construction

C.1 Clay Liner

C.1.1 Subgrade

Compact the subgrade to the minimum density using standard spec 207.3.6.2 Standard Compaction, or as otherwise specified in the contract requirements.

C.1.2 Erosion Protection

Do not place the clay liner until after all adjacent site grading has been completed and only after silt fence has been installed completely around the area of clay liner placement.

C.1.3 Clay Placement

After the fine grading is complete, place and compact clay liner in compacted 6-inch lifts. Place each lift of clay liner in one continuous lift. See plans for clay liner construction limits. Measure the thickness of the clay, as shown in the plans, perpendicular to the surface.

Notify the engineer at least three days before starting construction of clay liner.

		Test Title	Requirements	Testing Frequency	
Reference	Number			Source Screening	Project Testing
AASHTO ¹	T99-01	Moisture –Density Relationships of Soils Using a 2.5-kg (5.5 lb) Rammer a 305 mm (12-in.) Drop (Standard Proctor)	NA	1/source	NA
AASHTO	T-88-00	Particle Size Analysis of Soils	P200 ³ ≥ 50%	2/source	1/lift
AASHTO	T-89-02	Determining the Liquid Limit of Soils	LL ⁴ ≥ 22%	2/source	1/lift
AASHTO	T-90-00	Determining the Plastic Limit and Plasticity Index of Soils	PI ⁵ ≥ 12%	2/source	1/lift
AASHTO	T310-03	In-Place Density and Moisture Content of Soils and Soil-Aggregates by nuclear Methods (Shallow Depth)	DD ⁶ ≥ 95% of the MDD ⁷	NA	100'x100' Grid/lift
ASTM ²	D5084-03	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter	K ⁸ <u><</u> 1 x 10 ⁻⁷ cm/sec	1/source ⁹	1/site ¹⁰

Table 1

Notes:

- 1. AASHTO = American Association of State Highway and Transportation Officials
- 2. ASTM = American Society of Testing and Materials
- 3. P200 = Percent by weight passing the #200 sieve (%)
- 4. LL = Liquid Limit (%)
- 5. PI = Plasticity Index (%)
- 6. DD = Dry Density (pcf)
- 7. MDD = Maximum Dry Density (pcf) as determined by the Standard Proctor Test
- 8. K = Hydraulic Conductivity (cm/sec)
- 9. The sample for the test shall be remolded at a minimum dry density of 95% of the maximum dry density as determined by the Standard Proctor test and at a moisture content required to achieve the required hydraulic conductivity, but with a minimum moisture content at or above the optimum moisture content as determined in the Standard Proctor test.
- 10. An undisturbed sample from a thinned walled sampler (Shelby tube)

Compact the clay liner to a minimum of 95% Standard Proctor AASHTO T-99 Maximum Dry Density with footed compaction equipment having feet at least as long as the loose lift height. As needed, clay shall be disked or otherwise mechanically processed before compaction to break up clods and allow moisture content adjustment. Clod size shall be no greater than 4 inches. All compaction equipment utilized shall have a minimum static weight of 30,000 pounds.

Provide all equipment necessary to adjust clay liner to the proper moisture content for compaction.

Make sufficient number of passes of the compaction equipment over each lift of clay to ensure complete remolding of the clay.

Do not proceed with placement of additional lifts until all required clay liner testing and documentation has been completed for the previous lift.

During placement of the clay liner the minimum moisture content shall be as defined by the testing performed in the source screening evaluation and with the following limits:

No drier than the optimum moisture content as determined by the Standard Proctor test.

If the in-place clay liner fails to meet the requirements of Table 1, then remove and replace or rework any portion of the clay liner not meeting the project requirements until project specifications are met. There shall be no compensation for removing, replacing and reworking clay not meeting the requirements in Table 1.

C.1.4 Project Testing and Acceptance

Perform all project testing at the frequency shown in Table 1 except for project testing for ASTM D5084-03 Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter, which will be done by the department. Record clay liner thickness on a 100 foot x 100 foot grid pattern.

Provide the following:

- Access for on-site testing, inspection, and documentation.
- Machinery required to grade/blade density test locations.
- Machinery required to collect undisturbed clay samples (i.e., with Shelby tubes).
- Replace and recompact clay material removed for testing purposes.

Perform sampling, testing, and documentation for project testing in Table 1, required under this provision using HTCP certified technicians. Have a HTCP Grading Technician I (GRADINGTEC-I); or Assistant Certified Technician, Grading (ACT-GRADING); or Aggregate Technician I (AGGTEC-I); or Assistant Certified Technician, Aggregate (ACT-AGG) present at each grading site during all clay liner placement, compaction, and sampling/testing activities. Have a HTCP Nuclear Density Technician I (NUCDENSITYTEC-I) or Assistant Certified Technician, Nuclear Density Gauge Operator (ACT-NUC) perform field density and field moisture content testing.

If an Assistant Certified Technician (ACT) is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

Perform all project testing with a department approved laboratory.

C.1.5 Department Testing

The department will perform the project testing for ASTM D5084-03 Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter.

D Measurement

The department will measure Pond Liner Clay in volume by the cubic yards, acceptably completed.

E Payment

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

640.1303.S Pond Liner Clay

Payment is full compensation for dewatering areas of site where the clay liner is to be placed; for furnishing, placing and compacting the clay liner; and for performing all tests.

stp-640-016 (20210113)

93. Traffic Control.

Supplement standard spec 643.3.1 with the following:

Prior to beginning work on the contract, provide the engineer, in writing, an emergency response to traffic incident plan.

Provide the Wisconsin State Patrol, Milwaukee County Highway Maintenance, Ozaukee County Highway Maintenance, and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Do not park or store equipment, contractor's and personal vehicles or construction materials within the clear zone (20' from edge of traveled way) or on any roadway carrying traffic during working and non-working hours except at locations and periods of time approved by the engineer.

Clear zone during Freeway No Closures (Peak Hours) is measured as 20' from the edge of traveled way. The clear zone may be reduced to 10' (measured from the edge of traveled way) during a single lane closure that occurs within the Freeway Lane Closure Hours (Off Peak Hours) in Stage 1A to construct the temporary widening only.

Do not permit construction or personnel equipment or vehicles to directly cross the live traffic lanes of the freeway. Yield to all through traffic at all locations. Equip all vehicles or equipment operating in the live traffic lanes with a hazard identification beam (flashing yellow signal light) that is visible from 360 degrees. Operate the flashing yellow beam only when merging or exiting live traffic lanes or when parked or operating on shoulders, except when parked behind barrier wall. Do not park personal vehicles within the access control limits of the freeway. Do not cross live freeway traffic lanes of with equipment or vehicles.

Obtain prior approval from the engineer for the locations of egress or ingress for construction vehicles to prosecute the work.

Do not disturb, remove or obliterate any traffic control signs, advisory signs, sand barrel array, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

Flagging operations shall follow standard spec 104.6.1.(4) and chapter 6E of the WMUTCD.

Replace standard spec 643.3.1.(7) with the following:

Provide equipment, forces, and materials to promptly restore any traffic control devices or pavement markings damaged or disturbed within 2 hours of being contacted.

Supplement standard spec 643.5 with the following:

All lane closures and full closures of Mequon Road, or any other local road, will be considered incidental to the Traffic Control Bid Item.

SER-643-001 (20170808)

1229-04-75

CY

94. Nighttime Work Lighting-Stationary.

A Description

This special provision describes furnishing portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

B (Vacant)

C Construction

C.1 General

This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days before the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

- 1. Layout, including location of portable lighting lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.
- 2. Specifications, brochures, and technical data of all lighting equipment to be used.
- 3. The details on how the luminaires will be attached.
- 4. Electrical power source information.
- 5. Details on the louvers, shields, or methods to be employed to reduce glare.
- 6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
- 7. Detail information on any other auxiliary equipment.

C.2 Portable Lighting

Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lighting protection for the portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

C.3 Light Level and Uniformity

Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

C.4 Glare Control

Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

- 1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.
- 2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

C.5 Continuous Operation

Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

D (Vacant)

E Payment

Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract.

stp-643-010 (20100709)

95. Truck or Trailer-Mounted Attenuator, Item 643.1055.S.

A Description

This special provision describes protecting work operations with a truck or trailer-mounted attenuator (TMA).

B Materials

Furnish and maintain a TMA conforming to NCHRP Report 350 test level 3 or to MASH crashworthiness criteria. Submit written certification from the manufacturer that the host vehicle/attenuator configuration provided conforms to crashworthiness criteria. Include the federal-aid reimbursement eligibility letter with that submittal.

Provide a host vehicle and mount the attenuator conforming to the attenuator manufacturer's specifications. Provide the engineer a copy of the manufacturer's specifications and installation instructions.

C Construction

Coordinate with the engineer at least 72 hours before its intended use so the engineer can determine if the work operation requires TMA protection.

Position the attenuator at a manufacturer-recommended location in advance of a stationary work operation. Position and maintain the attenuator consistently at the manufacturer-recommended distance from a mobile work operation. Ensure that an operator stays with the host vehicle while protecting a mobile work operation.

D Measurement

The department will measure Truck or Truck-Trailer-Mounted Attenuator by the day, acceptably completed, measured to the 1/2-day based on the engineer-determined time the attenuator is required to protect work operations. The department will measure 4 or less hours per calendar day as a half day and over 4 hours as a full day.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION643.1055.STruck or Trailer-Mounted AttenuatorDAY

Payment is full compensation for providing the portable attenuator, host vehicle, and operator.

stp-643-015 (20140630)

96. Basic Traffic Queue Warning System, Item 643.1205.S.

A Description

This special provision describes providing, repositioning, operating, maintaining, monitoring, calibrating, testing and removing a basic traffic queue warning system (QWS) capable of measuring vehicular speeds at downstream sections of a roadway, and activating the system.

B Materials

Provide Basic Traffic QWS components and software that is National Transportation Communications for ITS Protocol (NCTIP) compliant.

B.1 Portable Traffic Sensors (PTS)

Provide PTS that are nonintrusive and capable of capturing vehicle speed in mph. Integrate each sensor with a modem to communicate with the automated system manager.

B.2 Static Traffic Control Signs with Temporary Flashing Beacon Signs (FBS)

Provide static traffic control signs with temporary flashing beacon signs conforming to standard spec 658.2(2) for Traffic Signal Faces. Ensure each FBS is integrated with a modem, and other equipment (e.g., automated system manager) mounted on it, and acts as a single device for communicating with similarly integrated devices and displaying real-time traffic conditions.

B.3 Automated System Manager (ASM)

Provide an ASM that assesses current traffic data captured by the PTS and activates/deactivates the FBS based on predetermined speed thresholds.

B.4 System Communications

Ensure Basic Traffic QWS communications meet the following requirements:

- 1. Perform required configuration of the Basic Traffic QWS's communication system automatically during system initialization.
- 2. Communication between the server and any individual FBS or PTS are independent through the full range of deployed locations, and do not rely upon communications with any other FBS or PTS.
- 3. Incorporate an error detection/correction mechanism into the Basic Traffic QWS communication system to ensure the integrity of all traffic condition data.

B.5 System Acceptance

Submit vendor verification to the engineer and Bureau of Traffic Operations

(DOTBTOworkzone@dot.wi.gov) 14 calendar days before the pre-construction meeting that the system will adequately perform the functions specified in this special provision. Adequate verification includes past successful performance of the system, literature and references from successful use of the system by other agencies, and/or demonstration of the system.

Provide contact information for a designated representative responsible for monitoring the performance of the system and for making modifications to the operational settings as the engineer directs. Provide all testing and calibration equipment.

C Construction

C.1 General

Install and reposition Basic Traffic Queue Warning System per plan or as the engineer directs. Provide plan to the engineer and Bureau of Traffic Operations (<u>DOTBTOworkzone@dot.wi.gov</u>) 14 calendar days before the pre-construction meeting.

PTS may be mounted on FBS, arrow board or other trailer devices.

Install PTS at the following locations:

- 1. Place first PTS within the lane closure taper.
- 2. Place second PTS 5,700 feet upstream of the lane closure taper or on FBS #3.
- 3. Place third PTS 2 miles upstream of the lane closure taper or on FBS #2.

Install FBS at the following locations, delineated by 5 drums:

- 1. Place first FBS (FBS #3) 5,700 feet upstream of the lane closure taper.
- 2. Place second FBS (FBS #2) 2 miles upstream of the lane closure taper.
- 3. Place third FBS (FBS #1) 3 miles upstream of the lane closure taper.

If there are more than 2 lanes or specified in the plans, place FBS on both sides of the roadway.

Number the devices in chronological order so they are visible from the shoulder with 6-inch white high reflective sheeting.

Provide technical personnel for all system calibration, operation, maintenance, and timely on-call support services.

Promptly correct the system within 24 hours of becoming aware of a deficiency in the operation or individual part of the system. A minimum of three days before deployment, place the Basic Traffic QWS and demonstrate to the department that the Basic Traffic QWS is operational.

Maintain the Basic Traffic QWS for the duration of the project. Ensure the system operates continuously (24 hours, 7 days a week) in the automated mode throughout the duration of the project.

Remove the system upon completion.

C.2 Reports

Provide an electronic copy of a weekly summary report of all data via email to the engineer. Ensure the report includes, at a minimum, the average speed per sensor, time in congestive state per sensor and number of triggers per day.

C.3 Meetings

Attend mandatory in-person pre-construction meetings with the department. Attend additional meetings as deemed necessary by the department. These meetings may be held in person or via teleconference, as scheduled by the department.

C.4 Programming

C.4.1 General

Program the Basic Traffic QWS to ensure that the following general operations are performed:

- 1. Provide a password protected login to the ASM, website and all other databases.
- 2. Automatic setting of the FBS to reflect current traffic flow status updated every 60 seconds for congestion. Ensure to remove a congestion message when 180 seconds of average traffic speeds above the current level are observed, or utilize a customized frequency as determined by the engineer.
- 3. The FBS activate based on pre-determined speed thresholds from the next downstream sensor.
 - FBS #3 shall activate based on traffic speeds at the PTS located within the lane closure taper.
 - FBS #2 shall activate based on traffic speeds at the PTS located approximately 1 mile upstream of lane closure taper, or at FBS #3.
 - FBS #1 shall activate based on traffic speeds at the PTS located 2 miles upstream of lane closure taper, or at FBS #2.
- 4. Provide real-time data from the ASM to a website with a full color mapping feature and refresh every 60 seconds. Make data on website available to the department staff at all times for the duration of the work zone activity. Ensure website includes:
 - Vehicle speeds
 - FBS triggers
 - Device locations
- 5. Archive all traffic data in a Microsoft Excel format with date and time stamps.
- 6. Configure the website to quantify system failures which includes communication disruption between any devices in the system configuration, FBS malfunctioning, PTS malfunction, loss of power, low battery, etc.
- 7. Automatically generate and send an email alert any time a user specified queue is detected by the system.
- 8. Ensure the system autonomously restarts in case of any power failure.

C.4.2 System Operation Strategy

Arrange for the vendor/manufacturer to coordinate system operation, detection, and trends/thresholds with the engineer.

The sequences below are a minimum requirement, but can be adjusted at the discretion of the engineer, are as follows:

Free Flow:

If the current PTS speed on a downstream section is at or above 40 mph, the next upstream FBS will not flash.

Slow or Stopped Traffic:

If the current PTS speed on a downstream section of the roadway is between the 39 mph and 0 mph (for example, 35 mph), the next upstream FBS shall flash.

C.5 Calibration and Testing

At the beginning of the project perform a successful field test and calibration at the Basic Traffic QWS location to verify the system is detecting accurate vehicle speeds, and accurately relaying the information to the ASM and the FBS.

Send email of successful calibration and testing to the engineer.

D Measurement

The department will measure Basic Traffic Queue Warning System by the day, acceptably completed, measured as each complete system per roadway.

E Payment

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

643.1205.S Basic Traffic Queue Warning System

Payment is full compensation for providing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing the complete system consisting of FBS, PTS, ASM, and system communications.

Failure to correct a deficiency to the FBS, PTS, or ASM within 24 hours after notification from the engineer or the department will result in a one-day deduction of the measured quantity for each day in which the deficiency is not corrected.

Failure to correct the website within 24 hours after notification from the engineer will result in a 10% reduction of the day quantity for each day the website is down.

The engineer will have sole discretion to assess the deductions for an improperly working Basic Traffic QWS.

stp-643-046 (20210113)

97. Temporary Pavement Marking

Add the following to standard spec 646.3.1.4:

(1) On pavements not scheduled for removal under this project, remove markings using air blasting, water blasting, or a combination of thereof. Do not use grinding on these pavements.

98. General Requirements for Electrical Work.

General

Add the following to standard spec 651, 652, 653, 654, 655, 656, 657 and 659.

All the work necessary to comply with revisions to standards specifications mentioned herewith shall be incidental to associated pay items or to the project including coordination, materials, and labor. No additional payment shall be made to the contractor.

Add the following to standard spec 651.2:

Wisconsin Department of Transportation

Materials indicated to be returned to the department shall be hauled to one of the following two locations:

1. State Electrical Shop at 935 South 60th street, West Allis, as directed by Mr. Pat Stoetzel, tel. (414) 750-5306

Arrange pickups and deliveries 3 days in advance and during regular business hours (Monday – Thursday 7:00 AM to 3:45 PM).

Add the following to standard spec 651.3.1:

Any circuit that the contractor does not personally tag out at the disconnect shall be considered live, and will be subject to being activated by another person with no notice to the contractor. Make tagouts with manufactured tags and endorse them with the date and the name of the contractor. Clear tagouts at the

DAY

end of the workday. The department does not employ a load dispatcher and has no intent to do so. Each electrical worker is responsible for their own protection from automatic switching and from switching by others.

The plans show required disconnections of existing lighting circuits, most in the form of abandoning existing underground conductors in place. The contractor may need to mobilize several times per each existing lighting distribution center. The contractor is expected to build these costs into the various paid items for removals and installations.

Replace standard spec 651.3.3(3) with the following:

(3) Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region Electrical personnel will perform the inspection. In the event of deficiencies, request a re-inspection when the work is corrected. The engineer will not authorize continuation of aboveground work or turn-on until the contractor corrects all deficiencies.

Add the following to standard spec 651.5:

Work to disconnect and connect conductors will be incidental to the paid measurement of footage.

There will be no measurement for payment for abandoning conductors or removing conductors for scrap.

Work to disconnect and connect electrical system, splice through, or to connect conductors are incidental to the installation or removal of the freeway lighting pay items included in this contract. The department will not measure conductors or conduits that have been abandoned in place or removed for scrap. The department will allow, at the contractor's discretion, for the salvaging of conductors to be abandoned, if possible.

Add the following to standard spec 652.3.1.4:

Support conductors at the top of the vertical raceway or as close as practical if the vertical rise exceeds 40-feet. Provide additional supports as shown; in no case shall the distance between supports exceed that shown in Table 300.19(A) of the Wisconsin State Electric Code.

Add the following to standard spec 653.3(1):

This provision modifies the standard detail drawing for pull boxes and thereby both the standard items and SPV pay item for pull boxes. Lighting pull box covers shall read "LIGHTING".

Add the following to standard spec 655.3.1:

Wet location splices are not anticipated on this project and not shown in the plans. In the event that the engineer allows wet location splices, make pull box splices with engineer approved epoxy kit for the freeway lighting and should be incidental to the installation of pull box.

At each pull point or access point, indicate the line side bundle with a lap of blue tape. Mark conductors in poles and in pull boxes or other terminations with a 6-Inch long blue tape wrap to identify the set of conductors emanating from distribution center (feeder).

Add the following to standard spec 655.3.7(4):

Where two or more wire networks pass through a pull point, tag each circuit network (i.e., A/B/N and C/D/N) with approved all-weather tags.

Add the following to standard spec 657.2:

Non-breakaway poles (mounted on structures, concrete bases or behind noise wall barriers without transformer base), as well as at stems of sign bridges containing electrical wires are to be double nutted and install galvanized rat screen enclosing the bottom of pole area; extra nuts and screen incidental.

Add the following to standard spec 657.3.1 and 657.3.5:

Corrosion protection measures described in standard spec 657.3.1 and 657.3.5 are invoked for breakaway transformer bases and aluminum light poles. Avoid contact of dissimilar metals in erecting the pole on its foundation and/or breakaway device. Resolve any concern of trapped moisture or potential corrosion cell to the satisfaction of the engineer.

Manufacturer's Warranty for LED luminaires: The manufacturer shall warrant to the department that each complete luminaire (consisting of the housing, optical assembly, LED drivers, surge protection and wiring) will be free from defects in material and workmanship for 10 years from the date that the luminaire are put into service. Install luminaires within one year of manufacture.

If any luminaires fail to meet the above warranty, the department shall provide the manufacturer with a written notice of any defect within 30 days after discovery of the defect. The manufacturer shall provide all materials, luminaires, replacement component parts, labor and all incidentals necessary to restore the luminaire to a fully operational, installed condition.

Submittal Requirements for LED luminaires: Considering the rapid advancement in LED technology, the overall project construction and duration of construction, within 10 calendar days after contract execution, the contractor is responsible to coordinate the lead time for LED luminaires purchase and installation schedule with the engineer and the department's lighting engineer, Eric Perea, at <u>eric.perea@dot.wi.gov</u> or at (414) 750-0935 for freeway lighting system prior to order LED luminaires. The LED luminaires purchasing may be done during later stage of construction as directed by the department which shall not delay the construction.

Add the following to standard spec 659.3:

Provide and install / replace Plaques Light Pole on all poles located in the median at a mounting height of 6-inch above the highest adjacent safety barrier or obstruction.

Add the following to standard spec 659.3.1:

Contractor responsible to provide adequate temporary roadway lighting during all the construction stages not shown on the temporary lighting plans, but which are necessitated by field conditions or by any construction phasing changes. Installation of temporary lighting not shown on temporary lighting plans will be paid according to appropriate pay items included in this contract. Contractor responsible to submit a redline markup plans for any additional temporary lighting to the engineer for approval prior to installation.

99. Install Conduit Into Existing Item, Item 652.0700.S.

A Description

This special provision describes installing proposed conduit into an existing manhole, pull box, junction box, communication vault, or other structure.

B Materials

Use conduit rigid non-metallic schedule 40, 3-Inch, and 1 conduit, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the standard spec.

C Construction

Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for entering conduits at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place.

D Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
652.0700.S	Install Conduit Into Existing Item	EACH	

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections.

stp-652-070 (20100709)

100. Electrical Conduit.

Replace standard spec 652.5(2) with the following:

(2) Payment for Conduit Rigid Metallic, Conduit Rigid Nonmetallic, Conduit Reinforced Thermosetting Resin, and Conduit Special bid items is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for making necessary connections into existing pull boxes; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

Replace standard spec 652.5(5) with the following:

⁽⁵⁾ Payment for Conduit Loop Detector is full compensation for providing all materials, including conduit, compacted backfill, surface sealer if required, pull wire if required, condulets, conduit fittings, and for making necessary connections into existing pull box, manhole, junction box or communication vault.

101. Electrical Service Meter Breaker Pedestal STH 57/167 & CTH W, Item 656.0201.3401; Electrical Service Meter Breaker Pedestal IH 43 SB Ramps & STH 57/167, Item 656.0201.3402; Electrical Service Meter Breaker Pedestal IH 43 NB Ramps & STH 57/167, Item 656.0201.3403.

Append standard spec 656.2.3 with the following:

- (2) The department will be responsible for the electrical service installation request for all project facilities.
- (3) Electrical utility company service installation and energy cost will be billed to and paid for by the maintaining authority.
- (4) Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Install a 3" conduit from the point of service from the utility to the meter breaker pedestal. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electrical utility company.

Append standard spec 656.5 with the following:

(8) Payment is full compensation for grading the service trench; replacing topsoil; and for fertilizing, seeding, and mulching to restore the disturbed area of the service trench.

102. Signal Housings.

Replace standard spec 658.2(4) with the following:

(4) For pedestrian signal faces: furnish polycarbonate resin housings, doors, and visors. Use yellow, Federal Standard 595 - FS13538, housings and dull black door faces and visors. For 16-inch heads, mount a z-crate visor and gasket to the door with stainless steel tabs. Drill the housing for top and bottom pipe mounting with the ability to rotate 270 degrees on the poly mounting brackets.

103. Pedestrian Push Buttons.

Replace standard spec 658.2(5) with the following:

(5) For pedestrian push buttons: furnish freeze-proof ADA compliant pedestrian push buttons made by a department-approved manufacturer. The contractor shall place a Size 1, Type H reflective (R10-3EL, R, D) sign sticker (per state sign plate), message series – B directly above each push button. Include a directional arrow or arrows on the sign as the plans show.

104. Temporary Traffic Signal for Intersections STH 57/167 & CTH W, Item 661.0201.3401.

Replace standard spec 661.2.1(1) with the following:

(1) Furnish control cabinet and control equipment. The department will supply, maintain, and install a signal controller, cellular modem, and ethernet switch to establish remote communication to the signal controller. The cabinet must be equipped with a 6-circuit lsotel independent of the GFI receptacles. Provide a cabinet with a Corbin #2 door lock and an access door that allows placing the controller in emergency flash. Provide keys to the access door to the engineer and law enforcement agencies as required. Also provide a manual control accessible by the police. Test traffic signal control cabinets before installation. The department will provide the signal controller with the initial traffic signal timing, and the department will be responsible for all subsequent signal timing changes.

Replace standard spec 661.2.1(3) with the following:

(3) Use existing underground electric service and meter breaker pedestal for the operation of the Temporary Traffic Signal at the intersection of STH 57/167 & CTH W. The department will pay for all installation and Energy Costs associated with the operation of the Temporary Traffic Signals.

Furnish and install a generator to operate the temporary traffic signals for the times required to switch the existing permanent traffic signal over to the temporary traffic signal and for the time required to switch the temporary traffic signal back over to the permanent traffic signal.

Contact the local electrical utility at least four days prior to making the switch from the Temporary Traffic Signal to the new Permanent Traffic Signal.

Append standard spec 661.2.1(6) with the following:

(6) Control equipment or controller equipment is defined as anything inside the control cabinet excluding the department furnished signal controller, cellular modem, and ethernet switch.

Replace standard spec 661.3.1(2) with the following:

(2) Request a signal inspection of the completed temporary traffic signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the SE Region Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The SE Region electrical personnel will perform the inspection.

Append standard spec 661.3.1.4(4) with the following:

(4) Arrange for every other week inspections with the engineer to check the height of the span wire above the roadways to ensure that the bottom of the traffic signal heads remain within the minimum and maximum heights allowed above the roadway. Make all height adjustments within 1-hour of an inspection indicating that adjustments are required. Notify the engineer in writing upon completion of all necessary adjustments. Maintain a written log to properly document the date of each biweekly (i.e., once every two weeks) inspection, the heights above the roadway, the roadway clearance after adjustments have been made, and acceptance by the engineer. Provide all documentation related to the biweekly span wire height checks as well as all records related to maintenance performed on the temporary traffic signal installations to the engineer.

Replace standard spec 661.3.2.6(2) with the following:

(2) Upon acceptance of new signal and completion of work, the department will switch control of the intersection over to the permanent cabinet installation. Remove signal cable and wires, wood poles, wood posts, control cabinet, control equipment, and incidental materials. Upon deactivation of the

controller, call the electrical utility immediately for the temporary electrical service disconnect. The department shall remove the cellular modem.

Replace standard spec 661.3.2.7(2) with the following:

(2) Respond within one hour of notification to provide corrective action to any emergency such as but not limited to knockdowns, signal cable problems, and controller equipment failures. If equipment becomes damaged or faulty beyond repair, replace it within one working day. In order to fulfill this requirement, maintain, in stock, sufficient materials and equipment to provide repairs. Replace the traffic signal control equipment including the cabinet and cabinet accessories within 4 hours. If the outcome of the response identifies damage to the department furnished signal controller, notify the Traffic Management Center at (800) 375-7302 who will then dispatch the SE Region Electrical Field Unit.

Replace standard spec 661.5(2) with the following:

- (2) Payment for the Temporary Traffic Signals for Intersections bid item is full compensation for providing, maintaining, and repairing the complete temporary installation, and for removal. Payment also includes the following:
 - 1. Furnishing and installing replacement equipment.
 - 2. The cost of delivery and pick-up of the cabinet assemblies.

Payment is full compensation for drilling holes; furnishing and installing all materials, including bricks, and coarse aggregate; for excavation, bedding, and backfilling, including any sand or other required materials; furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; for making inspections; for cleaning up and properly disposing of waste.

105. Cameras.

Replace standard spec 677.3(8) with the following:

(8) For permanent camera installations, provide camera cables in conduit and poles as the plans show. For temporary traffic signal camera installations, provide camera cables on the temporary traffic signal span wire as the plans show. Provide continuous cable runs without splices between the camera assembly and the camera controller assembly.

106. Traffic Signal Faces & Pedestrian Signal Face 16-Inch.

Append standard spec 658.3(5) with the following:

(5) Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

107. Lamp, Ballast, LED, Switch Disposal by Contractor, Item 659.5000.S; Lamp, Ballast, LED, Switch Disposal by Contractor Lighting Items, Item 659.5000.S.1001.

A Description

This special provision describes the detachment and packaging of lamps, ballasts, LEDs, and mercury containing switches (e.g., overhead roadway lighting, underdeck bridge, wall packs, pedestrian signals, traffic control stop lights and warning flashers, fluorescent bulbs, and thermostats) removed under this contract for disposal as hazardous materials.

For Lamp, Ballast, LED, Switch Disposal by Contractor, coordinate removal from the work site by the department's hazardous waste disposal vendor. Disposal will be billed to the department by the hazardous waste disposal vendor.

B Materials

B.1 Disposal by Contractor

Items removed under this contract will be considered the property of the department for waste generator identification. The contractor is responsible for coordinating with the department's hazardous waste vendor for disposal:

https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/hazwaste-contacts.pdf

B.2 Disposal by Department (Vacant)

C Construction

C.1 Removal

Arrange for the de-energizing of luminaires after receiving approval from the engineer that the existing luminaires can be removed. Do not remove luminaires that cannot be replaced with proposed LED units and operational within the same workday. The new LED units need to be operational prior to sunset of the same workday.

Detach and remove luminaires and lamps from the existing traffic signal poles or respective structure. Avoid breaking fixtures whenever possible.

Lamps, ballasts, LED, and switches will become property of the department, and will be disposed of in an environmentally sound manner.

C.2 Packaging of Hazardous Materials

Provide a secure, level location removed from the travelled way for storage of the material for disposal.

Pack intact fixtures in the packaging of the new lamps used to replace them, or packaging affording the equivalent protection. Place in full, closed stackable cartons.

Pile cartons no more than four high if palletized and secure cartons with shrink wrap to prevent shifting or falling of the loads. Clearly mark each pallet with the words "Universal Waste Lamps" or "Universal Waste Ballasts", the date, and the number of fixtures on each pallet.

Pack broken fixtures into (min.) 6 mil thick plastic bags and place inside sturdy cardboard boxes or the equivalent. Mark the outer packaging with the term "Broken Fixtures/Lamps", the date and the number of broken fixtures clearly marked on the box.

The hazardous waste vendor will not accept fixtures improperly packaged. The vendor will reject any fixtures not removed as part of a contract pay item or otherwise required under this contract.

Pack ballasts and mercury containing switches in appropriate containers.

C.3 Disposal by Contractor

Complete the lamp and ballast inventory (<u>https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/dotlampballastinventory.dotx</u>) and contact the hazardous waste vendor to coordinate pickup and disposal at a location specified by the contractor. Consolidate all pallets and boxes from one project at a single location. Contact the hazardous waste vendor to set up an appointment for pickup. The hazardous waste vendor requires a minimum of one week advance notice to schedule pickup.

C.4 Disposal by Department (Vacant)

D Measurement

The department will measure Lamp, Ballast, LED, Switch Disposal by Contractor and Lamp, Ballast, LED, Switch Disposal by Contractor Lighting Items as each individual unit removed and received by the hazardous waste vendor, properly packaged and acceptably completed, matching the total number of units provided on the inventory form. The department will not measure broken fixtures that exceed a total of 10 percent of all fixtures to be disposed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION659.5000.SLamp, Ballast, LED, Switch Disposal by Contractor659.5000.S.1001Lamp, Ballast, LED, Switch Disposal by Contractor Lighting ItemsEACH

Payment for Lamp, Ballast, LED, Switch Disposal by Contractor is full compensation for detachment, handling, packaging, labeling and scheduling disposal with the hazardous waste vendor; and scrapping and disposal of all other materials.

108. Ramp Closure Gates 28-FT, Item 662.1028.S.

A Description

This special provision describes providing freeway on-ramp closure gates on type 5 steel luminaire poles.

B Materials

B.1 General

Provide five user manuals and a listing of vendors and contact information for each manufactured component including flasher electrical components.

The engineer may allow alternates equal to specified manufactured components. The engineer may require plan detail modifications to accommodate alternates. The engineer may accept alternate arms or mounting adaptors only if the contractor can demonstrate that the department can easily remove and replace the arms.

B.2 Components

Furnish type 5 steel poles designed to carry twin 15-foot luminaire arms and conforming to standard spec 657 and with dimensions for acceptable installation of the ramp gate hardware as shown on the detail. Ensure a contiguous pole by eliminating the hand hole near base of pole, thus allowing uninhibited mounting of the gate pivot assembly.

Furnish galvanized steel nuts and bolts conforming to ASTM A307 except where designated as high strength (HS), conform to ASTM F3125. For the ramp closure gate locking mechanism, furnish a 3/4-inch handle nut.

Furnish grade A36 steel for the gate supports, gate pivot assembly, and associated hardware galvanized after fabrication by either a mechanical or hot-dip process. Grind welded connections, rough edges, and burrs smooth before galvanizing to ensure a finished appearance. Ensure that the galvanized coating conforms to ASTM A 153.

Provide aluminum/fiberglass gate arms of the nominal length the bid item indicates and conforming to plan dimensions. Cover gate arms on two sides with alternating red and white shop-applied type H reflective from the department's approved products list. Also provide a shear pin base that is the manufacturer's "permanent pivot" style. Obtain components from:

B&B Roadway 15191 Hwy 243 Russellville, AL 35654 Tel: (888) 560-2060 Gate arm: Model MU605

Furnish a worm gear winch with a single line vertical lift capacity of 2000 lbs. Ensure that the winch has hardened steel gears, a handgrip, permanently lubricated bearings, a reinforced arc-welded reel assembly, and mounting plate. Ensure that the winch can be mounted to the winch mount plate shown on the construction details and the handgrip can be operated without conflict with the pole or ramp gate assembly. Furnish a 2-inch outdoor rated, rot resistant polyester strap for the connection between the worm gear winch and the gate arm pivot assembly.

C Construction

Provide ramp closure gate at the locations the plans show. Apply marine grade anti seize compound compound to all bolt threads and to the interface between the aluminum base and steel pole. The engineer may direct adjustment of the gate arm assembly to ensure the correct vertical and angular orientation of the completed closure gate.

Install structure identification plaques in the location the plan details show.

D Measurement

The department will measure the Ramp Closure Gates bid items as each individual installation, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION 662.1028.S Ramp Closure Gates 28-FT

Payment for the Ramp Closure Gate bid items is full compensation for providing ramp closure gates including support poles; for gate arm assemblies including guides, collars, and gate arms; and for structure identification plaques.

stp-662-005 (20191121)

109. Ramp Closure Gates 40-FT, Item 662.1040.S.

A Description

This special provision describes providing freeway on-ramp closure gates on type 5 steel luminaire poles.

B Materials

B.1 General

Provide five user manuals and a listing of vendors and contact information for each manufactured component including flasher electrical components.

The engineer may allow alternates equal to specified manufactured components. The engineer may require plan detail modifications to accommodate alternates. The engineer may accept alternate arms or mounting adaptors only if the contractor can demonstrate that the department can easily remove and replace the arms.

B.2 Components

Furnish type 5 steel poles designed to carry twin 15-foot luminaire arms and conforming to standard spec 657 and with dimensions for acceptable installation of the ramp gate hardware as shown on the detail. Ensure a contiguous pole by eliminating the hand hole near base of pole, thus allowing uninhibited mounting of the gate pivot assembly.

Furnish galvanized steel nuts and bolts conforming to ASTM A307 except where designated as high strength (HS), conform to ASTM F3125. For the ramp closure gate locking mechanism, furnish a 3/4-inch handle nut.

Furnish grade A36 steel for the gate supports, gate pivot assembly, and associated hardware galvanized after fabrication by either a mechanical or hot-dip process. Grind welded connections, rough edges, and burrs smooth before galvanizing to ensure a finished appearance. Ensure that the galvanized coating conforms to ASTM A 153.

Provide aluminum/fiberglass gate arms of the nominal length the bid item indicates and conforming to plan dimensions. Cover gate arms on two sides with alternating red and white shop-applied type H reflective from the department's approved products list. Also provide a shear pin base that is the manufacturer's "permanent pivot" style. Obtain components from:

B&B Roadway 15191 Hwy 243 Russellville, AL 35654 Tel: (888) 560-2060 Gate arm: Model MU605

Furnish a worm gear winch with a single line vertical lift capacity of 2000 lbs. Ensure that the winch has hardened steel gears, a handgrip, permanently lubricated bearings, a reinforced arc-welded reel assembly, and mounting plate. Ensure that the winch can be mounted to the winch mount plate shown on the construction details and the handgrip can be operated without conflict with the pole or ramp gate assembly. Furnish a 2-inch outdoor rated, rot resistant polyester strap for the connection between the worm gear winch and the gate arm pivot assembly.

C Construction

Provide ramp closure gate at the locations the plans show. Apply marine grade anti seize compound compound to all bolt threads and to the interface between the aluminum base and steel pole. The

UNIT

EACH

engineer may direct adjustment of the gate arm assembly to ensure the correct vertical and angular orientation of the completed closure gate.

Install structure identification plaques in the location the plan details show.

D Measurement

The department will measure the Ramp Closure Gates bid items as each individual installation, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTION662.1040.SRamp Closure Gates 40-FTEACH

Payment for the Ramp Closure Gate bid items is full compensation for providing ramp closure gates including support poles; for gate arm assemblies including guides, collars, and gate arms; and for structure identification plaques.

stp-662-005 (20191121)

110. Communication Systems.

Replace standard spec 678.2.1(1) with the following:

(1) The department will furnish fiber optic cable, termination panels, Ethernet switches, wireless antennas, SFP's and cellular modems.

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking up the materials.

Replace standard spec 678.5(6) with the following:

(6) Payment for Install Ethernet Switches and Install Wireless Antennas is full compensation for transporting and installing the devices; for cables and connectors; and connecting the devices.

Replace standard spec 678.5(7) with the following:

(7) Payment for Install Cellular Modems is full compensation for transporting and installing the modem; for cables and connectors including rack mountable shelf; for connecting the devices; for programming and configuration; and for testing.

111. Install ITS Field Cabinet, Item 673.1200.S.

A Description

This special provision describes installing a department-furnished type 170, size 334 field cabinet.

B Materials

The department will furnish the type 170, size 334 field cabinet. Provide all necessary miscellaneous mounting hardware and internal power cables. With the field cabinet, the department will furnish cabinet bolts to anchor the cabinet to the concrete base.

C Construction

Install the field cabinet on a new or existing concrete base paid separately. Make all power connections to the cabinet, isolating the neutral bus from the cabinet and equipment ground.

Effectively ground all cable grounding shields and any spare or unused conductors in the field cabinet to the equipment grounding terminal strip.

D Measurement

The department will measure Install ITS Field Cabinet by the unit, installed according to the contract and accepted.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:ITEM NUMBERDESCRIPTIONUNIT673.1200.SInstall ITS Field CabinetEACH

Payment is full compensation for installing the state-furnished field cabinet; making all connections; and grounding as necessary.

stp-673-005 (20220107)

112. Install Pole Mounted Cabinet, Item 673.1225.S.

A Description

This special provision describes installing department furnished aluminum enclosures on poles for intelligent transportation systems equipment.

B Materials

Use stainless steel bolts, nuts, and washers unless otherwise specified.

All conductors, terminals, and parts that could be hazardous to maintenance personnel shall be protected with suitable insulating material.

The cabinet will be equipped with service panels. Two panels shall be provided and mounted on the cabinet sidewalls. The left side panel shall be designated as "Input/Communications," and the right side panel shall be designated as the "Service Panel."

The service panel will be equipped with a four-outlet handi-box. Wire the handi-box to the series portion of the filtering surge protector.

Use metallic conduit, fittings, and adapters required from the underground conduit transition point to the cabinet as part of this item. A typical installation requires on 2-inch conduit. Use metallic conduit conforming to standard spec 652.

C Construction

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as the plans show, and according to the applicable requirements of standard spec 652.

D Measurement

The department will measure Install Pole Mounted Cabinet as each individual assembly, 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	
673.1225.S	Install Pole Mounted Cabinet	EACH	

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for all testing.

stp-673-010 (20220107)

113. Removing 50-Foot Camera Pole, Item 677.9051.S.

A Description

This special provision describes removing existing camera poles.

B (Vacant)

C Construction

Disconnect all cables, wiring and equipment that are mounted on or in the poles, and remove the pole from the concrete footing. The department will pick up any antennae, cameras, or other equipment mounted on the pole; contact maintenance staff at (414) 227-2166 at the department's Statewide Traffic Operations Center, when the material is ready to be picked up. Properly dispose of the pole, conduit, cabling, and wiring away from the project site.

D Measurement

The department will measure Removing (Height) Camera Pole by the unit, acceptably removed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid items:ITEM NUMBERDESCRIPTIONUNIT677.9051.SRemoving 50-Foot Camera PoleEACH

Payment is full compensation for removing and disposing of the existing camera pole; disconnecting any necessary wiring; removing the equipment mounted on the poles; disposing of cabling and wiring; and transportation.

stp-677-901 (20100630)

114. Removing CCTV Camera, Item 677.9200.S.

A Description

This special provision describes removing existing CCTV cameras from existing camera poles as the plans show.

B (Vacant)

C Construction

Disconnect all wiring at the control cabinet and at the top of the camera pole. Remove all fastening hardware and remove the existing camera and pan, tilt, and zoom mechanisms from the top of the pole. Salvage and store the cameras for pick up by the department; contact maintenance staff at (414) 227-2166 at the department's Statewide Traffic Operations Center to coordinate when the materials will be picked up.

The contractor may request a meeting with the engineer to assess the condition and operability of the camera before beginning work on removing the camera. Any damage or improper operation not noted at the meeting, or before the contractor starting work on the removal, will be assumed to be the fault of the contractor; repair or replace the camera. Store the camera until the department picks up the camera.

D Measurement

The department will measure Removing CCTV Camera by the unit, acceptably and completely removed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
677.9200.S	Removing CCTV Camera	EACH	

Payment is full compensation for removing an existing CCTV camera; for disconnecting all necessary cables and wiring; and properly storing the materials.

stp-677-902 (20100630)

115. Install Overhead Freeway DMS Full Matrix, Item 678.0100.S.

A Description

This special provision describes installing a state-furnished, or an existing salvaged, dynamic message sign on a new sign structure.

B Materials

The department will provide the sign, or it will be salvaged, controller, and the control cable.

Use an AWG #6 copper wire or equivalent bonding straps to bond the sign and cabinet to the structure. Use an AWG #6 solid, bare copper wire to bond the sign structure to ground rods.

For the three wires carrying 120/240 VAC power from the cabinet to the sign, use single conductor, stranded copper, 120/240 VAC, XLP insulated, USE rated wire. Size the wire to carry the maximum amperage permitted by the main breakers in the sign.

Provide a 100-amp 120/240-VAC load center in the controller cabinet, along with breakers recommended by the sign manufacturer.

C Construction

Install the load center so that the main breakers control all power to the sign and cabinet. Provide at least three branch circuits, one for the sign, one for the controller and communication equipment, and one for all cabinet accessories, such as fan, light, and heater. Only protect the branch serving the controller and communication equipment with the second stage of the surge protector. Connect the power and control cables according to the manufacturer's recommendations. Run the cables in rigid metallic conduit or flexible metallic conduit, or combination of these, within the sign structure.

Bond the bottom of the sign structure to one or more ground rods. Use exothermic welding at each end of the ground wire, unless the steel structure has a suitable grounding lug. Use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the sign's ground bar to ground does not exceed 4 ohms. Add more ground rods if necessary to achieve this requirement.

D Measurement

The department will measure Install Overhead Freeway DMS Full Matrix by each sign, acceptably installed and tested.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
678.0100.S	Install Overhead Freeway DMS Full Matrix	EACH

Payment is full compensation for installing and testing the sign and controller; providing cables, conduits, and fittings; for testing the sign; and for transporting materials.

stp-678-010 (20100630)

116. Roadway Embankment, Item SPV.0035.0001.

A Description

This special provision describes placing in embankments and in miscellaneous backfills, material obtained under the bid items in the roadway and drainage excavation or excavation for structure sections; or material obtained off site as specified under these special provisions.

B Materials

B.1 Embankment

Furnish roadway embankment conforming with standard spec 207.2 except as follows:

Add the following to standard spec 207.2(1):

If the contractor utilizes offsite material to construct embankments, the material shall conform to standard spec 208 except as follows:

Delete standard spec 208.2.2(2).

C Construction

Construct roadway embankment according to standard spec 207.3 except as follows:

Add the following to standard spec 207.3.6:

Prior to placing any material for a succeeding layer, ensure the previous layer does not have excessive rutting, displacement, or distortion under the compacting or hauling equipment. If rutting, displacement, or distortion is observed, the contractor shall inform the engineer how yielding material will be addressed prior to continuing roadway embankment construction.

If off site material is utilized, construction must conform to standard spec 208.3.

Replace standard spec 205.3.2(4) with the following:

If placing embankment on side slopes 10 feet high or higher and steeper than one vertical to 3 horizontal, provide vertically-faced, horizontal benches at least 2 feet wide into the existing embankment slope every 2-foot of vertical height.

If constructing embankment on only one side of abutments, wing walls, or piers, construct the embankment so that the area immediately adjacent to the structure is not compacted in a manner that causes overturning of or excessive pressure against the structure. If constructing embankment on both sides of a concrete wall, pipe, or box type structure, construct the embankment so that the elevation on both sides of the structure is always approximately the same.

D Measurement

The department will measure Roadway Embankment without any correction for shrinkage or expansion factors by the cubic yard acceptably completed in its final location using the method of average end areas, except as follows:

- a) The engineer and contractor mutually agree to an alternative volume calculation method.
- b) If it is not possible to compute volumes of the various classes of roadway and drainage embankment by the method of average end areas due to erratic location of isolated deposits, the department may compute the volumes by three-dimensional measurements.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.0001	Roadway Embankment	CY

Payment is full compensation for furnishing offsite and onsite sources, for forming, compacting, shaping, sloping, trimming, finishing, and maintaining the embankments. If offsite materials are utilized for roadway embankments, payment includes full compensation for all items listed in standard spec 208.5 (2), for obtaining all required permits, and all other incidental work required under this section.

ASP-5 will be applied to this item. The Fuel Usage Factor is 0.23.

117. HPC Masonry Structures, Item SPV.0035.4000.

A Description

This special provision describes specialized material and construction requirements for high-performance concrete used in bridge structures. Conform to standard spec 501, 502 and 509, as modified in this special provision. Conform to standard spec 715 for QMP Concrete Pavement, Cast-in-Place Barrier and Structures.

B Materials

501.2.7.3 Coarse Aggregates

Replace the entire text of standard spec 501.2.3.1 with the following:

501.2.7.3.1 General

- ⁽¹⁾ Provide coarse aggregates from a department-approved source. Use an approved source listed on the APL or follow the source approval process specified in standard spec 106.3.4.2. In addition to the requirements of standard spec 106.3.4.2, perform tests for LA wear, sodium sulfate soundness, freeze-thaw soundness and lightweight pieces at least once per calendar year when producing coarse aggregates for use in high-performance concrete mixes.
- (2) Use clean, hard, durable crushed limestone or crushed gravel with 100 percent fractured surfaces and free of excess flat and elongated pieces, lightweight particles, frozen lumps, vegetation, deleterious substances or adherent coatings considered injurious.
- (3) Use virgin aggregates only.
- ⁽⁴⁾ Contact the engineer a minimum of 4 weeks prior to paving to collect a sample of the aggregates proposed for the project. The engineer will obtain the sample or observe the contractor obtaining the sample. The sampler must be HTCP certified to sample aggregates.
- (5) The department test results will be used for aggregate acceptance.
- (6) The department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete masonry structures.

501.2.7.3.2 Physical Properties

Replace standard spec 501.2.7.3.2.1 paragraph one with the following:

(1) Furnish coarse aggregates approved for use in concrete masonry structures and conforming to the following:

Aggregate Quality Test	Test Method	Maximum Percent by Weight
LA Wear (100 and 500 revolutions) ^[1]	AASTO T96 WTM	35
Sodium Sulfate Soundness (R-4, 5 cycles) ^[1]	AASHTO T104 WTM	6
Freeze-Thaw Soundness ^[1]	AASHTO T103 WTM	12
Lightweight Pieces ^{[1] [2]}	AASHTO T113 WTM	2.0

- ^[1] Coarse aggregate sizes No. 1 and No. 2 as defined in 501.2.7.4.2 will be tested individually and the results weighted by the blend percentage listed in the mix design.
- ^[2] Material having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of lightweight pieces in the sample retained on the 3/8-inch sieve by the weight of the total sample.

501.2.7.3.3 Deleterious Substances

Replace standard spec 501.2.7.3.3 paragraph one with the following:

(1) The quantity of deleterious substances must not exceed the following percentages:

DELETERIOUS SUBSTANCE	PERCENT BY WEIGHT
Shale	1.0
Coal	1.0
Clay lumps	0.3
Soft fragments	5.0
Any combination of above	5.0
Flat or elongated pieces based on a 3:1 ratio ^[1]	
Materials passing the No. 200 sieve	1.5
^[1] According to ASTM D4791 WTM	

501.2.8 Concrete Curing Materials

Replace entire text with the following:

(1) Furnish burlap conforming to AASHTO M 182, class 1, 2, 3 or 4.

C Construction

501.3.2.4.3.3 Extended Delivery Time

Delete standard spec 501.3.2.4.3.3 paragraph one.

501.3.5 Ready-Mixed Concrete

Replace standard spec 501.3.5.1 paragraph one with the following:

(1) Use central-mixed concrete as defined in standard spec 501.3.5.1(2) for all work performed under this special provision.

501.3.5.2 Delivery

Replace standard spec 501.3.5.2 paragraph three with the following:

⁽³⁾ Deliver and completely discharge all concrete within one hour beginning when adding water to the cement, or when adding cement to the aggregates. A decrease in air temperature below 60 F or the use of department-approved retarders does not increase the discharge time.

501.3.7.1 Slump

Replace the entire text with the following:

- (1) Use a 2-inch to 4-inch slump
- (2) Perform slump tests for concrete according to AASHTO T119 WTM.

501.3.8.2 Hot Weather Concreting

Replace the entire text of standard spec 501.3.8.2.1 (1) and (2) with the following:

501.3.8.2.1 General

- (1) The contractor is responsible for the quality of concrete placed in hot weather. Submit a written temperature control plan at or before the pre-pour meeting. In that plan, outline the actions to control concrete temperature if the concrete temperature at the point of placement exceeds 80° F. Do not place concrete without the engineer's written acceptance of that temperature control plan. Perform the work as outlined in the temperature control plan.
- (2) If the concrete temperature at the point of placement exceeds 80 F, do not place concrete for items covered in this special provision.
- (3) The department will pay \$0.75 per pound for the quantity of ice required to reach a target concrete temperature of 75° F if the following conditions are met:
 - 1. The un-iced concrete temperature exceeds 80 F.
 - 2. The contractor has performed the actions outlined in the contractor's accepted temperature control plan.
 - 3. The contractor elects to use ice.
- (4) Notify the engineer whenever conditions exist that might cause the temperature at the point of placement to exceed 80° F. If project information is not available, the contractor should obtain information from similar mixes placed for other nearby work.

501.3.8.2.2 Bridge Decks

Replace the entire text with the following:

- (1) Do not place concrete for bridge decks when the air temperature is above 80 F.
- ⁽²⁾ For concrete placed in bridge decks, submit a written evaporation control plan at each pre-pour meeting. In that plan, outline the actions to maintain concrete surface evaporation at or below 0.15 pounds per square foot per hour. Do not place concrete for bridge decks without the engineer's written acceptance of that evaporation control plan. If the engineer accepts an evaporation control plan calling for ice, the department will pay \$0.75 per pound for that ice. Perform the work as outlined in the evaporation control plan.

- (3) If predicting a concrete surface moisture evaporation rate exceeding 0.15 pounds per square foot per hour, do not place concrete for bridge decks.
- (4) Provide evaporation rate predictions to the engineer 24 hours before each bridge deck pour.
- (5) Compute the evaporation rate from the predicted ambient conditions at the time and place of the pour using the nomograph, or computerized equivalent, specified in <u>CMM 525</u>, figure 1 or using a computerized equivalent. Use weather information from the nearest national weather service station. The engineer will use this information to determine if the pour will proceed as scheduled.
- (6) At least 8 hours before each pour, the engineer will inform the contractor in writing whether or not to proceed with the pour as scheduled. If the actual computed evaporation rate during the pour exceeds 0.15 pounds per square foot per hour, at the engineer's discretion, the contractor may be allowed to implement immediate corrective action and complete the pour.

502.3.5.4 Superstructures

Delete standard spec 502.3.5.4 paragraph five.

502.3.7.8 Floors

Replace standard spec 502.3.7.8 paragraph five with the following:

(5) Set the rails or tracks that the finish machine rides on, to the required elevation; and ensure they adjust to allow for settlement under load. Support the rails or tracks outside the limits of the finished riding surface. Do not support rails or tracks on the tops of girders, or within the finished riding surface, without the engineer's written permission.

For bridges that include Longitudinal Grooving Bridge Deck, delete 502.3.7.8 paragraphs thirteen, fourteen, and fifteen. For bridges that include Polymer Overlay, follow the requirements of standard spec 502.3.7.8 paragraphs thirteen, fourteen, and fifteen.

Add the following to standard spec 501.3.7.8:

- (19) Do not place bridge deck concrete more than 10 feet ahead of the finishing machine. If there is a delay of more than 10 minutes during the placement of a bridge deck, cover all concrete (unfinished and finished) with wet burlap to protect the concrete from evaporation until placement operations resume.
- (20) Keep hand finishing, except for the edge of deck, to a minimum. Equip the finishing machine with a pan behind the screed. Apply micro texture using a broom or turf drag following the use of a 10-foot straight edge. Only finish by hand as necessary to close up finished concrete. Begin wet curing the deck within a timeframe acceptable to the engineer following the micro texture.

502.3.8 Curing

Replace standard spec 502.3.8.1 (1) with the following:

(1) Maintain adequate moisture throughout the concrete mass to support hydration for at least 14 days.

502.3.8.2 Curing Requirements

Replace entire text of standard spec 502.3.8.2.1 with the following:

502.3.8.2.1 General

(1) Wet-cure the concrete for bridge decks, structural approach slabs, sidewalks on bridges and raised medians on bridges for 14 days by use of a soaker hose system, or other engineer-approved methods. Cover the finished surface of bridge decks and overlays with one layer of wetted burlap or wetted cotton mats within 10 minutes after the finishing machine has passed. Apply the burlap/cotton gently to minimize marking of the fresh concrete. Keep the first layer of burlap/cotton continuously wet until the bridge deck or overlay is sufficiently hard to apply a second layer of wetted burlap/cotton. Immediately after applying the second layer of burlap/cotton, continue to keep the deck wet until placing and activating the soaker hose system. Throughout the remainder of the curing period, keep the burlap/cotton continuously wet with soaker hoses hooked up to a continuous water source. Inspect the burlap/cotton twice daily to ensure the entire surface is moist. If necessary, alter the soaker hose system as needed to ensure the entire surface is covered and stays moist. After 48 hours from the time of completion of the bridge deck or overlay pour, the soaker hose system and burlap/cotton may be covered with polyethylene sheeting. Provide a continuous flow of water through the soaker hose system for the entire curing period.

- (2) Do not uncover any portion of the deck at any time for any reason during the first 7 days of the curing period.
- ⁽³⁾ Set up and test the fogging system before each bridge deck, structural approach slab, bridge mounted sidewalk or bridge mounted raised median pour. Keep the fogging system set up and operational during the pour.

502.3.8.2.3 Decks

Delete the entire text.

502.3.8.2.4 Parapets

Replace the entire text with the following:

- (1) Cure the inside and outside concrete faces and tops of railings or parapets by covering with wetted burlap immediately after form removal and surface finish application. Keep the burlap thoroughly wet for at least 7 days; or by covering for the same period with thoroughly wet polyethylene-coated burlap conforming to standard spec 501.2.8.
- (2) Secure coverings along all edges to prevent moisture loss.

502.3.9 Cold Weather Protection

Replace the entire text of 502.3.9.6 with the following:

502.3.9.6 Bridge Decks

- (1) Protect concrete in bridge decks as specified for structural masonry, and except for parapets and similar pours, according to the following requirements:
 - 1. Do not place concrete for bridge decs or other superstructure elements when the national weather service forecast for the construction area predicts temperatures to fall below 32 F within 24 hours, unless the engineer specifically allows or requires in writing.
 - Protect the underside of the deck, including the girders, for bridge deck and overlay pours by housing and heating when the national weather service forecast predicts temperatures to fall below 32 F during the cold weather protection period. Maintain a minimum temperature of 40 F in the enclosed area under the deck for the entire 14-day curing period.

D (Vacant)

E Payment

Replace standard spec 502.5.1 paragraph one with the following:

502.5.1 General

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.4000	HPC Masonry Structures	CY

710.5 Sampling and Testing

Supplement standard spec 710.5 with the following:

710.5.8 Chloride Penetration Resistance

- ⁽¹⁾ For each new or changed mix design, measure chloride penetration resistance according to AASHTO T277 at a frequency of 1 test per 3 months (quarterly) of production.
- (2) Strip permeability samples from molds and wet cure according to AASHTO T277 Accelerated Moist Curing. Upon completion of the curing process, obtain one sample from each cylinder and test according to AASHTO T277.
- (3) Ensure that the initial accepted mix designs meet the chloride penetration resistance limit of 1500 coulombs based on AASHTO T277. Quarterly chloride resistance test results exceeding 1500 coulombs, the department will require adjustment of the concrete mix going forward to improve the chloride penetration resistance.

715.2.2 Class I Concrete Mixes

Supplement standard spec 715.2.2.2 with the following:

715.2.2.2 Structures

- (5) Provide a mix design using optimized aggregate gradation and a cementitious content within the range of 470 to 540 pounds per cubic yard. For all superstructure and substructure concrete, unless the engineer approves otherwise in writing, concrete mixtures must use an IL, IP, IS, or IT blended cement.
- (6) In addition to the standard spec mix design laboratory trial batching for structures, include the results of the following tests:
 - 1. AASHTO T119 Slump of Hydraulic Cement Concrete.
 - 2. AASHTO T277 Rapid Determination of the Chloride Permeability of Concrete, using the modified curing procedure according to 710.5.8 in this special provision.
- (7) Provide concrete with a 28-day compressive strength that equals or exceeds the following:
 - If the contract specifies f'c, then f'c.
 - If the contract does not specify f'c, then 4000 psi.
- (8) Provide concrete with a maximum chloride penetration resistance of 1500 coulombs at 28-days.

118. Truck Entering Warning System, SPV 0045.1001.

A Description

This special provision describes furnishing, installing, integrating, calibrating, making functional, and maintaining a Truck Entering Warning System to provide advance warning of construction vehicles merging into the traffic stream. The warning system must be functional at all times for the respective work zone is in use.

This system will include one solar powered flashing beacon sign (FBS) with a static traffic control sign, a wireless sensor system to detect construction vehicle traffic as it is about to merge into the traffic stream, and communications between the sensor and the FBS that will activate the sign upon detection of a merging construction vehicle.

B Materials

B.1 Traffic Detection System

Provide a Traffic Detection System that is non-intrusive to the roadway pavement. Locate the portable traffic sensor(s) (PTS) to provide a maximum 5 second delay, or other time as directed by the engineer, between the construction vehicle reaching the access point and trigger the FBS beacon activation.

B.2 Static Traffic Control Signs with Temporary Flashing Beacon Signs (FBS)

Provide static traffic control signs conforming to standard spec 643 and Standard Sign Plate W8-77. Provide temporary FBS conforming to the standard spec 658.2.2, Traffic Signal Faces.

B.3 Automated System Manager (ASM)

Provide an ASM that assesses current detector data captured by the traffic detection system that activates/deactivates the FBS based on work zone vehicle truck locations.

B.4 System Communications

Ensure Truck Entering Warning System communications meet the following requirements:

- 1. Perform required configuration of the Truck Entering Warning System's communication system automatically during system initialization.
- 2. Communication between the server and the FBS or PTS are independent throughout the full range of deployed locations, and do not rely upon communications with any other FBS or PTS.
- 3. Incorporate an error detection/correction mechanism into the Truck Entering Warning System to ensure the integrity of all traffic condition data and motorist information messages.
- 4. All communications systems within this system shall be certified to be compliant with all pertinent F.C.C. regulations.

B.5 System Acceptance

Submit vendor verification to the engineer 14 calendar days before the pre-construction meeting that the system will adequately perform the functions specified in this special provision. Adequate verification includes past successful use of the system by other agencies, and/or demonstration of the system.

Provide contact information for a designated representative responsible for monitoring the performance of the system and for making modifications to the operational settings as the engineer directs.

Provide all testing and calibration equipment.

C Construction

C.1 General

Install and reposition Truck Entering Warning System per plan or as the engineer directs. FBS are typically located 1500' in advance of the truck merging location. Quantity and location of the detectors shall be determined by the contractor.

Provide technical personnel for all system calibration, operation, maintenance, and timely on-call support services.

Promptly correct the system within 24 hours of becoming aware of a deficiency in the operation or individual part of the system. A minimum of three days before deployment, place the Truck Entering Warning System and demonstrate to the department that the Truck Entering Warning System is operational.

Maintain the Truck Entering Warning System for the duration identified in the plan. Ensure the system operates continuously during work hours throughout the duration of the project.

Remove the system upon completion.

C.2 Meetings

Attend mandatory in-person/virtual pre-construction meetings with the department. Attend additional meetings as deemed necessary by the department. These meetings may be held in person or via teleconference, as scheduled by the department.

C.3 Programming

C.3.1 General

Program the Truck Entering Warning System to ensure the following general operations are performed:

- 1. Provide a password protected login to the ASM and all other databases.
- 2. Ensure the system autonomously restarts in case of any power failure.

C.3.2 System Operations Strategy

Arrange for the vendor/manufacturer to coordinate system operation, detection, and trends/thresholds with the engineer.

FBS shall be activated to give approaching traffic adequate advance warning and be activated throughout the vehicles entrance onto the highway.

C.4 Calibration and Testing

At the beginning of the project and monthly throughout the duration of the project, perform a successful field test and calibration to verify the system is accurately detecting trucks entering the highway and accurately relaying the information to the ASM and FBS.

Send email of successful calibration and testing to the engineer.

D Measurement

The department will measure Truck Entering Warning System by the day, acceptably completed, measured as each complete system per access location.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV 0045.1001	Truck Entering Warning System	DAY

Payment is full compensation for providing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing the complete system consisting of FBS, PTS, ASM, and system communications.

Failure to correct a deficiency to the FBS, PTS, or ASM within 24 hours after notification from the engineer or the department will result in a one-day deduction of the measured quantity for each day in which the deficiency is not corrected.

It is the engineer's sole discretion to assess the deductions for an improperly working Truck Entering Warning System.

119. Combination Work Zone Digital Speed Limit – Speed Feedback Sign Trailer, Item SPV.0045.1002.

A Description

This special provision describes furnishing, installing, repositioning, operating, maintaining, monitoring, calibrating, testing and removing a combination work zone digital speed limit – speed feedback (WZDSL-SF) sign trailer as the engineer directs.

B Materials

Furnish items from the department's approved proprietary products list.

B.1 Automated System Manager (ASM)

Provide an ASM that assesses current traffic data captured by the traffic sensors and displays appropriate speeds/messages to the motorists through the speed feedback sign based on predetermined speed thresholds.

C Construction

C.1 General

The digital speed limit shall be continuously displayed. All speeds displayed must be approved by the engineer.

There shall not be any conflicting speed limits displayed throughout the project limits.

The contractor will be responsible for coordinating with the engineer when the Work Zone Speed Limits are to be changed.

Place WZDSL-SF trailer within the project limits as the engineer directs. Move the WZDSL-SF trailer to a new location within the project limits every 21 days, or as the engineer directs.

Placement of WZDSL-SF signs shall be on the right side of the road unless infeasible or as directed by the engineer. Placement of signs shall not interfere with the function of existing signs or roadside devices.

Provide technical personnel for all system calibration, operation, maintenance, and timely on-call support services.

Upon notification of a deficiency in the operation of the system, or individual part of the system, corrections to the system must be made within 24 hours.

Maintain the WZDSL-SF trailer for the duration of the project or as directed by the engineer. Ensure the system operates continuously (24 hours, 7 days a week) throughout the duration of the project.

Remove WZDSL-SF once the project is completed.

C.2 Reports

Provide an electronic copy via email of all data to the engineer in the form of a weekly summary report that includes, at a minimum, speed data, the dates/times and locations of the speed limit changes along with their corresponding speed values. The reports shall also include the speed data in either 1 minute, 5 minute or 15 minutes bins, as directed by the engineer.

C.3 Meetings

Attend mandatory in-person/virtual pre-construction meetings with the department. Additional meetings with the department may be required on a periodic basis. These meetings may be held in person or virtually, as scheduled by the department.

C.4 Programming

C.4.1 General

Program the WZDSL-SF to ensure that the following general operations are performed:

- 1. Provide a password protected login to the ASM, website and all other databases.
- 2. Provide real-time data from the ASM to a website and refresh every 60 seconds. The website should have a full-color mapping feature. Data on the website should be available to the department staff at all times for the duration of the work zone activity and should include:
 - Vehicle speeds
 - Dates and Times of Speed Limit Changes
 - Device locations
- 3. Archive all traffic data in a Microsoft excel format with date and time stamps.
- 4. Configure the website to quantify system failures which includes traffic sensor malfunction, loss of power, low battery, etc.
- 5. Ensure the device autonomously restarts in case of any power failure.
- 6. Provide the department access to manually override the WZDSL-SF trailer for a user-specified duration. Document all override messages.
- 7. The WZDSL-SF trailer and it's remote management software shall be able to provide a real-time API feed (updated at least once a minute with any new information) conforming to the latest version of the FHWA's <u>Work Zone Data Exchange (WZDx)</u> (<u>https://www.transportation.gov/data/wzdx</u>) format as well as make the feed publicly available to any Agency-approved third parties. This feed shall include the following elements (at a minimum); Device Name, Device Position, Current Display Message and Device Status (on/offline) when the WZDSL-SF has an ACTIVE display message posted. The feed should also include the <Road_Name>, <Road_Direction>, <Mile_Marker> when possible, when on Interstate and State Highway routes.
- 8. A <u>Waze</u> compatible data push should also be provided, to allow the WZDSL-SF to be autolocated as an ON_ROAD_CONSTRUCTION (hardhat icon) alert with the following associated description (<40 characters) "WORK ZONE SPEED LIMIT - XX MPH", where XX is automatically populated with the current speed display value. The WZDSL-SF location feeds shall include all active devices. The event location shall be updated at least once a minute, if the device changes position. The event shall be removed when the Display is Blank. Waze events shall be visible on <u>Waze web map</u> and on smartphones generate a driver alert for an approaching motorist actively using the Waze app with notifications activated.

C.4.2 System Operation

Speed Feedback Conditions: The Speed Feedback Display shall provide the following four feedback displays depending on the speed of each approaching vehicle.

<u>Feedback Condition 1</u>: If an approaching vehicle is </= Posted Speed (on the above WZDSL) + 4 mph, then the display shall show the approaching vehicle's speed in large bold font visible from at least 750 feet away.

<u>Feedback Condition 2</u>: If an approaching vehicle is 5 to 9 mph > Posted Speed (on the above WZDSL), then the display shall Flash the approaching vehicle's speed in large bold font visible from at least 750 feet away. The flash rate shall be 5 cycles per second (0.1 second ON and 0.1 second OFF).

<u>Feedback Condition 3</u>: If an approaching vehicle is 10 to 14 mph > Posted Speed (on the above WZDSL), then the display shall alternate flashing the approaching vehicle's speed and the words "SLOW" and "DOWN" on three (3) separate frames in large bold font visible from at least 750 feet away. In addition, the display shall provide 4 beacons in the four (4) corners of the display that rapid flash. There shall be an option to activate or deactivate the beacons based on agency preference/practice. The flash rate of the numbers and words shall be 5 cycles per second (0.1 second ON and 0.1 second OFF) and the flash rate of the beacons (below) is 10 cycles per second.

<u>Feedback Condition 4</u>: If an approaching vehicle is 15 mph > Posted Speed (on the above WZDSL), then the display shall alternate flashing the words "SLOW" and "DOWN" on two (2) separate frames in large bold font visible from at least 750 feet away. In addition, the display shall provide 4 beacons in the four (4) corners of the display that rapid flash. There shall be an option to

activate or deactivate the beacons based on agency preference/practice. The flash rate of the words shall be 5 cycles per second (0.1 second ON and 0.1 second OFF) and the flash rate of the beacons (below) is 10 cycles per second.

C.5 Calibration and Testing

Perform a successful field test and calibration at the WZDSL-SF trailer location to verify the system is detecting accurate vehicle speeds and accurately relaying the information to the ASM and then to the speed feedback sign at the beginning of the project.

Send email of successful calibration and testing to the engineer.

D Measurement

The department will measure each Combination Work Zone Digital Speed Limit – Speed Feedback Sign Trailer by the day, 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.0045.1002	Combination Work Zone Digital Speed Limit – Speed Feedback Sign Trailer	DAY

Payment is full compensation for furnishing, installing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing the WZDSL-SF trailer.

Failure to correct a deficiency within 24 hours after notification from the engineer or the department will result in a one day deduction of the measured quantity for each day in which the deficiency is not corrected.

Failure to correct the website within 24 hours after notification from the engineer will result in a 10% reduction of the day quantity for each day the website is down.

It is the engineer's sole discretion to assess the deductions for an improperly working WZDSL-SF trailer.

120. Maintain and Remove Crash Cushions Temporary Left In Place, Item SPV.0060.0010.

A Description

This special provision describes maintaining and removing crash cushions left in place according to standard spec 614 and as hereinafter provided.

B Materials

Furnish any replacement materials for the temporary crash cushions left in place by others according to the pertinent requirements of standard spec 614.2.

C Construction

Maintain and remove the temporary crash cushion according to standard spec 614.3.4.

D Measurement

The department will measure Maintain and Remove Crash Cushions Temporary Left In Place as each individual crash cushion location, 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.0060.0010	Maintain and Remove Crash Cushions Temporary Left In Place	EACH

Payment is full compensation for maintaining and removing the crash cushions.

121. Marking Contrast Epoxy Special Marking Arrow, Item SPV.0060.0020; Marking Contrast Epoxy Special Marking Words, Item SPV.0060.0021

A Description:

This special provision describes furnishing and installing contrast epoxy special pavement marking according to standard spec 646.

B Materials:

Furnish epoxy pavement marking materials according to standard spec 646.

C Construction:

Contractor shall apply the 1 ½ wide black epoxy around the perimeter of the special marking. Construct epoxy pavement marking according to the pertinent requirements of standard spec 646.3.

D Measurement:

Shall be according to standard spec 646.4 and measured by each arrow or only special marking applied.

E Payment:

Payment for this item is full compensation for preparing the surface, for providing all marking, for protecting until cured; and for replacing marking improperly constructed or failures during the proving period.

The department will pay for measured quantities at the contract unit price under the following bid items:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0020	Marking Contrast Epoxy Special Marking Arrow	EACH
SPV.0060.0021	Marking Contrast Epoxy Special Marking Words	EACH

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; furnishing, placing, and removing temporary pavement marking, if necessary.

122. Concrete Barrier Transition Type G1, Item SPV.0060.0101; Concrete Barrier Transition Type G2, Item SPV.0060.0102; Concrete Barrier Transition Type M1, Item SPV.0060.0103; Concrete Barrier Transition Type M2, Item SPV.0060.0104; Concrete Barrier Transition Type M3, Item SPV.0060.0105; Concrete Barrier Transition Type M4, Item SPV.0060.0106.

A Description

This special provision describes constructing Concrete Barrier Transition (Type) according to standard spec 603, details shown in the plans, and as hereinafter provided.

- **B** (Vacant)
- C (Vacant)

D Measurement

The department will measure Concrete Barrier Transition (Type) by each individual unit, acceptably placed according to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0101	Concrete Barrier Transition Type G1	EACH
SPV.0060.0102	Concrete Barrier Transition Type G2	EACH
SPV.0060.0103	Concrete Barrier Transition Type M1	EACH
SPV.0060.0104	Concrete Barrier Transition Type M2	EACH
SPV.0060.0105	Concrete Barrier Transition Type M3	EACH
SPV.0060.0106	Concrete Barrier Transition Type M4	EACH

123. Temporary Storm Sewer Plug, Item SPV.0060.0107.

A Description

Install a Storm Sewer Plug at locations specified in the plans

B Materials

Provide a precast reinforced concrete plug or an engineer approved alternative, conforming to the inside diameter of the corresponding pipe as shown on the plan.

All materials, if concrete, must conform to standard spec 501 and standard spec 611.

C Construction

Place a watertight plug in the end of the storm sewer pipe in a manner that seals the pipe but allows for future removal of plug without damaging the storm sewer pipe.

D Measurement

The department will measure Storm Sewer Plug as each individual 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.0060.0107	Storm Sewer Plug	EACH

Payment is full compensation for furnishing and installing all required materials.

124. Structural Concrete Collar, Item SPV.0060.0108.

A Description

This special provision describes structural concrete collar for storm sewer pipes to structure connections at locations shown on the plans.

B Materials

Furnish concrete for structural concrete collar conforming to standard spec 520.2.4.

Furnish mortar for structural concrete collar conforming to standard spec 611.2 (1).

C Construction

Construct structural concrete collars at the locations and extents as shown in the plans. Construct and place structural concrete collars as specified in the plans and conforming to standard spec 611 and 608.

Ensure structural concrete collar creates a watertight seal between pipe and structure.

D Measurement

The department will measure Structural Concrete Collar by the each, 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.0060.0108	Structural Concrete Collar	EACH

Payment is full compensation for installing and providing all materials necessary to complete the work.

125. Outlet Control Manhole 10X10 FT, Item SPV.0060.0109.

A Description

This special provision describes furnishing and installing manhole structures with baffle walls for storm sewer in-line detention.

B Materials

Furnish concrete manhole structures with a baffle wall and restrictor holes that are according to standard spec 501 and 611 and as shown on the plans.

C Construction

Field verify all existing connections. Ensure the sump depth as shown on the plans is 2-feet below the lowest pipe invert.

Conform to standard spec 611.

D Measurement

The department will measure Outlet Control Manhole by 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.0060.0109	Outlet Control Manhole 10x10-FT	EACH

Payment is full compensation for furnishing and installing Outlet Control Manhole.

126. Reconnect Storm Sewer, Item SPV.0060.0110.

A Description

This special provision describes connecting proposed storm sewer pipe/structures to existing storm sewer pipe/structures or proposed pipe/structures.

B Materials

Use concrete masonry for concrete collar conforming to standard spec 520.2.4.

Furnish storm sewer pipe according to standard spec 608.2

C Construction

Remove existing concrete collars, pipe seals, end walls, or temporary storm sewer plugs constructed under previous projects or in earlier stages of this project as necessary to reconnect storm sewer. Ensure that positive drainage is achieved when connecting proposed pipe to existing structures or storm sewer. Salvage any structurally sound pipe that requires removal if prior approval is granted by the engineer. Make all necessary connections using the appropriate coupling, concrete collar, or by means approved by the engineer.

D Measurement

The department will measure Reconnect Storm Sewer as each location as specified in the plans, 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.0060.0110	Reconnect Storm Sewer	EACH

Payment is full compensation for performing all work; removing seals, end walls and concrete collars, providing all materials, coring, couplings, concrete collars. Any additional pipe or materials required to reconnect the storm sewer shall be considered incidental to this bid item.

127. Inlets Type Tee Special, Item SPV.0060.0111.

A Description

This special provision describes furnishing and installing inlets according to the pertinent provisions of standard spec 611, as shown on the plans and as hereinafter provided.

B Materials

Conform to standard spec 611.2.

C Construction

Construct Inlets Type Tee Special to the dimensions specified in the plans.

D Measurement

The department will measure Inlets Type Tee Special as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid items:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.106	Inlets Type Tee Special	EACH

Payment is full compensation for providing all materials, including all masonry for chimney and pipe, sewer connections, steps and other fittings; for all excavating, backfilling, disposing of surplus material, and for cleaning out and restoring the work site; for all covers, including frames, grates and lids.

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128. Fastening Sewer Access Covers, Item SPV.0060.0200.

A Description

This special provision describes sealing, maintaining, and removing sealant for sewer access covers.

B Materials

Furnish preformed butyl rubber based sealant conforming to ASTM C990 Section 6.2. Size the preformed joint sealant to fill the joint to 50% of its annular volume when assembled.

C Construction

Open the sewer access cover, inspect the frame and grate, and remove material that will interfere with the sealant application from the cover and casting. Apply sealant in a continuous ring around the frame without stretching. Knead the ends together with no overlap.

Monitor performance during the project and maintain as needed. Remove sealant after traffic is shifted into its final configuration.

D Measurement

The department will measure Fastening Sewer Access Covers as each individual cover, 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.0060.0200	Fastening Sewer Access Covers	EACH

Payment is full compensation for providing and maintaining sealed covers; and removing sealant.

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129. Manhole, 10X10-FT SPV.0060.0208.

A Description

This special provision describes furnishing and installing 10-FT x 10-FT box manhole.

B Materials

Furnish concrete manhole structures that are according to standard spec 501 and 611 and as shown on the plans.

C Construction

Field verify all existing connections.

Conform to standard spec 611.

D Measurement

The department will measure Manhole 10X10-FT by 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.0060.0208	Manhole 10X10-FT	EACH

Payment is full compensation for furnishing and installing Manhole 10X10-FT and all incidentals to complete the work.

130. Baseline CPM Progress Schedule, Item SPV.0060.0601; Monthly CPM Progress Schedule Updates, Item SPV.0060.0602.

Replace standard spec 108.4 with the following:

108.4 Critical Path Method Progress Schedule

108.4.1 Definitions

The department defines terms used in 108.4 as follows:

Activity	An administrative or construction task performed during the course of the project with a defined duration, and scheduled (or actual) start and finish dates.
Critical Path	The longest continuous chain of activities through the CPM schedule that establishes the minimum overall project duration.
Construction Activity	Construction activities are discrete work activities performed by the contractor, subcontractors, utilities, or third parties within the project limits.
CPM Progress Schedule	A Critical Path Method (CPM) Progress Schedule is a network of logically related activities. The CPM schedule calculates when activities can be performed and establishes the critical or longest continuous path or paths of activities through the project.
Float	Float, as used in this special provision, is the total float of an activity; i.e., it is the amount of time between the date when an activity can start (the early start), and the date when an activity must start (the late start). In cases where the total float of an activity has a different value when calculated based on the finish dates, the lower (more critical) value will govern.
Forecast Completion Date	The completion date predicted by the latest accepted CPM Update, which may be earlier or later than the contract completion date, depending on progress.
Fragnet	A group of logically-related activities, typically inserted into an existing CPM schedule to model a portion of the project, such as the work associated with a change order.
Initial Work Plan	The initial work plan is a time-scaled CPM schedule showing detailed activities for the first 90 calendar days of work and summary level activities for the remainder of the project.
Intermediate Milestone Date	A contractually required date for the completion of a portion of the work, so that a subsequent portion of the work or stage of traffic phasing may proceed.
Department's Project Schedule Template	The department's project schedule template for the overall IH 43 North South Freeway Program, including interim and final contract completion dates, and containing codes for use as a template for the development of the contractor's schedule.

Work Breakdown Structure (WBS) A framework for organizing the activities that make up a project by breaking the project into successively greater detail by level. A WBS organizes the project work. It does not address the sequencing and scheduling of project activities.

108.4.2 Department's Project Schedule Template

108.4.2.1 Project Schedule

Within five business days after award, the department will provide its current Project Schedule Template. containing intermediate milestone constraints, standard activity codes, and a standard WBS for the contractor to use to develop its schedule.

108.4.2.2 Use of Project Schedule Template

The Project Schedule Template provides information to assist the contractor in preparing its schedule. The Project Schedule Template is not a contract document. The logic contained in the Project's Schedule Template is not intended to alter or supplement contract requirements for the phasing of the work, but to reflect those requirements.

108.4.3 Contractor's Scheduling Responsibilities

Prepare and submit a CPM progress schedule that accurately reflects the plan for the performance of the work, based on the physical requirements of the Work, and Traffic Phasing requirements. The CPM schedule is the contractor's committed plan to complete all work within the completion deadlines. Full responsibility is assumed for the prosecution of the work as shown. The CPM schedule is not part of the contract. Schedule the Work in the manner required to achieve the completion date and interim completion dates specified in the Prosecution and Progress Special Provision. The contractor will schedule and attend a CPM Initial Workshop. If necessary, the engineer may modify the workshop schedule to ensure attendance by the necessary department and contractor personnel; however, the CPM Initial Workshop must be completed prior to issuing the Notice to Proceed. The CPM Initial workshop will include:

- 1. Department presentation of the use of CPM scheduling on the project and presentation of the department's master schedule.
- 2. Contractor presentation of the conceptual work plan for the project.
- Department and contractor discussion of the level of detail on features in the CPM Initial Work Plan and the Baseline CPM Progress Schedule.

Use the department-provided Project Schedule Template to develop the Initial Work Plan and the Baseline CPM Progress Schedule. Use the Project's Schedule Template ID coding structure to categorize activities by Contract, Stage, Location, and Responsibility to ensure compatibility with the Project Schedule Template and with schedules prepared by other contractors. Add additional activity codes as necessary, but do not delete the coding structure provided.

To ensure compatibility with the Project Schedule Template, use the latest version of Primavera P6 Project Management, by Oracle Corporation, Redwood Shores, CA, to prepare the Initial Work Plan, Baseline CPM Progress Schedule, and Monthly CPM Updates.

Designate a Project Scheduler who will be responsible for scheduling the Work and submit a professional resume describing a minimum of three years of scheduling experience on urban, interstate-highway reconstruction work of similar size and complexity, including recent experience with P6. Obtain approval of the submitted resume before scheduling the work.

108.4.4 Submittals

108.4.4.1 Initial Work Plan

Within ten business days after the CPM Initial Work Plan Workshop, submit an Initial Work Plan as follows:

- 1. Develop the Initial Work Plan using the Project Schedule Template. Identify the contemplated start and completion dates for each activity.
- 2. Provide a detailed plan of activities to be performed within the first 90 calendar days of the contract. Provide construction activities with durations not greater than 28 calendar days (20 business days), unless the engineer accepts requested exceptions.
- 3. Provide activities as necessary to depict administrative work, including submittals, reviews, and procurements that will occur within the first 90 calendar days of the contract. Show additional activities that require department review or approval. Activities other than construction activities may have durations

greater than 28 calendar days (20 business days). Allow 21 calendar days (15 business days) for department review of submittals.

- 4. Provide summary activities for the balance of the project. Summary activities may have durations greater than 28 calendar days (20 business days).
- 5. Submit electronic copies of the Initial Work Plan and the corresponding Oracle Primavera P6 schedule (XER) in a format acceptable to the engineer.
- 6. The engineer will accept the contractor's Initial Work Plan or provide comments within five business days after receipt of the Initial Work Plan. Address comments and resubmit the Initial Work Plan as necessary. Do not begin work until the engineer accepts the Initial Work Plan. The department will use the initial work plan to monitor the progress of the work until the Baseline CPM Progress Schedule is accepted.
- 7. Submit an updated version of the Initial Work Plan monthly until the engineer accepts the Baseline CPM Progress Schedule. With each update, include actual start dates, completion percentages, and remaining durations for activities started but not completed. Include actual finish dates for completed activities.
- 8. Ensure the Initial Work Plan shows completing the work within the interim completion dates and specified completion date.
- 9. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.

108.4.4.2 Baseline CPM Progress Schedule

Within 15 business days after the CPM Initial Workshop, submit a Baseline CPM Progress Schedule and written narrative. The department will use the schedule to monitor the progress of the work.

- 1. Develop the Baseline CPM using the Project Schedule Template. The Baseline CPM is the contractor's committed plan to complete the Work within the time frames required to achieve the contract completion date and intermediate milestone dates.
 - 1.1. Provide a detailed plan of activities to be performed during the entire contract duration, including all administrative and construction activities required to complete the work as described in the contract documents. Provide construction activities with durations not greater than 28 calendar days (20 business days), unless the engineer accepts requested exceptions.
 - 1.2. Provide activities as necessary to depict administrative work, including submittals, reviews, procurements, inspections, and all else necessary to complete the work as described in the contract documents. Activities other than construction activities may have durations greater than 28 calendar days (20 business days). Allow 21 calendar days (15 business days) for department review of submittals.
 - 1.3. Submit a temporary drainage plan showing the interface between various stages of a project as well as the interface with adjacent projects.
 - 1.4. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.
 - 1.5. Show completing the work within interim completion dates and the specified completion date.
 - 1.6. Provide summary activities for the balance of the project. Summary activities may have durations greater than 28 calendar days (20 business days).
 - 1.7. Provide activities as necessary to depict third party work related to the contract.
 - 1.8. Make allowance for specified work restrictions, non-working days, time constraints, calendars, and weather; and reflect involvement and reviews by the department, and coordination with adjacent contractors, utility owners, and other third parties.
 - 1.9. With the exception of the Project Start Milestone and Project Completion Milestone, all activities must have predecessors and successors. The start of an activity shall have a Start-to-Start or Finish-to-Start relationship with preceding activities. The completion of an activity shall have a Finish-to-Start or Finish-to-Finish relationship with succeeding activities. Do not use Start-to-Finish relationships. Do not use Finish-to-Start relationships with a lag unless the engineer accepts requested exceptions.
 - 1.10. Schedule all intermediate milestones in the proper sequence and input as either a "Start-no-Earlier-Than" or "Finish-no-Later-Than" date. Provide predecessors and successors for each intermediate milestone as necessary to model each Stage of the Work. Unless the engineer accepts a requested exception, the schedule should encompass all the time in the contract period between the starting date and the specified completion date.
 - 1.11. Using the bid quantities and unit prices, develop an anticipated cash-flow curve for the project, based on the Baseline CPM.
- 2. Provide three hard copies of a hand-drawn or electronically drafted logic diagram depicting the CPM network. Organize the logic diagram by grouping related activities, based on the activity codes in the CPM.
- 3. Provide a written narrative with the baseline CPM explaining the planned sequence of work, as-planned critical path, critical activities for achieving intermediate milestone dates, traffic phasing, and planned labor and equipment resources. Use the narrative to further explain:

- 3.1. The basis for activity durations in terms of production rates for each major type of work (number of shifts per day and number of hours per shift), and equipment usage and limitations.
- 3.2. Use of constraints.
- 3.3. Use of calendars.
- 3.4. Estimated number of adverse weather days on a monthly-basis.
- 3.5. Scheduling of permit and environmental constraints, and coordination of the schedule with other contractors, utilities, and public entities.

Submit electronic copies of the Baseline CPM and the corresponding Oracle Primavera P6 schedule file (XER) in a format acceptable to the engineer.

Within 10 business days of receiving the Baseline CPM, the engineer will provide comments and schedule a meeting for the contractor to present its Baseline CPM and answer questions raised in the engineer's review.

At the meeting scheduled by the engineer, provide a presentation of the Baseline CPM. In the presentation, include a discussion of the staging and sequencing of the work, understanding of traffic phasing, and application of labor and equipment resources to the work. Address comments raised in the engineer's review.

Within five business days after the meeting, the engineer will accept the contractor's Baseline CPM schedule or provide comments. Address the engineer's comments and resubmit a revised Baseline CPM within ten business days after the engineer's request. If the engineer requests justification for activity durations, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.

The department will only make progress payments for the value of materials, as specified in 109.6.3.2, until the contractor has submitted the Baseline CPM Schedule. The department will retain 10 percent of each estimate until the department accepts the Baseline CPM Schedule.

The engineer will accept the Baseline CPM based solely on whether the schedule is complete as specified in this section. The engineer's acceptance of the schedule does not modify the contract or validate the schedule.

The department will not consider requests for contract time extensions as specified in 108.10 or additional compensation for delay specified in 109.4.7 until the department accepts the Baseline CPM schedule.

108.4.4.3 Monthly CPM Updates

Submit CPM Updates on a monthly basis after acceptance of the Baseline CPM as follows:

- 1. Include actual start dates, completion percentages, and remaining durations for activities started but not completed, and actual finish dates for completed activities, through the final acceptance of the project.
- 2. Include additional activities as necessary to depict additions to the contract by changes and logic revisions as necessary to reflect changes in the contractor's plan for prosecuting the work.
- 3. Include a narrative report that includes a brief description of monthly progress, changes to the critical path from the previous update, sources of delay, potential problems, work planned for the next 30 calendar days, and changes to the CPM schedule. Changes to the logic of the CPM schedule include the addition or deletion of activities and changes to activity descriptions, original durations, relationships, constraints, calendars, or previously recorded actual dates. Justify changes to the CPM schedule in the narrative by describing associated changes in the planned methods or manner of performing the work or changes in the work itself.
- 4. Submit electronic copies of each CPM Update and the corresponding Oracle Primavera P6 schedule file (XER) in a format acceptable to the engineer.
- 5. If additions or changes were made to the CPM schedule since the previous update, submit an updated hard copy of the revised logic diagram.

Within five business days of receiving each CPM Update, the engineer will provide comments and schedule a meeting as necessary to address comments raised in the engineer's review. Address the engineer's comments and resubmit a revised CPM Update within five business days after the engineer's request.

108.4.4.4 Three-Week Look-Ahead Schedules

Submit Three-Week Look-Ahead Schedules on a weekly basis after the notice to proceed (NTP). The schedule can be hand drawn or generated by computer. With each Three-Week Look-Ahead include:

- 1. Activities underway and as-built dates for the past week.
- 2. Actual as-built dates for completed activities through final acceptance of the project.

- 3. Planned work for the upcoming two-week period.
- 4. The activities underway and critical RFIs and submittals, based on the CPM schedule.
- 5. Details on other activities not individually represented in the CPM schedule.

On a weekly basis, the department and the contractor shall agree on the as-built dates depicted in the Three-Week Look-Ahead schedule or document all disagreements. Use the as-built dates from the Three-Week Look-Ahead schedules for the month when updating the CPM schedule.

108.4.4.5 Weekly Production Data

Provide estimated and actual weekly production rates for items of work on a weekly basis as follows:

- 1. Data on the following items by area or station:
 - 1.1. Roadway Excavation—CY per week
 - 1.2. Roadway Structural Section
 - 1.2.1. Grading/Subgrade Preparation—SY
 - 1.2.2. Base Material Placement-Ton
 - 1.2.3. Base Material Subgrade Preparation—SY
 - 1.2.4. Asphalt Pavement—Ton
 - 1.2.5. Concrete Pavement SY
- 2. The actual daily production for the past week and the anticipated weekly production for the next week.

Submit the data in an electronic spreadsheet format at the same time the Three-Week Look-Ahead is submitted. On a weekly basis, the department and the contractor shall agree on the production data or document all disagreements.

108.4.5 Progress Review Meetings

108.4.5.1 Weekly Progress Review Meetings

After completing the weekly submittal of the Three-Week Look-Ahead and production data, attend a weekly meeting to review the submittals with the department. At the meeting, address comments as necessary, and document agreement or disagreement with the department.

108.4.5.2 Monthly Update Review Meetings

After submitting the monthly update and receiving the engineer's comments, attend a job-site meeting, as scheduled by the engineer, to review the progress of the schedule. At that meeting, address comments as necessary, and document agreement or disagreement with the department. The monthly meeting will be coordinated to take place on the same day and immediately before or after a weekly meeting, whenever possible.

108.4.6 CPM Progress Schedule Revisions

Revision by the contractor if necessary due to changes in the Work or project conditions and authorized by the engineer, a CPM Progress Schedule Revision may be submitted, although the next Monthly CPM Update is not yet due. Prepare the CPM Revision in the same format as required for Monthly CPM Updates, including justification for changes to the schedule. The process for comment and acceptance of a CPM Revision will be the same as for Monthly CPM Updates. If the CPM Revision is accepted, prepare the next monthly update based on the revised CPM. If the CPM Revision is rejected, prepare the next monthly update based on the previous month's update.

Engineer's Right to Request Revisions—The engineer will monitor the progress of the work and may request revisions to the CPM schedule. Revise the schedule as requested by the engineer and submit a CPM Progress Schedule Revision within 10 business days of the request. The process for comment and acceptance of a CPM Revision will be the same as for Monthly CPM Updates. The engineer may request that the contractor revise the CPM schedule for one or more of the following reasons:

- 1. The forecast completion date is scheduled to occur more than 14 calendar days after the contract completion date.
- 2. An intermediate milestone is scheduled to occur more than 14 calendar days after the date required by the contract.
- 3. The engineer determines that the progress of the work differs significantly from the current schedule.
- 4. A contract change order requires the addition, deletion, or revision of activities that causes a change in the contractor's work sequence or the method and manner of performing the work.

108.4.7 Documentation Required for Time Extension Requests

To request a time extension to an intermediate milestone date or the contract completion date associated with changes to the work, provide a narrative detailing the work added or deleted and the other activities affected, based on the latest accepted CPM Update. For added work, submit a proposed fragnet of activities to be added or revised in the CPM schedule, indicating how the fragnet is to be tied to the CPM schedule.

To request a time extension to an intermediate milestone date or the contract completion date associated with delays to the work, provide a narrative detailing the affected activities and the cause of the delay, based on the latest accepted CPM Update. Requests for time extensions due to delays should meet the following criteria:

- 1. For requests to extend the contract completion date, include a description of how the delay affected the project's critical path, based on the latest accepted CPM Update.
- 2. For requests to extend an intermediate milestone date, include a description of how the delay affected the controlling (longest) path to the milestone, based on the latest accepted CPM Update.
- 3. The department and the contractor agree that the float is not for the exclusive use or financial benefit of either party. Either party has the full use of the float on a first come basis until it is depleted.

108.4.8 Payment for CPM Progress Schedule

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0601	Baseline CPM Progress Schedule	EACH
SPV.0060.0602	Monthly CPM Progress Schedule Updates	EACH

The department will only make progress payments for the value of materials, as specified in 109.6.3.2.1, until the Baseline CPM schedule has been submitted. The department will retain ten percent of each estimate until the department accepts the Baseline CPM schedule.

The department will only make progress payments for the value of materials, as specified in 109.6.3.2.1, until the Monthly CPM schedule updates have been submitted. The department will retain 10 percent of each estimate until the department accepts the Monthly CPM schedule update.

Payment is full compensation for all work required under these bid items. The department will pay the contract unit price for the Baseline CPM schedule after the department accepts the schedule. Then, the department will pay the contract unit price for each Monthly CPM Update, acceptably completed.

sef-108-005 (20180404)

131. Detention Pond Anti-Seep Collar, Item SPV.0060.0701.

A Description

This special provision describes furnishing and installing low permeable clay around pipes at pond outlet control structures at the locations shown on the plans.

B Materials

Furnish materials and testing of materials as specified in Item 640.1303.S of these special provisions.

C Construction

Construct clay anti-seep collars to the locations and extents as shown in the plans. Construct, place, and compact clay for anti-seep collars as specified in Item 640.1303.S of these special provisions.

D Measurement

The department will measure Detention Pond Anti-Seep Collar as each individual collar, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0206	Detention Pond Anti-Seep Collar	EACH

Payment is full compensation for dewatering areas of site where the low permeable clay is to be placed; for furnishing and placing and compacting the low permeable clay and all incidentals to complete the work

132. Traffic Control Close-Open Freeway Entrance Ramp, Item SPV.0060.0910.

A Description

This special provision describes closing and re-opening a freeway entrance ramp and exit ramp.

B (Vacant)

C Construction

Install or reposition traffic control devices required for closing a freeway entrance ramp and exit ramp. Remove or return traffic control devices to their previous configuration when the closure is no longer required.

D Measurement

The department will measure Traffic Control Close-Open Freeway Entrance Ramp by each individual ramp closure, 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.0060.0910	Traffic Control Close-Open Freeway Entrance Ramp	EACH

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials. Traffic Control devices will be paid separately.

sef-643-001 (20180627)

133. Traffic Control Full Freeway Closure, Item SPV.0060.0918.

A Description

This special provision describes closing and re-opening a freeway or expressway.

B (Vacant)

C Construction

Install or reposition traffic control devices required for a full freeway closure. Remove or return traffic control devices to their previous configuration when the full closure is no longer required.

D Measurement

The department will measure Traffic Control Full Freeway Closure by each individual freeway closure that is set up and later removed in each traffic direction, acceptably completed.

E Payment

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

SPV.0060.0918 Traffic Control Full Freeway Closure EACH

Payment is full compensation for closing and re-opening the freeway. Traffic Control devices will be paid separately.

sef-643-003 (20180627)

134. Install, Maintain, and Remove State Furnished Sign, Item SPV.0060.0920.

A Description

Work under this special provision shall comply with standard spec 638 as described for Erecting State Owned Signs, except as otherwise defined for this item.

B (Vacant)

C Construction

Remove state-owned signs, move signs to new locations, and erect signs as described in standard spec 638.3.7. Prior to installation contact Keegan Dole at (414) 640-1148 for locations of sign placement. At the completion of the project, remove the signs and return them to the WisDOT Sign Shop. Contact Randy Hoyt at (414) 227-4671 10 days in advance to arrange for delivery.

D Measurement

The department will measure Install, Maintain, and Remove State Furnished Sign by each individual sign location, acceptably installed and removed.

E Payment

The department will p	pay for measured quantities at the contract unit price under the following bid	item:
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0920	Install, Maintain, and Remove State Furnished Sign	EACH

Payment is full compensation for removing the sign, moving the sign, installing the sign, removing the sign at the end of the project, returning the sign to the WisDOT Sign Shop, and restoring the site. Payment does not include compensation for furnishing new wood posts, which are paid for under the pertinent contract bid item.

135. Emergency Response to Pavement Repairs, Item SPV.0060.0935.

A Description

This special provision describes providing prompt response to an emergency repair request of damaged or deteriorated concrete or HMA pavement located on IH 43, an IH 43 ramp, or a local road.

B (Vacant)

C Construction

The contractor shall provide staff, equipment, and materials to the incident site within 2 hours of receiving a repair request from the responding agency. The contractor shall consult with the department's representative on potential repair or replacement options to restore the damaged or deteriorated pavement section to a safe and drivable condition. Staff and equipment deployed shall be capable of completing the needed repairs as quickly as possible once repair work is started. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating and completing repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff and equipment within 2 hours of receiving a repair request, the department will assess the contractor liquidated damages for each 15-minute interval that the contractor is not present following the allotted 2 hour response time, as follows:

IH 43 Weekday:

- \$6,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Weekend:

- \$3,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Service Ramp

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Local Road:

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Lane rental fees will be assessed under the administrative item Failing to Open Road to Traffic.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

D Measurement

The department will measure Emergency Response to Pavement Repairs as each individual response, 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.0060.0935	Emergency Response to Pavement Repairs	EACH

Payment is full compensation for providing prompt response to an emergency repair request for damaged or deteriorated concrete or asphalt pavement located within the project's construction limits.

The cost of providing the appropriate level of on-call staff, equipment, and materials for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for concrete pavement or asphalt pavement repairs under the respective concrete pavement or asphalt pavement bid items in the contract.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

In addition to the liquidated damages detailed above, the department will not pay for any work performed under the bid item if contractor fails to respond within the allotted 2 hour response time.

136. Emergency Response to Traffic Involving Concrete Barrier Temporary, Item SPV.0060.0940.

A Description

This special provision describes providing prompt response to an emergency repair request for damaged and/or dislodged temporary concrete barrier located on IH 43 that is damaged or displaced due to a vehicular collision during the time this contract is in effect.

B (Vacant)

C Construction

The contractor shall provide staff, equipment, and materials to the incident site within 2 hours of receiving a repair request from the responding agency. The contractor shall consult with the department's representative on potential repair or replacement options to restore the temporary concrete barrier to proper working condition. Staff and equipment deployed shall be capable of completing the needed repairs as quickly as possible once repair work is started. Repair work shall be completed off the traveled way to the maximum extent allowable. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating and completing repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff and equipment within 2 hours of receiving a repair request, the department will assess the contractor liquidated damages for each 15-minute interval that the contractor is not present following the allotted 2 hour response time, as follows:

IH 43 Weekday:

- \$6,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Weekend:

- \$3,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Service Ramp

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Local Road:

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

For state-owned temporary barrier, repair work is covered under article Concrete Barrier Temporary Precast Left In Place of these special provisions.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

D Measurement

The department will measure Emergency Response to Traffic Incident Involving Concrete Barrier Temporary Precast as each individual response, 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.0060.0940 Emergency Response to Traffic Incident Involving Concrete Barrier Temporary Precast EACH

Payment is full compensation for providing prompt response to an emergency repair request for damaged and/or dislodged temporary concrete barrier located within the project's limits.

The cost of providing the appropriate level of on-call staff, equipment, and materials for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

In addition to the liquidated damages detailed above, the department will not pay for any work performed under the bid item if contractor fails to respond within the allotted 2 hour response time.

137. Emergency Response to Traffic Involving Crash Cushion, Item SPV.0060.0945.

A Description

This special provision describes providing prompt response to an emergency repair request for involving a damaged crash cushion device on IH 43 that is damaged or displaced due to a vehicular collision during the time this contract is in effect.

B (Vacant)

C Construction

The contractor shall provide appropriate staff to the incident site within 2 hours of receiving a repair request from the responding agency. Staff deployed shall be capable of immediately assessing the severity of the damage to the device. Consult with the department's representative on potential repair or

replacement options and the projected timeline to restore the roadside device to its proper working condition. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site for an incident with appropriate staff within 2 hours of receiving a repair request, the department will assess the contractor liquidated damages for each 15-minute interval that the contractor is not present following the allotted 2 hour response time, as follows:

IH 43 Weekday:

- \$6,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Weekend:

- \$3,000 per lane, per direction of travel, per hour broken into 15 minute increments

IH 43 Service Ramp

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Local Road:

- \$1,000 per lane, per direction of travel, per hour broken into 15 minute increments

Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

Once repair work has been started, work shall continue until completion. Repair work shall be completed off the traveled way to the maximum extent allowable.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

D Measurement

The department will measure Emergency Response to Traffic Incident Involving Crash Cushion as each individual response, 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.0060.0945	Emergency Response to Traffic Incident Involving Crash Cushion	EACH

Payment is full compensation for providing a prompt staff response to an emergency repair request for a damaged crash cushion device located within the project limits or associated with the project's traffic control.

The cost of providing the appropriate level of on-call staff 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

In addition to the liquidated damages detailed above, the department will not pay for any work performed under the bid item if contractor fails to respond within the allotted 2 hour response time.

138. Exposing Existing Infrastructure Paved Area, Item SPV.0060.0950.

A Description

This work includes locating and exposing existing infrastructure in paved areas as directed by the engineer. The contractor shall be responsible for compliance with s.182.0175 (2), Stats., with respect to

precautions to be taken to avoid and prevent damage to utility facilities. The location of existing utilities and infrastructure needed to complete the contract work shall be addressed independent of this provision. Conform to Wisconsin State Statute 182.0175 (2) and Wisconsin Administrative code Trans 220. The work includes exposing existing infrastructure, including utilities, under paved surfaces and providing both lateral and depth measurements for use in determining potential infrastructure conflict solutions, and backfilling.

B Materials

B.1 Backfill Slurry

Utilize backfill slurry as specified elsewhere in these special provisions.

C Construction

C.1 General

The location of existing utilities and infrastructure needed to complete the contract work shall be addressed independent of this provision. This item will only be used as determined by the department for unique locations as directed by the engineer. It does not remove the contractor's obligation to locate utilities as specified by Wisconsin Administrative code Trans 220 and Wisconsin State Statute 182.0175. The engineer will direct all exposing existing infrastructure in writing. Coordinate infrastructure exposures with the engineer and notify the infrastructure owner or their agents of this work two working days in advance so that they may be present when the work commences.

C.2 Excavation

Remove all paved surfaces at locations where the existing infrastructure is being exposed. Saw or remove concrete and asphaltic pavements to the nearest joint. Remove all pavement surfaces in such a way that all existing edges consist of a true line having a perpendicular edge with no unraveling. Maintain drainage at all times according to standard spec 205.3.3. Take precautions, including temporary shoring, in order to prevent any undermining of the existing roadway. Perform work according to all applicable laws, ordinances, rules, regulations, and OSHA standards.

Expose all infrastructure locations within a given location to a minimum depth of 18-inches below the bottom of each infrastructure. Excavate in a manner that protects the integrity of the infrastructure and prevents any damage to wrappings or protective coatings such as by any mechanical method or hand digging. Notify the infrastructure owner promptly if damage or interruption of service occurs. Repair all damage caused to such infrastructure resulting from negligence or carelessness at own expense.

Take all lateral and depth measurements in US feet and tenths thereof. Identify horizontal locations of each exposed infrastructure with a coordinate northing and easting referenced to the Wisconsin County Coordinate System (WCCS), Milwaukee County, NAD 83 (2007). Provide vertical elevations for each exposed infrastructure and reference to NAVD 88 (2007).

The infrastructure location shall remain exposed and available for visual inspection until the completion of all work in a given location. If the infrastructure shall remain exposed overnight or for prolonged periods of time, protect the location with traffic-rated steel plating, safety barriers, and all necessary traffic control devices that may be required under applicable standards or as directed by the engineer.

C.3 Backfilling

Upon completion of the infrastructure exposure, restore the location in kind to its original condition. When exposed infrastructure locations fall within local streets or city right-of-way, use backfill slurry to fill the entire location to the subgrade elevation. Restore concrete pavement and concrete base course to the depth found in the existing roadway. Replace all locations that fall within live lanes of any roadway or pedestrian traffic with a high early-strength concrete pavement mix design having a depth equivalent to the existing pavement structure unless directed otherwise by the engineer. Locations that are closed to through traffic may use an approved concrete pavement mix conforming to standard spec 501. If directed by the engineer, tie concrete pavement and/or dowel it to the existing pavement shall consist of HMA Pavement 4 MT 58-28 S unless otherwise directed by the engineer. Place the HMA pavement in lifts to a depth as directed by the engineer. Apply tack coat to composite pavement structures and between lifts. Alternate restoration methods may be used upon written approval from the engineer. Place base aggregate dense between the subgrade surface and the bottom of the pavement.

C.4 Documentation

Provide documentation to the engineer and include the coordinates, elevations, and sketches of the infrastructure locations tied to known features in the plans. Reference each infrastructure to a proposed alignment with a station and offset. Where near a ramp, reference the ramp alignment. Document the size and/or diameter, composition, and a description of each infrastructure and the location of the elevation with respect to each infrastructure noted. Supply digital photographs of the uncovered infrastructure to the engineer in .jpeg format for future reference.

D Measurement

The department will measure Exposing Existing Infrastructure Paved Area as a unit for each location. A location may have multiple infrastructures located within the same exposure area. An exposure area will include all infrastructures within 6 lateral feet of each other and payment will only be made for one unit regardless of the number of infrastructures exposed. If the distance from the existing ground elevation, located above the existing infrastructure, to a point 18 inches below the exposed infrastructure is between 0 and 6 feet, the department will measure each location as a single unit of work. If the distance from the existing ground elevation, located above the existing infrastructure, to a point 18 inches below the exposed infrastructure is greater than 6 feet and less than 12 feet, the department will pay for the item as two units of work.

E Payment

The department will pay for the measured quantities at the contract unit price under the following bid item:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0950	Exposing Existing Infrastructure Paved Area	EACH

Payment is full compensation for mobilization; for excavation; for disposing of all materials; for locating all infrastructure within each respective location; for providing documentation and photographs of infrastructure locations to the engineer; for all surveying associated with exposing existing infrastructure; for maintenance of the location during construction; for furnishing all traffic control, safety barriers, and steel plating required; for temporary shoring; and for furnishing all finishing items including, but not limited to, base aggregate dense, backfill slurry, concrete pavement, HMA pavement, curb and gutter, and sidewalk located above the subgrade elevation.

139. Exposing Existing Infrastructure Unpaved Area, Item SPV.0060.0955.

A Description

This work includes locating and exposing existing infrastructure in unpaved areas as directed by the engineer. The contractor shall be responsible for compliance with s.182.0175 (2), Stats., with respect to precautions to be taken to avoid and prevent damage to utility facilities. The location of existing utilities and infrastructure needed to complete the contract work shall be addressed independent of this provision. Conform to Wisconsin State Statute 182.0175 (2) and Wisconsin Administrative code Trans 220. The work includes exposing existing infrastructure, including utilities, under unpaved surfaces and providing both lateral and depth measurements for use in determining potential infrastructure conflict solutions, and backfilling.

B Materials

B.1 Backfill Slurry

Utilize backfill slurry as specified elsewhere in these special provisions.

C Construction

C.1 General

The location of existing utilities and infrastructure needed to complete the contract work shall be addressed independent of this provision. This item will only be used as determined by the department for unique locations as directed by the engineer. It does not remove the contractor's obligation to locate utilities as specified by Wisconsin Administrative code Trans 220 and Wisconsin State Statute 182.0175. The engineer will direct all exposing existing infrastructure in writing. Coordinate infrastructure exposures with the engineer and notify the infrastructure owner or their agents of this work two working days in advance so that they may be present when the work commences.

C.2 Excavation

Remove all unpaved surfaces at locations where the existing infrastructure is being exposed. Maintain drainage at all times according to standard spec 205.3.3. Take precautions, including temporary shoring, in order to prevent any undermining of the existing roadway. Perform work according to all applicable laws, ordinances, rules, regulations, and OSHA standards.

Expose all infrastructure locations within a given location to a minimum depth of 18-inches below the bottom of each infrastructure. Excavate in a manner that protects the integrity of the infrastructure and prevents any damage to wrappings or protective coatings such as by any mechanical method or hand digging. Notify the infrastructure owner promptly if damage or interruption of service occurs. Repair all damage caused to such infrastructure resulting from negligence or carelessness at own expense. Take all lateral and depth measurements in US feet and tenths thereof. Identify horizontal locations of each exposed infrastructure with a coordinate northing and easting referenced to the Wisconsin County Coordinate System (WCCS), Milwaukee County, NAD 83 (2007). Provide vertical elevations for each exposed and available for visual inspection until the completion of all work in a given location. If the infrastructure shall remain exposed overnight or for prolonged periods of time, protect the location with traffic-rated steel plating, safety barriers, and all necessary traffic control devices that may be required under applicable standards or as directed by the engineer.

C.3 Backfilling

Upon completion of the infrastructure exposure, restore the location in kind to its original condition. Use backfill slurry, conforming to standard spec 501, to backfill the exposed infrastructure locations to the subgrade elevation. In grassy areas, place 6-inches of topsoil, sod or seed and mulch, and fertilizer. Alternate restoration methods may be used upon written approval from the engineer.

C.4 Documentation

Provide documentation to the engineer and include the coordinates, elevations, and sketches of the infrastructure locations tied to known features in the plans. Reference each infrastructure to a proposed alignment with a station and offset. Where near a ramp, reference the ramp alignment. Document the size and/or diameter, composition, and a description of each infrastructure and the location of the elevation with respect to each infrastructure noted. Supply digital photographs of the uncovered infrastructure to the engineer in .jpeg format for future reference.

D Measurement

The department will measure Exposing Existing Infrastructure Unpaved Area as a unit for each location. A location may have multiple infrastructures located within the same exposure area. An exposure area will include all infrastructures within 6 lateral feet of each other, and payment will only be made for one unit regardless of the number of infrastructures exposed. If the distance from the existing ground elevation, located above the existing infrastructure, to a point 18 inches below the exposed infrastructure is between 0 and 6 feet, the department will measure each location as a single unit of work. If the distance from the existing ground elevation, located above the existing infrastructure, to a point 18 inches below the exposed infrastructure is greater than 6 feet and less than 12 feet, the department will pay for the item as two units of work.

E Payment

The department will pay for the measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
SPV.0060.0955	Exposing Existing Infrastructure Unpaved Area	EACH	

Payment is full compensation for mobilization; for excavation; for disposing of all materials; for locating all infrastructure within each respective location; for providing documentation and photographs of infrastructure locations to the engineer; for all surveying associated with exposing existing infrastructure; for maintenance of the location during construction; for furnishing all traffic control, safety barriers, and steel plating required; or temporary shoring; for furnishing backfill slurry and backfilling the location; for restoration with topsoil, seed or sod, mulch, and fertilizer.

140. Temporary Concrete Barrier Gate, 24-FT, Item SPV.0060.0960.

A Description

Furnish and install a Temporary Concrete Barrier Gate and remove upon completion

B Materials

Furnish a Temporary Concrete Barrier Gate and all necessary hardware and materials to install the gate.

The gate system must be capable of meeting the recommended structural adequacy, occupant risk, and vehicle trajectory criteria set forth in the National Cooperative Highway Research Program Report (NCHRP) 350 for Test Level 3 for Longitudinal Barriers.

The gate must be able to prevent vehicle penetration, vaulting, and under-riding during Test Level 3 Length of Need with Transition (TL-3 LON/T) impacts and smoothly redirect the vehicle.

It must be possible for the gate system to span a 24-foot minimum gap in concrete barrier. Fasten gate system only to the temporary concrete barrier wall. The gate system must also be able to be opened completely within 5 minutes once the moving process begins.

The gate must be capable to be opened both by pivoting the gate on a hinge and by completely disconnecting the gate from the barrier wall and rolling it parallel to the temporary barrier wall.

Tools and materials required to open the gate system must be physically fastened to, or stored within, the gate system in such a way that prevents such tools and materials from becoming hazards during a crash. Tools and material must be accessible and usable immediately upon need.

C Construction

Install the gate system according to manufacturer's recommendations at contract-identified locations or as the engineer directs. Move and reinstall the gate system as required for contract staging.

Ensure that the gap between the traffic face of temporary barrier and the traffic face of the gate transition is to be less than ¼ of an inch. If manufacturer allows, the contractor may bolt thrie beam and thrie beam terminal connector to concrete barrier and the gate transition to bridge the gap in concrete barrier.

Provide and maintain the gates throughout the duration of the project. Repair any damage to the gates within 48 hours. Once the gate is installed, give a tutorial WisDOT and law enforcement at a time determined by the engineer.

Upon completion of the work, remove the gate system and properly dispose of all materials.

D Measurement

The department will measure Temporary Concrete Barrier Gate as each individual gate system, acceptably completed.

The department will not make additional measurements for Temporary Concrete Barrier Gate if damaged during construction, including damage due to vehicular hits.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.0925	Temporary Concrete Barrier Gate 24-FT	EACH

Payment is full compensation for providing, installing, maintaining, and removing the gate system; for furnishing all documentation, labor, tools, equipment, and incidentals necessary to complete the contract work.

141. Survey Project 1229-04-75, Item SPV.0060.1000.

A Description

This special provision describes modifying standard spec 105.6 and 650 to define the requirements for construction staking for this contract. Conform to standard spec 105.6 and 650 and as follows.

The department will not perform any construction staking for this contract. Obtain engineer's approval before performing all survey required to lay out and construct the work under this contract.

Replace standard spec 650.1 with the following:

This section describes the contractor-performed construction staking required under individual contract bid items to establish the horizontal and vertical position for all aspects of construction including, but not limited to:

- storm sewer
- subgrade
- base
- curb
- gutter
- curb and gutter
- curb ramps
- pipe culverts
- drainage structures
- structure layout
- bridges
- noise barriers
- pavement
- pavement markings (temporary and permanent)
- barriers (temporary and permanent)
- overhead signs
- ramp and local street lighting
- electrical installations
- supplemental control
- slope stakes
- ponds
- traffic signals
- ITS
- FTMS
- paths
- utilities
- conduit
- sanitary sewer
- traffic control items
- fencing

B (Vacant)

C Construction

Add the following to standard spec 650.3.1 (5):

Confirm with engineer before using global positioning methods to establish the following:

- 1. Structure layout horizontal or vertical locations.
- 2. Concrete pavement vertical locations.
- 3. Curb, gutter, and curb & gutter vertical locations.
- 4. Concrete barrier vertical locations.
- 5. Storm Sewer layout horizontal or vertical locations, including structure centers, offsets, access openings, rim and invert elevations.

Replace standard spec 650.3.1.1(2) with the following:

Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. This includes:

- Raw data files
- Digital stakeout reports
- Control check reports
- Supplemental control files (along with method used to establish coordinates and elevation)

- Calibration report

D Measurement

Replace standard spec 650.4 with the following:

The department will measure Survey Project 1229-04-75 as a separate single each unit, acceptably completed.

E Payment

Replace standard spec 650.5 with the following:

The department will pay for measured quantities at the contract unit price under the following bid item:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.1000	Survey Project 1229-04-75	EACH

Payment is full compensation for performing all survey work required to lay out and construct all work under this contract and for adjusting stakes to ensure compatibility with existing field conditions. The department will not make final payment for this item until the contractor submits all survey notes and computations used to establish the required lines and grades to the engineer. Submit all notes and computations within 24 hours of completing this work. Re-staking due to construction disturbance and knock-outs will be performed at no additional cost to the department.

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142. Remove Electrical Service Meter Breaker Pedestal Lighting, Item SPV.0060.1001.

A Description

This special provision describes removing an existing electrical service meter breaker pedestal, supports and any additional electrical equipment associated with the service including disconnect switches and overall enclosure, disconnecting all connected power wires, and disposing of the equipment appropriately.

B (Vacant)

C Construction

Coordinate for removal of the existing electrical service meter breaker pedestal with WE Energies.

Disconnect all connected power wires, remove the pedestal, include existing electrical service meter breaker, supports and disconnect switches if present and dispose of all materials properly away from the project area.

D Measurement

The department will measure Remove Electrical Service Meter Breaker Pedestal Lighting by the unit, acceptably removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.1009	Remove Electrical Service Meter Breaker Pedestal Lighting	EACH

Payment is full compensation for coordination with WE Energies; for disconnection of wires; and for removal of the pedestal and any additional material of the service.

143. Maintenance of Lighting Systems, Item SPV.0060.1002.

A Description

This special provision describes maintaining existing and proposed lighting system beginning on the date that the contractor's activities, including electrical, begin at the job site. Properly operate and maintain all existing and proposed lighting systems which are part of, or which may be affected by, the work until final acceptance or as otherwise determined by the engineer.

Before performing any excavation, removal, or installation work, including electrical, for the project, initiate a request for maintenance transfer and preconstruction inspection, as specified in this special provision. Conduct the transfer and inspection in the engineer's presence and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. Request the maintenance preconstruction inspection at least seven calendar days before the desired inspection date.

Existing lighting systems, when shown on the plans, are intended only to indicate the general equipment installation of the systems involved, possibly not exactly representing the field conditions. A site visit will confirm the exact condition of the electrical equipment and systems to be maintained.

Issues found during contractor assessment can be discussed and addressed by contacting the SE Region Lighting Engineer (Eric Perea, (262) 574-5422, Email: <u>eric.perea@dot.wi.gov</u>) before transferring maintenance responsibility to the contractor.

Maintenance of the lighting system includes lighting control cabinet(s):

HL-45-MQ.

The following lighting control cabinet(s) will be used long enough to allow the installation of temporary lighting:

HL-44-MQ

B (Vacant)

C Construction

C.1 Existing Lighting Systems

Existing lighting systems are defined as any lighting system or part of a lighting system in service before this contract. The contract drawings indicate the general extent of any existing lighting. <u>Understand</u> the effort required for compliance with these specifications; Clear and replace any knockdowns or damage caused to the existing lighting system, regardless of who causes the damage. Maintain existing lighting system as follows:

- **Partial Maintenance:** Only maintain the affected circuits if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work unless otherwise indicated. Obtain engineer approval to isolate the affected circuits by in-line waterproof fuse holders as specified elsewhere
- **Full Maintenance:** Maintain the entire controller and all associated circuits if the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work.

C.2 Proposed Lighting Systems

Proposed lighting systems are any temporary or final lighting systems or part of a lighting system to be constructed under this contract.

Maintain all items installed under this contract, including all equipment failures or malfunctions as well as equipment damage by the motoring public, contractor operations, or other sources.

C.3 Maintenance Operations

Maintain lighting units (including sign lighting), cable runs, and lighting controls. If a pole is knocked down or sign light damage is caused by normal vehicular traffic, promptly clear the lighting unit and circuit discontinuity, and restore the system to service. Reinstall the lighting unit (if salvageable) or install a new one.

Provide weekly night-time patrol of the lighting system, with patrol reports filed on standard forms as designated by the engineer. Send a copy to the region lighting coordinator.

Correct the deficiencies within a time frame acceptable to the engineer. Remaining deficiencies may require corrective action on specific lighting system equipment as described in the chart or based on material availability.

Incident or Problem	Service Response Time	Service Restoration Time	Permanent Repair Time
Control cabinet out	12 hours	24 hours	7 Calendar days
Hanging mast arm	Emergency - As Soon As Possible	na	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	Emergency - As Soon As Possible	7 Calendar days	14 Calendar days
Circuit out – Needs to reset breaker	12 hours	12 hours	na
Circuit out – Cable trouble	12 hours	7 Calendar days	21 Calendar days
Outage of 3 or more successive lights	12 hours	7 Calendar days	na
Outage of 75% of lights on one tower	12 hours	7 Calendar days	na
Outage of light nearest RR crossing approach, Islands and gores	12 hours	7 Calendar days	na
Outage (single or multiple non successive lights) found on night outage survey	na	na	7 Calendar days

C.4 Lighting

- 1. **Service Response Time:** The amount of time from the initial contractor notification to the patrolman physically arriving.
- Service Restoration Time: The amount of time from the initial contractor notification to a fully
 operational system again. (In cases of motorist-caused damage, the undamaged portions of the
 system are operational.)
- 3. **Permanent Repair Time**: The amount of time from initial contractor notification until permanent repairs are made unless the contractor was required to make temporary repairs to meet the service restoration requirement. Temporary repairs that do not meet the service restoration requirements require engineer's approval.

C.5 Operation of Lighting

Maintain operational lighting every night, from dusk until dawn. Do not operate duplicate lighting systems (such as temporary lighting and proposed new lighting) simultaneously. Do not keep lighting systems in operation during long daytime periods. Ensure that the lighting system is fully operational and approved by the engineer before submitting a pay request.

D Measurement

The department will measure Maintenance of Lighting Systems as a single unit for the project, 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.0060.1002	Maintenance of Lighting Systems	EACH

Payment is full compensation for maintenance of lighting systems, both existing and proposed, weekly night-time patrol of the lighting system, mobilization, and filed patrol reports.

The contractor will be reimbursed for replaced equipment, materials only, if the invoice paid for the individual piece of equipment is greater than \$500.

Non-compliance with designated response, restoration, and permanent repair times will result in liquidated damages of \$500 per day per occurrence. In addition, the department reserves the right to assign any work not completed within this timeframe to the State Electrical Engineering and Electronics Unit. Reimburse all

costs associated to repair this uncompleted work within one month after the incident or additional liquidated damages of \$500 per month per occurrence will be assessed. Unpaid bills will be deducted from the cost of the contract. Repeated non-response or a negligent maintenance shall result in the State's Electrical Engineering and Electronics Unit being directed to correct all deficiencies and the resulting costs deducted from all monies owed the contractor.

Not understanding the effort required for compliance with these specifications will not be justification for extra payment or reduced responsibilities. No payment will be considered for damage or repairs due to contractor operations.

Not ensuring that the lighting system is fully operational and approved by the engineer before submitting a pay request will be grounds for denying the pay request.

144. Lighting System Integrator, Item SPV.0060.1003.

A Description

These special provisions describe coordinating lighting with various parties; record keeping, and documentation. Where the department is responsible for freeway lighting operation, maintenance, or utility locates on existing systems or systems overlapping project boundaries, the contractor's freeway lighting integrator will serve as the contractor's liaison to the department's electrical operations unit.

B Personnel Qualifications

Assign personnel experienced in underground utility construction and department lighting specifications and practices.

C Construction

At any one time during the project, the contractor shall assign one individual person as the freeway lighting integrator.

The freeway lighting integrator shall:

- 1. Familiarize himself with the location and nature of existing lighting circuits. This familiarity shall include the extent of any lighting system that overlaps project limits.
- 2. Maintain a file of applicable permits or licenses issued to the contractor and convey copies to the engineer.
- 3. Keep with him at all times a contact list of affected lighting personnel.
- 4. Maintain a record of tagouts and the clearance of tagouts.
- 5. Interface with department electrical personnel to determine how contract limits might affect maintenance or operation of existing systems.
- 6. Maintain ongoing contact with the department's Diggers' Hotline Coordinator to ensure that each of the two persons knows that all requested utility locates are marked in the field by the appropriate party. The intent here is to assure coordination. This special provision does not transfer additional utility locating responsibilities to the contractor, beyond those responsibilities already assigned to him by other provisions of the contract.
- 7. Inform the department of any lighting outages, including outside the project limits where a lighting system crosses the project boundary.
- 8. Maintain in any format real-time records of existing, removed and new lighting facilities. Include utility service extensions. Additional required records will include temporary connections and their ultimate removal.
- 9. Maintain records of tests, including: "meg" tests, amperage draw per circuit leg, voltage reading at the disconnect, and voltage reading at the furthest pole per circuit leg. Convey these records at time of acceptance or partial acceptance.
- 10. At the time of acceptance or partial acceptance, convey as-built drawings in both the following formats: plan redlines and .dgn electronic. Include utility service extensions.
- 11. Secure copies of operators' manuals, tear sheets, etc. as may be provided by manufacturers of some lighting materials, and convey a minimum of three sets to the department.

- 12. Work with the engineer to notify department electrical personnel of acceptance or partial acceptance.
- 13. Perform related duties as may be needed to ensure continuity of freeway lighting during construction, and orderly transfer upon completion.
- Contractor must use GPS to provide coordinates of each light pole and control cabinet. The data must be entered into a Microsoft Excel 2007 spreadsheet along with other required fields as specified by WisDOT.

D Measurement

The department will measure Lighting System Integrator as a single unit for all required coordination, record-keeping, and documentation for the project, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.1003	Lighting System Integrator	EACH

Payment will be full compensation for personnel costs; and for all labor, tools, equipment and incidentals necessary to complete the contract work.

145. Lighting System Survey, Item SPV.0060.1004.

A Description

This special provision describes performing a lighting system survey as-built for IH 43 (Mequon Road Interchange) Mainline, Ramps, and Local Street, as shown on the plans, and hereinafter provided.

B Vacant

C Construction

Locate and survey all the lighting units, pull boxes, and control cabinets to sub-meter accuracy. Maintain neat, orderly, and complete survey notes. Perform the survey in NAD 83, Wisconsin County Coordinate System (WCCS), and Milwaukee Coordinates. Deliver data in a comma delimited text file with metadata including datum, county, and date the survey was performed. Data for each point shall have a point number, northing, easting, and point description including pole, pull box, or cabinet number.

D Measurement

The department will measure Lighting System Survey as a single unit for the project, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit prices under the following bid items:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.1004	Lighting System Survey	EACH

Payment will be full compensation for locating and surveying all the lighting units, pull boxes, and control cabinets and for delivery of the comma delimited data file and all survey notes.

146. Removing Electrical Service Meter Breaker Pedestal, Item SPV.0060.2000.

A Description

This special provision describes removing an existing electrical service meter breaker pedestal, disconnecting all connected power wires, and disposing of the equipment appropriately.

B Materials

Existing electrical service meter breaker pedestal.

C Construction

Coordinate for removal of the existing electrical service meter breaker pedestal with WE Energies.

Disconnect all connected power wires, remove the pedestal and dispose of all materials properly away from the project area.

D Measurement

The department will measure Removing Electrical Service Meter Breaker Pedestal by the unit, acceptably removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2000	Removing Electrical Service Meter Breaker Pedestal	EACH

Payment is full compensation for coordination with WE Energies; for disconnection of wires; and for removal and disposal of the pedestal.

147. Removing Controller Cabinet, Item SPV.0060.2001.

A Description

This special provision describes removing an existing controller cabinet.

B (Vacant)

C Construction

Remove controller cabinets at the locations shown on the plans, or as directed by the engineer. Salvage and store the cabinets and all contents for pick up by the department.

Do not remove the existing ITS control cabinets or any other associated equipment, until necessary, or as directed by the engineer. Carefully remove the existing cabinets from the concrete bases, together with all components in such a manner as to safeguard all parts and wiring from damage or loss. Salvage and store the cabinet and contents for pick up by the department.

Prior to removing the existing ITS control cabinets, remove all cables being terminated in the cabinet. Cut existing cables flush with cabinet base and cap existing conduits. Dispose of the cables properly away from the project area.

D Measurement

The department will measure Removing Controller Cabinet by the unit, acceptably removed, salvaged, and stored.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2001	Removing Controller Cabinet	EACH

Payment is full compensation for removal and storage of the controller cabinet; disconnecting all associated wires and cables; and for capping existing conduits.

148. Removing Controller Cabinet Base, Item SPV.0060.2002.

A Description

This special provision describes removing an existing controller cabinet concrete base.

B Materials

Existing controller cabinet base, including concrete masonry, ground rods, masonry anchors, and restoration materials such as topsoil, seeding, mulch, and fertilizer according to the pertinent provisions of standard spec 201, 625, 627, 629, 630, 636, and 640.

C Construction

Remove and dispose of the concrete foundation and all other pertinent materials and restore the disturbed area by placing 4-inches of topsoil, and fertilize, seed, and mulch all disturbed areas according to the pertinent requirements of the standard specifications.

D Measurement

The department will measure Removing Controller Cabinet Base by the unit, removed from the ground, removed from the project site, and the disturbed area restored according to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2002	Removing Controller Cabinet Base	EACH

Payment is full compensation for removing and disposing of a concrete controller cabinet base, including masonry anchors, ground rods, and concrete masonry; for topsoil, fertilizer, seed and mulch.

149. Removing Ramp Control Signal Assembly Sidemount, Item SPV.0060.2004.

A Description

This special provision describes removing an existing sidemount ramp control signal assembly.

B Materials

Materials included in sidemount ramp control signal assemblies are:

- 1. Traffic signal standards.
- 2. Pedestal bases for traffic signal use.
- 3. Vehicular traffic signal heads.
- 4. Signal mounting brackets.
- 5. Sign mounting brackets.
- 6. Enforcement signal displays.

C Construction

Remove sidemount ramp control signal assemblies at the locations shown in the plans, or as directed by the engineer. Salvage the signal assemblies for the department to pick up or dispose of them properly as directed by the engineer.

All work shall be according to the applicable requirements of standard spec 655, 656, 657, and 658, the Wisconsin Electrical Code, these special provisions, and the details shown in the plans.

Salvage and store all removed materials for pickup by the department. Coordinate with the engineer on a schedule to have the removed items picked up. Maintain all materials in a condition suitable for reutilization. Replace all items damaged during construction operations.

Electrical work under this item shall be completed by a journeyman electrician or be completed under the supervision of a journeyman electrician. Legal status or standing as a journeyman electrician shall be certified or otherwise documented to the engineer before any electrical work may begin.

D Measurement

The department will measure Removing Ramp Control Signal Assembly Sidemount by the unit, acceptably removed, salvaged, and stored.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2004	Removing Ramp Control Signal Assembly Sidemount	EACH

Payment is full compensation for removal and storage of the ramp control signal assembly; disconnecting all wiring connections; removing all conduit connections; for any necessary restoration, including backfill, topsoil, and seeding necessary to complete the work.

150. Remove Pole, Item SPV.0060.2008

A Description

This special provision describes removing an existing Type 2, 3, 4, 5, 6, or 7 pole.

B Materials

Existing poles, including antennae, conduit and cabling, and any other equipment mounted to the poles.

C Construction

Disconnect all cables and wiring that are mounted on or in the poles, and carefully remove the pole from the concrete footing. Salvage and store all hardware for pick up by the department. Dispose of the pole and any conduit and cabling appropriately away from the project area.

D Measurement

The department will measure Remove Pole as a unit for each pole removed, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following item:		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2008	Remove Pole	EACH

Payment is full compensation for disconnecting any necessary wiring; removing the poles and equipment mounted on the poles; and disposing of the poles. Salvage any equipment attached to the poles.

151. Temporary Poles Wood 40-Foot, Item SPV.0060.2010.

A Description

This special provision describes furnishing and installing a Class 4, 40-Foot wood pole for use during the duration of the contract.

B Materials

Furnish wood poles that are Class 4 or larger with a 40-Foot minimum overall length. The poles shall be western red cedar according to ANSI standards 05.1. Pressure treatment shall be 5% pentachlorophenol with a minimum of 8 pounds per cubic foot net retention of the oil-borne preservative. Poles shall be shaved the entire length.

C Construction

Place the wood pole in the ground as shown in the plans or as directed by the engineer and mount detectors and solar power assemblies as shown in the plans and as directed and paid for under other pay items in this contract.

D Measurement

The department will measure Temporary Poles Wood 40-Foot as each individual pole, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2010	Temporary Poles Wood 40-Foot	EACH

Payment is full compensation for furnishing and installing the wood post for the duration of the project and all excavating and backfilling.

152. Temporary Poles Wood 60-Foot, Item SPV.0060.2011.

A Description

This special provision describes furnishing and installing a Class 4, 60-Foot wood pole for use during the duration of the contract.

B Materials

Furnish wood poles that are Class 4 or larger with a 60-Foot minimum overall length. The poles shall be western red cedar according to ANSI standards 05.1. Pressure treatment shall be 5% pentachlorophenol with a minimum of 8 pounds per cubic foot net retention of the oil-borne preservative. Poles shall be shaved the entire length.

C Construction

Place the wood pole in the ground as shown in the plans or as directed by the engineer and mount detectors and solar power assemblies as shown in the plans and as directed and paid for under other pay items in this contract.

D Measurement

The department will measure Temporary Poles Wood 60-Foot as each individual pole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2011	Temporary Poles Wood 60-Foot	EACH

Payment is full compensation for furnishing and installing the wood post for the duration of the project and all excavating and backfilling.

153. Ground Rod, Item SPV.0060.2013.

A Description

This special provision describes installing a ground rod and ground wire.

B Materials

Ground rod shall be copper clad steel with cladding 13 mils thick. The minimum diameter is 5/8-inch and the minimum length is eight feet. Ground wire shall be AWG # 6 bare, solid copper.

C Construction

Use exothermic welding to connect the ground wire to the rod. Install the rod vertically, or as close to vertical as conditions permit. Select locations with moist soil, if available. Place the rod at least six feet from all other ground rods.

D Measurement

The department will measure Ground Rod by the unit, acceptably installed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2013	Ground Rod	EACH

Payment is full compensation for installation of the ground rod and ground wire; and welding and connections at both ends of the ground wire.

154. Refocus Vehicle Detector Assembly, Item SPV.0060.2015.

A Description

This special provision describes refocusing an existing microwave detector, or detectors, on a pole or other structure, for operation with a new lane configuration.

B Materials

Materials include Electronic Integrated Systems, Inc. (EIS) Remote Traffic Microwave Sensors (RTMS) and the respective poles they have been mounted on.

C Construction

Coordinate all planned down-time of vehicle detector assemblies with the STOC at (414) 227-2166. Notify the STOC an amount of time ahead of planned down-time equal to the planned down-time. Examples would be that a 4-hour temporary down-time of the system would require notification 4-hours ahead of time while an 8-hour planned down-time would require 8-hours of advance notification.

Refocus and recalibrate the detector each time the adjacent traffic pattern is changed due to a change in traffic control or construction staging.

Verify to the satisfaction of the engineer that the existing detector assembly is working properly. Inspect the vehicle detector assembly for damage.

D Measurement

The department will measure Refocus Vehicle Detector Assembly by the unit, acceptably refocused and operational.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2015	Refocus Vehicle Detector Assembly	EACH

Payment is full compensation for making the detector fully operational with a new lane configuration.

155. Install Ethernet Radio, Item SPV.0060.2016.

A Description

This special provision describes installing a state-furnished, or salvaged, 5.8 GHz Ethernet bridge access point or subscriber unit at a new or existing cabinet or new or existing pole.

B Materials

Materials will include state-furnished materials and contractor furnished materials.

State-furnished or salvaged, materials include the following:

- One 5.8 GHz Ethernet bridge with integral antenna.
- One 5.8 GHz Ethernet bridge power converter.
- One 5.8 GHz Ethernet bridge mounting bracket.

Contractor-furnished materials include the following:

- Mounting hardware.
- · Outdoor rated Category 6 communications cable.
- Inline network cable surge suppressor.

C Construction

Bond the surge suppressor to the cabinet grounding system.

Install the 5.8 GHz Ethernet Bridge in a point-to-point or point-to-multipoint configuration as shown on the plans and as directed by the engineer.

Use the manufacturer's set-up software to configure the Ethernet radio for its intended use. Use the signal strength indicator on the radio to find the optimum position. Also perform a frequency analysis to determine the optimal hop pattern of the radios and test the continuity of the link by polling the radios using the software provided. The position of the radio and the hop pattern shall be adjusted until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies identified in the frequency analysis. Deliver 3 copies of the final test results for signal strength, frequency analysis, and test polling.

D Measurement

The department will measure Install Ethernet Radio as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2016	Install Ethernet Radio	EACH

Payment is full compensation for installing, setting up, configuring, and testing the 5.8 GHz Ethernet bridge radio, surge suppressor, cables, and connections; and required transportation.

156. Signal Assembly Advance Flasher Type 1, Item SPV.0060.2018.

A Description

This special provision describes providing and installing type 1 advance flasher traffic signal assemblies for use with ramp meters, including the pedestal base, traffic signal standard, traffic signal heads, traffic signal mounting brackets, sign mounting brackets, and wiring within the assembly.

B Materials

Provide pedestal bases that meet the requirements of standard spec 657.2.6.

Provide traffic signal standards that meet the requirements of standard spec 657.2.5.

Provide two single-section 12-inch yellow face traffic signal heads meet the requirements of standard spec 658.

Provide traffic signal mounting hardware that meets the requirements of standard spec 658.

Provide sign mounting brackets that meet the requirements of standard spec 637.2.4.

Provide wiring within the assembly and from the signal heads to the pedestal base that meets the requirements of standard spec 655.2.2.

C Construction

Perform work conforming to standard spec 637, 657, and 658 and the WSEC, and as the plans show.

Ensure that the positioning, mounting height, and lateral placement of signal heads are according to the MUTCD. The contractor may be required to revisit locations to re-adjust the signal heads once the engineer observes the metering operation of the ramp.

For traffic signal cable that extends from the signal base to the terminal strips in the signal heads, provide the number of conductors as the plans show. Match the color of the conductor to the lens color.

Install conductors in continuous lengths without splices from terminal to terminal. Splice only at hand holes at the bases of the standards or poles. Do not splice in underground pull boxes or conduit.

Group and identify sets of conductors in signal cables, 3 each per signal phase, whether insulated with red, yellow, green, or other colors, at each pertinent termination. Use conductors colored to match lens colors first. The engineer shall approve the method of identification. Furnish 2 as-built cable layout drawings with labeling to the engineer upon completion of the work. Place one of those copies in the cabinet.

Connect the white 14 AWG wires to a 10 AWG current carrying neutral. Make the connection with a wirenut. Extend the 10 AWG wire from the current carrying neutral grounding strip in the ramp meter processor assembly cabinet, being installed from base to base to the far end of each signal conduit run.

Furnish the 10 AWG USE XLP current carrying grounded conductor in white colored insulation.

Furnish the 10 AWG USE XLP equipment-grounding wire in green colored insulation.

Furnish equipment and appliances necessary to test the complete installation of the ramp meter control signal assembly, including electrical conductors.

D Measurement

The department will measure Signal Assembly Advance Flasher Type 1 as each individual assembly, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2018	Signal Assembly Advance Flasher Type 1	EACH

Payment is full compensation for providing and installing traffic signal standards, pedestal bases, signal heads, signal mounting brackets, cabling within the assembly, and the sign support system; for providing electrical connections and grounding; and for testing.

157. Install Salvaged Pole, Item SPV.0060.2019.

A Description

This special provision describes installing a previously removed and salvaged pole and transformer base on a new concrete base.

B Materials

Materials include salvaged pole and transformer base, and new hardware (nuts and washers) required to mount the pole and transformer base to a new concrete base.

C Construction

Perform work conforming to standard spec 657 and the WSEC, and as the plans show.

D Measurement

The department will measure Install Salvaged Pole as each individual assembly, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2019	Install Salvaged Pole	EACH

Payment is full compensation for installing a salvaged pole and transformer base on a new concrete base, and for providing new mounting hardware.

The department will pay separately for the concrete base.

158. Install Cellular Modem, Item SPV.0060.2023.

A Description

This special provision describes installing a wireless cellular modem and antenna and providing all necessary associated wiring.

B Materials

The department will furnish the wireless cellular modem and antenna. Provide all necessary cables between the wireless modem and device to be connected to it.

C Construction

Drill a hole in the new or existing cabinet to install the wireless modem antenna cable through. Mount the antenna on top of the cabinet and seal the hole with purpose-made waterproof sealing device such as a grommet or gasket.

Install the wireless modem in a new or existing field cabinet. Connect it to the antenna and to devices as shown on the plans, or as directed by the engineer.

D Measurement

The department will measure Install Cellular Modem by the unit, installed according to the contract, tested, and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2023	Install Cellular Modem	EACH

Payment is full compensation for installing a cellular modem; furnishing all necessary incidental hardware; and making all necessary connections.

159. Signal Assembly Ramp Control Overhead, Item SPV.0060.2025.

A Description

This special provision describes providing and installing overhead traffic signal assemblies for use with ramp meters, including, traffic signal heads, traffic signal mounting brackets, sign mounting brackets, and wiring within the respective overhead sign support.

B Materials

Provide one three-section 12-inch face traffic signal head that meets the requirements of Section 658 of the Standard Specifications.

Provide traffic signal mounting hardware that meets the requirements of standard spec 658.

Provide sign mounting brackets that meet the requirements of standard spec 637.2.4.

Provide wiring within the overhead sign support that meets the requirements of standard spec 655.2.2.

C Construction

Perform work conforming to standard spec 637 and 658 and the WSEC, and as the plans show.

Ensure that the positioning, mounting height, and lateral placement of signal heads are according to the MUTCD. For overhead signals, provide a clearance from the pavement surface of the roadway to the lowest part of the mast arm, or the lowest part of any object mounted on the mast arm, between 17 feet and 19 feet. The contractor may be required to revisit locations to re-adjust the signal heads once the engineer observes the metering operation of the ramp.

For traffic signal cable that extends from the signal base to the terminal strips in the signal heads, provide the number of conductors as the plans show. Match the color of the conductor to the lens color.

Install conductors in continuous lengths without splices from terminal to terminal. Splice only at hand holes at the bases of the standards or poles. Do not splice in underground pull boxes or conduit.

Group and identify sets of conductors in signal cables, 3 each per signal phase, whether insulated with red, yellow, green, or other colors, at each pertinent termination. Use conductors colored to match lens colors first. The engineer shall approve the method of identification. Furnish 2 as-built cable layout drawings with labeling to the engineer upon completion of the work. Place one of those copies in the cabinet.

Connect the white 14 AWG wires to a 10 AWG current carrying neutral. Make the connection with a wire-nut. Extend the 10 AWG wire from the current carrying neutral grounding strip in the ramp meter processor assembly cabinet, being installed from base to base to the far end of each signal conduit run.

Furnish the 10 AWG USE XLP current carrying grounded conductor in white colored insulation.

Furnish the 10 AWG USE XLP equipment-grounding wire in green colored insulation.

Furnish equipment and appliances necessary to test the complete installation of the ramp meter control signal assembly, including electrical conductors.

D Measurement

The department will measure Signal Assembly Ramp Control Overhead as each individual assembly, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2025	Signal Assembly Ramp Control Overhead	EACH

Payment is full compensation for providing and installing, signal heads, signal mounting brackets, cabling within the overhead sign support, and the sign support system; for providing electrical connections and grounding; and for testing.

160. Install Temporary Traffic Camera Assembly, Item SPV.0060.2026.

A Description

This special provision describes assembling from a combination of state-furnished and contractor furnished materials, as well as materials furnished through other pay items, a temporary traffic monitoring camera assembly and installing, and integrating the assembly into the existing system. Assembly will be done on a 60-foot wood pole (provided under other pay items in the contract) and will include communications through 5.8 GHz Ethernet radios.

B Materials

Materials will include state-furnished materials and contractor furnished materials.

State-furnished materials include the following:

- One Internet Protocol Dome CCTV camera.
- One solar power system consisting of 4-85W panels, 4-120 Amp-Hour batteries, a solar power controller, and two solar power cabinets to house the batteries, controller, and ethernet switch.
- One mid-span Power-Over-Ethernet power injector.

Contractor furnished materials include the following:

- Outdoor rated power cable between solar power system output and ethernet switch, CCTV camera, and ethernet radios.
- Outdoor rated power cable between the temporary traffic camera assembly and its associated temporary traffic camera power assembly (provided under other pay items in the contract).
- Mounting hardware for solar power system and CCTV Camera.
- · 2-inch schedule 80 nonmetallic conduit.

- 2-inch stainless steel bands.
- Category 5 (or better) network cable between the wireless Ethernet bridge and the power injector, and between the power injector and the CCTV camera.

C Construction

Install the wood pole according to industry standards for supplied pole length.

Install the CCTV camera as required in standard spec 677, including addenda to that article included in this project.

Integrate the 5.8 GHz wireless Ethernet radios with the existing communications system as shown on the plans or as directed by the engineer.

Install the solar panels facing south on the pole with the devices to be powered. If a compass is used, a correction must be made for the difference between magnetic north and true north. Install the solar panels at a tilt angle of approximately 60 degrees. The tilt angle shall be considered the angle from horizontal to the front, or face of the solar panel.

Mount the cabinets to the pole by the two cast aluminum mounting brackets which are already attached to the back of the cabinet. The brackets shall be attached to the pole using stainless steel bands or U-bolts.

Install the cabling, ensuring that cables enter the cabinet only through the bottom, and that strain relief fittings are used to seal cable entrance points. Connect the panel to the charge controller, connecting the white wire to the positive (+) terminal and the black wire to the negative terminal (-).

D Measurement

The department will measure Temporary Traffic Camera Assembly as each individual unit consisting of one CCTV camera and one CCTV camera solar power assembly, acceptably installed and integrated into the existing FTMS system.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2026	Install Temporary Traffic Camera Assembly	EACH

Payment is full compensation for providing the contractor furnished materials, assembling the statefurnished and contractor furnished materials, installing the camera assembly, connecting the camera assembly to the 5.8 GHz Ethernet radios, and for integrating the assembly into the existing FTMS system, and making the assembly functional.

161. Install Temporary Traffic Camera Power Assembly, Item SPV.0060.2027.

A Description

This special provision describes assembling from a combination of state-furnished and contractor furnished materials, as well as materials furnished through other pay items, a temporary traffic monitoring camera assembly and installing, and integrating the assembly into the existing system. Assembly will be done on a 40-foot wood pole (provided under other pay items in the contract) and will include connecting an associated temporary traffic camera assembly.

B Materials

Materials will include state-furnished materials and contractor furnished materials.

State-furnished materials include the following:

• Two solar power systems consisting of 8-85W panels, 8-120 Amp-Hour batteries, two solar power controllers, and two solar power cabinets to house the batteries.

Contractor furnished materials include the following:

- Outdoor rated power cable to connect the solar power controllers.
- Outdoor rated power cable between the temporary traffic camera power assembly and its associated temporary traffic camera assembly (provided under other pay items in the contract).

Mounting hardware for solar power system.

C Construction

Install the wood pole according to industry standards for supplied pole length.

Install the CCTV camera as required in standard spec 677, including addenda to that article included in this project.

Connect the temporary solar power assembly to the associated temporary traffic camera assembly as shown on the plans or as directed by the engineer.

Install the solar panels facing south on the pole with the devices to be powered. If a compass is used, a correction must be made for the difference between magnetic north and true north. Install the solar panels at a tilt angle of approximately 60 degrees. The tilt angle shall be considered the angle from horizontal to the front, or face of the solar panel.

Mount the cabinets to the pole by the two cast aluminum mounting brackets which are already attached to the back of the cabinet. The brackets shall be attached to the pole using stainless steel bands or U-bolts.

Install the cabling, ensuring that cables enter the cabinet only through the bottom, and that strain relief fittings are used to seal cable entrance points. Connect the panel to the charge controller, connecting the white wire to the positive (+) terminal and the black wire to the negative terminal (-).

D Measurement

The department will measure Temporary Traffic Camera Power Assembly as each individual unit consisting of one CCTV camera and one CCTV camera solar power assembly, acceptably installed and integrated into the existing FTMS system.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2027	Install Temporary Traffic Camera Power Assembly	EACH

Payment is full compensation for providing the contractor furnished materials, assembling the statefurnished and contractor furnished materials, installing the camera assembly, connecting the camera assembly to the 5.8 GHz Ethernet radios, and for integrating the assembly into the existing FTMS system, and making the assembly functional.

162. Remove Temporary Traffic Camera Assembly, Item SPV.0060.2028.

A Description

This special provision describes removing a combination of state-furnished and contractor furnished materials, as well as materials furnished through other pay items, a temporary traffic monitoring camera assembly and salvaging and returning the components to the department.

B Materials

Materials will include materials to be salvaged and returned to the department and contractor materials to be returned to the contractor for re-use or disposal.

Materials to be salvaged and returned to the department include the following:

- One Internet Protocol Dome CCTV camera.
- One solar power system consisting of 4-85W panels, 4-120 Amp-Hour batteries, a solar power controller, and two solar power cabinets to house the batteries, controller, and ethernet switch.
- · One mid-span Power-Over-Ethernet power injector.
- 5.8 Ghz ethernet radios.
- Ethernet switch.

Materials to be returned to the contractor include:

- Outdoor rated power cable between solar power system output and ethernet switch, CCTV camera, and ethernet radios.
- Outdoor rated power cable between the temporary traffic camera assembly and its associated temporary traffic camera power assembly (provided under other pay items in the contract).
- Mounting hardware for solar power system and CCTV Camera.
- · 2-inch schedule 80 nonmetallic conduit.
- · 2-inch stainless steel bands.
- Category 5 (or better) network cable between the wireless Ethernet bridge and the power injector, and between the power injector and the CCTV camera.
- 60-foot wood pole.

C Construction

At the direction of the engineer remove the Temporary Traffic Camera Assembly and disassemble to separate the contractor-furnished materials from the department furnished materials. Return the department furnished materials to the department and dispose of contractor-furnished materials appropriately or retain.

D Measurement

The department will measure Remove Temporary Traffic Camera Assembly as each individual unit consisting of one CCTV camera and one CCTV camera solar power assembly, acceptably removed from the project site and materials returned to the department.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2028	Remove Temporary Traffic Camera Assembly	EACH

Payment is full compensation for removing the materials and returning them to the department.

163. Remove Temporary Traffic Camera Power Assembly, Item SPV.0060.2029.

A Description

This special provision describes removing a combination of state-furnished and contractor furnished materials, as well as materials furnished through other pay items, a temporary traffic monitoring camera assembly and salvaging and returning the components to the department.

B Materials

Materials will include materials to be salvaged and returned to the department and contractor materials to be returned to the contractor for re-use or disposal.

Materials to be salvaged and returned to the department include the following:

Two solar power systems consisting of 8-85W panels, 8-120 Amp-Hour batteries, two solar power controllers, and two solar power cabinets to house the batteries.

Materials to be returned to the contractor include:

- Outdoor rated power cable between solar power system output and ethernet switch, CCTV camera, and ethernet radios.
- Outdoor rated power cable between the temporary traffic camera assembly and its associated temporary traffic camera power assembly (provided under other pay items in the contract).
- Mounting hardware for solar power system and CCTV Camera.
- 2-inch schedule 80 nonmetallic conduit.

- 2-inch stainless steel bands.
- Category 5 (or better) network cable between the wireless Ethernet bridge and the power injector, and between the power injector and the CCTV camera.
- 40-foot wood pole

C Construction

At the direction of the engineer remove the Temporary Traffic Camera Power Assembly and disassemble to separate the contractor-furnished materials from the department furnished materials. Return the department furnished materials to the department and dispose of contractor-furnished materials appropriately or retain.

D Measurement

The department will measure Remove Temporary Traffic Power Camera Power Assembly as each individual unit consisting of one CCTV camera and one CCTV camera solar power assembly, acceptably removed from the project site and materials returned to the department.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.2029	Remove Temporary Traffic Camera Power Assembly	EACH

Payment is full compensation for providing the contractor furnished materials, assembling the statefurnished and contractor furnished materials, installing the camera assembly, connecting the camera assembly to the 5.8 GHz Ethernet radios, and for integrating the assembly into the existing FTMS system, and making the assembly functional.

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164. Install Poles Type 9, Item SPV.0060.3001;
Install Poles Type 10, Item SPV.0060.3002;
Install Poles Type 9-Special, Item SPV.0060.3003;
Install Poles Type 10-Special, Item SPV.0060.3004;
Install Poles Type 12, Item SPV.0060.3005;
Install Poles Type 13, SPV.0060.3006;
Install Monotube Arms 15-FT, Item SPV.0060.3007;
Install Monotube Arms 20-FT, Item SPV.0060.3008;
Install Monotube Arms 25-FT, Item SPV.0060.3009;
Install Monotube Arms 30-FT, Item SPV.0060.3010;
Install Monotube Arms 35-FT-Special, Item SPV.0060.3012;
Install Monotube Arms 45-FT-Special, Item SPV.0060.3016;
Install Monotube Arms 50-FT, Item SPV.0060.3017;
Install Monotube Arms 50-FT, Item SPV.0060.3017;
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A Description

This special provision describes installing state furnished materials conforming to standard spec 657, details shown in the plans, and as modified in this special provision.

B Materials

The department will furnish the monotube poles, monotube arms and luminaire arms.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

C Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

D Measurement

The department will measure Install [Equipment] at the contract unit price, acceptably completed.

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

The department will p	by for measured quantities at the contract unit price under the following blu	nom.
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.3001	Install Poles Type 9	EACH
SPV.0060.3002	Install Poles Type 10	EACH
SPV.0060.3003	Install Poles Type 9-Special	EACH
SPV.0060.3004	Install Poles Type 10-Special	EACH
SPV.0060.3005	Install Poles Type 12	EACH
SPV.0060.3006	Install Poles Type 13	EACH
SPV.0060.3007	Install Monotube Arms 15-FT	EACH
SPV.0060.3008	Install Monotube Arms 20-FT	EACH
SPV.0060.3009	Install Monotube Arms 25-FT	EACH
SPV.0060.3010	Install Monotube Arms 30-FT	EACH
SPV.0060.3012	Install Monotube Arms 35-FT-Special	EACH
SPV.0060.3016	Install Monotube Arms 45-FT-Special	EACH
SPV.0060.3017	Install Monotube Arms 50-FT	EACH
SPV.0060.3019	Install Luminaire Arms Steel 15-FT	EACH

Payment is full compensation for installing all materials, including all associated hardware, fittings, mounting devices, and attachments necessary to completely install the pole and arms.

165. Trnspt & Install State Furn Traffic Signal Cabinet STH 57/167 & CTH W, Item SPV.0060.3401; Trnspt & Install State Furn Traffic Signal Cabinet IH 43 SB Ramps & STH 57/167, Item

SPV.0060.3402; Trnspt & Install State Furn Traffic Signal Cabinet IH 43 NB Ramps & STH 57/167, Item SPV.0060.3403.

A Description

This special provision describes the transporting and installing of department furnished materials for traffic signals as the plans show and as follows.

B Materials

Use materials furnished by the department including: the traffic signal controller and the traffic signal cabinet.

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

C Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. The departments' Region Electrical personnel will perform the inspection.

D Measurement

The department will measure Trnspt & Install State Furn Traffic Signal Cabinet [Location] as each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.3401	Trnspt & Install State Furn Traffic Signal Cabinet STH 57/167 & CTH W	EACH
SPV.0060.3402	Trnspt & Install State Furn Traffic Signal Cabinet IH 43 SB Ramps & STH 57/167	EACH
SPV.0060.3403	Trnspt & Install State Furn Traffic Signal Cabinet IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for transporting and installing the traffic signal controller and the traffic signal cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors, tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit and for clean-up and waste disposal.

166. Trnspt Traffic Signals & Inter Lighting Materials STH 57/167 & CTH W, Item SPV.0060.3404; Trnspt Traffic Signals & Inter Lighting Materials IH 43 SB Ramps & STH 57/167, Item

SPV.0060.3405;

Trnspt Traffic Signals & Inter Lighting Materials IH 43 NB Ramps & STH 57/167, Item SPV.0060.3406.

A Description

This special provision describes the transporting of department furnished monotube poles, monotube arms, and monotube luminaire arms.

B Materials

Transport materials furnished by the department including: Monotube poles, monotube arms and monotube luminaire arms (to be installed on monotube assemblies).

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

C Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3.

D Measurement

The department will measure Trnspt Traffic Signals & Inter Lighting Materials [Location] as each individual 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.0060.3404	Trnspt Traffic Signals & Inter Lighting Materials STH 57/167 & CTH W	EACH
SPV.0060.3405	Trnspt Traffic Signals & Inter Lighting Materials IH 43 SB Ramps & STH 57/167	EACH
SPV.0060.3406	Trnspt Traffic Signals & Inter Lighting Materials IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for transporting the monotube poles, monotube arms and monotube luminaire arms (to be installed on monotubes). Installation of these materials is included under a separate pay item.

167. Trnspt & Install State Furn EVP Heads With Confirmation Lights STH 57/167 & CTH W, Item SPV.0060.3407;

Trnspt & Install State Furn EVP Heads With Confirmation Lights IH 43 SB Ramps & STH 57/167, Item SPV.0060.3408;

Trnspt & Install State Furn EVP Heads With Confirmation Lights IH 43 NB Ramps & STH 57/167, Item SPV.0060.3409.

A Description

This special provision describes the transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets at STH 57/167 & CTH W, IH 43 SB Ramps & STH 57/167, and IH 43 NB Ramps & STH 57/167.

B Materials

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

C Construction

Install the EVP detector heads as shown on the plans. The department will determine the exact location to ensure that the installation does not create a sight obstruction. Mount the EVP detector heads and confirmation lights and wire them per manufacturer instructions. For a cabinet that is not operating the signal, the contractor will terminate the ends and install the discriminators and card rack in the cabinet. If the cabinet is operating the signal, the contract will be done by the department.

Notify the department's Electrical shop at (414) 266-1170 upon completion of the installation of the Emergency Vehicle Preemption (EVP) Detector Heads.

D Measurement

The department will measure transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads as each individual unit, in place and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.3407	Trnspt & Install State Furn EVP Heads With Confirmation Lights	EACH
	STH 57/167 & CTH W	
SPV.0060.3408	Trnspt & Install State Furn EVP Heads With Confirmation Lights	EACH
	IH 43 SB Ramps & STH 57/167	
SPV.0060.3409	Trnspt & Install State Furn EVP Heads With Confirmation Lights	EACH
	IH 43 NB Ramps & STH 57/167	

Payment is full compensation for transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets.

168. Transport and Install State Furnished Radar Detection System, IH 43 SB Ramps & STH 57/167, Item SPV.0060.3410; Transport and Install State Furnished Radar Detection System, IH 43 NB Ramps & STH 57/167, Item SPV.0060.3411.

A Description

This special provision describes the transporting and installing of department furnished Radar Detection System on monotube poles or arms.

B Materials

Pick up the department furnished Radar System at the department's electrical shop located at 935 South 60th Street, West Allis. Notify the department's electrical field unit (EFU) at (414) 266-1170 to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

C Construction

Install the department furnished pole/arm mounting brackets, extension arms (if required), and radar units per manufacturer recommendations in the locations determined by the department.

Install the power and communication cable to run continuously (without splices) from the traffic signal cabinet to the pole handhole plus an additional 16-feet in each pull box and an extra 10-feet in the pole handhole. Install the detector unit cable whip from the detector unit to the pole handhole. Splice the detector unit cable whip to the power and communication cable in the pole handhole using the provided junction box.

Mark each end of the lead in the traffic signal cabinet and each cable in the pole handhole to indicate the equipment label (i.e., RA1, RA2, etc.) on the plans. For a cabinet that is not operating the signal, the contractor will terminate the ends. If the cabinet is operating the signal, the cabinet wiring will be done by the department.

Notify department's Electrical Shop at (414) 266-1170 upon completion of the installation and aiming of the radar units.

The department will provide the vendor's contact information. Coordinate directly with the department's radar detection system vendor to arrange for the vendor to program the radar detection system on site. Notify the department and vendor at least five working days prior to the date of programming. Assist the department and vendor with fine adjusting of the radar units during the radar system programming, if necessary.

D Measurement

The department will measure Transport and Install State Furnished Radar Detection System [Location] as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.3410	Transport and Install State Furnished Radar Detection System	EACH
	IH 43 SB Ramps & STH 57/167	
SPV.0060.3411	Transport and Install State Furnished Radar Detection System IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for transporting and installing the radar detection system, cable, mounting hardware, and radar units, assisting the department and vendor during the radar system programming.

169. Trnsprt and Install S-F FO Cable Pigtail 8-CT STH 57/167 & CTH W, Item SPV.0060.3412; Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 SB Ramps & STH 57/167, Item SPV.0060.3413; Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 NB Ramps & STH 57/167, Item SPV.0060.3414.

A Description

This special provision describes the transporting and installing of fiber optic cable pigtail 8-ct in traffic signal cabinets.

B Materials

The department will furnish the pre-terminated fiber optic patch panel. The material will be provided with the traffic signal cabinet. The patch panel will have a pre-terminated fiber optic cable pigtail. Provide all patch panel attachment hardware.

C Construction

Install the patch panel on the side of the traffic signal cabinet opposite the electrical service at a location as approved by the engineer. Install the pre-terminated fiber optic cable in conduit from the patch panel to the communication vault as specified in standard spec 678.3.1. Fiber optic cable ends shall be covered securely to protect open ends during installation in raceways. Leave the remainder of the fiber optic cable coiled in the communication vault.

D Measurement

The department will measure Trnsprt and Install S-F FO Cable Pigtail 8-CT [Location] as each individual 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.0060.3412	Trnsprt and Install S-F FO Cable Pigtail 8-CT STH 57/167 & CTH W	EACH
SPV.0060.3413	Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 SB Ramps & STH 57/167	EACH
SPV.0060.3414	Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 NB Ramps & STH 57/167	EACH

Payment is full compensation for transporting and installing pre-terminated patch panels; furnishing and installing attachment hardware; and cleaning up and disposing of waste.

170. Temporary EVP System STH 57/167 & CTH W, Item SPV.0060.3415.

A Description

This special provision describes furnishing, installing, and maintaining temporary EVP systems at the temporary signalized intersection as shown in the plans.

B Materials

Furnish an emergency vehicle preemption system compatible with the local municipal systems and users.

C Construction

The Temporary EVP System, as shown in the temporary traffic signal plans or as directed by the engineer, shall be complete in place, tested, and in full operation during each stage and sub-stage of construction.

Install the temporary EVP system as shown in the plans and according to the manufacturer's recommendations. Determine a suitable location for the temporary EVP detectors for each stage and substage of construction. Detectors may be mounted on the temporary traffic signal span wire or wood poles. Relocate the temporary EVP detectors to a suitable location if construction activities and/or construction staging changes impede the detector operation. Arrange for testing of equipment prior to acceptance of the installation for each construction stage.

All cables associated with the temporary EVP system shall be routed to the cabinet. Each lead shall be appropriately marked as to which EVP channel it is associated.

Periodic adjustment and/or moving of the temporary EVP detectors may be required due to changes in traffic control, staging, or other construction operations.

Ensure that the temporary EVP system stays in clean working order. Periodic cleaning of the equipment may be required due to dirt and dust build-up.

Remove the temporary EVP system upon project completion.

Provide the engineer records of all EVP settings used during construction.

D Measurement

The department will measure Temporary EVP System [Location] as each individual 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.0060.3415	Temporary EVP System STH 57/167 & CTH W	EACH

Payment is full compensation for furnishing and installing all required equipment, materials, and supplies; for maintaining and changing the EVP detectors to match the plans, traffic control, and construction staging; for relocating the temporary EVP detectors due to construction activities, if required; for testing

the EVP system for each stage and sub-stage of construction; for periodically cleaning all temporary EVP detectors; for removing the temporary EVP system; and for cleaning up and properly disposing of waste.

171. Pile Dynamic Analyzer (PDA)Testing, Item SPV.0060.4000; Pile Dynamic Analyzer (PDA) Restrikes, Item SPV.0060.4001; CAse Pile Wave Analysis Program (CAPWAP) Evaluation, Item SPV.0060.4002.

A Description

The items consist of providing Pile Dynamic Analyzer (PDA) load testing and analyses/evaluation. This Dynamic Pile Load Testing is being done to set pile resistance criteria. Production piles will be driven conforming to pile resistance criteria produced by the contractor after PDA testing and evaluation is completed at each substructure unit. PDA restrikes will be completed as described in this special provision, or as directed by the engineer.

The piles and pile driving will be paid for under standard spec 550. This applies to both piles installed using the PDA criteria and for production piles installed using the criteria developed by the contractor from the PDA installations.

Data collected during the testing described herein will form the basis for the final driving criteria to be applied to production piles in the substructure unit under consideration. Submit the name and qualifications of the person(s) completing this work. Provide documentation that the person(s) completing this work have successfully completed at least 5 PDA testing projects within the last 3 years, and that these identified projects are of a scope and complexity similar to that anticipated for this project. Persons without this minimum experience will not be allowed to complete work on this project. Also submit documentation of experience with PDA equipment manufactured by Pile Dynamics, Inc. and the CAse Pile Wave Analysis Program (CAPWAP). All dynamic monitoring shall be performed using a PDA (Model PAK, PAX, or PAL). Furnish all equipment necessary for the dynamic monitoring such as sensors, cables, or wireless transmitters, etc. The equipment shall conform to the requirements of ASTM D4945. A person with a minimum of 4 years of experience and who has achieved a minimum of Advanced Level on the Foundation QA Examination for Providers of PDA Testing Services, shall be in charge of PDA operations and of data interpretation. They shall be present on site, or by remote connection, at the time of all PDA testing.

B (Vacant)

C Construction

C.1 Test Locations

Perform dynamic pile load testing at the pile locations identified on the plans. These locations are referred to simply as 'PDA Test Piles' throughout the remainder of this specification. Piles noted as PDA Test Piles are a functional load-carrying part of the completed foundation unit, and not solely used for testing.

C.2 Driving Sequence

Perform PDA testing on the first piles installed in each substructure unit. PDA Test Piles shall be located as shown on the footing plan. No other piles in the substructure unit shall be used for PDA testing unless agreed to by the engineer. Do not drive any other piles in the unit until all required testing has been completed and the final driving criteria for that substructure unit has been determined in writing and accepted by the engineer.

C.3 Pile Driving

Drive PDA Test Piles to penetration depths and/or penetration resistances as directed by the engineer. Drive PDA Test Piles using the same methods and equipment that have been accepted for driving the production piles.

Drive PDA Test Piles to one of the following lengths:

- If the required plan driving resistance is achieved at a pile length less than plan length, stop driving the pile. Pile restrikes will be required as described in Section C.6 of this special provision to document that the minimum plan required driving resistance is achieved.
- If PDA indicated pile capacity is greater than or equal to 85% of the required driving resistance, at the estimated plan length, stop driving. Pile restrikes will be required as described in Section C.6

of this special provision to document that the minimum plan required driving resistance is achieved.

 If the pile resistance at plan length is less than 85% of the required driving resistance, continue to drive the pile until the resistance reaches 85% or more of the plan driving resistance. Upon achieving 85% or more, stop driving. Pile restrikes will be required as described in Section C.6 of this special provision to document that the minimum plan required driving resistance is achieved.

In all cases, the required plan driving resistance will be shown either through end of initial drive data or from restrike data, as defined above.

C.4 Scheduling

Provide a written schedule to the engineer showing all required PDA Test Pile activities for the following week. Submit this schedule a minimum of 2 working days prior to the first day included in the schedule.

Multiple concurrent PDA testing and/or analyses will be allowed. Any delays to the contractor's schedule due to coordination or untimeliness of PDA testing or evaluation/analyses will not be grounds for extension of contract time.

C.5 Installation Testing

Perform dynamic measurements following procedures set forth in ASTM D4945 during the driving of piles designated as PDA Test Piles.

Continuous PDA monitoring may require multiple installations of PDA testing equipment depending on the supplied pile length. If multiple piles lengths are used to produce the final installed pile, multiple PDA equipment installations will be required. With the PDA testing equipment attached, drive the pile and monitor using the PDA equipment.

C.6 Restrike Tests

Perform restrike tests on all PDA test piles as part of the initial dynamic pile load testing program as described in section C.5. See restrike criteria given in section C.3.

Wait a minimum of 12 hours and a maximum of 72 hours or a time period as directed by the engineer, after initial pile installation is complete; then, restrike each PDA test pile with the required dynamic testing instruments attached.

Warm the hammer before the restrike by applying at least 20 blows to a non-test pile, or by other means acceptable to the engineer.

The maximum amount of penetration required during the restrike test shall be 6 inches, or the maximum number of hammer blows required will be 30, whichever occurs first.

The pre-approved pile-driving hammer used for restrike testing shall be capable of supplying enough energy to develop a minimum of twice the required driving resistance shown on the plans.

C.7 CAPWAP Evaluation and Drive Criteria

Pile-driving criteria for each substructure unit shall be determined from dynamic pile tests conducted on the total length of each pile noted for PDA Testing in the plans. Submit the required driving resistance and the driving criteria for the production piles determined by dynamic pile testing to the engineer for acceptance for the production pile installation. Electronically submit the driving criteria and a report with the results of the CAPWAP evaluation to the engineer.

Utilize the dynamic test data to establish the following pile driving criteria: (1) a minimum driven length below cutoff level, and (2) a maximum penetration rate per 10 hammer blows for 30 consecutive blows. Drive all remaining piles in each unit according to the established criteria for that unit.

Driving production piles shall continue until the required driving resistance is achieved for 30 consecutive hammer blows. Mark penetration per 10 consecutive hammer blows.

The engineer may alter driving criteria as necessary to assure development of adequate pile capacity. In any pile where pile capacity or integrity is suspect, the engineer may order PDA testing.

D Measurement

The department will measure Pile Dynamic Analyzer (PDA) Testing as each individual unit acceptably completed, in which one unit includes all PDA-related effort on one pile during the initial driving.

The department will measure Pile Dynamic Analyzer (PDA) restrikes as each individual unit acceptably completed, in which one unit includes all of the restrike and testing effort required on an individual pile when it is restruck.

The department will measure CAse Pile Wave Analysis Program (CAPWAP) Evaluation as each individual unit acceptably completed, in which one unit includes all analyses and effort required to provide drive criteria for installation of production piles in one substructure unit.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.4000	Pile Dynamic Analyzer (PDA)Testing	EACH
SPV.0060.4001	Pile Dynamic Analyzer (PDA) Restrikes	EACH
SPV.0060.4002	CAse Pile Wave Analysis Program (CAPWAP) Evaluation	EACH

Payment for Pile Dynamic Analyzer (PDA) Testing is full compensation for facilitating the initial dynamic pile load test on a given pile, including possible multiple sensor installations.

Payment for Pile Dynamic Analyzer (PDA) Restrikes is full compensation for facilitating and performing one restrike test on a pile, including the sensor installation, mobilization of equipment, hammer warm-up, and pile restriking.

Payment for CAse Pile Wave Analysis Program (CAPWAP) Evaluation is full compensation for providing the personnel, software and equipment to evaluate the results of the monitoring for each substructure unit for the purpose of establishing production pile driving criteria, and the electronic submittal of the driving criteria and report with the results of the CAPWAP evaluation.

172. Boulder Retards, Item SPV.0060.4003.

A Description

This special provision describes furnishing and placing boulder retards in the tributary to the Milwaukee River

B Materials

Furnish boulder retards with a diameter of 18 to 24 inches and conforming to the pertinent requirements of standard spec 606.2. Obtain Wisconsin Department of Natural Resources (DNR) approval of the boulder retards prior to placement.

C Construction

Place boulder retards conforming to standard spec 606.3.3 and as shown in the plans.

The exact location of the boulder retards will be determined by the DNR. Coordinate this work with the DNR and notify the DNR a minimum of 7 days prior to boulder placement to allow DNR oversight during boulder placement. The DNR contact is Kristina Betzold, WDNR, at (414) 263-8517.

D Measurement

The department will measure Boulder Retards as each individual boulder retard, 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.0060.4000	Boulder Retards	EACH

Payment is full compensation for furnishing and placing each Boulder Retard.

173. Temporary Water Diversion Culvert C-45-18, Item SPV.0060.4004; Temporary Water Diversion Bridge B-45-116, Item SPV.0060.4005.

A Description

This special provision describes providing temporary water diversion for the flow of tributary to the Milwaukee River during the extension of Structure C-45-18 and the installation of Structure B-45-116 and as hereinafter described.

B Materials

Follow the applicable sections of the WisDOT Standard Specifications for all materials utilized under this item, as directed by the engineer. Provide evidence that items meet specifications and/or certifications prior to use of such items if requested by the engineer.

C Construction

- (1) Alterations to the suggested methodologies of water diversion as noted below may be acceptable. Such alterations should be clearly spelled out in the Erosion Control Implementation Plan (ECIP) for approval by WisDOT and the Wisconsin Department of Natural Resources prior to construction.
- (2) Method #1: Divert the existing flow through a temporary open channel lined with polyethylene sheeting or other approved plastic. The bottom of the channel shall have a 6-inch depth of coarse aggregate #2 stone. Divert flow into the temporary open channel utilizing barriers made of non-erodible materials, such as rock bags and polyethylene sheets, to prevent siltation into the live stream. Details of the temporary open channel and the non-erodible barrier system shall be detailed in the contractor's ECIP, for approval by the engineer.
- (3) Method #2: Divert the existing flow through a temporary culvert pipe utilizing barriers made of non-erodible materials, such as rock bags and polyethylene sheets, and a channel comprised of plastic and #2 stone as described under Method #1. Details of the temporary culvert pipe, the temporary channel, and the non-erodible barrier system shall be detailed in the contractor's ECIP, for approval by the engineer.

The following values are provided for the contractor's use in sizing a temporary culvert pipe:

 $\frac{\text{Structure C-45-18}}{\text{Q2} = 40 \text{ cfs}}$ $\frac{\text{Structure B-45-116}}{\text{Q2} = 80 \text{ cfs}}$

- (4) Method #3: Dam the flow using non-erodible materials, such as rock bags and polyethylene sheets, and pump the water across the roadway. Details of the damming and pumping system shall be detailed in the contractor's ECIP, for approval by the engineer. The water must be treated to remove suspended solids before it is allowed to enter any waterway or wetland. Provide a settling basin, or other suitable means approved by the engineer, with sufficient capacity and size to provide an efficient means to filter the water from the dewatering operation before it is discharged back into the stream as provided in the Standard Specifications and these special provisions. Direct discharge into the stream will not be permitted. Saturated sediment shall be dewatered in an upland location within a dewatering device. Treatment practices may include the use of a polymer in conjunction with the dewatering mechanism, as approved by the engineer.
- (5) Remove the temporary open channel, temporary culvert pipe, or temporary barriers after flow through the new box culvert structure is established. Restore the area outside of the proposed roadbed and slopes to natural surrounding conditions and elevations.

D Measurement

The department will measure Temporary Water Diversion (Location) as a single unit for each diversion, 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.0060.4004	Temporary Water Diversion Culvert C-45-18	EACH
SPV.0060.4005	Temporary Water Diversion Bridge B-45-116	EACH

Payment is full compensation for providing, installing, removing, and disposing of all materials used to divert flow, maintaining such materials during use, all excavation required, and for restoration of the area to original conditions, unless shown otherwise in the project plans.

174. Adjust Sanitary Manhole; Item SPV.0060.5000.

A Description

This work includes adjusting sanitary manholes to an elevation as determined by the engineer as well as installing frame and lid, internal frame/chimney seal, according to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and amendments (SSSW) and as hereinafter provided.

Add or remove masonry adjusting rings as needed. This item applies to structures to be lowered less than 6 inches or raised less than 12 inches.

B Materials

B.1 Adjusting Rings

Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C-478. Precast concrete rings shall have an inside diameter to match the manhole opening, be not less than 2 inches nor more than 6 inches high and have a wall thickness of 6 inches unless otherwise specified. The rings shall contain a minimum of one No. 2 reinforcing rod centered within the ring. Do not use any cracked or broken rings. The top of precast manhole cones shall be set a maximum of 18 inches lower than established grade in unimproved areas, with the top of the manhole cover being ringed up flush with the existing ground. The minimum number of adjusting rings shall be one 2-inch ring. The maximum height of adjusting rings shall be 8 inches in paved areas. All joints between the adjusting rings shall be filled with grout or mortar, including between the cone and the adjusting ring and the adjusting ring and the frame. Rings shall be grooved to receive a step.

B.2 Manhole Seal

Furnish new Cretex Specialty Products, NPC Flexrib, or approved equal internal or external frame/chimney seal, as shown in the plans. The seal shall meet the material requirements of section 8.42.3 and the performance requirements of section 8.42.4 of the SSSW.

B.3 Backfill Slurry

Backfill slurry shall meet the material and construction requirements of section 8.43.8 of the SSSW.

C Construction

C.1 General

The location of existing sanitary manholes to be adjusted is indicated on the plans. Adjust these items as shown in the plans. Adjust manholes as necessary so that the frames and lid when placed will be at the established required grade. Install seals according to the manufacturer's recommended installation procedures. Furnish and use backfill slurry in the manhole excavation area to existing surface or to appropriate depth for pavement restoration. Salvage and reinstall existing frames and lids.

C.2 Surface Preparation

Remove manhole cover and power wire brush the lower 3 inches of the manhole frame to remove any loose rust or scale and repair any imperfections by either grinding smooth or filling with mortar. A smooth, clean sealing surface is required. Realign the casting if it is offset more than approximately 2 inches from the chimney. Remove all loose and protruding mortar and brick from the upper 7-Inch chimney and clean surface by power wire brushing. Provide a 4-Inch wide sealing surface starting 2 inches down from the bottom of the frame.

All sealing surfaces must be circular, reasonably smooth, clean and free of any loose material or excessive voids. If such a surface does not exist for the bottom of the sleeve to seal against, use one-

component, quick-set, high strength, non-shrink, polymer modified patching mortar which has been formulated for vertical or overhead use. If the bottom of the sleeve is to seal against the top of an eccentric (straight side) cone and an inadequately high vertical surface does not exist, contact the manufacturer to obtain details to build the required vertical surface.

Use caulk to fill minor irregularities in the bottom sealing surface. The caulk shall be a butyl rubber caulk conforming to AASHTO M-198, Type B. Apply a single bead of the caulk to the center portion of the lower sealing surface of the sleeve.

Any flaws in the manhole frame, such as minor cracks, pits or protrusions, shall be repaired by either filling with mortar or grinding smooth.

C.3 Manhole Seal

Seals shall cover from the frame across all rings and onto the cone.

D Measurement

The department will measure Adjust Sanitary Manhole as a unit per each adjustment, 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.0060.5000	Adjust Sanitary Manhole	EACH

Payment is full compensation for providing and installing all required materials including adjusting rings, internal frame/chimney seals, and masonry and fittings; for salvaging and reinstalling existing or new covers, including frames and lids; for excavating, backfilling, and compacting; for furnishing and placing backfill slurry; for disposing of surplus materials; and for cleaning out and restoring the structure.

175. Pavement Cleanup Project 1229-04-75, Item SPV.0075.0601.

A Description

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site. Pavement Cleanup includes surveillance and reporting of all active haul routes.

B Materials

B.1 Pavement Cleanup

Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

Use vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified in this special provision or approved by the engineer.

C Construction

C.1 Surveillance

Provide daily surveillance of active haul routes to identify if material is being tracked from the jobsite. Document the condition of the roads and all sweeping recommendations in a daily report. Submit reports to the engineer daily, including hourly metered tickets for that day's sweeping activities.

C.2 Pavement Cleanup

Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract. Keep all pavements, sidewalks, driveways, curb lanes, and gutters adjacent to the project free of dust and debris that are caused by land disturbing, dust generating activities, as defined in the contractor's Dust Control Implementation Plan (DCIP). Provide routine sweeping of all pavements, sidewalks, driveways, curb lanes and gutters on local-street active haul routes as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

- IH 43 (NB and SB)

- On/Off Ramps
- Mequon Road
- And all other roadways approved by the department

In addition to routine sweeping, conduct sweepings as the engineer directs or approves, to eliminate dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Coordinate with engineer to determine deadlines for responding to emergency sweeping requests and cleaning up spillage and material tracked to/from the project.

Skid steers with mechanical power brooms may only be used on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer. Do not dry sweep. Ensure all broomed equipment used for sweeping has a functioning water bar.

D Measurement

The department will measure Pavement Cleanup (Project 1229-04-75) by the hour, acceptably completed.

Tickets shall include:

- Date
- Company
- Operator name
- Equipment make/model
- Routes swept
- Total hours.

Total hours shall be to the nearest 0.25 hour that work under this item was performed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:				
ITEM NUMBER	DESCRIPTION	UNIT		
SPV. 0075.0601	Pavement Cleanup Project 1229-04-75	HR		

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials.

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176. Native Pollinator Seeding Mixture No. 90A, Item SPV.0085.0001.

A Description

This special provision describes preparing seed beds and furnishing and sowing the required seed on areas identified in the plan set.

Conform to standard spec 630 except as modified in this special provision.

B Materials

Conform to standard spec 630.2 and follow guidance for seed mixture 70/70a. Use Table 1 for seed mixture 90A composition.

PLS for seeding mixture 90A must be packaged separately by species and clearly labeled with the vendor's name, species common and botanical names, gross weight, percent PLS, year of harvest and any specialized treatments that have been applied to ensure or enhance germination.

Table 1 – Native Pollinator Seed mix 90A

Nomenclature			Seed Metrics				
Scientific Name	Common Name	Purity & Germination minimum %	Oz/Acre	% Mix by Oz/Acre	lbs/Acre	lbs/1,000 square feet	Seeds/oz
Grasses and Sedges			I	<u> </u>	I	I	<u> </u>
Andropogon gerardii	Big Bluestem	PLS	8.00	4.68	0.50	0.011	10,000
Bouteloua curtipendula	Side oats Grama	PLS	32.00	18.72	2.00	0.046	6,000
Carex bicknellii	Bicknell's Oval Sedge	PLS	1.50	0.88	0.09	0.002	17,000
Carex brevior	Fescue Sedge	PLS	2.00	1.17	0.13	0.003	29,000
Carex molesta	Field Oval Sedge	PLS	1.75	1.02	0.11	0.003	25,000
Elymus canadensis	Canada Wild Rye	PLS	30.00	17.55	1.88	0.043	5,200
Elymus virginicus	Virginia Wild Rye	PLS	8.00	4.68	0.50	0.011	4,200
Panicum virgatum	Switch Grass	PLS	1.00	0.58	0.06	0.001	14,000
Schizachyrium scoparium	Little Bluestem	PLS	32.00	18.72	2.00	0.046	15,000
Sorghastrum nutans	Indian Grass	PLS	8.00	4.68	0.50	0.011	12,000
Sporobolus heterolepis	Prairie Dropseed	PLS	3.00	1.75	0.19	0.004	16,000
Alternate Grasses and Sedges	5						
Calamagrostis canadensis	Blue Joint Grass	PLS					280,000
Carex scoparia	Lance-fruited Oval Sedge	PLS					84,000
Muhlenbergia mexicana	Leafy Satin Grass	PLS					175,000
Spartina pectinata	Prairie Cord Grass	PLS					6,600
Forbs	Forbs						
Asclepias syriaca	Common Milkweed	PLS	3.00	1.75	0.19	0.004	4,000
Astragalus canadensis	Canadian Milk Vetch	PLS	1.00	0.58	0.06	0.001	17,000
Dalea purpurea	Purple Prairie Clover	PLS	4.00	2.34	0.25	0.006	15,000

Desmodium illinoense	Illinois Tick Trefoil	PLS	1.50	0.88	0.09	0.002	4,300
Echinacea pallida	Pale Purple Coneflower	PLS	2.00	1.17	0.13	0.003	5,200
Eryngium yuccifolium	Rattlesnake Master	PLS	2.00	1.17	0.13	0.003	7,500
Heliopsis helianthoides	False Sunflower	PLS	3.00	1.75	0.19	0.004	6,300
Heuchera richardsonii	Prairie Alumroot	PLS	0.20	0.12	0.01	0.000	700,000
Monarda fistulosa	Wild Bergamot	PLS	1.50	0.88	0.09	0.002	70,000
Penstemon digitalis	Foxglove Beardtongue	PLS	2.00	1.17	0.13	0.003	130,000
Pycnanthemum virginianum	Mountain Mint	PLS	0.75	0.44	0.05	0.001	220,000
Ratibida pinnata	Yellow Coneflower	PLS	3.00	1.75	0.19	0.004	30,000
Rudbeckia hirta	Black-eyed Susan	PLS	4.00	2.34	0.25	0.006	92,000
Rudbeckia subtomentosa	Sweet Black- eyed Susan	PLS	1.50	0.88	0.09	0.002	43,000
Silphium integrifolium	Rosinweed	PLS	2.00	1.17	0.13	0.003	1,200
Silphium laciniatum	Compass Plant	PLS	2.00	1.17	0.13	0.003	660
Solidago rigida	Stiff Goldenrod	PLS	2.50	1.46	0.16	0.004	41,000
Symphyotrichum laeve	Smooth Blue Aster	PLS	1.00	0.58	0.06	0.001	55,000
Symphyotrichum novae- angliae	New England Aster	PLS	1.00	0.58	0.06	0.001	66,000
Tradescantia ohiensis	Ohio Spiderwort	PLS	2.00	1.17	0.13	0.003	8,000
Verbena stricta	Hoary Vervain	PLS	1.50	0.88	0.09	0.002	28,000
Veronicastrum virginicum	Culver's Root	PLS	0.25	0.15	0.02	0.000	800,000
Zizia aurea	Golden Alexanders	PLS	2.00	1.17	0.13	0.003	11,000
Alternate Forbs ³							
Geum aleppicum	Yellow Avens	PLS					20,000
Parthenium integrifolium	Wild Quinine	PLS					7,000

Rudbeckia triloba	Brown-eyed Susan	PLS			34,000
Silphium terebinthinaceum	Prairie Dock	PLS			1,000
Solidago speciosa	Showy Goldenrod	PLS			95,000
Symphyotrichum oolantangiense	Sky Blue Aster	PLS			80,000
Verbena hastata	Blue Vervain	PLS			93,000
Vernonia fasciculata	Common Ironweed	PLS			24,000

Diversity and Density Metrics

Plant Type	Species Richness	Purity & Germination minimum %	Oz/Acre	% Mix by Oz/Acre	lbs/Acre	lbs/1,000 square feet	Seeds/oz
Grasses and Sedges	11		127.25	74.44	7.95	0.183	
Forbs	23		43.70	25.56	2.73	0.063	
Totals	34		170.95	100.00	10.68	0.245	

¹Seed mix is designed for 1.0 acre.

²Alternate species are provided below each section (graminoids and forbs). Wisconsin blooming periods are defined as Spring (April-May), Summer (June-August), and Fall (September-October).

³The contractor may, if the engineer approves, substitute an alternate for a required species that is not available using the same percentage as specified for the required species. Use a different alternate for each unavailable required species. Provide documentation showing that a required forb is not available before using an alternate.

If seeding bare soil with native seed mixture 90A, include the nurse crop as follows. Do not seed native seed mixtures between June 15 and October 15 unless the engineer allows.

Install nurse crop with permanent native seed mix. Select appropriate seed combinations from table below based on timing of installation. Annual rye will be installed with common oats or winter wheat. Nurse crop is not suitable for areas with standing water.

Table 2 – Nurse Crop

Scientific Name	Common Name	Installation Rate			
		(Ibs/acre)	(lbs/1000 sq. ft.)		
Spring seeding before June 15					
Avena sativa	Common Oats	35	0.8		
Lolium multiflorum	Annual Rye ¹	5	0.12		

Fall seeding after October 15 and dormant seeding			
Triticum aestivum	Winter Wheat ² 45		1
Lolium multiflorum Annual Rye ¹		5	0.12

¹Spring (April-May) and late summer (August-early September) preferred for annual rye but may be established in summer or a dormant seeding as seed will overwinter.

²August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

C Construction

Conform to standard spec 630.3 following guidance for seed mixture 70/70a.

Seeding will not be allowed between June 15 and October 15. There will be no exceptions.

Sow seeds at a rate of 0.25 pounds per 1000 square feet.

D Measurement

The department will measure the Seeding bid items by the equivalent pound, acceptably completed, measured based on net weights of seed shipments or weighed on department-approved scales the contractor furnishes. The department will deduct quantities wasted or not actually incorporated in the work according to the contract. The department will determine the equivalent pounds of seed furnished and applied by dividing the actual pounds of seed applied by the sum of the unadjusted and adjusted percentages, determined as specified in standard spec 630.3.5, of the various species in the seed mixture sown.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.0001	Native Pollinator Seeding Mixture No. 90A	LB

Payment is full compensation for providing, handling, and storing seed; for providing the required culture and inoculating seed as specified; and for preparing the seed bed, sowing, covering, and firming the seed.

177. Concrete Curb and Gutter 54-Inch Type A, Item SPV.0090.0001.

A Description

This special provision describes constructing Concrete Curb and Gutter 54-Inch according to pertinent requirements of standard spec 601, construction details, and plan details.

B Materials

Use materials as described in the construction detail shown in the plans and as described in standard spec 601.2.

C Construction

Perform work as specified in standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter 54-Inch Type A 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.0090.0001	Concrete Curb and Gutter 54-Inch Type A	LF

Payment is full compensation for preparing the foundation; all special construction required at driveway entrances, alley entrances or curb ramps; for providing all materials, including concrete, expansion joints and tie bars in unhardened concrete; for placing, finishing, protecting and curing concrete; and for hand forming or sawing contraction joints.

178. Concrete Barrier Type S42 Special, Item SPV.0090.0002; Concrete Barrier Type S56 Special, Item SPV.0090.0003.

A Description

This special provision describes constructing Concrete Barrier (Type) according to standard spec 603, details shown in the plans, and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Concrete Barrier (Type) by the linear foot, acceptably placed according to the contract.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:			
ITEM NUMBER	DESCRIPTION	UNIT	
SPV.0090.0002	Concrete Barrier Type S42 Special	LF	
SPV.0090.0003	Concrete Barrier Type S56 Special	LF	

179. Coconut Fiber Rolls, Item SPV.0090.0010.

A Description

This special provision describes providing Coconut Fiber Rolls at the locations shown on the plans, or as directed by the engineer.

B Materials

Obtain approval from the engineer prior to ordering coconut fiber rolls. Furnish coconut fiber rolls and all materials necessary to complete the work as shown on the plans.

C Construction

Deliver and install coconut fiber rolls according to the plan details. Securely anchor coconut fiber rolls by burying the bottom one-third of the roll and fastening them to the stakes.

D Measurement

The department will measure Coconut Fiber Rolls 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.0090.0010	Coconut Fiber Rolls	LF

Payment is full compensation for furnishing and installing, transporting, placing, and anchoring the coconut fiber rolls; and for supplying and installing fastening materials.

180. Maintain and Remove Temporary Precast Concrete Barrier Left In Place, Item SPV.0090.0015.

A Description

This special provision describes salvaging and removing existing temporary precast concrete barrier left in place according to standard spec 614 and as hereinafter provided. Take ownership of the barrier upon removal.

B (Vacant)

C Construction

Maintain and remove the temporary precast concrete barrier left in place according to standard spec 614.3.9.

D Measurement

The department will measure Maintain and Remove Temporary Precast Concrete Barrier Left In Place 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.0090.0015	Maintain and remove Temporary Precast Concrete Barrier Left In Place	LF

Payment is full compensation for maintaining and removing the temporary precast concrete barrier.

181. Glare Screens Temporary, Item SPV.0090.0910.

A Description

This special provision describes furnishing, installing, maintaining, and removing a modular paddle glare guard system on concrete barrier temporary precast at the indicated locations according to the plans and standard specifications, as directed by the engineer and as hereinafter provided.

B Materials

Utilize modular glare guard units consisting of vertical blades, bases, and a horizontal base rail. Utilize paddle devices a minimum of 24-inches in height and constructed of durable, impact resistant, non-warping flexible materials.

Utilize modular units with cumulative nominal length equal to the length of the temporary barrier on which they are installed so that the joint between the barrier sections shall not be spanned by any one unit. Units shall not alter the design of the concrete barrier.

Design the relative connection strengths between various components of the assembly to minimize the potential impact and debris hazard to approaching traffic and to simplify repairs. Fabricate the modular units in a manner to allow replacement of individual blades while the modular unit remains in place.

The blade, base and rail shall be made of high impact materials with sufficient strength to withstand three impacts from a horizontal steel bar traveling at 40 mph and impacting at mid-height of the blade. After three impacts, there shall be no evidence of cracking, splitting, delaminating or separation from the system.

Provide a paddle glare guard from a manufacturer below or an approved equal:

Manufacturer	Address
Safe-Hit Corporation 2405 IH 35 West, New Braunfels, Texas, 781	
Carsonite International	2900 Lockhead Way, Carson City, Nevada, 89701
Flexstake Incorporated	2150 Andrea Lane, Fort Myers, Florida, 33912

C Construction

Attach the base rail to the top of the concrete barrier temporary precast by a mechanical or adhesive system with a minimum pullout and shear of 3000 psi. All mounting hardware shall be as specified by the manufacturer.

D Measurement

The department will measure Glare Screens Temporary by the linear foot of paddle glare guard, 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.0090.0910	Glare Screens Temporary	LF

Payment is full compensation for furnishing, installing, maintaining and removing the Glare Screens Temporary.

182. Outdoor Rated Network Cable, Item SPV.0090.2001.

A Description

This special provision describes furnishing and installing outdoor rated network cable in new or existing conduit or as directed by the engineer. It also includes installing state-furnished network communications extenders as required.

B Materials

Furnish outdoor rated Category 5e, or better, UTP cable with water-blocking flooded core and UV-resistant polyethylene jacket. Cable shall consist of 4-pairs of 24 AWG solid copper conductors and shall meet the requirements of ANSI/TIA/EIA 5 68A Category 5e, CENELEC EN50173, ICEA S-90-661, and ISO/IEC 11801.

Furnish an RJ45 connector for each end of the cable.

State-furnished network communications extenders.

C Construction

Install the cable following the manufacturer's installation guidelines.

Install the RJ45 connectors (if not done prior to installation) according to manufacturer's installation guidelines.

Install a network communications extender as shown on the plans when cable length exceeds 100 meters.

Use a purpose built "Pass-Fail" network cable tester to test the network cable installation for Category 5, Class E compliance. Repair any connections or cable as needed for the test to register a "Pass".

Connect the cable to the devices on each end as shown on the plans or as directed by the engineer.

D Measurement

The department will measure Outdoor Rated Network Cable, acceptably installed and tested, by the linear foot.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.2001	Outdoor Rated Network Cable	LF

Payment is full compensation for furnishing, installing, and testing the outdoor rated network cable; for installing network communications extenders where required; for connecting the cable to the devices at each end of the cable.

183. Precast Trench Drain, Item SPV.0090.8031; Temporary Precast Trench Drain, Item SPV.0090.8036.

A Description

This special provision describes providing a precast trench drain system and temporary precast trench drain systems as the plans show. Conform to standard spec 415 and 611 and as follows.

B Materials

B.1 Documentation

Submit manufacturer's specifications, certifications, and installation instructions for grates, frames, connections, and precast drain channel two weeks before placement for engineer approval.

B.2 Frames and Grates

Furnish frames and grates manufactured of ductile iron conforming to ASTM A536 and meets AASHTO HS-25 load ratings for heavy-duty high-speed traffic. Ensure that frames and grates are one piece anchored into the body of the line drain, except where the plans show removable grates.

For removable grates, provide a repetitive minimum pullout resistance of 340 pounds per foot of length after completion of 1,000 hours of salt spray testing according to ASTM B117. Match removable grates to their frames in pairs before delivery to the worksite. Ensure that grates fit into frames without rocking. Furnish corrosion resistant locking devices for removable grates.

Secure the trench drain system in concrete according to the manufacturers specifications. Use concrete conforming to standard spec 415.2.1.

Furnish concrete curing compounds conforming to standard spec 415.2.4.

B.3 Precast Drain Channel

Furnish precast drain channel sections constructed of monolithic polymer concrete. Ensure that the interior surface of the channel is smooth below the level of the frame, grate, and associated connections. Use polymer concrete consisting of aggregate with either polyester resin or vinylester resin. Ensure that the polymer concrete conforms to the following:

Property	ASTM Test Method	VALUE
Compressive Strength		
Tensile Strength		
Flexural Strength	C-580	3,000 psi minimum
Moisture Absorption	C-140	5% max
Chemical Resistance	C-267	Pass
Freeze Thaw	Freeze Thaw C-666 1,600 minimum cyc Ios	

C Construction

Excavate trench channel to the lines and grades the plans show. Grade and compact the bottom of the trench to provide firm and uniform bearing throughout.

Install the trench drain channel, trench drain joints, and connections according to manufacturers' instructions. Install trench drains to the lines and grades the plans show. Securely join sections of the precast drain channel to prevent separation during backfilling. Connect to existing drainage facilities as the plans show before placing concrete backfill.

Place concrete in channel without floating or shifting the line drain and without concrete segregation. Secure the frames or the line drain wall into the concrete with steel anchoring rods. Ensure that concrete backfill is flush with the adjacent surfaces and with the drain's frame. Texture the surface of the concrete with a broom or burlap to produce a durable, skid-resistant surface.

D Measurement

The department will measure Precast Trench Drain and Temporary Precast Trench Drain 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.0090.8031	Precast Trench Drain	LF
SPV.0090.8036	Temporary Precast Trench Drain	LF

Payment is full compensation for providing precast trench drain; for excavation; aggregate base materials; for concrete backfill; and for removal/disposing of waste materials and restoring the site.

SER-611-002 (20180327)

184. Longitudinal Grooving Bridge Deck, Item SPV.0165.4000.

A Description

This special provision describes providing longitudinal deck grooves parallel to the centerline of the roadway prior to opening the bridge to traffic as directed by the engineer.

B Materials

Use a grooving machine containing blades mounted on a multi-blade arbor on a self-propelled machine built for grooving hardened concrete surfaces.

Use a grooving machine with a depth control device that detects variations in the deck surface and adjusts the cutting head height to maintain a specified depth of groove.

Equip the grooving machine with a guide device to control multi-pass alignment.

C Construction

Groove the pavement longitudinally without damaging the concrete deck surface.

Complete a longitudinal grooving operation that results in a uniformly grooved deck surface.

Cut grooves continuously across the deck width to within 18 inches of the barrier rail, curb line, or median divider. If metal floor drains extend more than 18 inches from the barrier rail, curb line, or median divider; all grooves on the bridge deck surface are to end within 6 inches of the floor drain perimeter.

At skewed metal edged expansion joints in the bridge deck surface, end all grooves on the bridge deck surface within 6 inches of the joint leaving no ungrooved surface adjacent to each side of the joint greater than 6 inches in width on the deck side of the expansion joints.

Produce grooves that are continuous across construction joints or other joints in the concrete deck surface less than 1/2-inch wide.

Width (in)	Depth (in)	Spacing C-C (in)	Width Tolerance (in)	Depth Tolerance (in)	Spacing Tolerance (in)
1/8	3/16	3/4	0 to 1/16	± 1/16	± 1/16

Construct longitudinal grooves with the following criteria:

Collect, remove and dispose of solid material residue and liquid waste resulting from grooving operations by vacuuming in a manner satisfactory to the engineer.

D Measurement

The department will measure Longitudinal Grooving Bridge Deck by the square 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.0165.4000	Longitudinal Grooving Bridge Deck	SF

Payment is full compensation for providing the required machinery and operators; for grooving, for collecting, removing and properly disposing of all waste materials.

185. Topsoil Special, Item SPV.0180.0001.

A Description

This special provision section describes furnishing, placing, spreading, and finishing humus-bearing soil, adapted to sustain plant life, commonly known as topsoil, from locations the contractor furnishes beyond the limits of the right-of-way.

This special provision also describes removing topsoil from the sites of proposed roadway excavations and embankments in quantities and depths available and necessary to cover the work slopes. This work also includes reclamation, placing, spreading, and finishing of this topsoil.

B Materials

Furnish material that is relatively free from large roots, sticks, weeds, brush, stones, litter, and waste products.

Furnish material, either obtained offsite, or material obtained within project limits, consisting of loam, sandy loam, silt loam, silty clay loam, or clay loam humus-bearing soils adapted to sustain plant life. Do not use surface soils from ditch bottoms, drained ponds, and eroded areas, or soils which are supporting growth of NR 40 listed plants and noxious weeds or other undesirable vegetation. Ensure that the material conforms to the following:

Topsoil Requirements	Minimum Range	Maximum Range
Material Passing 2.00 mm (#10) Sieve ^[1]	90%	100%
PH Range	6.0	7.0
Organic Matter ^[2]	5%	20%
Clay	5%	30%
Silt	10%	70%
Sand and Gravel	10%	70%

- ^[1] See standard spec 625.3.3 for sieve requirements when using either sod or seed mixture 40.
- ^[2] Organic matter determined by loss on ignition test of samples oven dried to constant weight at 212 F (100 C).

C Construction

C.1 Preparing the Roadway for Topsoil

Undercut or underfill all areas designated to receive topsoil to a degree that if covered to the required depth with topsoil the finished work conforms to the required lines, grades, slopes and cross sections the plans and drawings show.

C.2 Processing Topsoil

Mow topsoil procurement areas to a height of approximately 6 inches. Remove litter such as brush, rock, and other materials that will interfere with subsequent vegetation establishment.

Strip off the humus-bearing soil. Take care to minimize removing the underlying sterile soil. Then stockpile the topsoil on the right-of-way or place it directly on the designated areas.

Obtain topsoil from embankment areas outside the roadway foundation only if that additional material is required to cover the slopes and conforms to the requirements of section B in this special provision. Use excess topsoil on the project or dispose of as specified in standard spec 205.3.12.

C.3 Placing Topsoil

After preparing and finishing the areas designated for topsoil to the required lines, grades, slopes and cross section, place and spread the topsoil to a uniform depth as the plans show or the contract requires. If no depth is shown, place and spread the topsoil to a minimum depth of 4 inches in rural areas and a minimum depth of 6 inches in urban areas, or as the engineer designates.

Break down all clods and lumps using appropriate equipment to provide a uniformly textured soil.

Where using either sod or seed mixture 40 ensure that, for the upper 2 inches, 100 percent of the material passes a one-inch sieve and at least 90 percent passes the No. 10 sieve.

Remove rocks, twigs, foreign material, and clods that cannot be broken down. Dress the entire surface to present a uniform appearance. The engineer will not require rolling.

If light sandy soils are covered with heavier clay bearing loam topsoil, then mix or blend the 2 types of soils to a more or less homogeneous mixture by using the appropriate equipment.

D Measurement

The department will measure Topsoil Special by the square yard, acceptably completed conforming to standard spec 625.4.1.

E Payment

The department will pay for plan quantities conforming to standard spec 109.1.1.2 at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.0001	Topsoil Special	SY

Payment for Topsoil Special is full compensation for removing, stockpiling, reclaiming, providing, processing, excavating, loading, hauling, and placing this material; and for undercutting excavations, or underfilling embankments necessary to receive this material. The department will make no deductions from the Excavation bid items for quantities of Topsoil Special obtained from cut sections. The department will not measure or pay for volumes of Topsoil Special obtained from the sites of proposed embankments under the Excavation bid items. Additionally, the department will make no allowance, adjustment, or measurement for payment under the Excavation bid items for undercutting cut sections necessary to receive Topsoil Special. The department will not measure and pay for volumes of topsoil placed under the Roadway Embankment bid item.

If an area is damaged by erosion after partial acceptance, the department will pay for restoring topsoil in these areas at a unit price determined by multiplying the contract unit price bid for Topsoil multiplied by 3, the department will pay for restoration under the Restoration Post Acceptance Topsoil administrative item.

The department will not pay for removing topsoil from outside the roadway foundation in embankment areas unless that material is necessary to cover the slopes.

sef-625-005 (20170310)

186. Concrete Pavement 8-Inch Special, Item SPV.0180.0003.

A Description

This special provision describes specialized material and construction requirements to use on mainline concrete pavement and shoulders, and freeway entrance and exit ramps.

Conform to standard spec 415, 501, and 715 as modified in this special provision.

B Materials

B.1 Reinforcement

B.2 Coarse Aggregates

B.2.1 General

Replace standard spec 501.2.7.3.1 (2) with the following:

Use clean, hard, durable crushed limestone with 100 percent fractured surfaces and free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances or adherent coatings considered injurious.

Use virgin aggregates only.

B.3 Deleterious Substances

Replace standard spec 501.2.7.2.2 (1) and 501.2.7.3.3 with the following:

The quantity of deleterious substances shall not exceed the following percentages:

DELETERIOUS SUBSTANCE	PERCENT BY WEIGHT
Shale	

Coal	1.0
Clay lumps	0.3
Soft fragments	3.0
Any combination of above	3.0
Thin or elongated pieces based on a 3:1 ratio ^[1] 1	10.0
Materials passing the No. 200 (75 µm) sieve	1.5
Chert ^[2]	3.0
Lightweight pieces in concrete not for prestressed members ^[3]	5.0

- ^[1] As modified by CMM 860.
- ^[2] Material classified lithologically as chert and having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of chert by dividing the weight of chert in the sample retained on a 3/8-inch (9.5 mm) sieve by the weight of the total sample.
- ^[3] Material having a saturated surface-dry bulk specific gravity of less than 2.45, tested according to AASHTO T113. Determine the percentage of lightweight pieces by dividing the weight of lightweight pieces in the sample retained on the 3/8-inch sieve by the weight of the total sample.

B.4 Physical Properties

Replace standard spec 501.2.7.3.2 (1) and (2) with the following:

- (1) The percent LA wear shall not exceed 30 percent.
- (2) The department will ensure that soundness testing conforms to AASHTO T 104, using five cycles in sodium sulfate solution on aggregate retained on the No. 4 (4.75 mm) sieve. The weighted loss shall not exceed 6 percent.

The department will ensure that freeze-thaw soundness testing confirms to AASHTO T 103. The weighted freeze-thaw average loss shall not exceed 15 percent.

B.5 Joint Filler

Replace standard spec 415.2.6 with the following:

(1) Furnish a silane sealer from the department's approved product list for Concrete Protective Surface Treatments.

C Construction

C.1 Jointing

Replace standard spec 415.3.7.1 (2) with the following:

For all intersections, ramps and mainline pavement; plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design plan to the engineer at least 7 calendar days before paving. Do not layout joints until the engineer has reviewed the joint layout design. Mark the location of the concrete joints in the field prior to or after paving. Follow the plan details for joints in the concrete, making adjustments as required to fit field conditions.

Supplement standard spec 415.3.7.1 with the following:

- (9) Remove all saw slurry from sawed joints and allow to dry thoroughly before application of silane joint sealer.
- (10) Apply silane joint sealer to all sawed surfaces of the transverse and longitudinal joints unless directed otherwise by the engineer. Apply the silane joint sealer directly to the interior of the sawed joint. Do not use a broadcast spray method of application.
- (11) Apply silane joint sealer per manufacturers specifications
- (12) Apply silane joint sealer within one month of concrete placement.

C.2 Surface Finishing

Replace standard spec 415.3.8.3.1 with the following:

- (1) Tine freshly placed pavement as soon as it is practical after floating.
- (2) Tine with a self-propelled tining machine. Where using a tining machine is not practical, tine by hand. Produce uniformly deep grooves approximately 1/8 to 3/16 inch (3 mm to 5 mm) deep.
- (3) Construct a finished surface free of tining defects. Complete before tining tears or unduly roughens the concrete
- (4) Tine surface longitudinally as specified in standard spec 415.3.8.3.2.

C.3 Curing Concrete

Replace standard spec 415.3.12.1 with the following:

(1) Maintain adequate moisture throughout the concrete mass to support hydration until the concrete develops sufficient strength to open it to service. Cure all concrete by impervious coating as specified in standard spec 415.3.12.2 within 75 minutes from the time concrete is discharged from the truck. Use PAM except, use curing compound conforming to 501.2.8 on pavement will get an overlay under the contract or as directed by the engineer. The liquid curing compound shall have a color equal to or lighter than Gardner Color Standard No.2 when tested according to ASTM C 1315.8.7.6 Yellowing Resistance.

(2) If the concrete is not cured as specified in the subsection, the engineer may suspend concrete placement operations.

C.4 Extended Delivery Time

Delete standard spec 501.3.2.4.3.3.

C.5 Ready-Mixed Concrete

Replace standard spec 501.3.5.1 with the following:

Use central-mixed concrete for all work under this special provision. Central-mixed concrete is mixed in a stationary mixer and transported to the point of delivery with or without mechanical agitation in the transporting vehicle.

C.6 Hot Weather Concreting

The contractor is responsible for the quality of the concrete pavement placed in hot weather.

Take the following steps to ensure that the concrete will cure during hot weather conditions. Submit a written temperature control plan at or before the pre-pour meeting. In that plan, outline the actions to control concrete temperature if the concrete temperature at the point of placement exceeds 80° F (27° C). Do not place concrete without the engineer's written acceptance of that temperature control plan. Perform the work as outlined in the temperature control plan.

If the concrete temperature at the point of placement exceeds 90° F (32° C), do not place concrete for items covered in this special provision.

Notify the engineer whenever conditions exist that might cause the temperature at the point of placement to exceed 80° F (27° C). If project information is not available, obtain information from similar mixes placed for other nearby work.

C.7 Lots by Lane-Feet

Add the following to standard spec 715.3.1.2.2 as paragraph three:

(3) A sublot is 350 linear feet for 3-lane paving width or 2-lane plus shoulder.

C.8 Strength Evaluation

Replace standard spec 715.3.2.2.1 with the following:

715.3.2.2.1 Pavement

(1) If a sublot flexural strength is less than 550 psi, the department may direct the contractor to core that sublot to determine its structural adequacy and whether to direct removal. Cut and test cores according to AASHTO T24 as and where the engineer directs. Have an HTCP-certified PCC technician I perform or observe the coring.

- (2) The sublot pavement is conforming if the compressive strengths of all cores from the sublot are 3000 psi or greater or the engineer does not require coring.
- (3) The sublot pavement is nonconforming if the compressive strengths of any core from the sublot is less than 3000 psi. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.
 - D (Vacant)
 - E Payment

Replace standard spec 415.5.1(1) with the following:

(1)	The department will p	ay for measured quantities at the contract unit price under the following bid	item:
	ITEM NUMBER	DESCRIPTION	UNIT
	SPV.0180.0003	Concrete Pavement 8-Inch Special	SY

Replace standard spec 415.5.1(2) with the following:

(2) Payment is full compensation for providing pavement; for preparing the foundation, unless provided otherwise; for joint layout and joint layout design, for placing thickness plates; and for thickness coring and filling core holes as required under 415.3.16.4. Payment also includes providing tie bars and dowel bars within concrete placed under the contract. The department will pay separately for tie bars and dowel bars used to connect the work to concrete not placed under the contract under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5. The department will not pay for removal and replacement of pavement not meeting the surface smoothness tolerances specified in 415.3.10.

Payment also includes sealing joints with silane sealer, sawing of concrete pavement, and any additive or action taken to control the temperature of concrete.

187. Concrete Pavement 10.5-Inch Special, Item SPV.0180.0004.

A Description

This special provision describes specialized material and construction requirements to use on mainline concrete pavement and shoulders, and freeway entrance and exit ramps.

Conform to standard spec 415, 501, and 715 as modified in this special provision.

B Materials

B.1 Reinforcement

Replace standard spec 415.2.2 with the following:

(1) Furnish high performance dowel bars for transverse joints from the WisDOT Approved Products List (APL) located at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

(2) Furnish only one type of high-performance bar for all concrete pavement under the contract.

B.2 Coarse Aggregates

B.2.1 General

Replace standard spec 501.2.7.3.1 (2) with the following:

Use clean, hard, durable crushed limestone with 100 percent fractured surfaces and free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances or adherent coatings considered injurious.

Use virgin aggregates only.

B.3 Deleterious Substances

Replace standard spec 501.2.7.2.2 (1) and 501.2.7.3.3 with the following:

The quantity of deleterious substances shall not exceed the following percentages:

DELETERIOUS SUBSTANCE	PERCENT BY WEIGHT
Shale	

Coal	1.0
Clay lumps	0.3
Soft fragments	3.0
Any combination of above	3.0
Thin or elongated pieces based on a 3:1 ratio ^[1] 1	10.0
Materials passing the No. 200 (75 µm) sieve	1.5
Chert ^[2]	3.0
Lightweight pieces in concrete not for prestressed members ^[3]	5.0

- ^[1] As modified by CMM 860.
- ^[2] Material classified lithologically as chert and having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of chert by dividing the weight of chert in the sample retained on a 3/8-inch (9.5 mm) sieve by the weight of the total sample.
- ^[3] Material having a saturated surface-dry bulk specific gravity of less than 2.45, tested according to AASHTO T113. Determine the percentage of lightweight pieces by dividing the weight of lightweight pieces in the sample retained on the 3/8-inch sieve by the weight of the total sample.

B.4 Physical Properties

Replace standard spec 501.2.7.3.2 (1) and (2) with the following:

- (1) The percent LA wear shall not exceed 30 percent.
- (2) The department will ensure that soundness testing conforms to AASHTO T 104, using five cycles in sodium sulfate solution on aggregate retained on the No. 4 (4.75 mm) sieve. The weighted loss shall not exceed 6 percent.

The department will ensure that freeze-thaw soundness testing confirms to AASHTO T 103. The weighted freeze-thaw average loss shall not exceed 15 percent.

B.5 Joint Filler

Replace standard spec 415.2.6 with the following:

(1) Furnish a silane sealer from the department's approved product list for Concrete Protective Surface Treatments.

C Construction

C.1 Jointing

Replace standard spec 415.3.7.1 (2) with the following:

For all intersections, ramps and mainline pavement; plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design plan to the engineer at least 7 calendar days before paving. Do not layout joints until the engineer has reviewed the joint layout design. Mark the location of the concrete joints in the field prior to or after paving. Follow the plan details for joints in the concrete, making adjustments as required to fit field conditions.

Supplement standard spec 415.3.7.1 with the following:

- (9) Remove all saw slurry from sawed joints and allow to dry thoroughly before application of silane joint sealer.
- (10) Apply silane joint sealer to all sawed surfaces of the transverse and longitudinal joints unless directed otherwise by the engineer. Apply the silane joint sealer directly to the interior of the sawed joint. Do not use a broadcast spray method of application.
- (11) Apply silane joint sealer per manufacturers specifications
- (12) Apply silane joint sealer within one month of concrete placement.

C.2 Surface Finishing

Replace standard spec 415.3.8.3.1 with the following:

- (1) Tine freshly placed pavement as soon as it is practical after floating.
- (2) Tine with a self-propelled tining machine. Where using a tining machine is not practical, tine by hand. Produce uniformly deep grooves approximately 1/8 to 3/16 inch (3 mm to 5 mm) deep.
- (3) Construct a finished surface free of tining defects. Complete before tining tears or unduly roughens the concrete
- (4) Tine surface longitudinally as specified in standard spec 415.3.8.3.2.

C.3 Curing Concrete

Replace standard spec 415.3.12.1 with the following:

(1) Maintain adequate moisture throughout the concrete mass to support hydration until the concrete develops sufficient strength to open it to service. Cure all concrete by impervious coating as specified in standard spec 415.3.12.2 within 75 minutes from the time concrete is discharged from the truck. Use PAM except, use curing compound conforming to 501.2.8 on pavement will get an overlay under the contract or as directed by the engineer. The liquid curing compound shall have a color equal to or lighter than Gardner Color Standard No.2 when tested according to ASTM C 1315.8.7.6 Yellowing Resistance.

(2) If the concrete is not cured as specified in the subsection, the engineer may suspend concrete placement operations.

C.4 Extended Delivery Time

Delete standard spec 501.3.2.4.3.3.

C.5 Ready-Mixed Concrete

Replace standard spec 501.3.5.1 with the following:

Use central-mixed concrete for all work under this special provision. Central-mixed concrete is mixed in a stationary mixer and transported to the point of delivery with or without mechanical agitation in the transporting vehicle.

C.6 Hot Weather Concreting

The contractor is responsible for the quality of the concrete pavement placed in hot weather.

Take the following steps to ensure that the concrete will cure during hot weather conditions. Submit a written temperature control plan at or before the pre-pour meeting. In that plan, outline the actions to control concrete temperature if the concrete temperature at the point of placement exceeds 80° F (27° C). Do not place concrete without the engineer's written acceptance of that temperature control plan. Perform the work as outlined in the temperature control plan.

If the concrete temperature at the point of placement exceeds 90° F (32° C), do not place concrete for items covered in this special provision.

Notify the engineer whenever conditions exist that might cause the temperature at the point of placement to exceed 80° F (27° C). If project information is not available, obtain information from similar mixes placed for other nearby work.

C.7 Lots by Lane-Feet

Add the following to standard spec 715.3.1.2.2 as paragraph three:

(3) A sublot is 350 linear feet for 3-lane paving width or 2-lane plus shoulder.

C.8 Strength Evaluation

Replace standard spec 715.3.2.2.1 with the following:

715.3.2.2.1 Pavement

(1) If a sublot flexural strength is less than 550 psi, the department may direct the contractor to core that sublot to determine its structural adequacy and whether to direct removal. Cut and test cores according to AASHTO T24 as and where the engineer directs. Have an HTCP-certified PCC technician I perform or observe the coring.

- (2) The sublot pavement is conforming if the compressive strengths of all cores from the sublot are 3000 psi or greater or the engineer does not require coring.
- (3) The sublot pavement is nonconforming if the compressive strengths of any core from the sublot is less than 3000 psi. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

D (Vacant)

E Payment

Replace standard spec 415.5.1(1) with the following:

(1)	The department will p	ay for measured quantities at the contract unit price under the following bid	item:
	ITEM NUMBER	DESCRIPTION	UNIT
	SPV.0180.0004	Concrete Pavement 10.5-Inch Special	SY

Replace standard spec 415.5.1(2) with the following:

(2) Payment for the Concrete Pavement bid items is full compensation for providing pavement; for preparing the foundation, unless provided otherwise; for joint layout and joint layout design, for placing thickness plates; and for thickness coring and filling core holes as required under 415.3.16.4. Payment also includes providing tie bars and dowel bars within concrete placed under the contract. The department will pay separately for tie bars and dowel bars used to connect the work to concrete not placed under the contract under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5. The department will not pay for removal and replacement of pavement not meeting the surface smoothness tolerances specified in 415.3.10.

Payment also includes sealing joints with silane sealer, sawing of concrete pavement, and any additive or action taken to control the temperature of concrete.

188. Asphaltic Material Binder, Item SPV.0180.0106.

A Description

This special provision describes furnishing and applying an asphaltic material binder to aggregate, at locations shown in the plans, to control erosion and prevent the growth of vegetation.

B Materials

B.1 General

Furnish emulsified asphalt, type RS 1 or RS 2 conforming to AASHTO M140, or type CRS 1 or CRS 2 conforming to AASHTO M208 for the asphaltic material.

Furnish evidence, to the satisfaction of the engineer, that the proposed product has been successfully used in a similar application.

C Construction

C.1 Application

Apply the Asphaltic Material binder uniformly over the dry surface at a rate just sufficient to ensure penetration and binding of the particles in the upper 2 inches of the aggregate blanket according to the manufacturer's recommended rate and procedures. Avoid excessive application of asphaltic material binder and exercise care to prevent material run-off. Protect the surface of adjacent structures, barriers, and pavement to prevent splattering or discoloration by asphaltic material.

Protect asphaltic material binder from excessive dust exposure for the first 4 hours of curing.

C.2 Test Section

Prepare a test section utilizing aggregate and asphaltic material binder so the engineer will be able to assess the adequacy of the product and the application to yield the desired results. Test section to be a minimum of 3-feet x 3-feet. Notify the engineer no less than 24 hours in advance of preparing the test section to allow him time to arrange for witnessing the asphaltic material binder application and mixing with the aggregate. Cure test section according to product manufacturer's requirements before the engineer will accept the product for use.

If the test section is not accepted, prepare another test section and repeat the process. Repeat this procedure until the engineer accepts the test section. Use the same asphaltic material binder means and methods when installing the product that were used in preparing the accepted test section.

D Measurement

The department will measure Asphaltic Material Binder by the square yard in place, 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.0180.0106	Asphaltic Material Binder	SY

Payment is full compensation for furnishing, mixing and applying the asphaltic material binder to the aggregate; for cleaning any splatter of asphaltic material binder from adjacent structures, barriers, and pavement; and for making and disposing of test sections.

189. HMA Longitudinal Joint Repair, Item SPV.0195.0001.

A Description

This special provision describes providing longitudinal joint repairs in HMA pavements. Conform to standard spec 204, 315, 455, and 460, and as follows.

B Materials

Furnish asphaltic mixture as specified for type 3 HT 58-28 H under standard spec 460.2.

Provide tack coat conforming to standard spec 455.2.5.

C Construction

C.1 General

Remove an area 1.5 to 3 feet wide and at least to the full depth of asphaltic pavement; the engineer will determine the repair length. Remove damaged concrete pavement discovered below the asphalt during this removal and replace with asphalt mixture.

Clean the existing exposed concrete pavement surface before placing tack coat.

Apply asphaltic materials the same day the joint is removed to prevent the entrance of water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

Conform to standard spec 315.3.1 for placement of the HMA pavement.

Dispose of removed pavement and other waste materials outside of the project limits unless the engineer allows otherwise.

C.2 Maintenance

Maintain repaired joints during the contract. Remove and replace additional tack coat and HMA pavement if the engineer directs.

D Measurement

The department will measure HMA Longitudinal Joint Repair 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.0195.0001	HMA Longitudinal Joint Repair	TON

Payment is full compensation for providing the joint repair including removing the existing asphaltic surface and damaged concrete; for tack coat and asphaltic pavement mixture; and for maintaining the repair during the contract.

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190. HMA Transverse Joint Repair, Item SPV.0195.0002.

A Description

This special provision describes providing transverse joint repairs in HMA pavements at bridges. Conform to standard spec 204, 315, 455, and 460, and as follows.

B Materials

Furnish asphaltic mixture as specified for type 3 MT 58-28 S under standard spec 460.2. Provide tack coat conforming to standard spec 455.2.5.

C Construction

C.1 General

Remove an area two feet wide and at least to the full depth of asphaltic pavement; the engineer will determine the repair length. Remove damaged concrete pavement discovered below the asphalt during this removal and replace with asphalt mixture.

Clean the existing exposed concrete pavement surface before placing tack coat.

Apply asphaltic materials the same day the joint is removed to prevent the entrance of water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

Conform to standard spec 315.3.1 for placement of the HMA pavement

Dispose of removed pavement and other waste materials outside of the project limits unless the engineer allows otherwise.

C.2 Maintenance

Maintain repaired joints during the contract. Remove and replace additional tack coat and HMA pavement if the engineer directs.

D Measurement

The department will measure HMA Transverse Joint Repair 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.0195.0002	HMA Transverse Joint Repair	TON

Payment is full compensation for providing the joint repair including removing the existing asphaltic surface and damaged concrete; for tack coat and asphaltic pavement mixture; and for maintaining the repair during the contract.

191. Stream Bed Material, Item SPV.0195.0003.

A Description

This work shall consist of furnishing, transporting, stockpiling, maintaining and placing for construction of the proposed channel relocation and at the end of culvert pipes as shown on the plan or as directed by the engineer. Work under this item shall be done according to standard spec 606, modified as follows.

B Materials

Coarse aggregate mix for stream bed material furnished and used in this work shall be natural, rounded, uncrushed coarse aggregate. The mix shall consist of roughly 75% Number 2 stone (standard spec 209) and 25% 3/8-inch pea gravel, thoroughly mixed. The mix must be approved by the engineer prior to installation.

C Construction

Thoroughly compact the coarse aggregate mix as construction progresses. The finished surface shall present an even, tight surface.

D Measurement

The department will measure the Stream Bed Material by the tons in place and completed work, and the quantity thereof to be paid will be the summation of tons of all aggregate incorporated in the work, acceptably completed, according to the contract. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the volume within the limiting dimensions designated on the plans, in the contract, or as established 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.0195.0003	Stream Bed Material	TON

Payment is full compensation for furnishing and placing Stream Bed 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:

 <u>On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.</u> 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.

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

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>7</u> (*number*) TrANS Graduate(s) be utilized on this contract.

2) <u>On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice</u>. 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).

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

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>7</u> (*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 Onthe-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: <u>http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx</u>

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 24hours 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. <u>Instructions for eSubmit.</u>

**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): <u>https://www.bidx.com/wi/main</u>, 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 <u>tied bid items</u>. 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 <u>unless</u> 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 <u>ASP-3 and Good Faith Effort Guidance</u> 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: <u>http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf</u>

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

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

- (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 billof-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 <u>Application to Use</u> <u>Joint Checks</u> 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.

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

- 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?

Following Bid Opening- this discussion can happen at any time

- 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.

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: <u>Wisconsin Department of Transportation</u> <u>Highway Construction Contract Information (wisconsindot.gov)</u>. 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	1	6
County	Dane County	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 <u>and completed XX WisDOT projects over the past XX years</u>
- Consider [Prime Contractor] your partner on WisDOT Projects

[Prime Contractor] is seeking <u>your</u> 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 <u>date</u>. 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 <u>time and date.</u> 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 <u>time and date.</u> 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 ٠
- 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 guotes 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 Page 22 of 36 •

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	All work items are broken out into economically feasible		
Documentation	units to facilitate DBE participation.		
	Such as: Selected work items are <u>specific</u> to each proposal and clearly identified in all solicitation(s)		
Documentation of Project	Provide interested DBEs with adequate information		
Information provided to Interested DBEs	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

COMMITMENT TO SU DT1506 12/2021 s.84.06(2)		ACT TO DBE		Clear Project ID:		onsin Departmer	999 - 9997 - 503,000 - 405,000	•••••••••••••••••••••••••••••••••••••••
Prime Contractor:				Proposal #				
County:				Letting Date				
This contract requires that a speci disadvantaged business enterpris	ified percentage	of the work be subcontra	acted to a	Total \$ Valu Prime Contr		\$		
described in ASP-3. The submitta DBE commitment. Include Attacht	I of this form wit	h the bid proposal constil	utes your	DBE Contra	ct Goal:	%		
This form must be completed				DBE Goal A		0.00 %		
site pretty over desiring a	Sent constant and the		3. Supplier		5. [DBE Full	6. DBE A	
1. DBE Firm	2. WORK OF Itel	ms to be subcontracted	Y/N	4. Trucking C	Sut	ocontract \$	for Credit	\$
				O# L#				
				O# L#				
				O#				
			-	L# 0#			1	
				L#			-	
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				O# L#				
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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 Participat	Name of DBE Firm Participating in this Contract:						
Name of the Prime/Subcontra	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 Mate	erial Supplied:						
Total Subcontract Value:			Total DBE Credit Value:				
		Prim	e Contractor Representative's Sigr	nature			
FOR PRIME CONTRACTORS (Prime Contractor Representative's Name (Print Name)			e)		
DBE firm to perform the type of v	DBE firm to perform the type of work listed or supply the material indicated above for the subcontract value listed		Prime Contractor (Print Company Name)				
		Date					
FOR PARTICIPATING DBE FIR	MS ONLY:	Parti	cipating DBE Firm Representative	's Signature	Date		
I certify that I made arrangement Contractor or the Hiring Contract							
work or supply the material indic subcontract value listed above.		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		Participating DBE Firm (Print Company Name)					
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.			Firm's Address:				
# Owned Trucks	# Leased Trucks		# DBE-Owned Leased Trucks	10-04 (0.140) (0.140) (0.140)	DBE-Owned sed Trucks		

Off site Hauling

DOCUMENTATION OF GOOD FAITH EFFORT



Project-ID *****	Proposal-No.	Letting 00000
Prime Contractor		County
Person-Submitting-Document		Telephone-Number
Address •••••		Email-Address

 $\label{eq:alpha} All \mbox{-}bidders \mbox{-}must \mbox{-}undertake \mbox{-}necessary \mbox{-}and \mbox{-}reasonable \mbox{-}steps \mbox{-}to \mbox{-}achieve \mbox{-}the \mbox{-}assigned \mbox{-}DBE \mbox{-}contract \mbox{-}goal \mbox{-}per \mbox{-}federal \mbox{-}regulatory \mbox{-}guidance \mbox{-}at \mbox{-}49 \mbox{-}CFR \mbox{-}Part \mbox{-}26 \mbox{-}Bidders \mbox{-}use \mbox{-}this \mbox{-}form \mbox{-}to \mbox{-}document \mbox{-}all \mbox{-}efforts \mbox{-}employed \mbox{-}to \mbox{-}meet \mbox{-}the \mbox{-}assigned \mbox{-}goal \mbox{-}as \mbox{-}a \mbox{-}record \mbox{-}of \mbox{-}contractor \mbox{-}goal \mbox{-}faith \mbox{-}efforts \mbox{-}(GFE) \mbox{-} Refer \mbox{-}to \mbox{-}ASP3 \mbox{-}or \mbox{-}49 \mbox{-}CFR \mbox{-}Part \mbox{-}26 \mbox{-}for \mbox{-}guidance \mbox{-}on \mbox{-}actions \mbox{-}that \mbox{-}demonstrate \mbox{-}goal \mbox{-}faith \mbox{-}effort \mbox{-}.$

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-tothe-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. Earlysolicitation-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-goodfaith-efforts. A-bidder-using-good-business-judgment-considers-a-number-of-factors-innegotiating-with-all-subcontractors, and-the-firm's-price-and-capabilities-in-addition-to-contractgoals-are-taken-into-consideration. However, the-fact-that-there-may-be-some-additional-costsinvolved-in-finding-and-using-DBEs-is-not-in-itself-sufficient-reason-for-failing-to-meet-the-DBEgoal-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-reasonssuch-as-past-performance, relevant-business-experience-and-stability, safety-record, businessethic-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 providetechnical 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

certify-that-I-have-utilized-comprehensive-good-faith-efforts-to-solicit-and-utilize-DBE-firms-to-meet-the-DBE-participation-requirements-of his-contract-proposal, as-demonstrated-by-my-responses-and-as-specified-in-Additional-Special-Provision-3-(ASP-3).						
l-certify-that-the-information-given-in-the-Documentation-of-Good-Faith-Effo	rts-is-true-and-correct-to-the-best-of-my-knowledge-and-belief.··					
l·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
Payament Marking	ABC·Marking	Leslie·Lynch	4/1/2020	Email; phone
Pavement-Marking	#1.Marking-Co.	Mark-Smart	4/1/2020	Email; ·left·VM
Electrical	Winterland Electric	Tabitha-Tinker	4/3/2020	Email, left VM
Electrical	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?	Considere d·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: <u>https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx</u>

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 PROVISIONS 5 FUEL COST ADJUSTMENT

A Description

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

B Categories of Work Items

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$2.70 per gallon.

D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \mathop{\mathbf{c}}_{\mathbf{c}} \underbrace{\mathbf{CFI}}_{\mathbf{c}BFI} - \mathop{\mathbf{l}}_{\mathbf{z}} \overset{\mathbf{o}}{\mathbf{z}} Q x BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

Additional Special Provision 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

416.2.4 Concrete Pavement Repair and Replacement

Replace the entire text with the following effective with the November 2022 letting:

- (1) Except as specified in 416.3.6 for inlaid rumble strips, use grade C concrete as specified in 501.
- (2) The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi.

416.2.5 Special High Early Strength Concrete Pavement Repair and Replacement

416.2.5.1 Composition and Proportioning of Concrete

Replace paragraph one with the following effective with the November 2022 letting:

⁽¹⁾ For the concrete mixture, use a minimum of 846 pounds of cementitious material per cubic yard of concrete. The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi. The contractor may add one or a combination of admixtures to the ingredients or to the mixture in order to obtain the required minimum strength and required air content. Do not retemper the concrete mixture.

455.2.4.3 Emulsified Asphalts

Replace paragraph one with the following effective with the November 2022 letting:

(1) Furnish material conforming, before dilution, to the following:

Anionic emulsified asphalts ^[1]	AASHTO M140
Cationic emulsified asphalts ^[1]	AASHTO M208
Polymer-modified cationic emulsified asphalts	AASHTO M316

^[1] Non-tracking emulsified asphalts shall conform to TABLE 455-1 for the type and grade specified.

TABLE 455-1 Requirements for Non-Tracking Emulsified Asphalt				
PRODUCT	ANTT	CNTT		
Saybolt Viscosity at 77°F (25°C), (AASHTO T 59), SFS	15-100	15-100		
Paddle Viscosity at 77°F (25°C), (AASHTO T 382), cPs ^[1]	30-200	30-200		
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max	1 max		
Residue by Distillation, 500 \pm 10 °F (260 \pm 5 °C), or Residue by Evaporation, 325 \pm 5 °F (163 \pm 3 °C), (AASHTO T 59), %	50 min	50 min		
Sieve Test, No. 20 (850 µm), (AASHTO T 59), %	0.3	0.3		
Penetration at 77°F (25°C), 100 g, 5 sec, (AASHTO T 49), dmm	10-40	10-40		
Ash Content, (AASHTO T 111), %	1 max	1 max		
Solubility in Trichlorethylene Test, (AASHTO T $44)^{[2]}$	97.5% min	97.5% min		

^[1] Paddle Viscosity (AASHTO T 382) may be run in lieu of Saybolt Viscosity (AASHTO T 59).

^[2] The solubility in Trichlorethylene test (AASHTO T 44) may be run in lieu of Ash Content (AASHTO T 111).

455.2.5 Tack Coat

Replace paragraph one with the following effective with the November 2022 letting:

(1) Under the Tack Coat bid item, furnish type SS-1h, CSS-1h, QS-1h, CQS-1h, ANTT, CNTT, or modified emulsified asphalt with an "h" suffix, unless the contract specifies otherwise.

710.5.7.1 Optimized Aggregate Gradations

Replace paragraph one with the following effective with the November 2022 letting:

- (1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size, notify the other party immediately and do one of the following:
 - Perform corrective action documented in the QC plan or as the engineer approves. Continue with the following:
 - 1. Document and provide corrective action results to the engineer as soon as they are available.
 - 2. Department will conduct two tests within the next business day after corrective action is complete.

If blended aggregate gradations are within the tarantula curve limits by the second department test:

- Continue with concrete production.
- Include a break in the 4-point running average.
- For Class I Pavements: The department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
- If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract requires an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit a new optimized aggregate gradation mix design.
- If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract does not require an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit either a new optimized aggregate gradation mix design or a combined aggregate gradation mix design.
- Submit a new optimized aggregate gradation mix design and perform the following:
 - 1. Restart control charts for the new mix design.
 - 2. Amend contractor Quality Control Plan

715.5 Payment

Replace the entire text with the following effective with the November 2022 letting:

715.5.1 General

(1) The department will pay incentive for concrete strength under the following bid items:

ITEM NUMBER	DESCRIPTION	<u>UNIT</u>
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

(2) Incentive payment may be more or less than the amount the schedule of items shows.

- (3) The department will administer disincentives for strength under the Disincentive Strength Concrete Structures, Disincentive Strength Concrete Barrier, Disincentive Flexural Strength Concrete Pavement, and Disincentive Compressive Strength Concrete Pavement, administrative items.
- (4) The department will adjust pay for each lot using PWL of the 28-day sublot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows:
 - Compressive strength of 3700 psi for pavements.
 - Flexural strength of 650 psi for pavements.
 - Compressive strength of 4000 psi for structures and barrier.
- ⁽⁵⁾ The department will not pay a strength incentive for concrete that is nonconforming in another specified property, for ancillary concrete accepted based on tests of class I concrete, or for high early strength concrete unless placed in pavement gaps as allowed under 715.3.1.2.2.
- (6) Submit test results to the department electronically using MRS software. The department will verify contractor data before determining pay adjustments.
- (7) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are incidental to the contract.

715.5.2 Pavements

715.5.2.1 Compressive

(1) The department will adjust pay for each lot using equation "QMP 3.01" as follows:

- Percent within Limits (PWL)
 Pay Adjustment (dollars per square yard)

 >= 95 to 100
 (0.1 x PWL) 9.5

 >= 85 to < 95</td>
 0

 >= 30 to < 85</td>
 (1.5/55 x PWL) 127.5/55

 < 30</td>
 -1.50
- (2) The department will not pay incentive if the lot standard deviation is greater than 400 psi compressive.
- ⁽³⁾ For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 3700 psi compressive by \$1.50 per square yard.
- (4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.2.2 Flexural

(1) The department will adjust pay for each lot using equation "QMP 6.02" as follows:

Percent within Limits (PWL)	Pay Adjustment (dollars per square yard)
>= 95 to 100	(0.2 x PWL) – 19
>= 85 to < 95	0
>= 50 to < 85	(2.0/35 x PWL) – 170/35
< 50	-2.00

- (2) The department will not pay incentive if the lot standard deviation is greater than 60 psi flexural.
- ⁽³⁾ For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 650 psi flexural by \$2.00 per square yard.
- ⁽⁴⁾ For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.3 Structures and Cast-in-Place Barrier

(1) The department will adjust pay for each lot using equation "QMP 2.01" as follows:

Percent within Limits (PWL)	Pay Adjustment (dollars per square yard)
>= 99 to 100	10
>= 90 to < 99	0
>= 50 to < 90	(7/8 x PWL) – 78.75
< 50	-35

- (2) The department will not pay incentive if the lot standard deviation is greater than 350 psi.
- ⁽³⁾ For lots with less than 4 sublots, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 4000 psi by \$35 per cubic yard.

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

ATTACHMENTS

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

I. GENERAL

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

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

Form FHWA-1273 must be included in all Federal-aid designbuild 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 nonminority 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 nonminority 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. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

2. Withholding (29 CFR 5.5)

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

3. Payrolls and basic records (29 CFR 5.5)

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

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

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) 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. 231.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees (29 CFR 5.5)

a. Apprentices (programs of the USDOL).

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

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

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

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

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

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. 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 journeymen 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 shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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 (29 CFR 5.5)

a. By entering into this contract, the contractor certifies that neither it (nor he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

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 watchmen 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. 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 watchmen 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. 29 CFR 5.5.

* \$27 as of January 23, 2019 (See 84 FR 213-01, 218) 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.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section. 29 CFR 5.5.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

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 longstanding 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 Federalaid 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 200.326.

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 200.326.

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 (<u>https://www.sam.gov/</u>). 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 (<u>https://www.sam.gov/</u>), 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 debarrent. 2 CFR 180.325.

* * * * *

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

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

(a) 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;

(b) 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

(c) 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)

2. 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 Nondiscrimination 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.

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:

County		County_			%
	<u>%</u>			<u>County</u>	
Adams	1.7	lowa	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 Minority Participation for Each Trade:

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 M-22-11 from the Office of Management and Budget: <u>https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf</u>) 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 smelting forward in the manufacturing process) 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 OMB M-22-11 and as referenced in CMM 228.5) must comply with Buy America. No exemptions (0.0%) are allowed.

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: <u>https://wisconsindot.gov/Documents/formdocs/dt4567.docx</u>

Attach a list of iron or steel exemptions and their associated costs to the certification form.

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. It is 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: WI20230010 06/02/2023

Superseded General Decision Number: WI20220010

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)(2)-(60).

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 \$16.20 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 2023.
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:	

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		01/06/2023	

1	01/13/2023
2	01/20/2023
3	03/31/2023
4	04/07/2023
5	05/26/2023
6	06/02/2023

BRWI0001-002 06/01/2022

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

Rates Fringes
BRICKLAYER.....\$ 37.96 25.13

BRWI0002-002 06/01/2022

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

BRWI0002-005 06/01/2022

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	.\$ 38.81	23.94	
BRWI0003-002 06/01/2021			
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE, AM	ND OCONTO COUNTIES	
	Rates	Fringes	
BRICKLAYER	.\$ 37.03	24.95	
BRWI0004-002 06/01/2022			
KENOSHA, RACINE, AND WALWORTH COUNTIES			
	Rates	Fringes	
BRICKLAYER	-	26.01	
BRWI0006-002 06/01/2022			
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES			
	Rates	Fringes	

BRICKLAYER\$ 3	38.26	24.83
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BRWI0007-002 06/01/2022			
GREEN, LAFAYETTE, AND ROCK COUNTIES			
	Rates	Fringes	
BRICKLAYER	\$ 39.26	25.52	
BRWI0008-002 06/01/2022			
MILWAUKEE, OZAUKEE, WASHINGTON, A	AND WAUKESHA COU	NTIES	
	Rates	Fringes	
BRICKLAYER		24.42	
BRWI0011-002 06/01/2022			
CALUMET, FOND DU LAC, MANITOWOC,	AND SHEBOYGAN C	OUNTIES	
	Rates	Fringes	
BRICKLAYER	\$ 38.00	25.09	
BRWI0019-002 06/01/2022			
BARRON, BUFFALO, BURNETT, CHIPPEW PIERCE, POLK, RUSK, ST. CROIX, SA			
	Rates	Fringes	
BRICKLAYER	\$ 37.36	25.73	
BRWI0034-002 06/01/2022			
COLUMBIA AND SAUK COUNTIES			
	Rates	Fringes	
BRICKLAYER	\$ 39.56	25.22	
CARP0068-011 05/02/2022			
BURNETT (W. of Hwy 48), PIERCE (W 35, 48 & 65), AND ST. CROIX (W. c			
	Rates	Fringes	
Carpenter & Piledrivermen		27.05	
CARP0264-003 06/01/2016			
KENOSHA, MILWAUKEE, OZAUKEE, RACI COUNTIES	ENE, WAUKESHA, A	ND WASHINGTON	
	Rates	Fringes	
CARPENTER		22.11	

CARP0310-002 06/05/2022

Ashland, Bayfield, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Shawano, Taylor and Vilas

	Rates	Fringes
CARPENTER Piledriver		26.12 25.96
CARP0314-001 06/05/2022		
Columbia, Dane, Dodge, Grant, Gre Lafayette, Richland, Rock, Sauk a		rson,
	Rates	Fringes
CARPENTER Piledriver	\$ 37.37	26.12 25.96
CARP0361-004 05/01/2018		
BAYFIELD (West of Hwy 63) AND DOU	GLAS COUNTIES	
	Rates	Fringes
CARPENTER CARP0731-002 06/05/2022	•	20.43
Calumet (Eastern portion of the C and Sheboygan	ounty), Fond Du	Lac, Manitowoc
	Rates	Fringes
CARPENTER Piledriver	\$ 37.37	26.12 25.96
CARP0804-001 06/05/2022		
Adams, Juneau, Portage and Wood		
	Rates	Fringes
CARPENTER Piledriver		26.12 25.96
CARP0955-002 06/01/2022		
Calumet (western portion of Count Marquette, Outagamie and Winnebag		, Green Lake,
	Rates	Fringes
CARPENTER PILEDRIVER	\$ 37.37	26.12 25.96
CARP1056-002 06/05/2022		
	Rates	Fringes
MILLWRIGHT	\$ 38.00	26.78

CARP1074-002 06/01/2022

Barron, Burnett, Chippewa, Clark, Dunn, Eau Claire, Pepin, Pierce, Polk, Rusk, Sawyer, St. Croix and Washburn

	Rates	Fringes
CARPENTER PILEDRIVER	\$ 37.37	
CARP1143-002 06/01/2022		
Crawford, Jackson, La Crosse, Mon	roe, Trempealea	u and Vernon
	Rates	Fringes
CARPENTER PILEDRIVER		26.12 25.96
CARP1146-002 06/01/2022		
Brown, Door, Florence, Kewaunee, Shawano	Marinette, Meno	minee and
	Rates	Fringes
CARPENTER PILEDRIVER		26.12 25.96
CARP2337-001 06/01/2016		
ZONE A: MILWAUKEE, OZAUKEE, WAUKE	SHA AND WASHING	TON
ZONE B: KENOSHA & RACINE		
	_ .	
	Rates	Fringes
PILEDRIVERMAN Zone A		
Zone B	\$ 31.03	22.69 22.69
	\$ 31.03	
Zone B	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IR LK, PRICE, RICH	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST
Zone B ELEC0014-002 12/25/2022 ASHLAND, BARRON, BAYFIELD, BUFFAL (except Maryville, Colby, Unity, Sherwood), CRAWFORD, DUNN, EAU CL CROSSE, MONROE, PEPIN, PIERCE, PO CROIX, SAWYER, TAYLOR, TREMPEALEA	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IR LK, PRICE, RICH	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST
Zone B ELEC0014-002 12/25/2022 ASHLAND, BARRON, BAYFIELD, BUFFAL (except Maryville, Colby, Unity, Sherwood), CRAWFORD, DUNN, EAU CL CROSSE, MONROE, PEPIN, PIERCE, PO CROIX, SAWYER, TAYLOR, TREMPEALEA COUNTIES Electricians:	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IRU LK, PRICE, RICH U, VERNON, AND N Rates	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST WASHBURN
Zone B ELEC0014-002 12/25/2022 ASHLAND, BARRON, BAYFIELD, BUFFAL (except Maryville, Colby, Unity, Sherwood), CRAWFORD, DUNN, EAU CL CROSSE, MONROE, PEPIN, PIERCE, PO CROIX, SAWYER, TAYLOR, TREMPEALEA COUNTIES	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IRU LK, PRICE, RICH U, VERNON, AND N Rates	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST WASHBURN Fringes
Zone B ELEC0014-002 12/25/2022 ASHLAND, BARRON, BAYFIELD, BUFFAL (except Maryville, Colby, Unity, Sherwood), CRAWFORD, DUNN, EAU CL CROSSE, MONROE, PEPIN, PIERCE, PO CROIX, SAWYER, TAYLOR, TREMPEALEA COUNTIES Electricians:	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IRU LK, PRICE, RICH U, VERNON, AND N Rates	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST WASHBURN Fringes
Zone B ELEC0014-002 12/25/2022 ASHLAND, BARRON, BAYFIELD, BUFFAL (except Maryville, Colby, Unity, Sherwood), CRAWFORD, DUNN, EAU CL CROSSE, MONROE, PEPIN, PIERCE, PO CROIX, SAWYER, TAYLOR, TREMPEALEA COUNTIES Electricians: ELEC0014-007 05/29/2022	\$ 31.03 O, BURNETT, CHI Sherman, Fremon AIRE, GRANT, IRU LK, PRICE, RICH U, VERNON, AND N Rates	22.69 PPEWA, CLARK t, Lynn & ON, JACKSON, LA LAND, RUSK, ST WASHBURN Fringes

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 06/01/2021

KENOSHA COUNTY

	Rates	Fringes
Electricians:	.\$ 43.16	30%+12.70
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
	AE /20 /2021		

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 Electrical contracts under	\$ 33.94	21.80
\$180,000	\$ 31.75	21.73

ELEC0242-005 05/30/2021

DOUGLAS COUNTY

Electricians:..... \$ 41.37 69.25%

ELEC0388-002 05/30/2021

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:	\$ 36.22	26%+11.24
ELEC0430-002 06/01/2022		

RACINE COUNTY (Except Burlington Township)

Rates Fringes

Electricians:.....\$ 45.02 24.35 ELEC0494-005 06/01/2022

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes	
Electricians:	\$ 46.38	25.86	
ELEC0494-006 06/01/2021			-

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes	
Electricians:	\$ 37.91	22.74	
ELEC0494-013 05/29/2022			

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	\$ 22.39	18.80
Technician	\$ 33.19	21.12

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

ELEC0577-003 06/01/2022

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:	.\$ 37.41	29.50%+10.00
ELEC0890-003 06/01/2022		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:	\$ 40.70	25.95%+11.26
ELEC0953-001 06/02/2019		

	Rates	Fringes
Line Construction: (1) Lineman (2) Heavy Equipment Operator (3) Equipment Operator (4) Heavy Groundman Driver. (5) Light Groundman Driver. (6) Groundsman	.\$ 42.78 .\$ 38.02 .\$ 33.27 .\$ 30.89	21.43 19.80 18.40 16.88 16.11 14.60

* ENGI0139-005 06/01/2023

Rates Fringes

Power	Equipment	Operator	
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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 06/13/2022

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES: Rates

IRONWORKER	.\$ 41.00	28.95
Paid Holidays: New Year's Day, Day, Thanksgiving Day & Christ		uly 4th, Labor
IRON0008-003 06/01/2021		
KENOSHA, MILWAUKEE, OZAUKEE, RAC WASHINGTON, AND WAUKESHA COUNTIE		.E. 2/3),
	Rates	Fringes
IRONWORKER	.\$ 40.57	28.40
Paid Holidays: New Year's Day, Day, Thanksgiving Day & Christ		uly 4th, Labor
IRON0383-001 06/05/2022		
ADAMS, COLUMBIA, CRAWFORD, DANE, GRANT, GREENE, (Excluding S.E. t JEFFERSON, JUNEAU, LA CROSSE, LA MARQUETTE, MENOMINEE, MONROE, PO area, vicinity of Edgerton and M WAUSHARA, AND WOOD COUNTIES	ip), GREEN LAKE, FAYETTE, LANGLAD RTAGE, RICHLAND,	IOWA, E, MARATHON, ROCK (Northern
	Rates	Fringes
IRONWORKER	.\$ 39.00	28.58
IRON0498-005 06/01/2021		
GREEN (S.E. 1/3), ROCK (South of WALWORTH (S.W. 1/3) COUNTIES:	Edgerton and Mi	lton), and
	Rates	Fringes
IRONWORKER		44.41
IRON0512-008 05/01/2022		
BARRON, BUFFALO, CHIPPEWA, CLARK PEPIN, PIERCE, POLK, RUSK, ST CR COUNTIES		
	Rates	Fringes
IRONWORKER	-	33.11
IRON0512-021 05/01/2022		
ASHLAND, BAYFIELD, BURNETT, DOUG PRICE, SAWYER, VILAS AND WASHBU		LN, ONEIDA,

PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

Rates	Fringes
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IRONWORKER.....\$ 36.94 33.11

LAB00113-002 06/01/2022

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1	\$ 32.65	23.09
Group 2	\$ 32.80	23.09
Group 3	\$ 33.00	23.09
Group 4	\$ 33.15	23.09
Group 5	\$ 33.30	23.09
Group 6	\$ 29.14	23.09

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

LAB00113-003 06/01/2022

OZAUKEE AND WASHINGTON COUNTIES

Rates Fringes

LABORER

Group	1\$ 31.90	23.09
Group	2\$ 32.00	23.09
Group	3\$ 32.05	23.09
Group	4\$ 32.25	23.09
Group	5\$ 32.10	23.09
Group	6\$ 28.99	23.09

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

LAB00113-011 06/01/2022

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KENOSHA AND RACINE COUNTIES

	Rates	Fringes
ABORER		
Group	1\$ 31.71	23.09
Group	2\$ 31.86	23.09
Group	3\$ 32.06	23.09
Group	4\$ 32.03	23.09
Group	5\$ 32.36	23.09
Group	6\$ 28.85	23.09

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

LAB00140-002 06/01/2022

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.

		Rates	Fringes
LABORER			
Group	1\$	36.42	18.68
Group	2\$	36.52	18.68
Group	3\$	36.57	18.68
Group	4\$	36.77	18.68
Group	5\$	36.62	18.68
Group	6\$	33.05	18.68

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

LAB00464-003 06/01/2022

DANE COUNTY

Rat	tes Fringe:	S
LABORER Group 1\$ 36 Group 2\$ 36 Group 3\$ 37 Group 4\$ 37 Group 5\$ 36 Group 5\$ 36 Group 5\$ 36	5.80 18.0 5.85 18.0 7.05 18.0 5.90 18.0	58 58 58 58 58

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 05/01/2023 ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES Rates Fringes Painters: New: Brush, Roller.....\$ 34.59 24.84 Spray, Sandblast, Steel....\$ 35.19 24.84 Repaint: Brush, Roller.....\$ 33.09 24.84 Spray, Sandblast, Steel....\$ 33.69 24.84 _____ PAIN0108-002 06/01/2022 RACINE COUNTY Fringes Rates Painters: Brush, Roller.....\$ 39.60 21.79 Spray & Sandblast.....\$ 40.60 21.79 _____ 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 06/01/2022 JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES Rates Fringes Painters: Bridge.....\$ 38.15 24.80

	Brush Spray & Sandblast	\$ 38.15	24.80
	N0802-002 06/01/2021		
	MBIA, DANE, DODGE, GRANT, G , AND SAUK COUNTIES	REEN, IOWA, L	AFAYETTE, RICHLAND,
		Rates	Fringes
PAIN	TER Brush	\$ 29.98	18.78
Sti	IUM PAY: ructural Steel, Spray, Brid ur.	ges = \$1.00) additional per
PAI	N0802-003 06/01/2022		
LAKE MARA OUTA	S, BROWN, CALUMET, CLARK, D , IRON, JUNEAU, KEWAUNEE, L THON, MARINETTE, MARQUETTE, GAMIE, PORTAGE, PRICE, SHAW HARA, WAUPACA, WINNEBAGO, A	ANGLADE, LING MENOMINEE, ANO, SHEBOYG	COLN, MANITOWOC, OCONTO, ONEIDA, SAN, TAYLOR, VILAS,
		Rates	Fringes
PAIN	TER	-	18.94
	TER N0934-001 06/01/2022	-	18.94
PAI		-	
PAI	N0934-001 06/01/2022	-	
PAII KENOS Paint	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES ters: Brush Spray Structural Steel	Rates \$ 36.70 \$ 37.70 \$ 36.85	
PAII KENOS Pain	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES ters: Brush Spray	Rates \$ 36.70 \$ 37.70 \$ 36.85	Fringes 24.69 24.69
PAIN KENOS Paint PAIN	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES ters: Brush Spray Structural Steel	Rates \$ 36.70 \$ 37.70 \$ 36.85	Fringes 24.69 24.69
PAIN KENOS Paint PAIN	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES ters: Brush Spray Structural Steel N1011-002 06/06/2021	Rates \$ 36.70 \$ 37.70 \$ 36.85	Fringes 24.69 24.69
PAIN KENOS Pain PAIN FLOR	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES Brush Spray Structural Steel N1011-002 06/06/2021 ENCE COUNTY	Rates \$ 36.70 \$ 37.70 \$ 36.85 Rates \$ 26.71	Fringes 24.69 24.69 24.69
PAIN KENOS Pain PAIN FLORN	N0934-001 06/01/2022 SHA AND WALWORTH COUNTIES Brush Spray Structural Steel N1011-002 06/06/2021 ENCE COUNTY	Rates \$ 36.70 \$ 37.70 \$ 36.85 Rates \$ 26.71	Fringes 24.69 24.69 24.69 Fringes

CEMENT MASON/CONCRETE FINISHER	
Area 1\$ 42.06	20.87
Area 2 (BAC)\$ 37.73	23.80
Area 3\$ 38.74	22.46
Area 4\$ 38.59	22.66
Area 5\$ 38.16	22.98
Area 6\$ 34.94	26.36

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: 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

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2021

Rate	s Fr	inges
TRUCK DRIVER 1 & 2 Axles\$ 32. 3 or more Axles; Euclids, Dumptor & Articulated,	57	23.81
Truck Mechanic\$ 32.	72	23.81
WELL DRILLER\$ 16.	52	3.70

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

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

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.

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.

END OF GENERAL DECISIO"

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, <u>per se</u>, 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 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.



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Proposal ID: 20230711002	Project(s):	1229-04-75
F	ederal ID(s):	WISC 2023548
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	176.000 STA	·	·
0004	201.0205 Grubbing	176.000 STA	·	
0006	203.0211.S Abatement of Asbestos Containing Material (structure) 0001. B-45-19	1.000 EACH	·	
0008	203.0211.S Abatement of Asbestos Containing Material (structure) 0002. B-45-20	1.000 EACH	·	·
0010	203.0220 Removing Structure (structure) 0001. B- 45-19	1.000 EACH	·	
0012	203.0220 Removing Structure (structure) 0002. B- 45-20	1.000 EACH	·	·
0014	203.0220 Removing Structure (structure) 0003. C- 45-19	1.000 EACH	·	
0016	203.0220 Removing Structure (structure) 0004. C- 45-18	1.000 EACH	·	·
0018	204.0100 Removing Concrete Pavement	80,843.000 SY		
0020	204.0150 Removing Curb & Gutter	2,200.000 LF		
0022	204.0155 Removing Concrete Sidewalk	638.000 SY		
0024	204.0157 Removing Concrete Barrier	687.000 LF		
0026	204.0165 Removing Guardrail	11,510.000 LF		
0028	204.0170 Removing Fence	20,645.000 LF		



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Proposal ID: 20230711002	Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0030	204.0180 Removing Delineators and Markers	155.000 EACH		
0032	204.0195 Removing Concrete Bases	48.000 EACH		
0034	204.0210 Removing Manholes	26.000 EACH		
0036	204.0220 Removing Inlets	79.000 EACH	<u></u>	·
0038	204.0245 Removing Storm Sewer (size) 0001. 12- Inch	616.000 LF		
0040	204.0245 Removing Storm Sewer (size) 0002. 18- Inch	1,129.000 LF		
0042	204.0245 Removing Storm Sewer (size) 0003. 24- Inch	1,098.000 LF		·
0044	204.0245 Removing Storm Sewer (size) 0004. 30- Inch	1,054.000 LF		
0046	204.0245 Removing Storm Sewer (size) 0005. 36- Inch	2,099.000 LF		
0048	204.0245 Removing Storm Sewer (size) 0006. 24X38-Inch	503.000 LF	·	
0050	204.0245 Removing Storm Sewer (size) 0007. 15- Inch	1,499.000 LF		
0052	204.0246 Removing Ancillary Structure (structure) 0001. S-45-201	1.000 EACH		
0054	204.0291.S Abandoning Sewer	39.510 CY	·	
0056	204.9001.S Removing Advance Flasher Assemblies Type 1	1.000 EACH		



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Proposal ID: 20230711	002 Project(s): 1229-04-75	
1100038110. 20230711		
	Federal ID(s): WISC 2023548	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0058	204.9060.S Removing (item description) 0001. Barricade Rack and Barricades	2.000 EACH		
0060	204.9060.S Removing (item description) 1001. Lighting Units	4.000 EACH		. <u></u>
0062	204.9060.S Removing (item description) 1002. Distribution Center	1.000 EACH	. <u></u>	·
0064	204.9060.S Removing (item description) 3401. Remove Traffic Signals STH 57/167 & CTH W	1.000 EACH	·	
0066	204.9060.S Removing (item description) 3402. Remove Traffic Signals IH 43 SB Ramps & STH 57/167	1.000 EACH		
0068	204.9060.S Removing (item description) 3403. Remove Traffic Signals IH 43 NB Ramps & STH 57/167	1.000 EACH		·
0070	204.9060.S Removing (item description) 3404. Remove Loop Detector Wire and Lead-In Cable STH 57/167 & CTH W	1.000 EACH		
0072	204.9060.S Removing (item description) 3405. Remove Loop Detector Wire and Lead-In Cable IH 43 SB Ramps & STH 57/167	1.000 EACH		
0074	204.9060.S Removing (item description) 3406. Remove Loop Detector Wire and Lead-In Cable IH 43 NB Ramps & STH 57/167	1.000 EACH		
0076	204.9090.S Removing (item description) 0001. Removing Underdrain	500.000 LF		
0078	204.9090.S Removing (item description) 0002. Removing Drain Tile	1,526.000 LF	·	



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Proposal ID: 2023071	1002 Project(s): 1229-04-75	
	Federal ID(s): WISC 2023548	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0080	205.0100 Excavation Common	218,605.000 CY		
0082	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	24.000 TON		·
0084	206.1001 Excavation for Structures Bridges (structure) 0001.B-45-112	1.000 EACH		;
0086	206.1001 Excavation for Structures Bridges (structure) 0002.B-45-113	1.000 EACH		
0088	206.2001 Excavation for Structures Culverts (structure) 0001. C-45-18	1.000 EACH		·
0090	206.2001 Excavation for Structures Culverts (structure) 0002. B-45-116	1.000 EACH		·
0092	210.1500 Backfill Structure Type A	828.000 TON	·	
0094	210.2500 Backfill Structure Type B	3,295.000 TON	·	
0096	211.0400 Prepare Foundation for Asphaltic Shoulders	119.000 STA		
0098	213.0100 Finishing Roadway (project) 0100. 1229- 04-75	1.000 EACH		
0100	305.0120 Base Aggregate Dense 1 1/4-Inch	111,970.000 TON		
0102	310.0110 Base Aggregate Open-Graded	1,666.000 TON		
0104	311.0110 Breaker Run	241,475.000 TON		
0106	311.0115 Breaker Run	294.000 CY	·	



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Proposal ID: 2023	0711002 Project(s): 122	9-04-75
	Federal ID(s): WI	SC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0108	390.0203 Base Patching Asphaltic	1,950.000 SY		
0110	415.0410 Concrete Pavement Approach Slab	436.000 SY	·	·
0112	416.0270 Concrete Driveway HES 7-Inch	155.000 SY		·
0114	416.0620 Drilled Dowel Bars	160.000 EACH		. <u> </u>
0116	416.1110 Concrete Shoulder Rumble Strips	52,603.000 LF		
0118	450.1100.S Asphaltic Mixture For Extreme Conditions	38.000 TON	. <u></u>	
0120	450.4000 HMA Cold Weather Paving	18,085.000 TON		. <u> </u>
0122	455.0605 Tack Coat	3,713.000 GAL		. <u> </u>
0124	460.2000 Incentive Density HMA Pavement	13,290.000 DOL	1.00000	13,290.00
0126	460.6223 HMA Pavement 3 MT 58-28 S	14,949.000 TON		. <u> </u>
0128	460.6224 HMA Pavement 4 MT 58-28 S	5,896.000 TON		
0130	465.0120 Asphaltic Surface Driveways and Field Entrances	14.000 TON		·
0132	465.0125 Asphaltic Surface Temporary	75.000 TON		·
0134	495.1000.S Cold patch	15.000 TON	·	
0136	501.1000.S Ice Hot Weather Concreting	69,760.000 LB	·	



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Proposal ID: 2023071100	2 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0138	502.0100 Concrete Masonry Bridges	474.000 CY	·	
0140	502.3200 Protective Surface Treatment	2,968.000 SY	·	·
0142	502.3210 Pigmented Surface Sealer	428.000 SY		••
0144	502.4205 Adhesive Anchors No. 5 Bar	40.000 EACH	·	·
0146	503.0137 Prestressed Girder Type I 36W-Inch	2,796.000 LF		<u></u>
0148	504.0100 Concrete Masonry Culverts	731.000 CY	·	<u></u>
0150	505.0400 Bar Steel Reinforcement HS Structures	125,550.000 LB	<u>.</u>	<u>.</u>
0152	505.0600 Bar Steel Reinforcement HS Coated Structures	270,850.000 LB		
0154	505.0800.S Bar Steel Reinforcement HS Stainless Structures	4,360.000 LB	·	
0156	506.2605 Bearing Pads Elastomeric Non- Laminated	64.000 EACH		
0158	506.4000 Steel Diaphragms (structure) 0001. B-45- 112	28.000 EACH	·	
0160	506.4000 Steel Diaphragms (structure) 0002. B-45- 113	28.000 EACH		·
0162	509.5100.S Polymer Overlay	2,432.000 SY		·
0164	511.1200 Temporary Shoring (structure) 0002. B- 45-113	1,060.000 SF		·



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Proposal ID: 20	230711002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 000	1 Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0166	511.1200 Temporary Shoring (structure) 0003. B- 45-116	1,210.000 SF		
0168	516.0500 Rubberized Membrane Waterproofing	142.000 SY		
0170	522.0136 Culvert Pipe Reinforced Concrete Class III 36-Inch	663.000 LF		·
0172	522.0436 Culvert Pipe Reinforced Concrete Class IV 36-Inch	224.000 LF		·
0174	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	1.000 EACH		·
0176	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	25.000 EACH		·
0178	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	8.000 EACH	·	
0180	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	1.000 EACH		·
0182	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	14.000 EACH		·
0184	522.2624 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	1.000 EACH		
0186	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	1.000 EACH		
0188	531.1100 Concrete Masonry Ancillary Structures Type NS	13.000 CY		<u>.</u>



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Proposal ID: 202307110	002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0190	531.1140 Steel Reinforcement HS Ancillary Structures Type NS	1,570.000 LB		
0192	531.2024 Drilling Shaft 24-Inch	110.000 LF	<u>.</u>	
0194	531.2030 Drilling Shaft 30-Inch	78.000 LF	<u>.</u>	
0196	531.2036 Drilling Shaft 36-Inch	162.000 LF		
0198	531.2042 Drilling Shaft 42-Inch	36.000 LF	<u>.</u>	
0200	531.4050 Foundation Camera Pole 50-FT	1.000 EACH		
0202	531.5220 Foundation Single-Shaft Type MF-II (structure) 0001. S-45-219	2.000 EACH		·
0204	531.5220 Foundation Single-Shaft Type MF-II (structure) 0002. S-45-220	2.000 EACH		·
0206	531.5220 Foundation Single-Shaft Type MF-II (structure) 0003. S-45-222	2.000 EACH	·	·
0208	531.5430 Foundation Single-Shaft Type TF-III (structure) 0001. S-45-221	2.000 EACH	·	·
0210	531.6010 Foundation Two-Shaft Type FC-I (structure) 0001. S-45-6	1.000 EACH		
0212	531.6010 Foundation Two-Shaft Type FC-I (structure) 0002. S-45-7	1.000 EACH		
0214	531.6120 Foundation Two-Shaft Type FF-II (structure) 0001. S-45-402	2.000 EACH		
0216	532.5220 Monotube Full Span Type II (structure) 0001. S-45-219	1.000 EACH		·



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Proposal ID: 202307	11002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbi	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0218	532.5220 Monotube Full Span Type II (structure) 0002. S-45-220	1.000 EACH		·
0220	532.5220 Monotube Full Span Type II (structure) 0003. S-45-222	1.000 EACH		·
0222	532.5430 Truss Full Span 2-Chord Type III (structure) 0001. S-45-221	1.000 EACH		. <u></u>
0224	532.6010 Truss Cantilever 4-Chord Type I (structure) 0001. S-45-6	1.000 EACH	·	·
0226	532.6010 Truss Cantilever 4-Chord Type I (structure) 0002. S-45-7	1.000 EACH	·	·
0228	532.6120 Truss Full Span 4-Chord Type II (structure) 0001. S-45-402	1.000 EACH		
0230	541.0300.S Noise Barriers Double-Sided Sound Absorptive (structure) 0001. N-45-003	44,735.000 SF		
0232	550.2126 Piling CIP Concrete 12 3/4 X 0.375-Inch	6,200.000 LF		
0234	601.0409 Concrete Curb & Gutter 30-Inch Type A	1,257.000 LF	·	·
0236	601.0411 Concrete Curb & Gutter 30-Inch Type D	3,558.000 LF		·
0238	601.0600 Concrete Curb Pedestrian	226.000 LF	·	·
0240	602.0410 Concrete Sidewalk 5-Inch	15,724.000 SF	·	·
0242	602.0505 Curb Ramp Detectable Warning Field Yellow	262.000 SF		·
0244	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	36.000 SF		·



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Proposal ID: 2023071	1002 Project(s):	: 1229-04-75
	Federal ID(s):	: WISC 2023548
SECTION: 0001	Contract Items	3
Alt Set ID:	Alt Mt	br ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0246	603.3559 Concrete Barrier Transition Type S42 to S56	25.000 EACH		·
0248	603.8000 Concrete Barrier Temporary Precast Delivered	30,499.000 LF	·	·
0250	603.8125 Concrete Barrier Temporary Precast Installed	47,500.000 LF	·	·
0252	603.8500 Anchoring Concrete Barrier Temporary Precast	15,266.000 LF	·	
0254	604.0400 Slope Paving Concrete	1,084.000 SY		
0256	606.0200 Riprap Medium	202.000 CY		
0258	606.0300 Riprap Heavy	226.000 CY		
0260	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	11.000 LF	·	
0262	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	1,792.000 LF	·	·
0264	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	6,277.000 LF	·	·
0266	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	4,459.000 LF	·	·
0268	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	121.000 LF	·	·
0270	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	2,644.000 LF		



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Proposal ID: 2023071100	2 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0272	608.0372 Storm Sewer Pipe Reinforced Concrete Class III 72-Inch	1,004.000 LF		·
0274	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	120.000 LF		·
0276	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	930.000 LF		·
0278	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	48.000 LF	·	·
0280	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	135.000 LF	·	
0282	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	55.000 LF	·	
0284	608.0515 Storm Sewer Pipe Reinforced Concrete Class V 15-Inch	56.000 LF		·
0286	608.0518 Storm Sewer Pipe Reinforced Concrete Class V 18-Inch	526.000 LF		
0288	608.2319 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30- Inch	130.000 LF	<u>.</u>	
0290	608.2419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30- Inch	1,126.000 LF	·	
0292	608.2424 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38- Inch	708.000 LF		·
0294	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45- Inch	1,028.000 LF		



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Proposal ID: 202307	11002 Project(s): 12	229-04-75
	Federal ID(s): W	VISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr II	D:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0296	611.0430 Reconstructing Inlets	66.000 EACH		
0298	611.0530 Manhole Covers Type J	22.000 EACH		
0300	611.0535 Manhole Covers Type J-Special	17.000 EACH		
0302	611.0610 Inlet Covers Type BW	224.000 EACH		
0304	611.0624 Inlet Covers Type H	49.000 EACH		
0306	611.0642 Inlet Covers Type MS	79.000 EACH		
0308	611.0654 Inlet Covers Type V	1.000 EACH		
0310	611.2004 Manholes 4-FT Diameter	11.000 EACH		
0312	611.2005 Manholes 5-FT Diameter	32.000 EACH		
0314	611.2006 Manholes 6-FT Diameter	40.000 EACH		
0316	611.2007 Manholes 7-FT Diameter	15.000 EACH		
0318	611.2008 Manholes 8-FT Diameter	2.000 EACH		
0320	611.3004 Inlets 4-FT Diameter	199.000 EACH		
0322	611.3225 Inlets 2x2.5-FT	2.000 EACH		
0324	611.3902 Inlets Median 2 Grate	34.000 EACH		
0326	611.8115 Adjusting Inlet Covers	11.000 EACH	·	·



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Proposal ID: 20230	711002 Project(s): 1229-04-75	
	Federal ID(s): WISC 2023548	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0328	611.8120.S Cover Plates Temporary	60.000 EACH		
0330	611.9850.S Pipe Grates (size) 0001. 18-inch	2.000 EACH		
0332	612.0106 Pipe Underdrain 6-Inch	44,778.000 LF		
0334	612.0206 Pipe Underdrain Unperforated 6-Inch	210.000 LF		
0336	612.0406 Pipe Underdrain Wrapped 6-Inch	1,000.000 LF	<u>.</u>	<u>.</u>
0338	612.0700 Drain Tile Exploration	225.000 LF		
0340	614.0397 Guardrail Mow Strip Emulsified Asphalt	84.000 SY		
0342	614.0805 Crash Cushions Permanent Low Maintenance	4.000 EACH	. <u></u>	
0344	614.0905 Crash Cushions Temporary	7.000 EACH	<u>.</u>	<u>.</u>
0346	614.2300 MGS Guardrail 3	4,064.000 LF	·	·
0348	614.2310 MGS Guardrail 3 HS	25.000 LF	·	<u>.</u>
0350	614.2500 MGS Thrie Beam Transition	118.000 LF	<u>.</u>	<u>.</u>
0352	614.2610 MGS Guardrail Terminal EAT	2.000 EACH		
0354	614.2620 MGS Guardrail Terminal Type 2	1.000 EACH		
0356	616.0206 Fence Chain Link 6-FT	20,813.000 LF		<u>.</u>
0358	616.0700.S Fence Safety	20,813.000 LF	·	·



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Proposal ID: 20230711	002 Project(s): 1229-04-75
	Federal ID(s): WISC 2023548
SECTION: 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0360	618.0100 Maintenance And Repair of Haul Roads (project) 0100. 1229-04-75	1.000 EACH	·	
0362	619.1000 Mobilization	1.000 EACH	·	··
0364	620.0200 Concrete Median Blunt Nose	80.000 SF		·
0366	620.0300 Concrete Median Sloped Nose	772.000 SF		
0368	624.0100 Water	351.000 MGAL		
0370	627.0200 Mulching	6,298.000 SY		
0372	628.1504 Silt Fence	1,233.000 LF		
0374	628.1520 Silt Fence Maintenance	740.000 LF	. <u></u>	
0376	628.1530.S Silt Fence Heavy Duty	1,563.000 LF		
0378	628.1535.S Silt Fence Heavy Duty Maintenance	938.000 LF		
0380	628.1905 Mobilizations Erosion Control	14.000 EACH		
0382	628.1910 Mobilizations Emergency Erosion Control	23.000 EACH		
0384	628.2002 Erosion Mat Class I Type A	164,904.000 SY		
0386	628.2006 Erosion Mat Urban Class I Type A	9,105.000 SY		·
0388	628.2008 Erosion Mat Urban Class I Type B	8,555.000 SY		
0390	628.6510 Soil Stabilizer Type B	37.000 ACRE	·	



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Proposal ID: 20230711002	Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr	ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0392	628.7005 Inlet Protection Type A	102.000 EACH		
0394	628.7010 Inlet Protection Type B	208.000 EACH		·
0396	628.7015 Inlet Protection Type C	49.000 EACH		
0398	628.7020 Inlet Protection Type D	9.000 EACH		
0400	628.7504 Temporary Ditch Checks	946.000 LF		
0402	628.7555 Culvert Pipe Checks	84.000 EACH		
0404	628.7560 Tracking Pads	10.000 EACH		
0406	628.7570 Rock Bags	180.000 EACH		
0408	629.0210 Fertilizer Type B	96.000 CWT	·	
0410	630.0140 Seeding Mixture No. 40	171.000 LB	·	·
0412	630.0200 Seeding Temporary	3,921.000 LB	·	
0414	630.0500 Seed Water	5,107.000 MGAL	·	
0416	633.0100 Delineator Posts Steel	14.000 EACH		
0418	633.0200 Delineators Flexible	10.000 EACH	<u></u>	·
0420	633.0500 Delineator Reflectors	14.000 EACH		
0422	633.1000 Delineators Barrier Wall	524.000 EACH	. <u></u>	



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Proposal ID: 20230711002	Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0424	633.5200 Markers Culvert End	51.000 EACH		
0426	634.0618 Posts Wood 4x6-Inch X 18-FT	80.000 EACH		
0428	634.0622 Posts Wood 4x6-Inch X 22-FT	56.000 EACH		
0430	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	6.000 EACH		
0432	634.0885 Posts Tubular Steel 2x2-Inch X 8.5-FT	92.000 EACH		
0434	635.0200 Sign Supports Structural Steel HS	6,900.000 LB		
0436	637.1220 Signs Type I Reflective SH	1,228.000 SF		
0438	637.2210 Signs Type II Reflective H	1,782.960 SF		
0440	637.2215 Signs Type II Reflective H Folding	203.740 SF		
0442	637.2230 Signs Type II Reflective F	249.250 SF		·
0444	638.2101 Moving Signs Type I	2.000 EACH		
0446	638.2102 Moving Signs Type II	3.000 EACH		·
0448	638.2601 Removing Signs Type I	11.000 EACH		
0450	638.2602 Removing Signs Type II	152.000 EACH	<u>.</u>	·
0452	638.3000 Removing Small Sign Supports	121.000 EACH		·
0454	638.3100 Removing Structural Steel Sign Supports	16.000 EACH		



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Proposal ID: 20230711002	Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0456	640.1303.S Pond Liner Clay	3,001.000 CY	<u>.</u>	·
0458	643.0300 Traffic Control Drums	218,405.000 DAY		
0460	643.0410 Traffic Control Barricades Type II	1,410.000 DAY	·	·
0462	643.0420 Traffic Control Barricades Type III	24,210.000 DAY	<u>.</u>	<u>.</u>
0464	643.0705 Traffic Control Warning Lights Type A	71,910.000 DAY	·	·
0466	643.0715 Traffic Control Warning Lights Type C	34,399.000 DAY		
0468	643.0800 Traffic Control Arrow Boards	1,860.000 DAY		
0470	643.0900 Traffic Control Signs	192,929.000 DAY	<u>.</u>	<u>.</u>
0472	643.0910 Traffic Control Covering Signs Type I	4,269.000 EACH	··	·
0474	643.0920 Traffic Control Covering Signs Type II	298.000 EACH	·	·
0476	643.1000 Traffic Control Signs Fixed Message	281.000 SF		
0478	643.1050 Traffic Control Signs PCMS	2,820.000 DAY	·	·
0480	643.1055.S Truck or Trailer Mounted Attenuator	150.000 DAY		
0482	643.1205.S Basic Traffic Queue Warning System	1,410.000 DAY	·	·
0484	643.3105 Temporary Marking Line Paint 4-Inch	63,365.000 LF	·	·
0486	643.3120 Temporary Marking Line Epoxy 4-Inch	81,040.000 LF		



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Proposal ID: 2023071	1002 Project(s)	: 1229-04-75
	Federal ID(s)	: WISC 2023548
SECTION: 0001	Contract Items	ŝ
Alt Set ID:	Alt M	br ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0488	643.3760 Temporary Marking Raised Pavement Marker Type I	2,846.000 EACH	·	
0490	643.4100 Traffic Control Interim Lane Closure	150.000 EACH	·	·
0492	643.5000 Traffic Control	1.000 EACH		·
0494	645.0105 Geotextile Type C	1,038.000 SY		
0496	645.0111 Geotextile Type DF Schedule A	25,141.000 SY		
0498	645.0120 Geotextile Type HR	6,379.000 SY		
0500	646.1020 Marking Line Epoxy 4-Inch	2,334.000 LF		
0502	646.1545 Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	68,549.000 LF		
0504	646.1555 Marking Line Grooved Contrast Permanent Tape 4-Inch	16,088.000 LF	·	
0506	646.3020 Marking Line Epoxy 8-Inch	2,056.000 LF	·	
0508	646.3555 Marking Line Grooved Contrast Permanent Tape 8-Inch	8,294.000 LF	;	
0510	646.5020 Marking Arrow Epoxy	25.000 EACH		
0512	646.5120 Marking Word Epoxy	11.000 EACH		
0514	646.5220 Marking Symbol Epoxy	2.000 EACH	<u>.</u>	
0516	646.5320 Marking Railroad Crossings Epoxy	2.000 EACH		



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Proposal ID: 20230711	002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0518	646.6120 Marking Stop Line Epoxy 18-Inch	401.000 LF	·	••
0520	646.7120 Marking Diagonal Epoxy 12-Inch	41.000 LF	·	·
0522	646.7220 Marking Chevron Epoxy 24-Inch	493.000 LF	<u>.</u>	<u></u>
0524	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,156.000 LF	·	·
0526	646.8120 Marking Curb Epoxy	98.000 LF		
0528	646.8220 Marking Island Nose Epoxy	8.000 EACH	<u>.</u>	
0530	646.9010 Marking Removal Line Water Blasting 4- Inch	3,355.000 LF	·	
0532	652.0125 Conduit Rigid Metallic 2-Inch	130.000 LF		
0534	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	11,956.000 LF		·
0536	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	4,465.000 LF	·	
0538	652.0700.S Install Conduit into Existing Item	5.000 EACH		
0540	652.0800 Conduit Loop Detector	3,529.000 LF		
0542	653.0135 Pull Boxes Steel 24x36-Inch	14.000 EACH		
0544	653.0140 Pull Boxes Steel 24x42-Inch	57.000 EACH		
0546	653.0905 Removing Pull Boxes	59.000 EACH		·



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Proposal ID: 20230711002	Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr	ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0548	654.0101 Concrete Bases Type 1	23.000 EACH		·
0550	654.0102 Concrete Bases Type 2	4.000 EACH	<u>.</u>	·
0552	654.0105 Concrete Bases Type 5	16.000 EACH		
0554	654.0106 Concrete Bases Type 6	3.000 EACH		
0556	654.0110 Concrete Bases Type 10	8.000 EACH		
0558	654.0113 Concrete Bases Type 13	2.000 EACH		
0560	654.0120 Concrete Bases Type 10-Special	4.000 EACH		
0562	654.0217 Concrete Control Cabinet Bases Type 9 Special	3.000 EACH	·	
0564	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	·	·
0566	654.1239 Concrete Control Cabinet Bases ITS	1.000 EACH		
0568	655.0230 Cable Traffic Signal 5-14 AWG	1,995.000 LF		
0570	655.0240 Cable Traffic Signal 7-14 AWG	4,067.000 LF		
0572	655.0250 Cable Traffic Signal 9-14 AWG	510.000 LF		
0574	655.0260 Cable Traffic Signal 12-14 AWG	5,489.000 LF		
0576	655.0270 Cable Traffic Signal 15-14 AWG	255.000 LF		



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Proposal ID: 202307110	02 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0578	655.0320 Cable Type UF 2-10 AWG Grounded	3,157.000 LF	·	
0580	655.0510 Electrical Wire Traffic Signals 12 AWG	1,317.000 LF	·	·
0582	655.0515 Electrical Wire Traffic Signals 10 AWG	22,005.000 LF	<u>.</u>	·
0584	655.0610 Electrical Wire Lighting 12 AWG	5,151.000 LF		
0586	655.0625 Electrical Wire Lighting 6 AWG	11,336.000 LF		
0588	655.0635 Electrical Wire Lighting 2 AWG	640.000 LF		
0590	655.0700 Loop Detector Lead In Cable	15,915.000 LF		
0592	655.0800 Loop Detector Wire	15,837.000 LF		
0594	655.0900 Traffic Signal EVP Detector Cable	3,244.000 LF		
0596	656.0201 Electrical Service Meter Breaker Pedestal (location) 2001. MBDMS450021	1.000 EACH		·
0598	656.0201 Electrical Service Meter Breaker Pedestal (location) 2002. MBRM450087	1.000 EACH	·	
0600	656.0201 Electrical Service Meter Breaker Pedestal (location) 3401.STH 57/167 & CTH W	1.000 EACH		
0602	656.0201 Electrical Service Meter Breaker Pedestal (location) 3402. IH 43 SB Ramp & STH 57/167	1.000 EACH		



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Proposal ID: 2023071100	02 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0604	656.0201 Electrical Service Meter Breaker Pedestal (location) 3403. IH 43 NB Ramp & STH 57/167	1.000 EACH		·
0606	656.0501 Electrical Service Breaker Disconnect Box (location) 1001. HL-45-MQ	1.000 EACH	. <u></u>	
0608	656.0501 Electrical Service Breaker Disconnect Box (location) 2001. DMS450021	1.000 EACH	. <u></u> .	·
0610	656.0501 Electrical Service Breaker Disconnect Box (location) 2002. RM450087	1.000 EACH	. <u></u>	·
0612	656.0501 Electrical Service Breaker Disconnect Box (location) 2003. CCTV450081	1.000 EACH	·	·
0614	657.0100 Pedestal Bases	21.000 EACH		·
0616	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	22.000 EACH	·	
0618	657.0310 Poles Type 3	4.000 EACH		
0620	657.0322 Poles Type 5-Aluminum	16.000 EACH		·
0622	657.0327 Poles Type 6-Aluminum	2.000 EACH		·
0624	657.0420 Traffic Signal Standards Aluminum 13-FT	7.000 EACH		
0626	657.0425 Traffic Signal Standards Aluminum 15-FT	7.000 EACH		
0628	657.0430 Traffic Signal Standards Aluminum 10-FT	7.000 EACH		
0630	657.0609 Luminaire Arms Single Member 4-Inch Clamp 6-FT	5.000 EACH	·	



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Proposal ID: 2	0230711002 Project(s):	1229-04-75
		WISC 2023548
SECTION: 00	01 Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0632	657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT	19.000 EACH	·	·
0634	658.0173 Traffic Signal Face 3S 12-Inch	40.000 EACH	·	·
0636	658.0174 Traffic Signal Face 4S 12-Inch	11.000 EACH	·	·
0638	658.0175 Traffic Signal Face 5S 12-Inch	6.000 EACH		,
0640	658.0416 Pedestrian Signal Face 16-Inch	24.000 EACH	·	
0642	658.0500 Pedestrian Push Buttons	28.000 EACH		
0644	658.5070 Signal Mounting Hardware (location) 3401. STH 57/167 & CTH W	1.000 EACH		
0646	658.5070 Signal Mounting Hardware (location) 3402. IH 43 SB Ramps & STH 57/167	1.000 EACH		·
0648	658.5070 Signal Mounting Hardware (location) 3403. IH 43 NB Ramps & STH 57/167	1.000 EACH		
0650	659.1125 Luminaires Utility LED C	40.000 EACH		
0652	659.2130 Lighting Control Cabinets 120/240 30- Inch	1.000 EACH	·	·
0654	659.5000.S Lamp, Ballast, LED, Switch Disposal by Contractor	94.000 EACH		
0656	659.5000.S Lamp, Ballast, LED, Switch Disposal by Contractor 1001. Lighting Items	4.000 EACH		
0658	661.0201 Temporary Traffic Signals for Intersections (location) 3401. STH 57/167 & CTH W	1.000 EACH	·	·



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Proposal ID: 20230711002	2 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0660	661.0300 Generators	2.000 DAY	·	·
0662	662.1028.S Ramp Closure Gates 28-FT	3.000 EACH	·	··
0664	662.1040.S Ramp Closure Gates 40-FT	1.000 EACH	·	·
0666	670.0101 Field System Integrator 0100. FTMS	1.000 EACH		
0668	670.0101 Field System Integrator 3401. STH 57/167	1.000 EACH	;	·
0670	670.0201 ITS Documentation 0200. FTMS	1.000 EACH		
0672	670.0201 ITS Documentation 3401. STH 57/167	1.000 EACH		
0674	671.0132 Conduit HDPE 3-Duct 2-Inch	10,495.000 LF		
0676	673.0105 Communication Vault Type 1	10.000 EACH		
0678	673.0200 Tracer Wire Marker Posts	3.000 EACH		
0680	673.1200.S Install ITS Field Cabinet	1.000 EACH		
0682	673.1225.S Install Pole Mounted Cabinet	2.000 EACH		
0684	674.0200 Cable Microwave Detector	7,940.000 LF		
0686	674.0300 Remove Cable	9,055.000 LF		
0688	675.0100 Install Controller Ramp Meter Processor Assembly	1.000 EACH	·	·



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Proposal ID: 2	20230711002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 00	001 Contract Items	
Alt Set ID:	Alt Mb	ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0690	675.0300 Install Mounted Controller Microwave Detector Assembly	8.000 EACH		·
0692	677.0150 Install Camera Pole 50-FT	1.000 EACH		
0694	677.0200 Install Camera Assembly	2.000 EACH	·	
0696	677.9051.S Removing 50-FT Camera Pole	1.000 EACH		
0698	677.9200.S Removing CCTV Camera	1.000 EACH	. <u></u>	
0700	678.0006 Install Fiber Optic Cable Outdoor Plant 6- CT	2,355.000 LF	·	
0702	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	11,610.000 LF		
0704	678.0100.S Install Overhead Freeway DMS Full Matrix	1.000 EACH		
0706	678.0200 Fiber Optic Splice Enclosure	4.000 EACH		
0708	678.0300 Fiber Optic Splice	230.000 EACH	·	
0710	678.0400 Fiber Optic Termination	18.000 EACH	. <u></u>	
0712	678.0501 Communication System Testing 0500. FTMS	1.000 EACH		
0714	678.0501 Communication System Testing 3401. STH 57/167	1.000 EACH		
0716	678.0600 Install Ethernet Switches	6.000 EACH	·	



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Proposal ID: 202307110	02 Project(s): 1229-04-75
	Federal ID(s): WISC 2023548
SECTION: 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0718	690.0150 Sawing Asphalt	11,073.000 LF	·	
0720	690.0250 Sawing Concrete	6,265.000 LF	·	·
0722	715.0502 Incentive Strength Concrete Structures	7,230.000 DOL	1.00000	7,230.00
0724	715.0603 Incentive Strength Concrete Barrier	26,225.000 DOL	1.00000	26,225.00
0726	715.0715 Incentive Flexural Strength Concrete Pavement	62,100.000 DOL	1.00000	62,100.00
0728	740.0440 Incentive IRI Ride	35,500.000 DOL	1.00000	35,500.00
0730	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	7,000.000 HRS	5.00000	35,000.00
0732	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	5,400.000 HRS	5.00000	27,000.00
0734	SPV.0035 Special 0001. Roadway Embankment	79,759.000 CY		
0736	SPV.0035 Special 4000. HPC Masonry Structures	1,170.000 CY		
0738	SPV.0045 Special 1001. Truck Entering Warning System	1,410.000 DAY		·
0740	SPV.0045 Special 1002. Combination Work Zone Digital Speed Limit - Speed Feedback Sign Trailer	1,410.000 DAY	·	
0742	SPV.0060 Special 0010. Maintain and Remove Crash Cushions Temporary Left In Place	6.000 EACH	·	. <u></u>
0744	SPV.0060 Special 0020. Marking Contrast Epoxy Special Marking Arrow	24.000 EACH	·	·



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Proposal ID: 2023	80711002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	I	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0746	SPV.0060 Special 0021. I Special Markin	Marking Contrast Epoxy g Word	4.000 EACH		
0748	SPV.0060 Special 0101. (Type G1	Concrete Barrier Transition	1.000 EACH		
0750	SPV.0060 Special 0102. (Type G2	Concrete Barrier Transition	1.000 EACH	·	
0752	SPV.0060 Special 0103. 0 Type M1	Concrete Barrier Transition	1.000 EACH		·
0754	SPV.0060 Special 0104. 0 Type M2	Concrete Barrier Transition	1.000 EACH	·	·
0756	SPV.0060 Special 0105. (Type M3	Concrete Barrier Transition	1.000 EACH		
0758	SPV.0060 Special 0106. 0 Type M4	Concrete Barrier Transition	1.000 EACH		·
0760	SPV.0060 Special 0107. Plug	Femporary Storm Sewer	77.000 EACH		·
0762	SPV.0060 Special 0108. \$	Structural Concrete Collar	14.000 EACH		
0764	SPV.0060 Special 0109. N	Manhole, 10X10-FT Outlet	3.000 EACH		
0766	SPV.0060 Special 0110. F	Reconnect Storm Sewer	146.000 EACH		
0768	SPV.0060 Special 0111. I	nlets Type Tee Special	1.000 EACH		
0770	SPV.0060 Special 0200. F Covers	Fastening Sewer Access	14.000 EACH		. <u> </u>
0772	SPV.0060 Special 0208. I	Manhole, 10X10-FT	3.000 EACH		



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Proposal ID: 202307110	02 Project(s): 1229-04-75
	Federal ID(s): WISC 2023548
SECTION: 0001	Contract Items
Alt Set ID:	Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0774	SPV.0060 Special 0601. Baseline CPM Progress Schedule	1.000 EACH		·
0776	SPV.0060 Special 0602. Monthly CPM Progress Schedule Updates	22.000 EACH		
0778	SPV.0060 Special 0701. Detention Pond Anti-Seep Collar	2.000 EACH		
0780	SPV.0060 Special 0910. Traffic Control Close-Open Freeway Entrance Ramp	50.000 EACH	·	·
0782	SPV.0060 Special 0918. Traffic Control Full Freeway Closure	25.000 EACH	·	
0784	SPV.0060 Special 0920. Install, Maintain, and Remove State Furnished Sign	4.000 EACH		
0786	SPV.0060 Special 0935. Emergency Response To Pavement Repair	8.000 EACH	·	·
0788	SPV.0060 Special 0940. Emergency Response to Traffic Involving Concrete Barrier Temporary	10.000 EACH	<u>.</u>	
0790	SPV.0060 Special 0945. Emergency Response to Traffic Involving Crash Cushion	25.000 EACH	·	·
0792	SPV.0060 Special 0950. Exposing Existing Infrastructure Paved Area	10.000 EACH		
0794	SPV.0060 Special 0955. Exposing Existing Infrastructure Unpaved Area	10.000 EACH		
0796	SPV.0060 Special 0960. Temporary Concrete Barrier Gate, 24-FT	4.000 EACH	·	
0798	SPV.0060 Special 1000. Survey Project 1229-04-75	1.000 EACH	·	·



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Proposal ID: 2023071	1002 Project(s):	1229-04-75
·	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	5
Alt Set ID:	Alt Mb	or ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0800	SPV.0060 Special 1001. Remove Electrical Service Meter Breaker Pedestal Lighting	1.000 EACH		·
0802	SPV.0060 Special 1002. Maintenance of Lighting System	1.000 EACH		·
0804	SPV.0060 Special 1003. Lighting System Integrator	1.000 EACH	·	·
0806	SPV.0060 Special 1004. Lighting System Survey	1.000 EACH	<u>.</u>	
0808	SPV.0060 Special 2000. Removing Electrical Service Meter Breaker Pedestal	1.000 EACH		
0810	SPV.0060 Special 2001. Removing Controller Cabinet	3.000 EACH	·	·
0812	SPV.0060 Special 2002. Removing Controller Cabinet Base	3.000 EACH		
0814	SPV.0060 Special 2004. Removing Ramp Control Signal Assembly Sidemount	3.000 EACH		·
0816	SPV.0060 Special 2008. Remove Pole	1.000 EACH		
0818	SPV.0060 Special 2010. Temporary Poles Wood 40-Foot	1.000 EACH		
0820	SPV.0060 Special 2011. Temporary Poles Wood 60-Foot	1.000 EACH	·	·
0822	SPV.0060 Special 2013. Ground Rod	5.000 EACH		·
0824	SPV.0060 Special 2015. Refocus Vehicle Detector Assembly	6.000 EACH		
0826	SPV.0060 Special 2016. Install Ethernet Radio	2.000 EACH		·



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Proposal ID: 2	20230711002 Project(s):	1229-04-75
	· · · · ·	
	Federal ID(s):	WISC 2023548
SECTION: 00	001 Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0828	SPV.0060 Special 2018. Signal Assembly Advance Flasher Type 1	2.000 EACH	·	·
0830	SPV.0060 Special 2019. Install salvaged Pole	1.000 EACH		
0832	SPV.0060 Special 2023. Install Cellular Modem	1.000 EACH	. <u></u>	
0834	SPV.0060 Special 2025. Signal Assembly Ramp Control Overhead	3.000 EACH		
0836	SPV.0060 Special 2026. Install Temporary Traffic Camera Assembly	1.000 EACH		
0838	SPV.0060 Special 2027. Install Temporary Traffic Camera Power Assembly	1.000 EACH	·	·
0840	SPV.0060 Special 2028. Remove Temporary Traffic Camera Assembly	1.000 EACH		·
0842	SPV.0060 Special 2029. Remove Temporary Traffic Camera Power Assembly	1.000 EACH		
0844	SPV.0060 Special 3001. Install Poles Type 9	2.000 EACH		
0846	SPV.0060 Special 3002. Install Poles Type 10	6.000 EACH	. <u></u>	
0848	SPV.0060 Special 3003. Install Poles Type 9- Special	2.000 EACH		
0850	SPV.0060 Special 3004. Install Poles Type 10- Special	2.000 EACH		·
0852	SPV.0060 Special 3005. Install Poles Type 12	1.000 EACH	·	
0854	SPV.0060 Special 3006. Install Poles Type 13	1.000 EACH		



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Proposal ID: 20	0230711002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 000	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0856	SPV.0060 Special 3007. Install Monotube Arms 15- FT	2.000 EACH	·	·
0858	SPV.0060 Special 3008. Install Monotube Arms 20- FT	1.000 EACH	·	
0860	SPV.0060 Special 3009. Install Monotube Arms 25- FT	4.000 EACH		·
0862	SPV.0060 Special 3010. Install Monotube Arms 30- FT	1.000 EACH	·	·
0864	SPV.0060 Special 3012. Install Monotube Arms 35- FT-Special	2.000 EACH	·	
0866	SPV.0060 Special 3016. Install Monotube Arms 45- FT-Special	2.000 EACH	·	
0868	SPV.0060 Special 3017. Install Monotube Arms 50- FT	2.000 EACH	·	·
0870	SPV.0060 Special 3019. Install Luminaire Arms Steel 15-FT	16.000 EACH		·
0872	SPV.0060 Special 3401. Trnspt & Install State Furn Traffic Signal Cabinet STH 57/167 & CTH W	1.000 EACH	·	
0874	SPV.0060 Special 3402. Trnspt & Install State Furn Traffic Signal Cabinet IH 43 SB & STH 57/167	1.000 EACH		·
0876	SPV.0060 Special 3403. Trnspt & Install State Furn Traffic Signal Cabinet IH 43 NB Ramps & STH 57	1.000 EACH		·
0878	SPV.0060 Special 3404. Trnspt Traffic Signal and Inter Lighting Materials STH 57/167 & CTH W	1.000 EACH		



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Proposal ID: 20230711002	Project(s): 1229-04-75	
	Federal ID(s): WISC 2023548	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0880	SPV.0060 Special 3405. Trnspt Traffic Signal and Inter Ltg Materials IH 43 SB Ramps & STH57/167	1.000 EACH		·
0882	SPV.0060 Special 3406. Trnspt Traffic Signal and Inter Ltg Materials IH 43 NB Ramps & STH 57/167	1.000 EACH		
0884	SPV.0060 Special 3407. Trnspt & Inst S-F EVP Heads w/ Confirm Lights STH 57/167 & CTH W	1.000 EACH		
0886	SPV.0060 Special 3408. Trnspt & Inst S-F EVP Heads w/ Confirm Lights IH 43 SB Ramps & STH 57/167	1.000 EACH		
0888	SPV.0060 Special 3409. Trnspt & Inst S-F EVP Heads w/ Confirm Lights IH 43 NB Ramps & STH 57/167	1.000 EACH		
0890	SPV.0060 Special 3410. Trnspt & Install S-F Radar Detection System IH 43 SB Ramps & STH 57/167	1.000 EACH		
0892	SPV.0060 Special 3411. Trnspt & Install S-F Radar Detection System IH 43 NB Ramps & STH 57/167	1.000 EACH		
0894	SPV.0060 Special 3412. Trnspt & Install S-F FO Cable Pigtail 8-CT STH 57/167 & CTH W	1.000 EACH		·
0896	SPV.0060 Special 3413. Trnsprt & Install S-F FO Cable Pigtail 8-CT IH 43 SB Ramps & STH 57/167	1.000 EACH		
0898	SPV.0060 Special 3414. Trnsprt & Install S-F FO Cable Pigtail 8-CT IH 43 NB Ramps & STH 57/167	1.000 EACH	·	



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Proposal ID: 20230	711002 Project(s):	1229-04-75
	Federal ID(s):	WISC 2023548
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mb	r ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0900	SPV.0060 Special 3415. Temporary EVP System STH 57/167 & CTH W	1.000 EACH	·	·
0902	SPV.0060 Special 4000. Pile Dynamic Analyzer (PDA) Testing	12.000 EACH		. <u></u>
0904	SPV.0060 Special 4001. Pile Dynamic Analyzer (PDA) Restrikes	12.000 EACH		
0906	SPV.0060 Special 4002. Case Pile Wave Analysis Program (CAPWAP) Evaluation	12.000 EACH	<u>.</u>	
0908	SPV.0060 Special 4003. Boulder Retards	4.000 EACH		·
0910	SPV.0060 Special 4004. Temporary Water Diversion Culvert C-45-18	1.000 EACH		
0912	SPV.0060 Special 4005. Temporary Water Diversion Culvert B-45-116	1.000 EACH		
0914	SPV.0060 Special 5000. Adjust Sanitary Manhole	1.000 EACH		
0916	SPV.0075 Special 0601. Pavement Cleanup Project 1229-04-75	2,000.000 HRS		
0918	SPV.0085 Special 0001. Native Pollinator Seeding Mixture No. 90A	336.000 LB	·	
0920	SPV.0090 Special 0001. Concrete Curb and Gutter 54-Inch Type A	99.000 LF	·	
0922	SPV.0090 Special 0002. Concrete Barrier Type S42 Special	49,417.000 LF	·	
0924	SPV.0090 Special 0003. Concrete Barrier Type S56 Special	3,025.000 LF	·	·



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Proposal ID: 202307110	02 Project(s): 1229-04-75	
	Federal ID(s): WISC 2023548	
SECTION: 0001	Contract Items	
Alt Set ID:	Alt Mbr ID:	

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0926	SPV.0090 Special 0010. Coconut Fiber Rolls	850.000 LF		
0928	SPV.0090 Special 0015. Maintain and Remove Temporary Precast Concrete Barrier Left In Place	4,518.000 LF	·	
0930	SPV.0090 Special 0910. Glare Screens Temporary	28,986.000 LF		·
0932	SPV.0090 Special 2001. Outdoor Rated Network Cable	310.000 LF	<u></u>	·
0934	SPV.0090 Special 8031. Precast Trench Drain	1,027.000 LF		·
0936	SPV.0090 Special 8036. Temporary Precast Trench Drain	3,955.000 LF		
0938	SPV.0165 Special 4000. Longitudinal Grooving Bridge Deck	26,126.000 SF	·	
0940	SPV.0180 Special 0001. Topsoil Special	151,505.000 SY	·	
0942	SPV.0180 Special 0003. Concrete Pavement 8-Inch Special	20,568.000 SY	·	·
0944	SPV.0180 Special 0004. Concrete Pavement 10.5- Inch Special	186,423.000 SY	·	
0946	SPV.0180 Special 0106. Asphaltic Material Binder	9,164.000 SY		·
0948	SPV.0195 Special 0001. HMA Longitudinal Joint Repair	38.000 TON		
0950	SPV.0195 Special 0002. HMA Transverse Joint Repair	15.000 TON	·	
0952	SPV.0195 Special 0003. Stream Bed Material	450.000 TON	·	·



	Proposal Schedule of Iten	ns	Page 35 of 35
Proposal ID: 20230711002	Project(s): 1229-04-75		
F	ederal ID(s): WISC 2023548		
	Section: 0001	Total:	·
		Total Bid:	

PLEASE ATTACH ADDENDA HERE



Wisconsin Department of Transportation

July 3, 2023

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

NOTICE TO ALL CONTRACTORS:

Federal Wage Rate Addendum #01

Letting of July 11, 2023

Attached is a copy of the revised WI 10 Highway Davis Bacon Prevailing Wage Rates that are included in proposals 02, 04, and 10. These wage rates are effective for all proposals they are included in in the July 11, 2023 letting. The updated wage rates are dated June 23, 2023, and are effective on or after July 3, 2023.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section "General Decision Number: WI20230010 06/23/2023

Superseded General Decision Number: WI20220010

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)(2)-(60).

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 \$16.20 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 2023.
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:	

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		01/06/2023	

1	01/13/2023
2	01/20/2023
3	03/31/2023
4	04/07/2023
5	05/26/2023
6	06/02/2023
7	06/16/2023
8	06/23/2023

BRWI0001-002 06/01/2022

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 37.96	25.13
BRWI0002-002 06/01/2022		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes	
BRICKLAYER	\$ 45.87	23.91	

BRWI0002-005 06/01/2022

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	.\$ 38.81	23.94		
BRWI0003-002 06/01/2021				
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE, AND	OCONTO COUNTIES		
	Rates	Fringes		
BRICKLAYER	.\$ 37.03	24.95		
BRWI0004-002 06/01/2022				
KENOSHA, RACINE, AND WALWORTH COUNTIES				
	Rates	Fringes		
BRICKLAYER	•	26.01		
BRWI0006-002 06/01/2022				
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES				

BRICKLAYER	\$ 38.26	24.83
BRWI0007-002 06/01/2022		
GREEN, LAFAYETTE, AND ROCK COUNT	TIES	
	Rates	Fringes
BRICKLAYER	.\$ 39.26	25.52
BRWI0008-002 06/01/2022		
MILWAUKEE, OZAUKEE, WASHINGTON,	AND WAUKESHA CO	UNTIES
	Rates	Fringes
BRICKLAYER		24.42
BRWI0011-002 06/01/2022		
CALUMET, FOND DU LAC, MANITOWOC,	, AND SHEBOYGAN	COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 38.00	25.09
BRWI0019-002 06/01/2022		
BARRON, BUFFALO, BURNETT, CHIPPE PIERCE, POLK, RUSK, ST. CROIX, S		
	Rates	Fringes
BRICKLAYER BRWI0034-002 06/01/2022	.\$ 37.36	25.73
COLUMBIA AND SAUK COUNTIES		
	Rates	Fringes
BRICKLAYER	\$ 39.56	25.22
CARP0068-011 05/02/2022		
BURNETT (W. of Hwy 48), PIERCE (35, 48 & 65), AND ST. CROIX (W.		
	Rates	Fringes
Carpenter & Piledrivermen	\$ 41.19	27.05
CARP0264-003 06/01/2016		
KENOSHA, MILWAUKEE, OZAUKEE, RAC COUNTIES	CINE, WAUKESHA,	AND WASHINGTON
	Rates	Fringes
		111965

CARP0310-002 06/05/2022

Ashland, Bayfield, Forest, Iron, Langlade, Lincoln, Marathon, Oneida, Shawano, Taylor and Vilas

	Rates	Fringes				
CARPENTER\$ Piledriver\$	37.37	26.12 25.96				
CARP0314-001 06/05/2022						
Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk and Walworth						
	Rates	Fringes				
CARPENTER\$ Piledriver\$	37.37	26.12 25.96				
CARP0361-004 05/01/2018						
BAYFIELD (West of Hwy 63) AND DOUG	LAS COUNTIES					
	Rates	Fringes				
CARPENTER\$ CARP0731-002 06/05/2022		20.43				
Calumet (Eastern portion of the Co and Sheboygan	Calumet (Eastern portion of the County), Fond Du Lac, Manitowoc and Sheboygan					
	Rates	Fringes				
CARPENTER\$ Piledriver\$	36.80 37.37	26.12 25.96				
CARPENTER\$	36.80 37.37	26.12 25.96				
CARPENTER\$ Piledriver\$	36.80 37.37	26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood	36.80 37.37	26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood CARPENTER\$ Piledriver\$	36.80 37.37 Rates 36.80 37.37	26.12 25.96 Fringes 26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood CARPENTER\$	36.80 37.37 Rates 36.80 37.37	26.12 25.96 Fringes 26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood CARPENTER\$ Piledriver\$	36.80 37.37 Rates 36.80 37.37), Fond Du Lac,	26.12 25.96 Fringes 26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood CARPENTER\$ Piledriver\$ CARP0955-002 06/01/2022 Calumet (western portion of County Marquette, Outagamie and Winnebago	36.80 37.37 Rates 36.80 37.37), Fond Du Lac,	26.12 25.96 Fringes 26.12 25.96				
CARPENTER\$ Piledriver\$ CARP0804-001 06/05/2022 Adams, Juneau, Portage and Wood CARPENTER\$ Piledriver\$ CARP0955-002 06/01/2022 Calumet (western portion of County Marquette, Outagamie and Winnebago	36.80 37.37 Rates 36.80 37.37), Fond Du Lac Rates 36.80 37.37	26.12 25.96 Fringes 26.12 25.96 Green Lake, Fringes 26.12 25.96				

Rates Fringes

MILLWRIGHT.....\$ 38.00 26.78

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CARP1074-002 06/01/2022

Barron, Burnett, Chippewa, Clark, Dunn, Eau Claire, Pepin, Pierce, Polk, Rusk, Sawyer, St. Croix and Washburn

	Rates	Fringes	
CARPENTER		26.12	
PILEDRIVER	\$ 37.37	25.96	_
CARP1143-002 06/01/2022			

Crawford, Jackson, La Crosse, Monroe, Trempealeau and Vernon

	Rates	Fringes	
CARPENTER	\$ 36.80	26.12	
PILEDRIVER	\$ 37.37	25.96	
CARP1146-002 06/01/2022			

Brown, Door, Florence, Kewaunee, Marinette, Menominee and Shawano

	Rates	Fringes	
CARPENTER	\$ 36.80	26.12	
PILEDRIVER	\$ 37.37	25.96	
CARD2227 001 06 (01 /2016			

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes	
PILEDRIVERMAN			
Zone A	\$ 31.03	22.69	
Zone B	\$ 31.03	22.69	

ELEC0014-002 12/25/2022

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:	\$ 39.25	22.34
ELEC0014-007 05/29/2022		

REMAINING COUNTIES

Rates

Fringes

Teledata System Installer Installer/Technician.....\$ 29.63 3%+16.18

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 06/01/2021

KENOSHA COUNTY

	Rates	Fringes
Electricians:	.\$ 43.16	30%+12.70
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

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

	Rates	Fringes
Electricians:		69.25%
ELEC0388-002 05/30/2021		
ADAMS, CLARK (Colby, Freemont, Ly Sherwood, Unity), FOREST, JUNEAU MARINETTE (Beecher, Dunbar, Goodm West of a line 6 miles West of th County), ONEIDA, PORTAGE, SHAWANG AND WOOD COUNTIES	J, LANGLADE, LIN nan & Pembine), ne West boundary	COLN, MARATHON, MENOMINEE (Area of Oconto
	Rates	Fringes
Electricians: * ELEC0430-002 06/01/2023		26%+11.24
RACINE COUNTY (Except Burlington	Township)	
	Rates	Fringes
Electricians:	\$ 46.70	25.02
ELEC0494-005 06/01/2022		
MILWAUKEE, OZAUKEE, WASHINGTON, A	AND WAUKESHA COU	NTIES
	Rates	Fringes
Electricians:	\$ 46.38	25.86
ELEC0494-006 06/01/2021		
CALUMET (Township of New Holstein including Chester Township), FONE (Schleswig), and SHEBOYGAN COUNT)	DU LAC, MANITO	
	Rates	Fringes
Electricians:	\$ 37.91	22.74
ELEC0494-013 05/29/2022		
DODGE (East of Hwy 26 including (Twp), FOND DU LAC (Except Waupuir MANITOWOC (Schleswig), WASHINGTON	n), MILWAUKEE, O	ZAUKEĒ,
	Rates	Fringes
Sound & Communications Installer Technician		18.80 21.12
Installation, testing, maintena of all sound, intercom, telepho circuit TV systems, radio syste systems, language laboratories	one interconnect ems, background	, closed 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

ELEC0577-003 06/01/2022

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:	\$ 37.41	29.50%+10.00
ELEC0890-003 06/01/2022		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes	
Electricians:	\$ 40.70	25.95%+11.26	
ELEC0953-001 06/02/2019			
	Rates	Fringes	
Line Construction:			
(1) Lineman	\$ 47.53	21.43	
Opérator	\$ 42.78	19.80	
(3) Equipment Operator		18.40	
(4) Heavy Groundman Drive	er\$ 33.27	16.88	
(5) Light Groundman Drive	er\$ 30.89	16.11	
(6) Groundsman	\$ 26.14	14.60	
ENGI0139-005 06/01/2023			
	Rates	Fringes	
Power Equipment Operator			
Choup 1	¢ 40 77	77 40	

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 06/13/2022

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,

MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Rates Fringes IRONWORKER.....\$ 41.00 28.95 Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day. _____ IRON0008-003 06/01/2021 KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES Rates Fringes IRONWORKER.....\$ 40.57 28.40 Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day. _____ IRON0383-001 06/05/2022 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.....\$ 39.00 28.58 _____ IRON0498-005 06/01/2021 GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES: Rates Fringes IRONWORKER.....\$ 41.37 44.41 _____ IRON0512-008 05/01/2022 BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES Rates Fringes 33.11 IRONWORKER.....\$ 41.00 _____ IRON0512-021 05/01/2022 ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

Rates Fringes

IRONWORKER.....\$ 36.94 33.11

LAB00113-002 06/01/2023

MILWAUKEE AND WAUKESHA COUNTIES

Rates	Fringes
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LABORER

Group 1\$ 33.56	23.86
Group 2\$ 33.71	23.86
Group 3\$ 33.91	23.86
Group 4\$ 34.06	23.86
Group 5\$ 34.21	23.86
Group 6\$ 30.05	23.86

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

LAB00113-003 06/01/2023

OZAUKEE AND WASHINGTON COUNTIES

		Rates	Fringes
LABORER			
Group	1	.\$ 32.81	23.86
Group	2	.\$ 32.91	23.86
Group	3	.\$ 32.96	23.86
Group	4	.\$ 33.16	23.86
Group	5	.\$ 33.01	23.86
Group	6	.\$ 29.90	23.86

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

* LAB00113-011 06/01/2023

KENOSHA AND RACINE COUNTIES

Rates Fringes

Т	A	в	O	R	F	R

Group	1\$	32.62	23.86
Group	2\$	32.77	23.86
Group	3\$	32.97	23.86
Group	4\$	32.94	23.86
Group	5\$	33.27	23.86
Group	6\$	29.76	23.86

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

* LAB00140-002 06/01/2023

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	\$ 37.57	19.25
Group 2	\$ 37.67	19.25
Group 3	\$ 37.72	19.25
Group 4	\$ 37.92	19.25
Group 5	\$ 37.77	19.25
Group 6	\$ 34.20	19.25

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

* LAB00464-003 06/01/2023

DANE COUNTY

Rates	Fringes
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LABORER

Group 1\$ 37.85	19.25
Group 2\$ 37.95	19.25
Group 3\$ 38.00	19.25
Group 4\$ 38.20	19.25
Group 5\$ 38.05	19.25
Group 6\$ 34.20	19.25

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 05/01/2023 ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES Rates Fringes Painters: New: Brush, Roller.....\$ 34.59 24.84 Spray, Sandblast, Steel....\$ 35.19 24.84 Repaint: Brush, Roller.....\$ 33.09 24.84 Spray, Sandblast, Steel....\$ 33.69 24.84 _____ PAIN0108-002 06/01/2022 RACINE COUNTY Rates Fringes Painters: Brush, Roller.....\$ 39.60 21.79 Spray & Sandblast.....\$ 40.60 21.79 PAIN0259-002 05/01/2008 BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES Fringes Rates 12.15 PAINTER.....\$ 24.11 _____ PAIN0259-004 05/01/2015 BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES Rates Fringes PAINTER.....\$ 22.03 12.45 _____ PAIN0781-002 06/01/2022 JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates Fr

Fringes

Painters: Bridge.....\$ 38.15 Brush.....\$ 37.40 Spray & Sandblast.....\$ 38.15 24.80 24.80 24.80 PAIN0802-002 06/01/2021 COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND, ROCK, AND SAUK COUNTIES Rates Fringes PAINTER Brush.....\$ 29.98 18.78 PREMIUM PAY: Structural Steel, Spray, Bridges = \$1.00 additional per hour. _____ PAIN0802-003 06/01/2022 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.....\$ 34.68 18.94 _____ 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 06/06/2021 FLORENCE COUNTY Rates Fringes Painters:....\$ 26.71 14.38 PLAS0599-010 06/01/2021 Rates Fringes CEMENT MASON/CONCRETE FINISHER Area 1.....\$ 42.06 20.87 Area 2 (BAC).....\$ 37.73 23.80 Area 3.....\$ 38.74 22.46 Area 4.....\$ 38.59 22.66 Area 5....\$ 38.16 22.98 Area 6....\$ 34.94 26.36

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: 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

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2021

	Rates	Fringes
TRUCK DRIVER 1 & 2 Axles 3 or more Axles; Euclids, Dumptor & Articulated,	.\$ 32.57	23.81
Truck Mechanic	.\$ 32.72	23.81
WELL DRILLER	.\$ 16.52	3.70

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) (ii)).

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.

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.

END OF GENERAL DECISIO"