

HIGHWAY WORK PROPOSAL

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

Proposal Number: **056**

<u>STATE ID</u>	<u>FEDERAL ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>	<u>COUNTY</u>
1090-39-70	WISC 2026103	IH 43 Rock Freeway, STH 83 to STH 164	IH 043	Waukesha

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 Date: January 13, 2026 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time June 30, 2028	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work: Removals, Milling, Grading, Aggregate, Concrete Pavement, Asphalt Pavement, Structure Replacement, Culvert Pipe, Sign Structure, Curb and Gutter, Concrete Sidewalk, Storm Sewer, Beam Guard, Erosion Control, Permanent Signing, Traffic Control, Pavement Marking, Lighting, Traffic Signals, Retaining Wall, Restoration.	For Department Use Only
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

BID PREPARATION

Preparing the Proposal Schedule of Items

A. General

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 1. Electronic bid on the internet.
 2. Electronic bid on a printout with accompanying diskette or CD ROM.
 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at:

<https://wisconsin.gov/Pages/doing-business/contractors/hcci/bid-let.aspx>

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

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

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

<https://wisconsin.gov/Pages/doing-business/contractors/hcci/bid-let.aspx>

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

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

B. Submitting Electronic Bids**B.1 On the Internet**

- (1) Do the following before submitting the bid:
 4. Have a properly executed annual bid bond on file with the department.
 5. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
 2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
 4. Submit the bid before the hour and date the Notice to Contractors designates.
 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>
Use Expedite™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.
- (2) Staple an 8 1/2 by 11 inch printout of the Expedite□□ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite□□ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
1. The check code printed on the bottom of the printout of the 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

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

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.

[illegible]

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

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 - "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

1. The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1090-39-70, IH 43 Rock Freeway, STH 83 to STH 164, IH 43, Waukesha 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, 2025 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 (20250701)

2. Scope of Work.

The work under this contract shall consist of removals, grading, base aggregate, concrete pavement, concrete curb and gutter, concrete sidewalk, concrete barrier, HMA pavement, culvert pipe work, storm sewer, guardrail, erosion control, permanent signing, traffic signals, traffic control, pavement marking, lighting, structures, bridges, retaining wall, sign structures and FTMS fiber and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

Bridges

B-67-120, B-67-121, B-67-122, B-67-123, B-67-124, B-67-125, B-67-126, B-67-127, B-67-128, B-67-132, B-67-133, B-67-325

Sign Structures

S-67-322, S-67-323, S-67-324, S-67-325, S-67-988, S-67-989, S-67-990, S-67-991, S-67-992, S-67-993

Retaining Walls

R-67-172

3. Prosecution and Progress.

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

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

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

Do not begin construction prior to April 1, 2026 without written consent from the engineer.

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

Be advised that there may be multiple mobilizations and/or remobilizations to complete construction operations, for example such items as; traffic control, paving, signing, temporary and permanent pavement marking, finishing items and other incidental items. No additional payment will be made, by the department, for additional mobilizations.

Interim Completion and Liquidated Damages – IH 43 NB: November 16, 2026

Complete construction operations on IH 43 northbound to the stage necessary to reopen all lanes of traffic by November 16, 2026. Do not reopen until completing the following work: IH 43 northbound lanes, shoulders, and ramps; temporary pavement marking; signing; permanent or temporary restoration; and crossover closures.

If the contractor fails to complete the work necessary to reopen IH 43 to all lanes of traffic by November 16, 2026, the department will assess the contractor \$3,000 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 17, 2026. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Interim Completion and Liquidated Damages – STH 164 Ramp C and Ramp D: June 15, 2027

Complete construction operations at the STH 164 interchange to the stage necessary to reopen Ramp C (IH 43 SB Exit) and Ramp D (IH 43 NB Entrance) to traffic by June 15, 2027. Do not reopen until completing the following work: final ramp pavement and shoulders, including gores and auxiliary lanes, and temporary or permanent pavement marking and signing.

If the contractor fails to complete the work necessary to reopen STH 164 Ramp C and Ramp D to traffic by June 15, 2027, the department will assess the contractor \$3,000 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on June 16, 2027. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Interim Completion and Liquidated Damages – STH 83 Ramp C: August 1, 2027

Complete construction operations on STH 83 Ramp C (IH 43 SB Exit) to the stage necessary to reopen the ramp to traffic by August 1, 2027. Do not reopen until completing the following work: final ramp pavement and shoulders, including gore and auxiliary lane, and temporary or permanent pavement marking and signing.

If the contractor fails to complete the work necessary to reopen STH 83 Ramp C to traffic by August 1, 2027, the department will assess the contractor \$3,000 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on August 2, 2027. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Interim Completion and Liquidated Damages – Complete Stage 5, IH 43 SB and STH 164: November 19, 2027

Complete construction operations on IH 43 southbound and STH 164 to the stage necessary to reopen all lanes of traffic by November 19, 2027. Do not reopen until completing the following work: IH 43 southbound lanes, shoulders, and ramps; STH 164 lanes, shoulders, and traffic signals; permanent or cold weather pavement marking; signing; permanent or temporary restoration; and crossover closures.

If the contractor fails to complete the work necessary to reopen IH 43 and STH 164 to all lanes of traffic by November 19, 2027, the department will assess the contractor \$3,000 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 20, 2027. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Enhanced Final Liquidated Damages

Replace standard spec 108.11 paragraph (3) as follows:

The department will assess \$3,000 in daily liquidated damages. These liquidated damages reflect the cost of engineering, supervision, and a portion of road user costs.

Critical Path Method Progress Schedule

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

Fish Spawning

There shall be no instream disturbance of the Fox River 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 species.

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

Migratory Birds

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

- B-67-120
- B-67-121
- B-67-122
- B-67-125
- B-67-126
- B-67-133

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-67-123
- B-67-124
- B-67-127
- B-67-128
- B-67-132
- B-67-325

Protection of Endangered Bats (Tree Clearing)

Federally protected bats 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 15 to October 31, both dates inclusive.

The department has contracted with others and will perform the following operations after October 31 and prior to April 15:

- Cutting down and removing trees.

If there are clearing operations required to remove previously cut trees, submit a schedule and description with the ECIP 14 days prior to the work. 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 approval letter for the ECIP.

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.

Limits of the tree clearing that is performed by others are shown in the removal plans. Additional tree clearing is to be completed under this contract and must adhere to the restrictions above.

Threatened and Endangered Species – Rusty Patched Bumble Bee

The federally protected Rusty Patched Bumble Bee (*Bombus affinis*) may be present within the project limits. The project includes disturbing low-quality Rusty Patched Bumble Bee feeding habitat and woodlands potentially suitable for Rusty Patched Bumble Bee nesting or overwintering habitat.

Trees will be cleared and removed between November 1 and April 14. Grubbing may not take place until the Rusty Patched Bumble Bee active season (April 15 to October 10) to avoid disturbing the overwintering habitat of the Rusty Patched Bumble Bee.

Pavement Markings

Any water blasting required due to incorrect placement of temporary pavement marking that requires removal, is incidental to the temporary pavement marking items. Temporary pavement markings shall be applied prior to opening the completed lanes to traffic.

Aerial Enforcement Bar Markings

Contact the Wisconsin State Patrol 48 hours prior to placing Marking Aerial Enforcement Bars Epoxy. The contact is Nate Clark at 414-930-7000.

Access

Proposed locations of access to the bridges over the Fox River, retaining wall, culvert pipes and FTMS fiber work are located in the plans. Include proposed access and work methods in the ECIP.

Fall and Winter Work Restrictions

No work requiring lane closures shall take place during fall and winter work restrictions unless approved by the engineer. Prior to fall and winter work restrictions, restore the traffic configuration to the existing (pre-construction) or final traffic configuration; restore all disturbed pavement and pavement markings; and remove all traffic control, equipment and materials from the project site unless approved by the engineer.

Winter Maintenance

Waukesha County will perform snow removal operations for freeway and ramp lanes and shoulders that are open to traffic. The Village of Big Bend will perform snow removal operations for local streets 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. Winter maintenance is incidental and there will be no additional payment to the contractor for such. Provide Waukesha County Highway Maintenance and Waukesha County Sheriff's Department with a 24-hour emergency contact number for when maintenance is required.

Schedule of Operations

The schedule of operations shall conform to the requirements contained herein, unless modifications are approved in writing by the engineer.

The department anticipates that the schedule for each stage shall be as follows. This list is not all inclusive.

Stage 1A

IH 43:

Mill and pave the northbound outside rumble strips to accommodate Stage 2 traffic. Construct southbound temporary emergency pullouts for use in Stage 2.

Stage 1B

IH 43:

Construct the north and south mainline median crossovers and install temporary drainage. Construct the southbound half of the STH 83 temporary ramp crossovers.

Replace existing southbound pier protection at STH 83 with temporary pier protection. Re-lap guardrail and install temporary hazard protection along the southbound median, as shown in the plans, to accommodate bi-directional traffic in Stage 2.

Mill and pave the southbound median rumble strips to accommodate Stage 2 traffic.

Stage 2A

IH 43:

Begin reconstructing the northbound lanes and shoulders. Gap northbound reconstruction north of STH 164 to maintain the IH 43 northbound entrance ramp.

Reconstruct the northbound entrance ramp at STH 83. Construct the northbound half of the STH 83 temporary ramp crossovers to match into the new IH 43 northbound pavement.

Install temporary pier protection at STH 83 and temporary hazard protection along the northbound median as shown in the plans to accommodate Stage 3 bi-directional traffic.

Construct the northbound temporary emergency pullouts for use in Stage 3.

Install FTMS conduit and equipment along the IH 43 northbound lanes and STH 83 northbound entrance ramp.

Begin repair work on the following structures:

- Edgewood Avenue: B-67-132 and B-67-133
- HiLo Drive: B-67-123 and B-67-124
- Center Drive: B-67-122

Stage 2B

IH 43:

Continue reconstructing the northbound lanes and shoulders. Continue to gap the northbound reconstruction north of STH 164 to maintain the northbound entrance ramp.

Begin repair work on the following structures:

- Fox River: B-67-127 and B-67-128

STH 164:

Construct the southbound temporary outside widening and storm sewer trunk line. Begin constructing retaining wall R-67-172.

Stage construction of the culvert crossing on Woodland Lane to maintain access to the fire department.

Up to three consecutive overnight off-peak closures of the southbound lanes will be allowed for storm sewer installation. Provide a minimum 30 calendar day advance notice to the engineer of when the overnight off-peak closures will take place.

One weekend full closure will be allowed to complete storm sewer work from 7:00 PM Friday to 6:00 AM Monday. Provide a minimum 30 calendar day advanced notice to the engineer of when the weekend full closure will take place.

Stage 2C

IH 43:

Finish reconstructing the northbound lanes and shoulders, including the lanes, shoulders, and auxiliary lane along the STH 164 northbound entrance ramp.

Construct temporary ramp connections between the existing STH 164 northbound exit and entrance ramps and the new ramp gores and auxiliary lanes on IH 43.

Construct overhead sign structure S-67-323.

Install temporary pier protection at STH 83 along the northbound median as shown in the plans and place temporary pavement marking prior to opening the IH 43 northbound lanes for Stage 2D.

STH 164:

Construct the median crossovers and temporary pavement. Continue constructing retaining wall R-67-172. Place temporary pavement marking prior to opening lanes for Stage 2D.

Stage 2D

IH 43:

Remove temporary barrier and pavement marking used in Stage 2 for bi-directional traffic on the IH 43 southbound lanes.

Close all crossovers and place temporary pavement marking prior to opening the IH 43 southbound lanes.

STH 164:

Continue constructing retaining wall R-67-172.

Winter Shutdown

Fall and Winter Work Restrictions

Complete construction operations on IH 43 and STH 164 to the stage necessary to reopen to all lanes of traffic by November 16, 2026, unless otherwise approved by the engineer. Do not reopen until the work that has been started is complete and all materials, equipment, and temporary traffic control devices are removed from the IH 43 right-of-way. Work on retaining wall R-67-172 may continue with southbound shoulder closures on STH 164.

Do not resume work until April 1, 2027, unless approved by the engineer. Provide a start date in writing at least 14 calendar days prior to the planned start of construction in 2027. Upon approval the engineer will issue a notice to proceed within 10 calendar days of the approved start date.

Stage 3A

IH 43:

Begin reconstructing the southbound lanes and shoulders. Gap southbound reconstruction north of STH 83 to maintain the southbound exit ramp. Construct the STH 164 southbound exit ramp.

Begin repair work on the following structures:

- Center Drive: B-67-122, north abutment slope paving
- STH 164: B-67-135

Construct the following overhead sign structures:

- S-67-322
- S-67-324

STH 164:

Reconstruct the northbound lanes, shoulders, and ramp termini. Install FTMS conduit and equipment along the northbound entrance ramp. Construct temporary pavement for use in Stage 4.

Stage construction of Woodland Lane to maintain access to the Park and Ride Lot.

Stage construction of the Park and Ride Lot to maintain a minimum of one-third of the parking stalls.

Begin constructing the following overhead sign structures:

- S-67-988
- S-67-990
- S-67-992

Stage 3B

IH 43:

Coordinate with Project ID 1090-09-75. Close the south crossover and match traffic control between projects.

Stage 4A

IH 43:

Construct the southbound exit ramp at STH 83 and the southbound entrance ramp at STH 164.

Reconstruct the southbound half of the STH 83 temporary ramp crossovers to match into the new IH 43 southbound pavement.

Begin repair work on the following structures:

- Oakdale Drive: B-67-125 and B-67-126
- Evergreen Drive: B-67-120 and B-67-121

STH 164:

Begin reconstructing the southbound lanes, shoulders, and ramp termini.

Install FTMS conduit and equipment across STH 164.

Stage construction of Woodland Lane to maintain access to the fire department.

Stage 4B

IH 43:

Finish reconstructing the STH 164 southbound entrance ramp.

Reconstruct the southbound half of the south crossover to match into the new IH 43 southbound pavement.

Install FTMS conduit and equipment along the IH 43 southbound lanes near STH 83 and along the STH 164 northbound exit ramp.

STH 164:

Finish reconstructing the southbound lanes, shoulders and ramp termini.

Construct the following overhead sign structures:

- S-67-325
- S-67-989
- S-67-990
- S-67-991
- S-67-993

One overnight off-peak full closure will be allowed for traffic switching work. Provide a minimum 30 calendar day advance notice to the engineer of when the overnight off-peak full closure will take place.

Stage 5A

IH 43:

Finish constructing the median shoulders. Install rumble strips and pavement marking. Install permanent northbound pier protection at STH 83. Install temporary southbound pier protection to be left in place at STH 83.

Remove temporary barrier and pavement marking used in Stages 3 & 4 for bi-directional traffic on the IH 43 northbound lanes.

Remove the north crossover. Restore median shoulders, ditch grades, and drainage.

Close the center and south crossovers and place final pavement marking prior to opening the IH 43 southbound lanes.

STH 164:

Construct the remaining northbound median islands and traffic signals. Remove median crossovers and restore grades and drainage.

Up to two consecutive overnight off-peak closures of the northbound lanes will be allowed for overhead sign structure, traffic signal, and pavement marking work. Provide a minimum 30 calendar day advance notice to the engineer of when the overnight off-peak closures will take place.

Up to two consecutive overnight off-peak closures of the southbound lanes will be allowed for overhead sign structure, traffic signal, and pavement marking work. Provide a minimum 30 calendar day advance notice to the engineer of when the overnight off-peak closures will take place.

One weekend full closure will be allowed to complete overhead sign structure, traffic signal, and pavement marking work from 7:00 PM Friday to 6:00 AM Monday. Provide a minimum 30 calendar day advanced notice to the engineer of when the weekend full closure will take place.

Stage 5B

Remove IH 43 northbound temporary emergency pullouts. Install northbound outside rumble strips and pavement marking prior to opening IH 43 northbound lanes.

Fall and Winter Work Restrictions

Complete construction operations on IH 43 and STH 164 to the stage necessary to reopen to all lanes of traffic by November 19, 2027, unless otherwise approved by the engineer. Do not reopen until the work that has been started is complete and all materials, equipment, and temporary traffic control devices are removed from the IH 43 and STH 164 right-of-way.

Do not resume work until April 1, 2028, unless approved by the engineer. Provide a start date in writing at least 14 calendar days prior to the planned start of construction in 2028. Upon approval the engineer will issue a notice to proceed within 10 calendar days of the approved start date.

Contractor Coordination

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.

Provide an individual to serve as the contractor's sole point of contact for field utility coordination and communication for the duration of the project.

4. 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 Traffic 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 extending into Peak Hours
 - NB \$6,000 per lane, per direction of travel, per hour broken into 15-minute increments
 - SB \$1,500 per lane, per direction of travel, per hour broken into 15-minute increments
- Service Ramp - \$1,000 per lane, per direction of travel, per hour broken into 15-minute increments
- IH 43 Full Freeway Closure:
 - 5:00 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
- Local Road Off-Peak Closure - \$1,000 per lane, per direction of travel, per hour broken into 15-minute increments
- Local Road Full Closure - \$1,000 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)

5. Traffic.

Supplement standard spec 643.3.1 with the following:

IH 43 is an OSOW route. All fixed message and width restricted signs must be in place prior to the beginning of the width restricted stage to inform multi trip permit holders to utilize alternate routes. See Wisconsin Lane Closure System Advance Notification article to address lane restrictions in LCS.

Provide the Waukesha County Sheriff's Department, the Wisconsin State Patrol, Mukwonago and Big Bend Police Departments and the project 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.

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 traffic lanes of IH 43 with equipment or vehicles.

Obtain prior approval from the engineer for the locations of egress or ingress for construction vehicles to prosecute the work.

Provide minimum 24 hour advance notification to the engineer for any LCS cancellations (not related to weather).

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.

SER-643-001 (20230214)

General

Keep the freeways, all system ramps and all service ramps open to traffic at all times for the duration of this project except as noted below. The schedule of operations shall conform to the requirements contained herein, unless modifications are approved in writing by the engineer.

Perform all work according to the requirements of standard spec 643, as detailed in the Traffic Control Plans and as hereinafter described.

Designate an individual responsible for traffic control maintenance including access of local traffic, and 24-hour emergency traffic control repair. Provide the name and telephone number of this individual to the engineer.

Conduct operations in a manner that will cause the least interference to traffic movements and adjacent business and residential access within the construction areas.

The parking and storage of construction vehicles, equipment and material shall be approved by the engineer and shall be restricted to the minimum required and the minimum time necessary at the work sites to prosecute the work. At such locations, the material and equipment involved shall not constitute a hazard to the traveling public.

Emergency Vehicle Access

Maintain emergency vehicular access at all times to roadways located within the project limits.

Fire Department Access

Maintain full access to Woodland Lane to the west of STH 164, unless otherwise stated in the traffic control plans.

Local Vehicle Access

Close driveways for a maximum of 7 calendar days to construct new access approaches. Prior to removal or closing of driveway access, provide 48-hour notice to the occupant and owner of the premises.

Business Access

Contact businesses which have entrances within the project limits 7 calendar days prior to performing work which may affect the entrances. Confirm the closure with the property owner 2 days prior to use. If a business has two driveways, keep one open while constructing the other driveway. If a property has one driveway, construct one half at a time or coordinate closure with the property owner.

WisDOT Park and Ride Access

Maintain full access to the WisDOT Park and Ride along Woodland Lane from STH 164 at all times during construction.

Traffic Control and Staging

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

General Traffic Operations During All Stages

Maintain at least one travel lane in each direction at all times unless specifically mentioned within this article.

Keep all interchange ramps open at all times unless specifically mentioned within this article.

Do not close consecutive intersections and/or ramps unless specifically mentioned within this article.

Maintain all intersection traffic movements during peak hours and when intersection work is not taking place unless specifically mentioned within this article.

Temporary or permanent markings must be placed prior to opening lanes to traffic.

Stage the work as shown on the plans or as directed by the engineer. Notify the engineer at least 7 calendar days before switching stages. Do not conduct traffic control stage changes during peak hours.

Complete work in one stage before beginning the next stage.

Notify WisDOT Signals a minimum of one week prior to beginning construction, a minimum of one week prior to the beginning of any construction stage, and a minimum of one week prior to any work at signalized intersections to coordinate signal timing adjustments. The WisDOT Signal contact is Jarrett Gates at (414) 750-2472 or Jarrett.Gates@dot.wi.gov.

Schedule of Operations – Traffic Control

Staging is as follows:

Stage 1A

During nighttime off-peak hours, close the IH 43 northbound outside lane in spot locations for milling and paving rumble strips. Close the IH 43 southbound outside lane in spot locations for the construction of temporary emergency-pull outs. Maintain one 12-foot travel lane adjacent to lane closures.

Stage 1B

Close the IH 43 southbound median lane for median prep-work. Maintain one southbound 12-foot travel lane.

During nighttime off-peak hours, close the IH 43 northbound median lane in spot locations for median prep-work. Maintain one northbound 12-foot travel lane.

Stage 2A

IH 43:

Shift traffic to the southbound lanes and close the northbound lanes between STH 83 and STH 164. Maintain one 11-foot travel lane in each direction separated by temporary barrier on the southbound lanes.

Close the northbound entrance ramp at STH 83. Maintain the southbound exit ramp at STH 83. Close the northbound exit ramp at STH 164. Maintain the northbound entrance ramp at STH 164.

STH 83:

Close the IH 43 northbound entrance ramp, including the northbound right turn lane and the southbound left turn lanes.

Minor Sideroads:

Close Center Drive between CTH ES and Scherer's Lane.

Close the shoulders on Edgewood Avenue and HiLo Drive as needed for work on structures. Single lane closures using flagging operations will be allowed for slope paving repairs.

Stage 2B:

IH 43:

Re-open the northbound entrance ramp at STH 83 utilizing the temporary ramp crossover.

STH 164:

Close the southbound outside lane between CTH ES and 1200' south of Woodland Lane. Maintain one 12-foot travel lane in the southbound direction.

Maintain one 11-foot minimum left turn lane in the southbound and westbound directions at the intersection with CTH ES. Maintain all other turn lanes.

Maintain fire department access to Woodland Lane at all times.

Maintain access to the Park and Ride Lot at all times.

See Prosecution and Progress for allowable overnight off-peak lane closures and weekend full closure.

STH 83:

Open the IH 43 northbound entrance ramp, including the northbound right turn lane and the southbound left turn lanes.

Minor Sideroads:

Open Center Drive to traffic.

Stage 2C:

IH 43:

Extend the closure of the northbound lanes along IH 43 to the north project limits. Close the IH 43 NB entrance ramp at STH 164.

STH 164:

Close the northbound and southbound median lanes. Maintain one 12-foot travel lane in each direction.

Close the IH 43 NB entrance ramp, including the northbound right turn movement and the southbound left turn lane.

The southbound shoulder may remain closed for continuing work on retaining wall R-67-172.

Maintain one 11-foot minimum left turn lane in the northbound, southbound and westbound directions at the intersection with CTH ES. Maintain all other turn lanes.

Stage 2D:

IH 43:

Shift traffic back to their respective sides of the median. Close the mainline and temporary ramp crossovers.

Open the IH 43 northbound lanes and all ramps to traffic. Close the IH 43 southbound median lane. Maintain one 11-foot southbound travel lane.

STH 164:

Open the northbound and southbound median lanes. The southbound shoulder may remain closed for continuing work on retaining wall R-67-172.

Open the IH 43 NB entrance ramp, including the northbound right turn movement and the southbound left turn lane.

Open left turn lane in the northbound, southbound and westbound directions at the intersection with CTH ES.

Fall and Winter Work Restrictions:

Open all travel lanes, ramps, and shoulders on IH 43.

Open all travel lanes and shoulders on STH 164 with the exception of the southbound shoulder which may remain closed for finishing work on retaining wall R-67-172.

STH 83 and all side roads are to remain open.

Stage 3A:IH 43:

Shift traffic to the northbound lanes and close the southbound lanes between STH 83 and STH 164. Maintain one 11-foot travel lane in each direction separated by temporary barrier on the northbound lanes.

Maintain the northbound entrance ramp and southbound exit ramp at STH 83. Close the southbound entrance ramp at STH 83. Close the southbound exit and entrance ramps at STH 164. Close the northbound entrance ramp from STH 164.

STH 164:

Shift traffic to the southbound lanes and close the northbound lanes. Maintain one 11-foot travel lane in each direction on the southbound lanes.

Close the IH 43 SB entrance ramp, including the northbound left turn lane and southbound right turn movement.

Close the IH 43 NB entrance ramp, including the northbound right turn movement and the southbound left turn lane.

Maintain one 11-foot minimum left turn lane in the northbound, southbound, and westbound directions at the intersection with CTH ES. Close the westbound right turn lane but allow right turns from the through lane. Maintain all other turn lanes.

Maintain fire departments access to Woodland Lane at all times.

Maintain access to the Park and Ride Lot at all times. Do not close both driveways at the same time. Close portions of the lot while maintaining a minimum of one-third of the parking stalls.

STH 83:

Close the IH 43 southbound entrance ramp, including the northbound left turn lane and the southbound right turn movement.

Stage 3B:IH 43:

Coordinate with Project ID 1090-09-75. Close the south crossover and match traffic control between projects. Maintain bi-directional traffic on the northbound lanes.

Stage 4A:IH 43:

Open the northbound entrance ramp and the southbound exit ramp at STH 164. Close the northbound exit ramp at STH 164. Close the southbound exit ramp at STH 83.

STH 164:

Shift traffic to the northbound lanes and close the southbound lanes. Maintain one 11-foot travel lane in each direction on the northbound lanes.

Open the IH 43 NB entrance ramp, including the northbound right turn movement and the southbound left turn lane.

Maintain one 11-foot minimum left turn lane in the northbound, southbound, and westbound directions at the intersection with CTH ES. Close the eastbound right turn lane but allow right turns from the through lane. Maintain all other turn lanes.

Maintain fire department access to Woodland Lane at all times.

Maintain access to the Park and Ride at all times.

Minor Sideroads:

Close the shoulders on Oakdale Drive and Evergreen Drive as needed for work on structures. Single lane closures using flagging operations will be allowed for slope paving repairs.

Stage 4B:IH 43:

Open the southbound exit ramp at STH 83.

STH 164:

See Prosecution and Progress for allowable overnight off-peak full closure.

Stage 5A:IH 43:

Shift traffic back to their respective sides of the median. Close the northbound and southbound median lanes. Maintain one 12-foot southbound travel lane and one 11-foot northbound travel lane.

Close the mainline and temporary ramp crossovers.

Open the northbound exit ramp and the southbound entrance ramp at STH 164.

STH 164:

Shift traffic back to their respective sides of the median. Close a single lane in each direction as shown in the plans. Maintain one 12-foot travel lane in each direction.

Maintain one 11-foot minimum left turn lane in the northbound, southbound, and westbound directions at the intersection with CTH ES. Maintain all other turn lanes.

Maintain fire department access to Woodland Lane at all times.

Maintain access to the Park and Ride at all times.

See Prosecution and Progress for allowable overnight off-peak lane closures and weekend full closure.

Stage 5B:IH 43:

Open the southbound lanes. Close the northbound outside lane. Maintain one 12-foot northbound travel lane.

Fall and Winter Work Restrictions:

Open all travel lanes, ramps, and shoulders on IH 43.

Open all travel lanes and shoulders on STH 164.

STH 83 and all side roads are to remain open.

Detours

Provide signed detour routes, as shown in the plans that are fully free of construction during all system ramp closures. Install required traffic control and detour signs as shown in the plans at least 14 calendar days prior to beginning stage construction; remove the detour after completion of the project. Cover advance-warning signs and detour signs until work begins.

IH 43 NB between STH 83 and STH 164 (Full Freeway Closure)

IH 43 NB traffic will be detoured to STH 83, then north to Holz Pkwy, then north to CTH ES, then east to STH 164, then south to IH 43 NB on ramp.

IH 43 SB between STH 83 and STH 164 (Full Freeway Closure)

IH 43 SB traffic will be detoured to STH 164, then north to CTH ES, then west to Holz Pkwy, then south to STH 83, then south to IH 43 SB on ramp.

STH 164 NB between Woodland Ln and CTH ES (Full Closure)

STH 164 NB traffic will be detoured south to STH 36, then south to STH 83, then north to Holz Pkwy, then north to CTH ES, then east to STH 164.

STH 164 SB between Woodland Ln and CTH ES (Full Closure)

STH 164 SB traffic will be detoured to CTH ES, then west to Holz Pkwy, then south to STH 83, then south to STH 36, then north to STH 164, then north to the end of the detour.

IH 43 NB on ramp from STH 83

IH 43 NB on ramp at STH 83 traffic will be detoured north on STH 83 to Holz Pkwy, then north to CTH ES, then east to STH 164, then south to IH 43 NB on ramp.

IH 43 NB off ramp to STH 164

IH 43 NB off ramp at STH 164 traffic will be detoured north on IH 43 to CTH Y, then north to IH 43 SB on ramp, then south to IH 43 SB off ramp to STH 164.

IH 43 NB on ramp from STH 164

IH 43 NB on ramp at STH 164 traffic will be detoured north on STH 164 to CTH ES, then east to CTH Y, then south to IH 43 NB on ramp.

IH 43 SB off ramp to STH 164

IH 43 SB off ramp at STH 164 traffic will be detoured to CTH Y, then north to CTH ES, then west to STH 164.

IH 43 SB on ramp from STH 164 – Stage 3

IH 43 SB on ramp at STH 164 traffic will be detoured north on STH 164 to CTH ES, then east to CTH Y, then south to IH 43 SB on ramp.

IH 43 SB on ramp from STH 164 – Stage 4

IH 43 SB on ramp at STH 164 traffic will be detoured south on STH 164 to IH 43 NB on ramp, then north on IH 43 to CTH Y, then north on CTH Y to IH 43 SB on ramp.

IH 43 SB off ramp to STH 83

IH 43 SB off ramp at STH 83 traffic will be detoured to STH 164, then north to CTH ES, then west to Holz Pkwy, then south to STH 83.

Portable Changeable Message Signs (PCMS)

Traffic Control Signs PCMS shall be installed in advance of the start of work to alert drivers of upcoming closures, following the table below. Obtain acceptance from the engineer regarding the wording of all messages on portable changeable message signs prior to placing the message.

Ramp Closures

All entrance and exit ramps shall be posted seven calendar days in advance of their closure with dates and time of closure. Do not close consecutive entrance ramps or consecutive exit ramps unless it is shown in the traffic control plans or approved by the engineer. Place a portable changeable message sign before the previous open exit ramp to advise traffic about the closure of the specific ramp.

Railroad

Except for railroad crossing DOT # 689882B where STSP 107-026 applies: Do not place any items within 50-feet of the railroad right-of-way, including items that could foul the same area. Including but not limited

to signing, equipment, or material. This includes at-grade crossings and structures with RR under or over. If this is not adhered to Railroad Protective Liability Insurance will be required of the contractor and incidental to the project.

Rolling Closure

Short term freeway mainline 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.

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 standard spec 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 mainline 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 are not allowed directly from the freeway during peak hours except where appropriate acceleration and deceleration lanes and traffic control 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 are 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.

Traffic Meetings and Traffic Control Scheduling

Every Wednesday by 8:00AM, 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. Any closure schedules submitted after 8:00AM Wednesday morning is subject to being denied by the engineer.

Attend, in person, the 10:00am contractor/utility traffic coordination meeting every Wednesday at the project field office to discuss and answer questions on the proposed schedule. The prime contractor, traffic control subcontractor, and any other subcontractors that have work that requires shoulder, lane, ramp, or full closures on the 2-week schedule is required to attend the 10:00 AM meeting. 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. Other edits, deletions or additions unrelated to meeting specification requirements may also be agreed upon with the engineer during the 10:00 AM meeting.

Every Wednesday at 2:00 PM, there will be a stakeholder traffic meeting held at the project field office. The prime contractor is required to attend the weekly 2:00 PM 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.

For any mid-week changes, submit requests for additions or modifications in writing to the engineer for review and approval. Any cancellations also need to be communicated in writing including a reason for

the cancellation. Any cancellations, additions, or modifications should be submitted by 4pm to allow for review, approval, and schedule updates. Any additions to the schedule need to adhere to the required advance notice requirements.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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 \geq 16 feet)	MINIMUM NOTIFICATION
Shoulder Closures	3 calendar days
Lane closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

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.

Freeway and Ramp Work Restrictions

Definitions

The following definitions apply to this contract for work restrictions:

System Ramps: Freeway to freeway ramps

Service Ramps: Freeway to/from local road ramps

IH 43:

Weekday Peak Hours

5:30 AM – 8:00 PM Monday, Tuesday, Wednesday, Thursday

5:30 AM – 9:00 PM Friday

Weekday Off-Peak Hours

8:00 PM – 5:30 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)

Weekend Peak Hours

10:00 AM – 9:00 PM Saturday

10:00 AM – 8:00 PM Sunday

Weekend Off-Peak Hours

9:00 PM – 10:00 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

Full Freeway Closure Hours

9:00 PM – 5:00 AM (Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM)

10:00 PM – 7:00 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

10:00 PM – 5:00 AM (Sunday PM to Monday AM)

Service Ramps Closure Hours

8:00 PM – 6:00 AM (Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM)

8:30 PM – 8:30 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

8:30 PM – 6:00 AM (Sunday PM to Monday AM)

Freeway and Ramp Closure Restrictions

Do not close freeway lanes (including auxiliary lanes, system ramps, service ramps and CD roadway system) and ensure the roadway is entirely clear for traffic during Weekday Peak Hours and Weekend Peak Hours, except as shown in the traffic control plans.

One freeway lane and/or shoulder may be closed on the freeway and system ramps, during Weekday Off-Peak hours and Weekend Off-Peak Hours but it must be approved by the engineer.

Inside and outside shoulders may be closed during Peak and Off-Peak Hours but it must be approved by the engineer.

Follow standard details and traffic control details for closures. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer so that approval, or disapproval, is obtained at least three business days prior to any closure.

Local Road Work Restrictions

Definitions

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

Peak Hours

6:00 AM – 9:00 AM Monday, Tuesday, Wednesday, Thursday, Friday

3:00 PM – 7:00 PM Monday, Tuesday, Wednesday, Thursday, Friday

11:00 AM – 8:00 PM Saturday

1:00 PM – 5:00 PM Sunday

Off-Peak Hours

9:00 AM – 3:00 PM Monday, Tuesday, Wednesday, Thursday, Friday

7:00 PM – 6:00 AM Monday, Tuesday, Wednesday, Thursday

7:00 PM – 11:00 AM Friday PM to Saturday AM

8:00 PM – 1:00 PM 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 (Monday PM to Tuesday AM, Tuesday PM to Wednesday AM, Wednesday PM to Thursday AM, Thursday PM to Friday AM)

10:00 PM – 8:00 AM (Friday PM to Saturday AM, Saturday PM to Sunday AM)

10:00 PM – 5:00 AM (Sunday PM to Monday AM)

Local Road Closure Restrictions

Do not close local roads and ensure that all local roads 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 local road that is entirely clear for traffic during Weekday Off-Peak Hours and Weekend Off-Peak Hours.

Follow standard details and traffic control details for closures. If plan details are not provided in the traffic control plan, furnish plans for review by the engineer so that approval, or disapproval, is obtained at least three business days prior to any closure.

Temporary Regulatory Speed Limit Reduction

During engineer-approved regulatory speed limit reductions, install temporary speed limit signs on the inside and outside shoulders of divided roadways to enhance visibility. On two-lane, two-way roadways, install temporary speed limit signs on shoulders. When construction activities impede the location of a post-mounted regulatory speed limit sign, relocate the sign for maximum visibility to motorists. If work lasts less than seven days, mount the regulatory speed limit sign on a portable sign support.

Post temporary regulatory speed limit signs in work zone only during continuous worker activity. During periods of no work activity or when the traffic controls are removed from the roadway, cover or remove the temporary speed limit signs.

Notifications

Notify the following emergency services two weeks prior to the beginning of construction to discuss access during construction:

Village of Big Bend	James Soneberg	Police Chief	262-363-6435
Village of Big Bend	John Ludwig	Fire Chief	262-662-2747
Village of Vernon	Alex Felde	Fire Chief	262-662-2079
Village of Mukwonago	Chris DeMotto	Assistant Police Chief	262-363-6435
Village of Mukwonago	Jeffrey Stien	Fire Chief	262-363-6426
Waukesha County	Eric Severson	Sheriff	262-446-5070
WI State Patrol	Bradley Ocain	Superintendent	262-785-4700

6. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 43 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, May 22, 2026 to 6:00 AM Tuesday, May 26, 2026 for Memorial Day;
- From noon Friday, July 3, 2026 to 6:00 AM Monday, July 6, 2026 for Independence Day;
- From noon Friday, September 4, 2026 to 6:00 AM Tuesday, September 8, 2026 for Labor Day;
- From noon Wednesday, November 25, 2026 to 6:00 AM Monday, November 30, 2026 for Thanksgiving;
- From noon Wednesday, December 23, 2026 to 6:00 AM Monday, January 4, 2027 for Christmas and New Years;
- From noon Friday, May 28, 2027 to 6:00 AM Tuesday, June 1, 2027 for Memorial Day;
- From noon Friday, July 2, 2027 to 6:00 AM Tuesday, July 6, 2027 for Independence Day;
- From noon Friday, September 3, 2027 to 6:00 AM Tuesday, September 7, 2027 for Labor Day;
- From noon Wednesday, November 24, 2027 to 6:00 AM Monday, November 29, 2027 for Thanksgiving;
- From noon Thursday, December 23, 2027 to 6:00 AM Monday, January 3, 2028 for Christmas and New Years;
- From noon Friday, May 26, 2028 to 6:00 AM Tuesday, May 31, 2028 for Memorial Day.

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Holiday and 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.

7. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

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

Any utility facility locations (stations, offsets, elevations, depths) listed in this article are approximate.

The following utility companies have facilities within the project area that need adjustments:

AT&T WI – Communications has facilities within the project limits. The following will be relocated prior to construction.

AT&T has facilities located from Station 1453+00 to Station 1483+71.

AT&T to bore new 3-4" conduits at elevation 937 or less to avoid storm and grade cuts for new ramps.

At nearest station 1483+62' – AT&T contractor to route new conduit pkg (3-4") from existing manhole in northwest right of way of County Road ES & STH 164 Intersection south along the west side of STH 164 until crossing at station 1480+90' to the east side of STH 164 before continuing south.

Conduit path will continue south until station 1465+98/1466+00' before crossing back to the west(new handhole placement at this crossing).

Conduit path will continue south until station 1455+60' LT (new handhole placement in woodland ln row and at station 1455+60' LT)

Existing AT&T facilities will be removed/discontinued in place along the west side of STH164.

The locations of the discontinued facilities are as follows:

Existing Conduit Package(s):

- 4-4" pc conduit pkg along the west side of STH 164 – to be discontinued in place (disconnected from existing MH/HH)

Existing Cables

- 200PR copper cable – already discontinued in place - nearest station 1483+62 to station 1455+60 38' LT
- 300PR copper cable – already discontinued in place - nearest station 1483+62 to station 1455+60 38' LT
- 1200PR copper cable – to be removed from conduit if present, if not discontinued in place - nearest station 1483+62 to station 1455+60 40' LT
- 48CT fiber cable – to be removed from conduit - nearest station 1483+62 to station 1455+60 48' LT
- 72CT fiber cable – to be removed from conduit - nearest station 1483+62 to station 1455+60 50' LT
- 216CT fiber cable – to be removed from conduit - nearest station 1483+62 to station 1455+60 45' LT

We Energies - Gas has facilities within the project limits. The following will be relocated prior to construction.

We Energies has facilities located at Station 1482+73 underneath STH 164.

We Energies to relocate existing 4" PE to Station 1482+60 at a depth of 78" in STH 164 south bound lane and to a depth of 72" in STH 164 north bound lane.

Any facilities not explicitly identified as being relocated and/or adjusted have been deemed to be not in conflict and will remain in place as is. We Energies has determined that the project is constructible with these facilities left within the work-zone.

The following utility companies have facilities within the project area; however, no adjustments are anticipated:

ATC Management, Inc. – Electric

Brightspeed of Western Wisconsin, LLC – Communications

Everstream – Communications

Level 3 Communications LLC – Communications

Spectrum – Communications

Village of Mukwonago – Sewer

Village of Mukwonago – Water

We Energies – Electric

8. 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.

The following projects may be under construction concurrently with the work under this contract.

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

Project 3742-03-70

SER Tree Clearing Project

Various SER Counties

WisDOT Contact: Jon Gill; (262) 548-8812

Project 1090-09-75

IH 43 Rock Freeway

STH 20 to STH 83

WisDOT Contact: Alex Grasse; (414) 750-1404

Project 2722-08-72

CTH O

CTH HH to Grange Ave

WisDOT Contact: Joe Jelacic; (262) 548-6762

Project 2781-03-70

STH 164

Edgewood Ave to I-43

WisDOT Contact: Christine Hanna; (262) 548-8809

Project 2810-05-71

STH 164

Denoon Rd to STH 36

WisDOT Contact: Nguyen Ly; (262) 548-8739

Waukesha County Project

CTH ES

Scotland Dr to CTH U

Waukesha County Contact: Kevin Yanny; (262) 548-7750

9. Railroad Insurance and Coordination - Wisconsin Central Ltd (CN)

A. Description

Comply with standard spec 107.17 for all work affecting Wisconsin Central Ltd (CN) 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 Wisconsin Central Ltd and Its Parents (CN).

Notify evidence of the required coverage, and duration to Suzanne Crueger, Senior Officer, Public Works, 1625 Depot Street, Stevens Point, WI 55481; Telephone (715) 572-7803; E-mail: suzanne.crueger@cn.ca

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: 1090-39-70
- Project Location: Mukwonago, Wisconsin
- Route Name: IH43, Waukesha County
- Crossing ID: 689882B
- Railroad Subdivision: Waukesha Sub
- Railroad Milepost: MP 84.53
- Work Performed on or within 50' of RR ROW: Traffic control.

A.2 Train Operation

Approximately 34 through freight trains operate daily at up to 60 mph. There are no switching movements at this location.

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

Construction Contact

Suzanne Crueger, Senior Officer, Public Works, 1625 Depot Street, Stevens Point, WI 55481; Telephone (715) 572-7803; E-mail: suzanne.crueger@cn.ca 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

Submit by US Mail a "Request for Flagging Services and Cable Location" form with prepayment to: Flagging-US, 17641 South Ashland Avenue, Homewood, IL 60430; Flagging_US@CN.CA .

The form can be obtained at: <https://www.cn.ca/en/safety/utility-installations/>

Requests for flagging and cable locates can take up to five business days after the railroad receives the paperwork. Reference the Wisconsin Milepost and Subdivision located in A.1. Advise Wisconsin Central Ltd (CN) that the flagging services are to be billed at the rate for a public highway project.

Cable Locate Contact

In addition to contacting Diggers Hotline, follow the procedure listed under Flagging Contact.

Wisconsin Central Ltd (CN) will only locate railroad owned facilities buried in the railroad right-of-way. The railroad does not locate any other utilities.

cc: WisDOT Region Railroad Coordinator referenced in A.1 on all written correspondence with the railroads.

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 (20250701)

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

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

A copy of the permit is available from the regional office by contacting Evan Limberatos at 262-548-8797.

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 (20230629)

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

The calculated land disturbance for the project site is 212.14 acres.

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 Evan Limberatos at 262-548-8797. Post the "Certificate of Permit Coverage" in a conspicuous place at the construction site.

Permit coverage for additional land disturbing construction activities related to contractor means and methods will be considered as part of the ECIP review and approval process. Coverage under the TCGP for additional land disturbance areas will be considered if the areas meet all of the following:

- Must meet the permit's applicability criteria.
- Must be for the exclusive use of a WisDOT project.
- Land disturbance first commences after the ECIP approval, and the areas are fully restored to meet the final stabilization criteria of the permit upon completion of the work.

The contractor is responsible for obtaining any permits for areas that are not approved by the department for coverage under the TCGP.

stp-107-056 (20250108)

12. 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)

13. 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 top soil to minimize the exposure to possible erosion.

Provide the ECIP 14 days before the pre-construction conference. 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 WDNR liaison for review as an amendment to the ECIP with a standard 14-day review period. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison Craig Webster, (414) 303-3011, craig.webster@wisconsin.gov. 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 within 5 days of the initial stockpile placement. 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 or any disturbed areas are left not completed and exposed for more than 14 days, seed those areas with temporary seed and mulch within 5 days of the initial or repeated disturbance.

Re-apply topsoil, seed, fertilize, and mulch/erosion mat top soiled areas, as designated by the engineer, within 3 days of initial disturbance for completing the FTMS fiber installation.

Permanently or temporarily restore disturbed stream bank areas adjacent to in-water work or wetland areas within 48-hours of initial disturbance.

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 work site or discharge to a storm water 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.

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 work site. 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 should 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 work site. 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 structure 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 high-water 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 structures. The contractor must provide a means of separating the live flow channel of the waterway from the disturbed areas (cofferdam, turbidity barrier, etc.). Any plan for diverging the flow of navigable waterway (listed under the Fish Spawning provision) needs to be submitted, reviewed, and approved by project staff and the WDNR liaison.

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

While performing rumble strip installation operations, the debris shall be broomed off to the gravel shoulder and not allowed into storm sewers, ditches, waterways, or wetlands.

There are locations on the erosion control plan where ground disturbance/grading will occur but no silt fence is indicated to be placed. In lieu of silt fence, these areas are to be temporary seeded and mulched within 48 hours of initial disturbance.

Include the concrete surface repair plans in the ECIP according to the articles Concrete Surface Repair.

14. Maintaining Drainage

Maintain drainage at and through worksite during construction conforming to standard specs 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 is 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)

15. Environmental Protection for Culvert Work.

Supplement standard spec 107.18 with the following:

There are numerous existing culvert pipes requiring cleaning and/or work on the endwalls that are within or adjacent to wetland areas. Limit wetland disturbance as much as possible unless some ditch cleaning is required. Equipment used in this area shall exert low ground pressure (no wheeled vehicles) or be done by hand. Use silt fence to protect adjacent wetland areas from siltation and disturbance.

The contractor will be allowed to isolate the work area with bypass pumping for one working day to clean each culvert.

Protect wetlands against erosion and sedimentation during the construction phase of the project.

Do not place any fills in waterways or wetlands.

Properly dispose of all sediment removed from the cleaning process at a site that is approved by the engineer.

Divert flow in any drainage ditches that have twin culverts. Use rock bags to isolate the flow into the second culvert while cleaning the first. If site dewatering is required, pump the sediment-laden water into an adequately sized sediment basin prior to discharging it to a ditch or waterway.

Utilize all best management practices for erosion control for this work as directed by the engineer.

Restore any disturbed area around the work area with specified landscaping as directed by the engineer.

Best management Practices

Each culvert location should be classified based on the required level of environmental protection. As per to the erosion control bid items, the contractor shall include protection as described below. BMP's shown on the erosion control plan sheets are a minimum level of protection. Additional guidance is below:

Type 1: For culverts that have water running or standing in them during dry periods

- (1) Provide a rock bag dam at both the upstream and downstream end of the culvert.
- (2) Place silt fence or other erosion control BMP's to protect undisturbed areas.
- (3) Dewater work area.
- (4) Clean the culvert, and ditch where applicable, of sediment. Limit cleaning operation to a single working day.
- (5) Complete any endwall and/or pipe repairs.
- (6) Reshape and restore all disturbed areas adjacent to the culvert with final restoration of topsoil, seed, and erosion mat within two calendar days.

Type 2: For culverts that are next to wetland areas without standing water or water in the culvert

- (7) Place silt fence or other erosion control BMP's to protect undisturbed area.
- (8) Clean the culvert, and ditch where applicable, of sediment. Limit cleaning operation to a single working day.
- (9) Complete any endwall and/or pipe repairs.
- (10) Reshape and restore all disturbed areas adjacent to the culvert with final restoration of topsoil, seed, and erosion mat within two calendar days.

Type 3: For culverts not near water or wetlands

- (11) Clean the culvert, and ditch where applicable, of sediment. Limit cleaning operation to a single working day.
- (12) Complete any endwall and/or pipe repairs.
- (13) Reshape and restore all disturbed areas adjacent to the culvert with final restoration of topsoil, seed, and erosion mat within three calendar days.

Dewatering

Perform all endwall repair work in a fully dewatered ditch or waterway.

In instances where topography or space does not allow for passive diversion of water, use pumps and pipes to divert the water. The contractor shall provide the pumps required for flow conditions as well as have available additional pumps in the event the flow increases.

All pumps shall be supervised during hours of pumping.

Provide pumps that are in good operating order and free of leaks. Pumps that are leaking fuel, lubricants or other material shall be removed immediately from the work area and then repaired or replaced as necessary.

During the dewatering operation, provide adequate protection from erosion at the discharge area. All materials placed to protect the discharge outfalls are temporary in nature and shall be removed from the project area upon completion of the dewatering process.

Pipe Cleaning

Pipes shall be cleaned according to standard spec 520 and special provision Cleaning Culvert Pipes.

All solids removed from the sewers must be completely removed from the storm sewer system and hauled off the project for disposal. Silts resulting from any flushing or jetting operation must be prevented from escaping into sewers or waterways.

16. Notice to Contractor, Asbestos Containing Materials on Structure.

John Roelke, License Number All-119523, inspected Structure B-67-0122 for asbestos on January 25, 2023. Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: Gasket under railing attachment, non-friable, 22 SF.

A copy of the inspection report is available from Evan Limberatos, (262) 548-8797, evan.limberatos@dot.wi.gov. Locations of asbestos containing material are noted on the plan set. Do not disturb any asbestos containing material. Should asbestos containing material be disturbed, 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.

stp-107-120 (20220628)

17. Notice to Contractor, Verification of Asbestos Inspection, No Asbestos Found.

John Roelke, License Number All-119523, inspected Structures B-67-120, B-67-121, B-67-123, B-67-124, B-67-125, B-67-126, B-67-127, B-67-128, B-67-132, B-67-133 and B-67-325 for asbestos on January 25, 2023. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from Evan Limberatos, (262) 548-8797, evan.limberatos@dot.wi.gov.

stp-107-127 (20220628)

18. Notice to Contractor – Media Relations

- (1) 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 4.
- (2) 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 4.
- (3) The contractor agrees to coordinate with the department as to the form, content and timing of any public announcement of this Agreement.
- (4) The Project Communications Leaders for the department shall be:

1. The department's Project Manager

Alex Grasse, PE
141 NW Barstow St.
PO Box 798
Waukesha, WI 53187-0798
Phone: (414) 750-1404
Email: Alex.Grasse@dot.wi.gov

2. Steven Theisen

4802 Sheboygan Avenue
Madison, WI 53705
Phone: (608) 267-9284
Email: Steven.Theisen@dot.wi.gov

3. Dan Sellers

141 NW Barstow Street
P.O. Box 798
Waukesha, WI 53188
Phone: (262) 548-6702
Email: Daniel.Sellers@dot.wi.gov

- (5) 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.
- (6) 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.

19. Notice to Contractor – Electronic Load Tickets.

Replace standard spec 109.1.4.3 (1) with the following:

- (1) Submit an electronic ticket for each load of material for the following bid items:

- 415.0080 Concrete Pavement 8-Inch
- 415.0090 Concrete Pavement 9-Inch

- 415.0410 Concrete Pavement Approach Slab
- 416.1720 Concrete Pavement Replacement
- 460.5223 HMA Pavement 3 LT 58-28 S
- 460.5224 HMA Pavement 4 LT 58-28 S
- SPV.0180.003 HPC Pavement 10 ½-Inch
- SPV.0180.004 HPC Pavement 8 ½-Inch

Include the information as specified in 109.1.4.2 on each electronic ticket. If there is a failure in the electronic ticket system, provide a printed ticket for each load of material as a substitute for electronic tickets.

stp-107-230 (20250108)

20. Notice to Contractor – Concrete Washout Containment.

All concrete trucks shall washout into a containment system located sufficiently away from the work area to prevent runoff into wetlands, waterways, inlets, and drainage courses. The contractor shall provide a construction detail and location of the containment system with the ECIP and reviewed by the engineer prior to use.

21. Notice to Contractor – Traffic Signal, Lighting, FTMS, and Sign Structure Equipment Lead Time.

Order traffic signal, lighting, FTMS, and sign structure equipment as soon as possible to assure the equipment is procured in a timely fashion and, therefore, installed, inspected, and ready for turn-on at required date.

22. 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
- Interstate Access Justification Report
- Environmental Document
- As-Built Drawings
- Traffic Management Plan

These documents are available from Evan Limberatos at 141 NW Barstow Street, Waukesha, WI 53187 (262) 548-8797.

Reproduction costs will be applied to all copies requested.

sef-102-005 (20170310)

23. 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 Evan Limberatos, Evan.Limberatos@dot.wi.gov 141 NW Barstow Street, Waukesha, WI 53187 (262) 548-8797.

Geotechnical Report for R-67-0172

Additional geotechnical information is available from studies and analyses that have been performed by Gestra 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)

24. 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.

25. 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, as specified in 104.3.3, of the specific differing condition before further disturbing the site and before further performing the affected work.

Replace standard specs 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, promptly provide a written notice 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 specified in 104.3.3 as early as possible 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.

26. 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, accepted, or approved 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 to the engineer-designated folder within the department's Box.com site. Send alerts with a link to the document 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)~~

27. Coordination with Businesses and Residents.

The department will arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including

vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and hold a meeting one week prior to each traffic staging change. The department will arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

28. 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.
2. 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.0075.001	Pavement Cleanup Project 1090-39-70

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)

29. 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)

30. 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)

31. Pavement Breaking Equipment.

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

32. Asphaltic Surface Temporary.

Replace standard spec 465.2 (1) with the following:

Under the Asphaltic Surface Temporary bid item; submit a mix design. Furnish asphaltic mixture meeting the requirements specified for HT under standard spec 460.2; except the engineer will not require the contractor to conform to the quality management program (QMP) specified under standard spec 460.2.8.

sef-465-005 (20170310)

33. Abatement of Asbestos Containing Material B-67-122, Item 203.0211.S.001.

A Description

This special provision describes abating asbestos containing material on structures.

B (Vacant)

C Construction

John Roelke, License Number All-119523, inspected Structure B-67-0122 for asbestos on January 25, 2023 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: Gasket under railing attachment, non-friable, 22 SF

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is included in the bid package or available from Evan Limberatos, (262) 548-8797, evan.limberatos@dot.wi.gov. According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 3/20), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Andrew Malsom, WisDOT SE Region Hazmat & Environmental Engineer, (262) 548-6705, andrew.malsom@dot.wi.gov and via email to dothazmatunit@dot.wi.gov 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:

- Site Name: Structure B-67-122, Center Dr. over IH43
- Site Address: 0.1M S JCT CTH ES
- Ownership Information: WisDOT Transportation SE Region, 141 NW Barstow Street, P.O. Box 798, Waukesha, WI 53187-0798
- Contact: Paul Schindelholz
- Phone: (262) 548-8723
- Age: 54 years. This structure was constructed in 1971
- Area: 8570 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.001	Abatement of Asbestos Containing Material B-67-122	EACH

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

stp-203-005 (20220628)

34. Removing Pavement Terminal Anchors, Item 204.9060.S.001.

A Description

This special provision describes removing existing pavement terminal anchors conforming to standard spec 204.

B (Vacant)

C Construction

Excavate and remove the existing concrete pavement terminal anchors to a minimum depth equal to the subgrade elevation.

D Measurement

The department will measure Removing Pavement Terminal Anchors as each individual unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.001	Removing Pavement Terminal Anchors	EACH

Payment is full compensation for all excavating, removing, loading, hauling, sawcutting and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

stp-204-025 (20230113)

35. Removing Barricade Rack and Barricades, Item 204.9060.S.002.

A Description

This special provision describes removing barricade rack and barricades conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Barricade Rack and Barricades as each individual unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.002	Removing Barricade Rack and Barricades	EACH

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

stp-204-025 (20230113)

36. Removing Lighting Units, Item 204.9060.S.101.

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 of 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 659-5000.S 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

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.101	Removing Lighting Units	EACH
SER-204.15 (20220214)		

37. Removing Distribution Center, Item 204.9060.S.102.

A Description

This special provision describes removing an existing highway lighting distribution center and electrical service pedestal as shown on the plans, in accordance with 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.102	Removing Distribution Center	EACH

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

SER-204.18 (20170407)

38. Removing Traffic Signals STH 164 & CTH ES, Item 204.9060.S.301; Removing Traffic Signals IH 43 Ramps & STH 164, Item 204.9060.S.302.

A Description

This special provision describes removing existing traffic signals at the intersections of IH 43 Ramps & STH 164 and STH 164 & CTH ES 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 this 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, emergency vehicle preemption heads (EVP), mast arms, luminaires, 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.

Dispose of the underground signal cable, internal wires, and street lighting cable off the state right-of-way.

Deliver the remaining materials, except for traffic signal LED and luminaire lamp, switch, and ballasts to the West Allis Electrical Service Facility at 935 South 60th Street, West Allis, Milwaukee County. Contact the department's Electrical Field Unit at (414) 266-1170 at least five 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.

DOT forces shall remove the signal cabinet from the footing. The signal cabinet and associated signal cabinet equipment will be removed from the site by DOT forces and will remain the property of the department.

D Measurement

The department will measure Removing Traffic Signals 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
204.9060.S.301	Removing Traffic Signals STH 164 & CTH ES	EACH
204.9060.S.302	Removing Traffic Signals IH 43 Ramps & STH 164	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, and incidentals necessary to complete the contract work.

The department will pay separately for the detachment and disposal of luminaires and lamps under the item Lamp, Ballast, LED, Switch Disposal by Contractor.

**39. Removing Loop Detector Wire and Lead-In Cable STH 164 & CTH ES, Item 204.9060.S.303;
Removing Loop Detector Wire and Lead-In Cable IH 43 Ramps & STH 164, Item 204.9060.S.304.**

A Description

This special provision describes removing loop detector wire and lead-in cable at the intersections of IH 43 Ramps & STH 164 and STH 164 & CTH ES. 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.

D Measurement

The department will measure Removing Loop Detector Wire and Lead-In Cable 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
204.9060.S.304	Removing Loop Detector Wire and Lead-In Cable IH 43 Ramps & STH 164	EACH
204.9060.S.303	Removing Loop Detector Wire and Lead-In Cable STH 164 & CTH ES	EACH

Payment is full compensation for removing, scrapping, and disposing of material and incidentals necessary to complete the contract work.

40. Removing Apron Endwalls for Underdrain Reinforced Concrete, Item 204.9060.S.801.

A Description

This special provision describes removing Apron Endwalls for Underdrain Reinforced Concrete conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure removing Apron Endwalls for Underdrain Reinforced Concrete as each individual unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.801	Removing Apron Endwalls for Underdrain Reinforced Concrete	EACH

stp-204-025 (20230113)

41. Removing Apron Endwalls, Item 204.9060.S.802.

A Description

This special provision describes removing Apron Endwalls conforming to standard spec 204.

B (Vacant)

C (Vacant)**D Measurement**

The department will measure removing Apron Endwalls as each individual unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.802	Removing Apron Endwalls	EACH
stp-204-025 (20230113)		

42. Removing Underdrain, Item 204.9090.S.801.**A Description**

This special provision describes removing underdrain conforming to standard spec 204.

B (Vacant)**C (Vacant)****D Measurement**

The department will measure Removing underdrain in linear feet, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.801	Removing Underdrain	LF
stp-204-025 (20230113)		

43. Temporary Emergency Pullouts, Item 205.3000.S.**A Description**

This special provision describes grading, furnishing, and placing crushed aggregate base course and signs to construct temporary emergency pullouts. This item also includes the removal of the pullouts including furnishing and placing finishing items as the plans show.

B (Vacant)**C Construction**

Dispose of all surplus and unsuitable material as specified in standard spec 205.3.12.

D Measurement

The department will measure Temporary Emergency Pullouts, acceptably completed, by the unit.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
205.3000.S	Temporary Emergency Pullouts	EACH

Payment is full compensation for grading, shaping, and compacting; providing and placing crushed aggregate base course; providing and placing signs; removing as required; and for providing and placing topsoil, fertilizer, seed, and mulch.

stp-205-020 (20080902)

44. **Excavation for Structures Retaining Walls R-67-172, Item 206.3001.001.**

Add the following to standard spec 206.2:

If the plan details call for Controlled Low Strength Material (CLSM), provide CLSM for backfill consisting of a designed cementitious mixture of natural or processed materials. Allowable materials include natural sand, natural gravel, produced sand, foundry sand, produced gravel, fly ash, Portland cement, and other broken or fragmented mineral materials. The designed mixture shall have a consistent texture and flow characteristics, be self-leveling, and not exhibit shrinkage after hardening. Design the mixture to reach a state of hardening such that it can support foot traffic in no more than 24 hours. Provide a mixture that also meets the following requirements:

Test	Method	Value
Flow	ASTM D-6103	9 inches, minimum
Compressive Strength	ASTM D-6024	20 – 40 psi @ 14 days 40 – 80 psi @ 28 days 80 – 120 psi @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days prior to placement, furnish the engineer with a design mix detailing all components and their proportions in the mix. Also, provide documentation from the supplier of the industrial byproducts that the foundry sand and fly ash used in the mixture meet the requirements for Industrial Byproducts Categories 1, 2, 3, or 4 in the NR 538 of the Wisconsin Administrative Code for use as a confined geotechnical fill.

If the plan details call for flowable backfill, provide backfill material consisting of aggregates that conform to standard spec 501 for Grade A concrete and do not add any cementitious material; cement or fly ash, to the flowable fill mix. 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.

Add the following to standard spec 206.3.13.1:

For soldier pile retaining walls, when called for in the plans, backfill around soldier piles above the soldier pile foundations with CLSM as shown on the plans. If the official Weather Bureau forecast for the construction site predicts temperatures at or below freezing within the next 24 hours after placement of controlled low strength backfill, protect the placed materials from freezing during that time period. If the temperature is not forecast to rise above 40° F for 72 hours after placement, the engineer may require protection from freezing up to 72 hours. No controlled low strength backfill shall be allowed to enter any stream, lake, or sewer system. The contractor shall be responsible for any clean up or remediation costs resulting from such occurrences.

For soldier pile retaining walls, when called for on the plans, fill all voids behind timber lagging and excavated soil with flowable backfill. Prior to placement of flowable backfill, provide for positive drainage of the area to be backfilled. Discharge from the truck in a manner to prevent segregation. Completely fill excavation in a single operation. Consolidation or compaction effort is not required.

Add the following to standard spec 206.5.2:

Payment for Excavation for Structures Retaining Walls includes providing and placing CLSM as backfill when CLSM as backfill is called for on the plans.

Payment for Excavation for Structures Retaining Walls includes providing and placing flowable backfill when flowable backfill is called for on the plans.

45. **Backfill Controlled Low Strength, Item 209.0200.S.**

A Description

This special provision describes furnishing and placing a controlled low strength material designed for use as backfill in trenches for culverts, sewers, utilities, or similar structures, as backfill behind bridges abutments, or as fill for the abandonment of culverts, pipes, or tanks.

B Materials

Provide controlled low strength backfill that consists of a designed cementitious mixture of natural or processed materials. Allowable materials include natural sand, natural gravel, produced sand, foundry sand, produced gravel, fly ash, Portland cement, and other broken or fragmented mineral materials. The designed mixture shall be self-leveling and shall be free of shrinkage after hardening. Design the mixture to reach a state of hardening such that it can support foot traffic in no more than 24 hours. Provide a mixture that also meets the following requirements.

TEST	METHOD	VALUE
Flow (inch)	ASTM D-6103	9 min
Compressive	ASTM D-6024	20-40 @ 14 days
Strength (psi)		40-80 @ 28 days
		80-120 @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days before placement, furnish the engineer with a design mix detailing all components and their proportions in the mix.

C Construction

Place controlled low strength backfill at the locations and to the lines and grades as shown on the plan. Proportion and mix materials to produce a product of consistent texture and flow characteristics. The engineer may reject any materials exhibiting a substantial change in properties, appearance, or composition.

If the official Weather Bureau forecast for the construction site predicts temperatures at or below freezing within the next 24 hours after placement of controlled low strength backfill, protect the placed materials from freezing during that time period. If the temperature is not forecast to rise above 40° F for 72 hours after placement, the engineer may require protection from freezing for up to 72 hours.

No controlled low strength backfill shall be allowed to enter any stream, lake, or sewer system. The contractor shall be responsible for any clean up or remediation costs resulting from such occurrences.

D Measurement

The department will measure Backfill Controlled Low Strength in volume by the cubic yard of material, placed and accepted. Such volume shall be computed from actual measurements of the dimensions of the area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
209.0200.S	Backfill Controlled Low Strength	CY

Payment is full compensation for designing the mix; supplying all materials; preparing the proportioned mix; hauling it to the construction site; placing the material; and protecting it from freezing.

stp-209-010 (20191121)

46. Rout and Seal, Item 415.6000.S.

A Description

This special provision describes routing, cleaning, drying, and sealing the longitudinal edge of pavement joints in new asphaltic pavement shoulders immediately adjacent to the edge of the concrete mainline pavement.

B Materials

Furnish material that conforms to the requirements of the Specifications for Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements, ASTM Designation: D 6690, Type II, modified to require that the bond strength test be run at -20 degrees F. (The unmodified ASTM D 6690, Type II allows this test to be run at either 0 degrees F or -20 degrees F.)

Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the safe heating temperature. Present the manufacturer's certification stating that the compound meets the requirements of this specification. Before applying the sealant, furnish to the engineer a certificate of compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

Heat the sealing compound to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. If, and when, using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure heat is not radiated to the pavement surface.

Make rout cuts in a single pass. Two-pass cutting will not be allowed. Use a self-propelled mechanical router capable of routing the bituminous pavement to provide a 1.0:1.0 depth to width ratio of all routed cracks. The router blade or blades shall be of such size and configuration to cut the desired joint reservoir in one pass. No spacers between blades shall be allowed unless the contractor can demonstrate to the engineer that the desired reservoir and rout cut can be obtained with them. Either wet or dry routing will be permitted provided the above conditions are met. Use a pressure distributor for applying sealing material through a hand-operated wand or nozzle according to sealant manufacturer's instructions.

C.2 Methods

Conduct the operation so that the routing, cleaning, and sealing are continuous operations. Traffic shall not be allowed to knead together or damage the routed joints. Rerout, if necessary, routed joints not sealed before traffic is allowed on the pavement when routing and sealing operations resume. Do not perform rout cutting, cleaning, and sealing, within 48 hours of the placement of the shoulder's surface course.

Rout the longitudinal joint to a minimum width of 3/4 inches and a minimum depth of 3/4 inches. Use a power vacuum or equivalent to immediately remove any routing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity, or both. Before sealing, dry the cleaned joints either by air-drying or by using a high capacity torch. Immediately before sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor shall be required to clean the joint again.

If cleaning operations could cause damage to, or interfere with, traffic in adjacent lanes, or both, provide protective screening that is subject to the approval of the engineer to the cleaning operation.

Following cleaning, dry the routed joints and warm them with a hot air lance. Take care not to burn the pavement surface. Under no circumstances shall more than two minutes elapse between the time the hot air lance is used, and the sealant is placed.

Provide positive temperature control and mechanical agitation. Do not heat the sealant to more than 20 degrees F below the safe heating temperature. The safe heating temperature can be obtained from the manufacturer's shipping container. Provide a direct connecting pressure type extruding device with nozzles shaped for insertion into the joint. Immediately remove sealant spilled on the surface of the pavement.

Seal the joints when the sealant material is at the pouring temperature recommended by the manufacturer. Fill the joint such that after cooling, the sealant is flush with the adjacent pavement surface. Do not overfill the joint; the engineer may allow a very slight overband. Sand shall not be spread on the sealed joints to allow for opening to traffic. Before opening to traffic, the sealant shall be tack free.

D Measurement

The department will measure Rout and Seal in length by the linear foot, completed 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 NUMBER	DESCRIPTION	UNIT
415.6000.S	Rout and Seal	LF

Payment is full compensation for rout cutting; cleaning the joint; sealing the joint; and cleanup.

stp-415-100 (20210113)

47. 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-08-00.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 815.

B.2 Testing

- (1) Conform to WTM T355 and CMM 815 for density testing and gauge monitoring methods. Conform to CMM 815.10.4 for test duration and gauge placement.

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges according to CMM 815.2.
- (2) Furnish nuclear gauges from the department's approved product list at

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/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 WTM T355.

B.3.2.2 Reference Site Monitoring

- (1) Conduct reference site monitoring for both QC and QV gauges according to WTM T355.

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 815.10.2.
- (2) Determine required number of tests according to CMM 815.10.2.1.
- (3) Determine random testing locations according to CMM 815.10.3.

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 815.10.2.
- (2) Determine required number of tests according to CMM 815.10.2.2.
- (3) Determine random testing locations according to CMM 815.10.3.

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

- (1) Calculate the average subplot densities using the individual test results in each subplot.
- (2) If all subplot 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 subplot average is more than one percent below the target density, do not include the individual test results from that subplot when computing the lot average density and remove that subplot's tonnage from the daily quantity for incentive. The tonnage from any such subplot 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 subplot 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 subplot 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 815. 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 subplot. Testing in a previously accepted subplot 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 subplot 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 subplot and lot densities.
- (6) If two consecutive subplot 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 subplot 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 subplot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification subplot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification subplot average is more than one percent below the specified target density, compare the QC and QV subplot averages. If the QV subplot average is within 1.0 lb/ft³ of the QC subplot average, use the QC tests for acceptance.
- (5) If the first QV/QC subplot average comparison shows a difference of more than 1.0 lb/ft³ each tester will perform an additional set of tests within that subplot. Combine the additional tests with the original set of tests to compute a new subplot average for each tester. If the new QV and QC subplot averages compare to within 1.0 lb/ft³, use the original QC tests for acceptance.
- (6) If the QV and QC subplot 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 subplot density test results or retesting of the subplot 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 (20230629)

48. 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)

49. Concrete Masonry Soldier Pile Footings, Item 502.0110.S.

A Description

This special provision describes furnishing and placing concrete into predrilled holes for soldier piles and installing soldier piles. Perform work conforming to standard spec 502.

B Materials

Provide and use concrete masonry for Concrete Masonry Soldier Pile Footings conforming to grade A as specified in standard spec 501. Perform QMP testing conforming to standard spec 716 for Class II Ancillary Concrete for all concrete masonry for Concrete Masonry Soldier Pile Footings.

C Construction

Before placing concrete masonry, give the engineer sufficient notice to allow inspection of the predrilled holes, soldier piles, and casting preparations. For concrete masonry soldier pile footings constructed without the use of slurry, no more than 3 inches of standing water is permitted in the bottom of the drilled hole before beginning soldier pile installation and immediately before placing concrete masonry in the hole around the soldier pile. If necessary, place up to 2 feet of concrete at the bottom of the hole to assist in aligning the soldier pile. Block or clamp the soldier pile in place at the ground surface before placing concrete.

For holes drilled or excavated without slurry, the department will allow the contractor to place concrete by free-falling the concrete from the ground surface down the shaft around the soldier pile. If temporary casing is used, begin placement of the concrete before removing the casing. Remove the casing while the concrete remains workable. For holes drilled or excavated using slurry, place concrete using a tremie method from the bottom of the shaft. Withdraw the tremie pipe slowly as the level of concrete rises in the shaft and never let the level of the tremie pipe outlet exceed the height of the slurry.

D Measurement

The department will measure Concrete Masonry Soldier Pile Footings by the cubic yard, acceptably completed. The department will only include material within the limits and in the places the plans show.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
502.0110.S	Concrete Masonry Soldier Pile Footings	CY

Payment is full compensation for furnishing all materials, pumping, placing, QMP testing, finishing, curing, and protecting installation of soldier piles.

stp-502-030 (20210708)

50. Non-Shrink Grout, Item 502.0120.S.

A Description

This special provision describes furnishing and placing Non-Shrink Grout.

B Material

Furnish non-shrink grout which is quick-setting, with rapid strength gain, and high-bond strength. Grout shall not contain calcium chloride or admixture containing calcium chloride or other ingredient in sufficient quantity to cause corrosion to steel reinforcement. Mix grout just before use according to the manufacturer's instructions. Follow manufacturer's recommendation for dosage of corrosion inhibitor admixture.

Use structural non-shrink grout that meets a minimum compressive strength of 4,000 psi within 24 hours when tested as specified in AASHTO T 106. Meet all the requirements of AASHTO T 160 with the exception that the contractor-supplied cube molds will remain intact with a top firmly attached throughout the curing period. Use structural non-shrink grout with no expansion after seven days. Refer to Table 1 for structural non-shrink grout requirements.

Table 1 Structural Non-Shrink Grout

Properties^[1]	Requirements	ASTM	AASHTO
Accelerated Weathering	As Specified in ASTM or AASHTO	C 666	T 260
Compressive Strength	>5,000 psi @ 28 days		T 106
Accepted Bond Strengths	>1,000 psi @ 24 Hours	C 882	
Test Medium	<3% White Utah Road Salt		T 161
Accepted Weight Loss	<15% @ 300 Cycles		T 161
Length Change	No expansion after 7 days		T 160

^[1] Certified test results from a private AASHTO accredited testing laboratory will suffice for acceptance.

C Construction

Place Non-Shrink Grout conforming to standard spec 501 and standard spec 502 and as the plans show.

D Measurement

The department will measure Non-Shrink Grout by the cubic 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
502.0120.S	Non-Shrink Grout	CF

Payment for Non-Shrink Grout is full compensation for providing all materials; placing, finishing, protecting and curing the Non-Shrink Grout.

stp-502-035 (20161130)

Only furnish non-shrink grout that is included on the Department's Approved Products List and complies with the material requirements shown there for "High Strength Application in Structures."

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

A Description

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

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 splices 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.

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.

stp-505-005 (20190618)

52. Removing Bearings, B-67-122, Item 506.7050.S.001.

A Description

This special provision describes raising the girders and removing the existing bearings, as the plans show.

B (Vacant)

C Construction

Raise the structure's girders and remove the existing bearings as the plans show

Obtain prior approval from the engineer for the method of jacking the girders and of supporting them as required.

D Measurement

The department will measure Removing Bearings B-67-122 by the unit for each bearing 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
506.7050.S.001	Removing Bearings, B-67-122	EACH

Payment is full compensation for raising the bridge girders; and for removing the old bearings.

Cost of furnishing and installing the bearings will be paid for under separate bid items.

stp-506-035 (20130615)

53. Cleaning Decks to Reapply Concrete Masonry Overlay, Item 509.0505.S.

A Description

This special provision describes cleaning the entire bridge deck after the existing concrete masonry overlay is removed, prior to placing a new concrete masonry overlay.

B (Vacant)

C Construction

Blast-clean the entire surface of the deck, the vertical faces of curbs, sidewalks and parapets to the depth of the adjoining concrete overlay. Blast-clean all exposed existing reinforcing steel. Repair damage to existing epoxy-coated reinforcement remaining in place that is either uncovered by or damaged by the contractor's operations. Use engineer-approved patching or repair material compatible with the existing coating and inert in concrete.

Clean the surface on which the new concrete will be placed to remove all loose particles and dust by either brooming and water pressure using a high-pressure nozzle, or by water and air pressure. Use water for cleaning that conforms to standard spec 501.2.6.

D Measurement

The department will measure Cleaning Decks to Reapply Concrete Masonry Overlay by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.0505.S	Cleaning Decks to Reapply Concrete Masonry Overlay	SY

Payment for is full compensation for cleaning the concrete surfaces.

stp-509-065 (20210708)

54. Removing Concrete Masonry Deck Overlay B-67-122, Item 509.9005.S.001.

A Description

This special provision describes removing concrete bridge deck overlays by milling the entire bridge deck as the plans show.

Conform to standard spec 204 as modified in this special provision.

B (Vacant)

C Construction

C.1 Milling

Use a self-propelled milling machine that is specially designed and constructed for milling bridge decks. It shall mill without tearing or gouging the concrete masonry underlying the existing overlay. The machine shall consist of a cutting drum with carbide or diamond tip teeth. Space the teeth on the drum to mill a surface finish that is acceptable to the engineer.

Shroud the machine to prevent discharge of any loosened material into adjacent work areas or live traffic lanes. Equip the machine with electronic devices that provide accurate depth, grade and slope control, and an acceptable dust control system.

Perform milling in a manner that precludes damage to the bridge floor and results in a uniform textured finish that:

1. Is free of sharp protrusions;
2. Removes a minimum of 1/4 inch of the original concrete deck or slab, or to a depth the plans show;
3. Has uniform transverse grooves that measure up to 1/4 inch vertically and transversely; and
4. If applicable, is acceptable to the manufacturer of the sheet waterproof membrane.

Windrowing and storing of the removed milled concrete masonry on the bridge is only permitted in connection with the continuous removal and pick-up operation. During nonworking hours, clear the bridge of all materials and equipment.

D Measurement

The department will measure Removing Concrete Masonry Deck Overlay B-67-122 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
509.9005.S.001	Removing Concrete Masonry Deck Overlay B-67-122	SY

Payment is full compensation for removing the concrete masonry; and for properly disposing of all materials.

stp-509-005 (20210113)

55. Removing and Resetting Tubular Railing B-67-122, Item 513.9006.S.001.

A Description

This special provision describes removing tubular railing and posts from existing bridge parapets, storing them, and then resetting them when the new parapet is complete.

B (Vacant)

C Construction

Remove the tubular railing and posts, taking care not to damage them. Store the tubular railing and posts in an area away from construction activities to preclude damage to them.

In the event that damage does occur to any item that is designated for re-use in the new work, repair or replace the damaged item at no expense to the department.

D Measurement

The department will measure Removing and Resetting Tubular Railing (Structure #) as a single unit for 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
513.9006.S.001	Removing and Resetting Tubular Railing B-67-122	EACH

Payment is full compensation for removing the tubular railing and posts; properly storing the tubular railing and posts; and for resetting the tubular railing and posts.

stp-513-090 (20210708)

56. Preparation and Coating of Top Flanges B-67-122, Item 517.0901.S.001.

A Description

This special provision describes thoroughly cleaning and coating the top surface and edges of the top flanges, removing loose paint, rust, mill scale, dirt, oil, grease, or other foreign substances until the specified finish is obtained.

B (Vacant)

C Construction

For top flanges and edges that have no paint on them and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean the top surface and edges of the top flanges and paint them with one coat of an approved zinc rich primer. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For top flanges and edges that have paint on them and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean all areas of rust and loose paint on the top surface and edges of the top flanges. Wash the top surface and edges of the top flanges and paint them with one coat of an approved zinc-rich primer according to paint manufacture's recommendations. If flash rusting occurs before the application of the primer, stop painting application, remove the flash rusting and paint cleaned surface. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

Where plans call for the cleaning of other painted structural steel including hanger assemblies, bearings, field splices, and connections, clean areas of loose paint and rust according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, or and according to paint manufacture's cleaning recommendations. Sound paint need not be removed with the exception of an area 12 inch on either side of hanger assembly centerlines. Clean this area to base metal according to the paint manufacture's cleaning recommendations and paint them one coat of an approved zinc-rich primer according to paint manufacture's recommendations. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For areas of exposed steel members that are to be imbedded in new concrete and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, thoroughly

clean the surface area of exposed steel members that are to be imbedded in the new concrete and solvent wash and paint one coat of an approved zinc rich primer according to paint manufacture's recommendations to these areas. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

According to the approved project specific hazardous material containment plan, furnish and erect tarpaulins or other materials to collect all of the spent paint containing material resulting from blasting or hand and power tool cleaning and coating. Minimize dust during all clean-up activities. Collect and store waste material at the end of each work day or more often if needed. Store waste materials in the hazardous waste containers provided. Lock and secure all waste containers at the end of each work day. Cover containers at all times except when adding or removing waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water. Transportation and disposal of such waste material will be the responsibility of the department.

Damage to existing painted surfaces as a result of construction operations, shall be restored to the approval of the engineer at the contractor's expense.

D Measurement

The department will measure Preparation and Coating of Top Flanges (Structure #) as a single unit for 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
517.0901.S.001	Preparation and Coating of Top Flanges B-67-122	EACH

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the coating.

stp-517-010 (20210708)

57. Surface Drain Pipe Corrugated Metal Slotted, 12-Inch, Item 521.2005.S.001; Surface Drain Pipe Corrugated Metal Slotted, 18-Inch, Item 521.2005.S.002.

A Description

This special provision describes furnishing and installing slotted corrugated metal pipe surface drain as the plans show.

Conform to standard spec 521 as modified in this special provision.

B Materials

Furnish backfill material that is grade A concrete conforming to standard spec 501 as modified in standard spec 716.

Provide QMP for class III ancillary concrete as specified in standard spec 716.

High Early Strength (HES) concrete conforming to standard spec 710.4(5) is allowed. Use HES if required by the plans, or if directed by the engineer.

C Construction

Before backfilling, plug the upper end of the slotted drain as the plans show or as approved by the engineer.

Before backfill operations adjacent to the slotted area of the slotted corrugated metal pipe surface drain pipe, install timber blocks in the slots according to the plan details. Remove any material entering the pipe at no expense to the department.

Keep the timber blocks in place until final cleanup operations are completed; at which time, remove the timber blocks.

Exercise care to avoid damage to the slotted corrugated metal pipe surface drain pipe. If any section of pipe is damaged or is unsatisfactory as determined by the engineer, replace the drain pipe at no expense to the department.

D Measurement

The department will measure Surface Drain Pipe Corrugated Metal Slotted, (Size)-Inch, completed according to the contract and accepted, in place 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
521.2005.S.001	Surface Drain Pipe Corrugated Metal Slotted, 12-Inch	LF
521.2005.S.002	Surface Drain Pipe Corrugated Metal Slotted, 18-Inch	LF

Payment is full compensation for furnishing all materials; hauling and placing the pipe, including bands; making connections to existing inlets; furnishing concrete, end plug or cap; and for cleaning out and restoring site of work.

stp-521-005 (20220628)

58. Slope Paving Repair Crushed Aggregate, Item 604.9010.S.

A Description

This special provision describes providing crushed aggregate slope paving where erosion has occurred. Conform to standard spec 604 as modified in this special provision.

B Materials

Furnish materials conforming to standard spec 604.2.

C Construction

Replace paragraph (1) of standard spec 604.3.2 with the following:

- (1) Place the crushed aggregate on the prepared foundation in areas where erosion has occurred. Shape and consolidate it using mechanical or hand methods to provide a stable, even and uniform surface.

D Measurement

The department will measure Slope Paving Repair Crushed Aggregate by the cubic 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
604.9010.S	Slope Paving Repair Crushed Aggregate	CY

Payment is full compensation for all excavating and backfilling required to prepare the foundation; disposing of surplus materials; providing, handling, placing, and consolidating the crushed aggregate; providing, handling, heating, and for applying the asphaltic material.

stp-604-010 (20100709)

59. Reseal Crushed Aggregate Slope Paving, Item 604.9015.S.

A Description

This special provision describes sealing existing crushed aggregate slope paving as the engineer directs and conforming to standard spec 604 as modified in this special provision.

B Materials

Furnish materials conforming to standard spec 604.2.

C Construction

Clean all debris from the surface of the slope paving before applying asphalt. Apply sufficient asphalt so that it penetrates to seal the top 2 inches of aggregate; where existing asphalt is closer to the surface of the aggregate, apply less asphalt.

D Measurement

The department will measure Reseal Crushed Aggregate Slope Paving in area by the square yard of slope paving, acceptably resealed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
604.9015.S	Reseal Crushed Aggregate Slope Paving	SY

Payment is full compensation for cleaning the surface; furnishing and applying the asphalt.

stp-604-015 (20100709)

60. Cover Plates Temporary, Item 611.8120.S.

A Description

This special provision describes providing and removing steel plates to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during temporary traffic control conditions.

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 NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

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)

61. Topsoil and Salvaged Topsoil.

Replace 625.2 (1) with the following:

- (1) Topsoil consists of loam, sandy loam, silt loam, silty clay loam, or clay loam humus-bearing soils adapted to sustain plant life, and ensure the topsoil consists of the following:

Topsoil Requirements	Minimum Range	Maximum Range
pH	6.0	8.0
Organic Matter*	5%	20%
Clay	5%	30%
Silt	10%	70%
Sand	10%	70%

*Organic matter determined by loss on ignition test of samples oven dried to constant weight at 212 F (100 C).

Add the following to standard spec 625.2:

- (3) Furnish material that is free from large roots, sticks, weeds, brush, stones, litter, and waste products.
- (4) Do not furnish 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.

Replace 625.3.3 (3) with the following:

- (3) 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.

SER-625-001 (20221007)

62. Fertilizer Type B.

Replace 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 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 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)

63. Seeding Mixture No. 30.

Replace 630.2.1.5.1.1 Table 630-1 Highway Seed Mixtures with the following:

Conform to the following the species, proportions, purity, and germination:

Species	Purity Minimum %	Germination Minimum %	Mixture Proportion %
Perennial Ryegrass	97	90	10
Hard Fescue	97	85	15
Red Fescue	97	85	25
Salt Grass	98	85	20
Tall Fescue	98	85	30

Replace 630.3.5 (1) with the following:

(1) Use the following sowing rates for the seeds in pounds per 1000 square feet:

Seed Mixture 30 Special at 5.0 pounds

SER-630-001 (20230109)

**64. Foundation Drilling 36-Inch Diameter, Item 636.0050.S.001;
Foundation Drilling 30-Inch Diameter, Item 636.0050.S.002.**

A Description

This special provision describes drilling holes for the H pile posts for retaining walls.

B (Vacant)

C Construction

Submit the proposed method for foundation drilling before beginning construction.

Drill holes to the diameter and depth the plans show. If necessary, use casing or alternative engineer-approved methods to maintain an open hole. If bentonite or other slurry is used to maintain an open hole, prevent spillage of the slurry into adjacent waterways. Locate the holes within the following tolerances:

Horizontal Location:	3 inches
Vertical Location:	1 inch
Vertical Alignment:	1/8 inch per foot

D Measurement

The department will measure the Foundation Drilling 36-Inch Diameter and Foundation Drilling 30-Inch Diameter by the linear foot, acceptably completed, measured from the bottom of the hole to the top of the foundation footing.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
636.0050.S.001	Foundation Drilling 36-Inch Diameter	LF
636.0050.S.002	Foundation Drilling 30-Inch Diameter	LF

Payment is full compensation for drilling holes; for furnishing casing or alternative drilling methods; and, if rock is encountered, for coring rock.

stp-636-010 (20140630)

65. Signs Type I and II.

Furnish and install aluminum vertical support beams for type I and II signs on overhead sign supports incidental to sign. For type I and II signs on sign bridges use aluminum vertical support beams noted above incidental to sign.

Supplement 637.3.3.3(3) of the standard specifications 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 and II signs on overhead sign supports incidental to sign. See SDD's A4-7a and A4-7b for installation requirements.

Furnish and install mounting brackets per approved product list for type II signs (overhead street name signs) on signal monotube arms incidental to sign.

Add the following to standard spec 532.3.2.1:

Submit shop drawings for sign bridges and overhead sign supports to SE Region Traffic Operations Engineer, Karen Martens and Tom Heydel and Bureau of Structures, Fabrication Library. Along with

Shop drawings, DT2326 is required to be filled out and submitted with the shop drawings. DT 2334 is also required for status report document for sign structures. Follow specification 105.2.2 for Fabrication Library requirements.

DT 2321 (Anchor Rod installation form) and DT 2322 (anciliary Structures Pre-installation verification test of high strength bolts form) shall be filled out as part of installation and fabrication.

SER-637-001 (20250303)

66. 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 (844) 496-9163 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.

stp-638-010 (20150630)

67. Sign Bridge Identification Plaques.

Supplement standard spec 641.5 with the following:

- (5) Payment for Sign Bridge and Overhead Sign Support bid items is full compensation for providing and installing sign bridge identification plaques and mounting hardware as shown on the standard detail drawing in the plans for each existing and new sign bridge or overhead sign support.

SER-641-001 (20160902)

68. 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)

69. 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 lightning protection for the portable lighting. 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)

70. Digital Speed Reduction System (DSRS), Item 643.0370.S.

A Description

This special provision describes furnishing, installing, repositioning, operating, maintaining, monitoring, testing and removing a Digital Speed Reduction System (DSRS) per plan or as the engineer directs.

B Materials

B.1 Digital Speed Limit Trailer (DSLTL)

Furnish items from the department's approved products list.

B.2 Automated System Manager (ASM)

Furnish an ASM from the department's approved products list to remotely change the speed limit on the DSRS devices.

C Construction

C.1 General

Trailer-mount the speed limit sign so that the bottom is a minimum 7 feet above the roadway.

Provide training to the department as needed on the use and operation of the field hardware and the website for the DSRS.

Ensure the DSRS operates continuously when deployed on the project.

Provide a local specialist to respond to emergency situations within 2 hours of being notified. Equip the local specialist with sufficient resources to correct deficiencies in the DSRS.

The Contractor will be responsible for coordinating with the engineer when the work zone speed limits are to be changed.

Place DSLTL at the following locations or per plan:

- 1,500 feet upstream of start of lane closure taper
- At existing post-mounted speed limit sign after the end of the acceleration lane of each entrance ramp. If there is not an existing sign, place 1,500 feet beyond the end of the acceleration lane of each entrance ramp
- Minimum of every 1 mile

Place DSLTLs on the right side of the roadway unless located in advance warning area, infeasible or as directed by the engineer.

Place DSLTL in a location that does not interfere with the function of existing signs or roadside devices.

R2-1 sign shall be 48" x 60" and follow standard spec 643 for sign requirements.

C.2 Programming

C.2.1 General

Program the DSRS to ensure the following operations are performed:

- Provide a password protected login to the ASM, website and all other databases.
- 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:
 - Dates and times of speed limit changes
 - Device locations

- Archive all data in a spreadsheet format with date and time stamps.
- Configure the website to quantify system failures which includes DSLT malfunction, loss of power, low battery, etc.
- Ensure the devices autonomously restart in case of any power failure.
- Provide the department access to manually override the DSRS for a user-specified duration. Document all override messages.
- The digital display portion automatically adjusts the brightness under varying light conditions to maintain legibility.
- Speed limit values shown on the digital display legend continuously displays without animation. Brief blanking may be experienced, up to 10 seconds, only during digital display legend user input utilizing the hard-wired hand control.
- The digital display changes between the original posted speed limit and the approved temporary speed limit on the digital speed limit trailer when directed by the engineer.
- The beacon on the DSLT shall flash when the speed limit has been reduced per the temporary speed declaration.

C.2.2 System Operation Strategy

When active work is taking place, the nearest upstream DSLT of the work area and any DSLT in the active work area shall display the work zone speed limit and the beacons on the DSRT shall flash. All other DSLT shall display the posted speed limit.

If there is more than one work area and the distance between the work areas is greater than 3 miles, the DSLT between the work areas shall display the posted speed limit. If the distance between multiple work areas is less than 3 miles, the DSLT between the work areas shall display the work zone speed limit.

C.3 Reports

Provide an electronic copy of a weekly summary report and end of project summary report via email to the engineer and Bureau of Traffic Operations (DOTBTOWorkzone@dot.wi.gov). Include timestamped information on the date, time, messages, and speed limit for when the DSRS was changed.

D Measurement

The department will measure DSRS 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 NUMBER	DESCRIPTION	UNIT
643.0370.S	Digital Speed Reduction System	DAY

Payment is full compensation for furnishing, installing, repositioning, operating, maintaining, monitoring, testing and removing the DSRS consisting of DSLT and ASM.

The department will deduct one day for each calendar day the DSRS is required but out of service for more than 2 hours.

The engineer will have the sole discretion to assess the deductions for an improperly working DSRS.

stp-643-037 (20250108)

71. Dynamic Late Merge System, Item 643.1100.S.

A Description

This special provision describes providing, repositioning, operating, maintaining, monitoring, calibrating, testing and removing a dynamic late merge system (DLMS) capable of measuring vehicular speeds at downstream sections of the roadway and activating the system.

B Materials

Provide DLMS components and software that is National Transportation Communications for ITS Protocol (NCTIP) compliant.

B.1 Portable Changeable Message Signs (PCMS)

Provide PCMS conforming to standard spec 643. Ensure each PCMS 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.2 Portable Traffic Sensors (PTS)

Provide PTS that are nonintrusive and capable of capturing vehicle speed in miles per hour. Integrate each sensor with a modem to communicate with the automated system manager (ASM).

B.3 Static Traffic Control Signs with Temporary Flashing Beacons (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.4 Automated System Manager (ASM)

Furnish ASM from department's approved products list that assesses current traffic data captured by the PTS, determines the appropriate merging strategy based upon predetermined speed thresholds, and communicates appropriate messages to the motorists through the PCMS and FBS.

B.5 System Communications

Ensure DLMS communications meet the following requirements:

1. Perform required configuration of the DLMS communication system automatically during system initialization.
2. Communication between the server and any individual PCMS, FBS or PTS are independent through the full range of deployed locations, and do not rely upon communications with any other PCMS, FBS or PTS.
3. Incorporate an error detection/correction mechanism into the DLMS communication system to ensure the integrity of all traffic condition data and motorist information messages.

B.6 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.

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 DLMS per plan or as the engineer directs. Provide plan to the engineer and Bureau of Traffic Operations (DOTBTOWorkzone@dot.wi.gov) 14 calendar days before the pre-construction meeting.

PTS may be mounted on PCMS, 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 one half-mile upstream of the lane closure taper.
3. Place third PTS 5,700 feet upstream of the lane closure taper.
4. Place fourth PTS 2 miles upstream of lane closure taper, if applicable.
5. Place any additional sensors even distances (in miles) upstream of the fourth PTS or as directed by the engineer.

Install the PCMS at the following locations, delineated by 5 drums:

1. Place first PCMS (PCMS #3) 200 feet upstream of the lane closure taper, offset to ensure downstream arrow board can be seen.
2. Place second PCMS (PCMS #2) approximately 3,100 feet upstream of the lane closure taper.
3. Place third PCMS (PCMS #1) 1 mile upstream of last FBS.

Install the FBS at the following locations, delineated by 5 drums:

1. Place first FBS (FBS #1) 5,700 feet upstream of the lane closure taper.
2. Place second FBS 2 miles upstream of the lane closure taper.
3. Place third FBS 3 miles upstream of the lane closure taper.
4. Place any additional FBS even distances (in miles) upstream of the third FBS or as directed by the engineer.

If there are more than two lanes or specified in the plans, place FBS and third PCMS (PCMS #1) on both sides of the roadway.

Number the devices in sequential 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 2 hours of becoming aware of a deficiency in the operation or individual part of the system.

Maintain the DLMS for the duration of the project or as identified in the plans. 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 project completion.

C.2 Reports

Provide an electronic copy of a weekly summary report 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 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 DLMS 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 PCMS message sequences and FBS to reflect current traffic flow status updated every 60 seconds for a congestion message. 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 DLMS operates as a unit where the PCMS activate at the same time for the same scenario.
 - PCMS #1, PCMS #2 and PCMS #3 shall all activate at the same time based on traffic speeds at the PTS one half mile upstream of the lane closure taper and at the PTS within the lane closure taper.
4. The ASM ensures that messages sent to the connected PCMS are synchronized so that all the messages on all the PCMS are for the same traffic conditions.
5. The FBS activate based on pre-determined speed thresholds from the next downstream sensor.
 - FBS #1 shall activate based on traffic speeds at the PTS within the lane closure taper or PTS one half mile upstream of the lane closure.
 - All other FBS in the DLMS shall activate based on traffic speeds at the next downstream PTS (e.g. FBS #2 should use PTS at/near FBS #1, FBS #3 should use PTS at/near FBS #2).

6. 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 at all times for the duration of the work zone activity. Ensure website includes at a minimum:
 - Vehicle speeds
 - PCMS messaging
 - FBS triggers
 - Device locations
7. Archive all traffic data and PCMS messages in a Microsoft Excel format with date and time stamps.
8. Configure the website to quantify system failures, which includes communication disruption between any devices in the system configuration, PCMS malfunctioning, FBS malfunctioning, PTS malfunction, loss of power, low battery, etc.
9. Provide default and advisory messages automatically based on traffic conditions.
10. Ensure the system autonomously restarts in case of any power failure.
11. Provide the department access to manually override PCMS messages for a user-specified duration, after which automatic operation will resume display of messages appropriate to the prevailing traffic conditions. Document all override messages.

C.4.2 System Operation Strategy

Arrange for the vendor/manufacturer to coordinate system operation, detection, trends/thresholds, and messaging parameters with the engineer.

The sequences that are a minimum requirement, but can be adjusted at the discretion of the engineer, are as follows:

Free Flow:

If the current PTS-measured speed with the lane closure taper or at one half mile from the lane closure taper is at or above 40 mph, display no lane use messages, and therefore allow traffic to resume typical early merge operation. PCMS #1 and PCMS #2 shall display nothing except for lighting the four corners (flashing caution mode) to show that it is on. PCMS #3 shall display a flashing arrow (flashing arrow merge mode) following applicable arrow board standards.

Congestion:

If the current PTS-measured speed near the lane closure taper is at or below 39 mph, the following two-phase messages shall be displayed on the upstream PMCS as shown below:

- Point of merge (PCMS #3):

FRAME 1	FRAME 2
MERGE HERE	TAKE TURNS

- Intermediate PCMS (PCMS #2):

FRAME 1	FRAME 2
STAY IN LANE	DO NOT MERGE

- PCMS located beyond estimated maximum queue length for two-lane configuration (PCMS #1):

FRAME 1	FRAME 2
STOPPED TRAFFIC AHEAD	USE BOTH LANES

- PCMS located beyond estimated maximum queue length for three-lane configuration on both sides of the roadway (PCMS #1):

FRAME 1	FRAME 2
STOPPED	USE
TRAFFIC	ALL
AHEAD	LANES

FBS #1 shall flash if the current PTS-measured speed within the lane closure taper or at one half mile upstream of the lane closure taper is at or below 39 mph. All other FBS shall flash if the current PTS-measured speed at/near the next downstream PTS is at or below 39 mph.

C.5 Calibration and Testing

At the beginning of the project perform a successful field test and calibration at the DLMS location to verify the system is detecting accurate vehicle speeds, and accurately relaying the information to the ASM, PCMS and FBS.

Send email of successful calibration and testing to the engineer.

D Measurement

The department will measure Dynamic Late Merge 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 NUMBER	DESCRIPTION	UNIT
643.1100.S	Dynamic Late Merge System	DAY

Payment is full compensation for providing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing the complete system consisting of PCMS, FBS, PTS, ASM, and system communications.

Failure to correct a deficiency to the PCMS, FBS, PTS, or ASM within 2 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 2 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 DLMS.

stp-643-040 (20250108)

72. 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 miles per hour (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)

Furnish ASM from department's approved products list 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.

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 (DOTBTOWorkzone@dot.wi.gov) 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 as specified in the plans, place FBS on both sides of the roadway.

Number the devices in sequential 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 2 hours of becoming aware of a deficiency in the operation or individual part of the system.

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 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 NUMBER	DESCRIPTION	UNIT
643.1205.S	Basic Traffic Queue 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 2 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 2 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 (20250108)

73. Temporary Pavement Marking.

Add the following to standard spec 646.3.1.4:

- (5) On pavements not scheduled for removal under this project, remove markings using air blasting, water blasting, or a combination of thereof. Do not use grooving or grinding on these pavements.

74. General Requirement for Electrical Work.

General

Add the following to standard specification sections 651, 652, 653, 654, 655, 656, 657 and 659.

All the work necessary to comply with revisions to standard 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 locations:

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 specification subsection 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 tag-outs with manufactured tags and endorse them with the date and the name of the contractor. Clear tag-outs at the 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 turn-on until the contractor corrects all deficiencies.

Add the following to standard specification subsection 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 specification subsection 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 specification subsection 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 specification subsection 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 specification subsection 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 specification subsection 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 nipped 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. The contractor shall avoid contact of dissimilar metals in erecting the pole on its foundation and/or breakaway device. Any concern of trapped moisture or potential corrosion cell shall be resolved 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 ten (10) years from the date that the luminaire are put into service. Luminaires shall be installed 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 thirty (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 eric.perea@dot.wi.gov 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 specification 659.3.1:

Contractor shall be responsible to maintain adequate 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. Contractor shall coordinate with WisDOT for the existing poles with luminaires to remain in place until new lighting is installed and operational. Installation of temporary lighting not shown on lighting plans shall be incidental in this contract. Contractor shall be responsible to submit a redline markup plans for any additional temporary lighting to the Engineer for approval prior to installation.

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.

75. 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 box, manhole, junction box or communication vault; 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 boxes.

76. Install Conduit Into Existing Item, Item 652.0700.S.

A Description

This special provision describes installing proposed conduits into an existing manhole, pull box, junction box, communication vault, or other structure.

B Materials

Use conduits, 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, or holes, 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 respective 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 (20230629)

77. **Electrical Service Meter Breaker Pedestal IH 43 Ramps & STH 164, Item 656.0201.301.**

Append standard spec 656.2.3 with the following:

- (2) The department will be responsible for the electrical service installation request for any department-maintained facility. Notify the maintaining authority if the signal is not state maintained that it is their responsibility to arrange for the electrical service installation.
- (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.

78. **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.

79. **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.

80. **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.

81. Lamp, Ballast, LED, Switch Disposal by Contractor, Item 659.5000.S.101.

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://wisconsin.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/environment/hazwaste-contacts.pdf>

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.

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 (<https://wisconsin.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/environment/dotlampballastinventory.dotx>) 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.

D Measurement

The department will measure Lamp, Ballast, LED, Switch Disposal by Contractor 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 NUMBER	DESCRIPTION	UNIT
659.5000.S.101	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH

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.

stp-659-500 (20220628)

82. Temporary Traffic Signals for Intersections IH 43 Ramps & STH 164, Item 661.0201.001; Temporary Traffic Signals for Intersections STH 164 & CTH ES, Item 661.0201.002.

Replace standard spec 661.2.1(1) with the following:

- (14) 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 Isotel 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:

- (15) Use existing underground electric service and meter breaker pedestal for the operation of the Temporary Traffic Signal at the intersections of IH 43 Ramps & STH 164 and STH 164 & CTH ES. Contact Jarrett Gates at (262) 548-5894 to coordinate the temporary electrical service. The department will pay for all installation and Energy Costs associated with the operation of the Temporary Traffic Signals. It is the contractor's responsibility to contact the electrical utility as it pertains to the affidavit and site ready card to arrange timely installation of the temporary service. If the control cabinet is not mounted on the electrical service pole, add a second electrical service disconnect to the outside of the control cabinet for the convenience of emergency personnel.

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 every other week 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 every other week 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 signal controller, cellular modem, and ethernet switch.

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; and for cleaning up and properly disposing of waste.

**83. Ramp Closure Gates 24-FT, Item 662.1024.S;
Ramp Closure Gates 26-FT, Item 662.1026.S;
Ramp Closure Gates 28-FT, Item 662.1028.S;
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 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 (length) as each gate 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	UNIT
662.1024.S	Ramp Closure Gates 24-FT	EACH
662.1026.S	Ramp Closure Gates 26-FT	EACH
662.1028.S	Ramp Closure Gates 28-FT	EACH
662.1040.S	Ramp Closure Gates 40-FT	EACH

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)

84. 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 department-furnished equipment includes the following:

Department-Furnished Items
6-Count Fiber Optic Cable
72-Count Fiber Optic Cable

Fiber Optic Splice Enclosures
Fiber Optic Termination Panels
Ethernet Switches
SFPs
CCTV Camera Pole
CCTV Camera

Pick-up small department-furnished equipment, such as communications devices, cameras, and controllers, from the department's Traffic Management Center (TMC), 433 W. St. Paul Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the Statewide ITS Engineer, Dean Beekman at (414) 227-2154 to coordinate pick-up of equipment.

Pick up cabinets and solar power systems, including batteries, at the department's TMC equipment storage facility at 633 W. Wisconsin Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact Dean Beekman to coordinate pick-up of equipment.

Large department-furnished equipment, such as camera poles and dynamic message signs will be delivered by the supplier to a contractor-controlled site identified by the contractor. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation.

Within two weeks of Notice to Proceed, contact the engineer and Dean Beekman. Provide the address and contact information for the contractor-controlled location for delivery and the desired delivery schedule for the large state-furnished materials.

Transportation of the equipment between the electric shop and the field or interim locations are the responsibility of the contractor.

Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

Design/Shop Drawings

Before 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.

stp-670-005 (20230629)

85. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

This special provision describes providing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as the plans show.

Unusual aspects of this project include:

1. The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Traffic Management Center (TMC). 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 TMC 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 before 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:**
 - 4.1. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase 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.
 - 4.2. **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.
 - 4.3. **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:**
 - 5.1. **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.
 - 5.2. **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 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 labeling methods before 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 Traffic Management Center (TMC) 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

The department will not measure the work performed under this special provision.

E Payment

The department will pay for the work performed under this special provision under the contract ITS bid items.

stp-670-010 (20230629)

86. 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

Coordinate receiving the cabinet from the department's vendor and protect and store the cabinet between receiving the cabinet and installing as shown on the plans. Note and photograph any damage to the cabinet upon receipt and notify the engineer and the Statewide ITS Engineer of any damage.

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 storing the pole mounted cabinet, installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for all testing.

stp-673-010 (20230629)

87. Communication Systems.

Replace standard spec 678.2.1(1) with the following:

- (1) The department will furnish fiber optic cable, Ethernet switches, 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 three working days prior to picking up the materials.

88. Installing and Maintaining Bird Deterrent System Station 368+44, Item 999.2000.S.001.

A Description

This special provision describes inspecting, installing and/or maintaining approved deterrents that prevent migratory bird nesting on bridges and culverts. Swallows or other migratory birds' nests have been observed on or under the existing culvert or bridge at the station identified. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. One deterrent system shall be installed and/or maintained for each applicable structure. Deterrent methods selected shall be appropriate for structure type, size and/or site-specific constraints.

B Materials

B.1 Hardware and Lumber

Lumber, hardware, and fastening devices shall be durable enough to last through the length of the nesting season. Fastening devices and deterrence system must be approved by the engineer prior to installation on culverts and bridges that will remain in service after removal of deterrent systems. The method of fastening should not compromise the culvert or bridge concrete surfaces or steel protection systems. The attachment locations must be restored and repaired as needed by use of engineer approved fillers, sealers and paint systems.

B.2 Netting Materials

Exclusion netting is material either wrapped around or draped and fastened to bridge decks/abutments and culvert corners to prevent bird entry.

Furnish exclusionary netting to deter nesting in bridge decks and abutments and corners of box culverts, consisting of either:

- a. 1/2" x 1/2" or 3/4" x 3/4" knotless, flame resistant, U.V. stabilized polyethylene or polypropylene netting with minimum 40-pound breaking strength per strand, or engineer approved equal.
- b. Galvanized wire mesh (hardware cloth) with a wire diameter of .040 inches (19-gauge) and opening width of 1/2-inch.

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and of equal length as the netting.

B.3 Plastic Strip Curtain

Plastic strip curtains are strips of plastic attached to vertical surfaces in areas suitable for nesting.

Furnish 3-foot wide lengths of 6 mil minimum plastic sheeting with the lower 2 feet cut into vertical strips 2 inches wide.

At a minimum, use either 1" x 2" (nominal) lumber or 3/4" x 2" pressure treated plywood strips and staples to attach plastic strips to wood to fabricate the strip curtain.

Furnish concrete screws to attach strip curtain to structure.

B.4 Corner Slope Materials

Corner slopes are pieces of curved plastic placed in corners suitable for nesting. They are particularly effective in preventing nesting in top corners of box culverts.

Furnish U.V. stabilized pre-fabricated PVC or polycarbonate corner slopes from commercial bird-deterrent manufacturers or an approved equal.

C Construction

C.1 General

If active nests are observed after construction starts, or if a trapped bird or an active nest is found, stop work that may affect birds or their nests, and notify the engineer to consult with the Wisconsin Department of Natural Resources transportation liaison at Craig Webster, at (414) 303-3011, or the department regional environmental coordinator Tommy Curran, at (262) 548-5682.

Efforts should be made to release trapped birds, unharmed.

C.2 Nest Removal

Remove unoccupied nests prior to the beginning of the nesting season as designated in Prosecution and Progress. Nest removal involves the removal and disposal of unoccupied or partially constructed nests without eggs or nestlings. Removing all evidence of nesting (e.g. cleaning droppings from structures) eliminates a visual cue for a potential breeding location, especially for first-time breeders. Nest removal is not a type of deterrent and does not prevent nest establishment but can delay the process. As such, it should only be used in conjunction with other methods. It cannot be used on its own to ensure compliance. Nest removal is not required if deterrents are installed before the start of the avoidance window unless nests interfere with successful installation of the deterrent.

Remove nests on the structure by scraping or pressure washing prior to established avoidance windows to deter nesting. Remove only unoccupied or partially constructed nests without eggs or nestlings. Remove newly built nests every two days before eggs are laid. Nest removal is intended to be used prior to and in conjunction with other nesting deterrents.

C.3 Exclusion Netting

C.3.1 Installation

Using concrete screws, anchor lumber to bridge or culvert along perimeter of intended netting. Fasten netting to lumber until netting is held taut. Use the minimum length of lumber and netting necessary to avoid sections of netting that are not flush to the bridge or culvert. Eliminate any loose pockets or wrinkles that could trap and entangle birds or other wildlife. Ensure the net is pulled taut in order to prevent flapping in the wind, which results in tangles or breakage at mounting points.

For culverts, attach netting at a 45-degree angle at the culvert corner so it extends at least 12" below the corner.

C.4 Plastic Curtains

C.4.1 Installation

Attach plastic curtains along the entire length of vertical surface or corner on which nest building is to be deterred. Affix plastic curtain strips to treated lumber with staples spaced a minimum of 1 foot O.C. Wrap plastic curtains around lumber prior to attaching it to the structure to reduce the likelihood of it tearing out at the staples. Screw lumber into the underside of the bridge deck or top of box culvert with concrete screws placed 24-inches O.C. minimum.

C.5 Corner Slopes

C.5.1 Installation

Attach corner slopes to the structure per the manufacturer's recommendations. Use urethane-based adhesives if manufacturer supplied hardware or adhesives are not available or no recommendations are provided. Install end caps or seal ends of corner slopes to prevent entry of birds or other animals.

C.6 Inspection and Maintenance

Inspect bird deterrent devices every two weeks both during and prior to construction when deterrents have been installed to exclude birds prior to nesting windows, and after large storm events or high winds. Ensure that netting is taut, that no gaps or holes have formed, and that the nets are functioning properly. Ensure that corner slopes are not cracked or otherwise damaged and are functioning properly. Ensure that curtains are undamaged, with no tears, holes, or creases. Repair any damaged or loose deterrent devices. Inspect, maintain, and repair nesting deterrents whether installed by the contractor or others. Repair, replace, supplement deterrents as necessary with materials meeting the requirements of this specification.

Remove any unoccupied or partially constructed nests without eggs or nestlings.

Repair deterrents to prevent birds from attempting to nest again.

Record all inspection, removal, and maintenance activities. Provide inspection, removal and maintenance records to the engineer upon request.

C.7 Removal and Structure Repair

Maintain the deterrent until the engineer determines that the deterrent is deemed no longer necessary. Upon completion of the project, remove any remaining migratory bird deterrent from the project site. If the existing bridge or culvert is to remain after construction, restore and repair as needed by use of engineer approved fillers, sealers and paint systems.

D Measurement

The department will measure Installing and Maintaining Bird Deterrent System (Station) as a single unit at each structure, acceptably completed.

The department will measure Maintaining Bird Deterrent System (Station) as a single unit at 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
999.2000.S.001	Installing and Maintaining Bird Deterrent System Station 368+44	EACH

Payment for Installing and Maintaining Bird Deterrent System is full compensation for providing and installing deterrents that prevent migratory bird nesting; removing and disposing of unoccupied or partially constructed nests without eggs or nestlings; maintaining, repairing, replacing, supplementing, existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

Payment for Maintaining Bird Deterrent System is full compensation for inspecting structures for the presence of migratory birds, inspecting deterrents installed by others; maintaining, repairing, replacing, and supplementing existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

stp-999-200 (20250108)

89. Baseline CPM Progress Schedule, Item SPV.0060.001 Monthly CPM Progress Schedule Updates, Item SPV.0060.002.

Replace standard spec 108.4 with the following:

108.4 Critical Path Method Progress Schedule

108.4.1 Definitions

(1) 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 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

- (1) 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

- (1) 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

- (1) 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.
 3. Department and contractor discussion of the level of detail on features in the CPM Initial Work Plan and the Baseline CPM Progress Schedule.
- (2) 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.
- (3) 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.
- (4) 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

- (1) 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

- (1) 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.
- (1) Submit electronic copies of the Baseline CPM and the corresponding Oracle Primavera P6 schedule file (XER) in a format acceptable to the engineer.
 - (2) Within ten 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.
 - (3) 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.
 - (4) 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.
 - (5) The department will only make progress payments for the value of materials, as specified in standard spec 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.
 - (6) 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.
 - (7) The department will not consider requests for contract time extensions as specified in 108.10 or additional compensation for delay specified in standard spec 109.4.7 until the department accepts the Baseline CPM schedule.

108.4.4.3 Monthly CPM Updates

- (1) 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.
- (2) 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

- (1) 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.
- (2) 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

- (1) 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. Retaining Walls
 - 1.1.1. Leveling Pads - LF
 - 1.1.2. Set Panels - SF
 - 1.1.3. Parapets - LF
 - 1.1.4. Wall Face - Bay
 - 1.1.5. Tie Backs – Each
 - 1.1.6. Anchor Slabs – LF
 - 1.1.7. Drilling - Each
 - 1.1.8. Coping – LF
 - 1.1.9. Footing - LF
 - 1.2. Bridge Construction
 - 1.2.1. Footings—Each
 - 1.2.2. Columns—Each
 - 1.2.3. Abutments—Each
 - 1.2.4. Pier Caps—Each
 - 1.2.5. Girder Spans – Each
 - 1.2.6. Decked Spans – Each
 - 1.2.7. Poured Spans – Each
 - 1.3. Roadway Excavation—CY per week
 - 1.4. Roadway Structural Section
 - 1.4.1. Grading/Subgrade Preparation—SY
 - 1.4.2. Base Material Placement—Ton
 - 1.4.3. Base Material Subgrade Preparation—SY
 - 1.4.4. Asphalt Pavement—Ton
 - 1.4.5. Concrete Pavement – SY
 - 1.5. Tunnels
 - 1.5.1. Drilled Shafts – Each
 - 1.5.2. Beam Seat/Cap - LF
 - 1.5.3. Girders - Each
 - 1.5.4. Deck – Percent
 - 1.6. Noise Walls
 - 1.6.1. Drill/Set Ground Mounted Posts - Each
 - 1.6.2. Install Ground Mounted Panels - Each
 - 1.6.3. Anchor/Set Structure Mounted Posts - Each
 - 1.6.4. Install Structure Mounted Panels - Each
 2. The actual daily production for the past week and the anticipated weekly production for the next week.

- (2) 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

- (1) 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

- (1) 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

- (1) 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.
- (2) 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 ten 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

- (1) 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.
- (2) 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 under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Baseline CPM Progress Schedule	EACH
SPV.0060.002	Monthly CPM Progress Schedule Updates	EACH

- (2) 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.
- (3) 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 ten percent of each estimate until the department accepts the Monthly CPM schedule update.
- (4) 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 (20231101)

90. Removing Bus Shelter, Item SPV.0060.003.

A Description

This special provision describes removing the existing bus shelter as shown in the plans.

B (Vacant)

C Construction

Remove the existing bus shelter as specified in the plans.

D Measurement

The department will measure Removing Bus Shelter 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.0060.003	Removing Bus Shelter	EACH

Payment is full compensation for removing the bus shelter and for disposing of materials.

91. Survey Project 1090-39-70, Item SPV.0060.004.

A Description

This special provision describes modifying standard specs 105.6 and 650 to define the requirements for construction staking for this contract. Conform to sections 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:

- storm sewer
- subgrade
- base
- curb and gutter
- curb ramps
- pipe culverts
- drainage structures

- structure layout
- bridges
- all retaining wall layout
- pavement
- pavement markings (temporary and permanent)
- overhead signs
- electrical installations
- supplemental control
- slope stakes
- ponds
- traffic signals
- FTMS
- parking lots
- utilities
- conduit
- traffic control items
- fencing

B (Vacant)

C Construction

Add the following to standard spec 650.3.1 (6):

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:

- (6) 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

Make the survey notes and computations available to the engineer within 24 hours as the work progresses unless a longer period is approved by the engineer.

Add the following to standard spec 650.3.1.2.1:

Under the Survey Project bid item, global positioning system (GPS) machine guidance for conventional subgrade staking on all or part of the work may be substituted. The engineer may require reverting to conventional subgrade staking methods for all or part of the work at any point during construction if the GPS machine guidance is producing unacceptable results.

Add the following to standard spec 650.3.1.2.3.1:

The department incurs no additional liability beyond that specified in standard spec 105.6 or standard spec 650 by having provided this additional information.

Add the following to standard spec 650.3.3:

Record all subgrade elevation checks and submit a hard copy to the engineer within 24 hours or as requested by the engineer.

D Measurement

Replace standard spec 650.4 with the following:

- (1) The department will measure Survey Project 1090-39-70 as a single unit for each project 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.0060.004	Survey Project 1090-39-70	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 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.

92. Exposing Existing Infrastructure Paved Area, Item SPV.0060.005.

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 contractors 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 in accordance to standard spec 205.3.3. Take precautions, including temporary shoring, in order to prevent any undermining of the existing roadway. Perform work in accordance 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 (97). Provide vertical elevations for each exposed infrastructure and reference to NAVD 88 (91).

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 according to the standard detail drawing for concrete pavement. All locations requiring asphaltic pavement shall consist of HMA Pavement Type E-3 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.0060.005	Exposing Existing Infrastructure Paved Area	EACH

Payment is full compensation for mobilization; for furnishing all 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 furnishing all surveying associated with exposing existing infrastructure; for furnishing all 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.

93. Exposing Existing Infrastructure Unpaved Area, Item SPV.0060.006.

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 contractors 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 in accordance to standard spec 205.3.3. Take precautions, including temporary shoring, in order to prevent any undermining of the existing roadway. Perform work in accordance 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 (97).

Provide vertical elevations for each exposed infrastructure and reference to NAVD 88 (91).

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. Use backfill slurry, conforming to standard spec 501, to backfill the exposed infrastructure locations to the subgrade elevation except for areas located within local streets. 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.0060.006	Exposing Existing Infrastructure Unpaved Area	EACH

Payment is full compensation for mobilization; for furnishing all 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 furnishing all surveying associated with exposing existing infrastructure; for furnishing all 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 locate.

94. Traffic Control Close-Open Freeway Entrance Ramp, Item SPV.0060.007.

A Description

This special provision describes closing and re-opening a freeway entrance ramp and associated auxiliary lane.

B (Vacant)

C Construction

Install or reposition traffic control devices required for closing a freeway entrance ramp and adjacent auxiliary lanes. 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.0060.007	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)

95. Traffic Control Full Freeway Closure, Item SPV.0060.008.

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 NUMBER	DESCRIPTION	UNIT
SPV.0060.008	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)

96. Traffic Control Local Road Lane Closures, Item SPV.0060.009.

A Description

This special provision describes closing and reopening a local road lane or lanes, including full closure conforming to standard spec 643, the plans, and as directed by the engineer.

B (Vacant)

C Construction

Install or reposition traffic control devices required for closing a local road or lanes of a local road. 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 Local Road Lane Closures by each individual closure acceptably completed. The department will not measure the closure of a local road not deemed necessary 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.0060.009	Traffic Control Local Road Lane Closures	EACH

Payment is full compensation for closing and re-opening a local road lane or lanes.

sef-643-035 (20171004)

97. Emergency Response to Traffic Incident Involving Concrete Barrier Temporary, Item SPV.0060.010.

A Description

This special provision describes providing prompt response to an emergency repair request for damaged and/or dislodged temporary concrete barrier, including temporary concrete barrier to be left in place, installed under this project 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 one hour 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 one hour of receiving a repair request, the department will assess the contractor \$500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted one-hour response time. 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 contractor owned temporary barrier, repair work shall be completed according to standard spec 603 and 643, and as directed by the engineer. For temporary barrier left in place from a previous project, repair work is covered under article Maintain and Remove Concrete Barrier Temporary Precast 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 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.0060.010	Emergency Response to Traffic Incident Involving Concrete Barrier Temporary	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.

The cost of providing the appropriate level of on-call staff 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.

98. Emergency Response to Traffic Incident Involving Crash Cushion, Item SPV.0060.011.

A Description

This special provision describes providing prompt response to an emergency repair request involving a damaged crash cushion installed under this project that is displaced or damaged 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 one hour 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 and 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 of an incident with appropriate staff within one hour of receiving a repair request, the department will assess the contractor \$500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted one-hour response time. 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.

Repair work shall be completed according to standard spec 614, and as directed by the engineer. 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 during the time this contract is in effect.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.011	Emergency Response to Traffic Incident Involving Crash Cushion	EACH

Payment is full compensation for providing prompt response to an emergency repair request for displaced or damaged crash cushion installed under this project.

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.

99. Mobilizations Emergency Pavement Repair, Item SPV.0060.012.

A Description

This special provision describes furnishing and mobilizing personnel, equipment, traffic control, and materials to the project site to repair the existing pavement for emergencies as the engineer directs. An emergency is a sudden occurrence of a serious and urgent nature, beyond normal maintenance of the existing pavement.

B (Vacant)

C Construction

Mobilize with sufficient personnel, equipment, traffic control, materials, and incidentals on the jobsite within 4 hours of the engineer's written order to repair the existing pavement on an emergency basis.

D Measurement

The department will measure Mobilizations Emergency Pavement Repair as each individual mobilization acceptably completed. The department will not include delivering and installing pavement repair or maintenance materials provided for in specific contract bid items. All traffic control items used for each Mobilization will be considered incidental to the Mobilization.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.012	Mobilizations Emergency Pavement Repair	EACH

Payment is full compensation for the staged moving of personnel, moving equipment, setting up and removing traffic control, traffic control materials, and moving materials. The department will pay separately for delivery and installation of pavement repair materials under the other bid items in this contract. The department will not pay separately for traffic control items and materials even though they may be included in other bid items in this contract and will consider them incidental to each Mobilization.

sef-999-025 (20170310)

100. Temporary Concrete Barrier Gate, 24-FT, Item SPV.0060.013.

A Description

This special provision describes providing and installing a temporary concrete barrier gate and removing upon completion of use.

B Materials

Furnish a Temporary Concrete Barrier Gate and all necessary hardware and materials to install the gate. The gate system shall be able to meet 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 shall be capable of preventing vehicle penetration, vaulting, and underriding during Test Level 3 Length of Need with Transition (TL-3 LON/T) impacts and shall smoothly redirect the vehicle.

The gate system shall be able to span a 24-foot minimum gap in concrete barrier. The gate system shall fasten only to the temporary concrete barrier wall. The gate system shall be able to be opened completely within 5 minutes once the moving process begins. The gate shall be able 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 $\frac{1}{4}$ 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, a tutorial shall be given to 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, 24-Inch by each individual gate system, acceptably completed. The department will not make additional measurements for Temporary Concrete Barrier Gate, 24-Inch 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.0060.013	Temporary Concrete Barrier Gate, 24-FT	EACH

Payment is full compensation for providing, installing, maintaining, and removing the gate system.

101. Crash Cushions Temporary Left In Place, Item SPV.0060.014.

A Description

This special provision describes leaving in place temporary crash cushions as shown in the plans and in accordance with the pertinent provisions of standard spec 614, these special provisions, and as hereinafter provided.

Crash Cushions Temporary Left in Place become property of the department after final acceptance by the engineer.

Temporary crash cushions shall be new at initial delivery. Ownership identification shall include the department (DOT).

B (Vacant)

C Construction

Complete work in accordance to standard spec 614.3.4. Maintain the crash cushions until the contract is substantially complete.

D Measurement

The department will measure Crash Cushions Temporary Left in Place by each unit left in place at the completion of 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.0060.014	Crash Cushions Temporary Left In Place	EACH

Payment is full compensation for leaving Crash Cushions Temporary on the project site.

Furnishing crash cushions temporary, foundation pads, transitions, backup blocks, and ID plaques will be paid for separately under the bid items provided for in the contract.

102. Connect to Existing Inlet, Item SPV.0060.015.

A Description

This special provision describes providing a connection between proposed pipes and existing inlets.

B Materials

Furnish materials in accordance with standard spec 611.2.

C Construction

Create a hole in the existing inlet to accept the proposed pipe. Make connection between the proposed pipe and existing inlet in accordance with standard spec 611.3.

D Measurement

The department will measure Connect to Existing Inlet by each connection, 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.0060.015	Connect to Existing Inlet	EACH

Payment is full compensation for providing materials, including masonry, sewer connections and other fittings; for saw cutting concrete; for necessary excavation and backfilling; and for cleaning out and restoring the site.

103. Drilled High Performance Dowel Bars, Item SPV.0060.016.

A Description

This special provision describes drilling in high performance dowel bars to transfer load between existing concrete and new concrete.

B Materials

Furnish high performance dowel bars from the APL.

Furnish epoxy according to the standard spec 416.2.2.2.

C Construction

Place dowel bars according to the standard spec 416.3.5.

D Measurement

The department will measure Drilled High Performance Dowel Bars by each individual bar, 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.0060.015	Drilled High Performance Dowel Bars	EACH

Payment is full compensation for providing high performance dowel bars, including coating; for drilling holes in hardened concrete not placed under the contract; and for epoxying.

104. Concrete Bases Type 5 Special, Item SPV.0060.101.

A Description

This special provision describes furnishing and installing Concrete Bases Type 5 Special as shown on the plans, conforming to standard spec 654, and as follows.

B Materials

Materials shall conform to standard spec 654.2.

C Construction

Construction shall conform to standard spec 654.3. The concrete base shall be the dimensions as shown on the plans.

D Measurement

The Department will measure Concrete Bases Type 5 Special as each individual base, 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.0060.101	Concrete Bases Type 5 Special	EACH

Payment shall be made as specified in standard spec 654.5(2).

SER-654.1 (20170407)

105. Lighting System Survey (1090-39-70), Item SPV.0060.102.

A Description

This special provision describes performing a lighting system survey as-built for IH 43 / STH 164 interchange, 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. The survey shall be performed in NAD 83, Wisconsin County Coordinate System (WCCS), and Waukesha Coordinates. The data shall be delivered 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 each individual 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.0060.102	Lighting System Survey (1060-10-72)	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.

106. Ground Rod, Item SPV.0060.200.

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.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.200	Ground Rod	EACH

Payment is full compensation for installation of the ground rod and ground wire; welding and connections at both ends of the ground wire; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

107. Install Poles Type 10 Special, Item SPV.0060.301; Install Monotube Arms 35-FT Type 9/10 Special Pole, Item SPV.0060.302; Install Monotube Arms 45-FT Type 9/10 Special Pole, Item SPV.0060.303; Install Luminaire Arms Steel 15-FT, Item SPV.0060.304.

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.

Touch-up and repair damage to any black equipment with matching material. All black equipment, whether department or contractor provided, must be touched-up, repaired, and accepted by the department prior to traffic signal turn-on.

D Measurement

The department will measure Install [Equipment] at the contract unit price, 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.0060.301	Install Poles Type 10 Special	EACH
SPV.0060.302	Install Monotube Arms 35-FT Type 9/10 Special Pole	EACH
SPV.0060.303	Install Monotube Arms 45-FT Type 9/10 Special Pole	EACH
SPV.0060.304	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.

108. Trnspt & Install State Furn Traffic Signal Cabinet IH 43 Ramps & STH 164, Item SPV.0060.305.

A Description

This special provision describes the transporting and installing of department furnished materials for traffic signals.

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 (5) 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 department's Region Electrical personnel will perform the inspection.

Coordinate directly with the department's traffic signal cabinet vendor {TAPCO at (262) 814-7327 or rickk@tapconet.com / TCC at (651) 439-1737 or mallwood@trafficcontrolcorp} to schedule the cabinet acceptance testing. Coordinate with the department's Electrical Field Unit at (414) 266-1170 to participate in the acceptance testing. The department has final determination of the cabinet acceptance testing date and time.

D Measurement

The department will measure Trnspt & Install State Furn Traffic Signal Cabinet [Location] as each individual unit of work, 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.0060.305	Trnspt & Install State Furn Traffic Signal Cabinet IH 43 Ramps & STH 164	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.

109. Trnspt Traffic Signals & Inter Lighting Materials IH 43 Ramps & STH 164, Item SPV.0060.306.

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 of work, 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.0060.306	Trnspt Traffic Signals & Inter Lighting Materials IH 43 Ramps & STH 164	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.

110. Trnspt & Install State Furn EVP Heads STH 164 & CTH ES, Item SPV.0060.307; Trnspt & Install State Furn EVP Heads IH 43 Ramps & STH 164, Item SPV.0060.308.

A Description

This special provision describes the transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets at IH 43 Ramps & STH 164 and STH 164 & CTH ES.

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 and confirmation lights 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 wire them per manufacturer instructions. Mount the confirmation lights and wire them with 3-14 AWG Traffic Signal cable in a continuous run from the cabinet to the confirmation lights. 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 cabinet wiring 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 with confirmation lights.

D Measurement

The department will measure transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads, confirmation lights, and mounting brackets as each individual unit of work, 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.0060.308	Trnspt & Install State Furn EVP Heads IH 43 Ramps & STH 164	EACH
SPV.0060.307	Trnspt & Install State Furn EVP Heads STH 164 & CTH ES	EACH

Payment is full compensation for transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads, confirmation lights, and mounting brackets.

111. Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 Ramps & STH 164 and STH 164 & CTH ES, Item SPV.0060.309.

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.0060.309	Trnsprt and Install S-F FO Cable Pigtail 8-CT IH 43 Ramps & STH 164 and STH 164 & CTH ES	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.

112. Concrete Control Cabinet Bases Type 9 Special Super P, Item SPV.0060.310.

A Description

Work under this specification shall be done according to standard spec 654, contract plan detail, and these special provisions.

B Materials

Materials shall be according to standard spec 654.

C Construction

Construction shall be according to standard spec 654.

D Measurement

The department will measure Concrete Control Cabinet Bases Type 9 Special Super P bid item as each individual base, 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.0060.310	Concrete Control Cabinet Bases Type 9 Special Super P	EACH

Payment is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor rods, nuts, and washers; for bar steel reinforcement, if required; for excavating, backfilling, and disposing of surplus materials.

113. Tighten Bearing Anchor Bolt Nuts, Item SPV.0060.401.

A Description

This special provision describes tightening loose anchor bolt nuts at bridge bearings, as noted on the plans. Perform all work in accordance with standard spec 506 as modified in this special provision.

B Materials

(Vacant)

C Construction

Clean anchor bolts with solvent or as needed to allow for tightening of the bolt. Tighten the existing nut so that it has a tight fit with the bearing plate. Lubrication may be used to facilitate tightening.

D Measurement

The department will measure Tighten Bearing Anchor Bolt Nuts by each nut acceptably tightened.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.401	Tighten Anchor Bolt Nuts	EACH

Payment is full compensation for providing access to the bearing locations, cleaning the existing anchor bolt, and tightening the existing nuts.

114. Cleaning and Sealing Concrete Girder, Item SPV.0060.402.

A Description

This special provision describes the removing of any loose, delaminated, or deteriorated concrete from the end 3 feet of concrete girders, cleaning any exposed bar steel reinforcement or steel prestressing strand, applying an organic zinc rich primer and top coat to areas of cleaned exposed steel, and applying a non-pigmented epoxy where shown in the plans, and as directed by the engineer.

B Materials

B.1 Non-Pigmented Epoxy

Furnish a non-pigmented epoxy conforming to AASHTO M-235 Type III, Grade 2, Class B or C.

B.2 Coating System

Furnish primary organic zinc rich layer and intermediate layer paint from the department's approved product list for structure overcoating cleaning and priming

C Construction

C.1 Surface Preparation

Use construction methods according to standard spec 203 and 517, and as hereinafter provided:

1. Take necessary precautions while removing deteriorated concrete to preclude damage to the remaining sound concrete and preserve all existing reinforcing steel and prestressing strands.

Clean, realign and retie existing reinforcing steel, as the engineer considers necessary.

2. Clean all exposed bar steel reinforcement and steel prestressing strands to remove all rust and corrosion prior to painting. Provide Near-White Blast Cleaning (SSPC-SP10 or SSPC-SP11) level of cleanliness approved by the engineer.

C.2 Coating Application

Apply organic zinc rich primer and intermediate paint coat in a neat, workmanlike manner, and according to the Manufacturer's instruction and recommendations at locations shown on the plans and as directed by the engineer. Paint application shall be by brush. The color of the primer shall be such that a definite contrast between it and the color of the blasted steel is readily apparent. The color of the paint's top coat shall be concrete gray.

C.3 Epoxy Application

Coat exposed strand ends, girder ends, and all non-bonding surfaces within the surface preparation and coating application extents shown on the plans and as directed by the engineer with a non-pigmented epoxy. The epoxy shall be applied after zinc rich primer and intermediate paint coat are fully dry.

D Measurement

The department will measure Cleaning Concrete Girder as each unit of work, 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.0060.402	Cleaning and Sealing Concrete Girder	EACH

Payment is full compensation for removing loose, delaminated, or deteriorated concrete; preparing and cleaning exposed steel; furnishing and applying paint to exposed steel surfaces; furnishing and applying epoxy, cleaning up; and containing, collecting, and disposal of all waste materials.

115. Tieback Anchors, Item SPV.0060.403; Tieback Anchor Performance Tests, Item SPV.0060.404.

A Description

A.1 General

The work under this item consists of permanent, pressure-grouted or post grouted, ground anchors designed, furnished, installed, tested, and stressed.

Install ground anchors that shall develop the load carrying capacity indicated on the plans conforming to the testing subsection of these special provisions.

The contractor has the option to provide an alternate permanent earth anchor system with the approval of the department. The contractor shall then be responsible for selecting the permanent earth anchor type, method of installation, and for determining the bond length and anchor diameter that shall develop the factored design loads indicated on the plans. The analysis, design, construction and testing of the post

tiebacks shall conform to the AASHTO LRFD Bridge Design Specifications and the AASHTO LRFD Bridge Construction Specifications.

A.2 Qualifications of the Contractor

The contractor performing the work described in these special provisions must have installed ground anchors for excavation retaining walls for a minimum of 5 years. Submit a list containing at least five projects where the contractor has installed ground anchors. Specifically, experience must demonstrate competence in the use of pressure or post grouting. At least one project must show evidence of permanence with a 5-year minimum age. The project experience documentation must include a brief project description, construction methods used during installation, local soil conditions, actual construction time and contact information consisting of an individual's name and current phone number. Contacts must be capable of verifying project participation.

Submit staff experience records of the engineer, drill operators, and on-site supervisors who will be assigned to the project. The staff records must contain a summary of each individual's experience and it must be complete enough for the engineer to determine whether each individual has satisfied the following qualifications.

Assign an engineer to supervise the work who has at least four years of experience in the design and construction of anchored earth retaining structures in similar soils. Do not use consultants or manufacturer's representatives in order to meet the requirements of this section. Drill operators and on-site supervisors must have a minimum of one-year experience installing ground anchors with the contractor's organization.

Submit your qualifications and staff experience records at the preconstruction meeting or 21 calendar days prior to the start of ground anchor installation, whichever date is earlier. The engineer will approve or reject the contractor's qualifications and staff experience records within 14 calendar days after receipt of the submission. Do not start work on any ground anchor installation until approval of the contractor's qualifications and staff experience are given by the engineer. The engineer may suspend the ground anchor work if the contractor substitutes unqualified personnel for approved personnel during construction. If work is suspended due to the substitution of unqualified personnel, the adjustment in contract time resulting from the suspension of work will not be allowed.

A.3 Submittals

Prepare and submit to the engineer for review and approval working drawings and a design submission describing the ground anchor system or systems intended for use. The working drawings and design submission must be submitted thirty business days before the commencement of the ground anchor work. The working drawing and design submission must include certificates of compliance for the following materials, if used. The certificates must state that the material or assemblies to be provided will fully comply with the requirements of the contract.

- Prestressing steel or bar;
- Portland cement;
- Prestressing hardware;
- Bearing plates.

The engineer will approve or reject the contractor's submittals within 30 business days after receipt of the submission.

Submit to the engineer for review and approval or rejection mill test reports for the prestressing steel and the bearing plate steel. The engineer may require the contractor to provide samples of any ground anchor material intended for use on the project. The engineer will approve or reject the prestressing steel and bearing plate steel within five business days after receipt of the test reports. Do not incorporate the prestressing steel and bearing plates in the work without the engineer's approval.

Submit to the engineer for review and approval or rejection calibration data for each test jack, pressure gauge and reference pressure gauge to be used. The engineer will approve or reject the calibration data within 5 business days after receipt of the data. Do not commence testing until the engineer has approved the jack, pressure gauge, and reference pressure gauge calibrations.

Submit to the engineer within 10 calendar days after completion of the ground anchor work, a report containing the following information:

- As-Built plans showing the location and vertical and horizontal orientation of the tiebacks, capacity, tendon type, total length, and unbonded length as installed.

- Steel tendon, corrosion protection elements and grout certifications and/or mill reports.
- Grouting records indicating the following:
 1. Cement type;
 2. Cube test strength results;
 3. Grout volume for bonded and unbonded lengths;
 4. Grout pressure.
- Show on the as-built plans the type of testing performed for each post tieback.
- Tieback tests results (Performance and proof test data with load-anchor elongation curves).
- Other records as required per standard spec 106.

A.4 Definitions

Anchorage Devices. The anchor head wedges or nuts, which grip the prestressing steel.

Bearing Plate. The steel plate, which distributes the ground anchor force to the structure.

Bond Length. The length of the ground anchor, which is bonded to the ground and transmits the tensile force to the soil or rock.

Factored Design Load. The factored design load is the maximum anticipated factored load that will be applied to the ground anchor during its service life after stressing and testing have been completed. Design loads and applicable load factors are per AASHTO LRFD Bridge Design Specifications.

Ground Anchor. A system, referred to as a tieback or an anchor, used to transfer tensile loads to soil or rock. A ground anchor includes all prestressing steel, anchorage devices, bearing plates, grout, coatings, corrosion protection, and sheathings and couplers if used.

Minimum Specified Ultimate Tensile Strength. The minimum breaking strength of the prestressing steel as defined by the specified standard.

Tendon Bond Length. The length of the tendon, which is bonded to the anchor grout.

Total Anchor Length. The unbonded length plus the tendon bond length.

Unbonded Length. The length of the tendon, which is not bonded to the grout. The grout surrounding the unbonded length is a void filler and provides corrosion protection.

B Materials

B.1 References

AASHTO Standards

- M85 Portland Cement
- M183 Structural Steel
- M275 Threadbar Prestressing Steel
- M203 Seven-wire, low relaxation strands
- M222 High-Strength Low-alloy Structural Steel with 50,000 psi Minimum Yield Point to 4 Inches Thick
- M252 Corrugated Polyethylene Drainage Tubing

ASTM Standards

- A53 Specification for Steel Pipe
- A252 Specification for Welded and Seamless Steel Pipe Files
- A500 Specification for Cold-formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
- A722 Threadbar Prestressing Steel
- A779 Compact Seven-wire, low relaxation strands
- D1248 Specification for Welded and Seamless Steel Pipe Files

- D1784 Specification for Rigid Poly Vinyl Chloride (PVC) Compounds and Chlorinated Poly Vinyl Chloride (CPVC) Compounds
- D4101 Specification for Propylene Plastic Injection and Extrusion Materials

Post-Tensioning Institute Standards

- "Guide Specification for Post-Tensioning Materials," Post-Tensioning Manual, Post Tensioning Institute.
- "Specification for Unbonded Single Strand Tendons," Post-Tensioning Institute.
- "Recommendations for Prestressed Rock and Soil Anchors," Post-Tensioning.

B.2 Tieback Anchors

Admixtures that control bleed, improve flowability, reduce water content, and retard set may be used in the grout subject to the approval of the engineer. Expansive admixtures may only be added to the grout used for filling sealed encapsulations, trumpets, and anchorage covers. Accelerators are not permitted. Admixtures, if used, must be compatible with the prestressing steels and mixed per the manufacturer's recommendations.

Fabricate exposed anchorage covers from steel or ductile cast iron with a minimum thickness of 0.10 inches. Securely attach the cover to the anchorage device or bearing plate. If the cover is to be grease filled, then the cover must form a permanent watertight enclosure for the anchorage device.

Use anchorage devices capable of developing 95 percent of the minimum specified ultimate tensile strength of the prestressing steel tendon. The anchorage devices must conform to the static strength requirements of section 3.1.6 (1) and section 3.1.8 (1) of the PTI "Guide Specification for Post-Tensioning Materials".

Fabricate the bearing plate from steel conforming to ASTM A572 Grade 50 or AASHTO M223 Grade 50 specifications.

Fabricate the bondbreaker from a smooth plastic tube or pipe having the following properties:

- Resistant to chemical attack from aggressive environments, grout or grease.
- Resistant to aging by ultra-violet light.
- Fabricated from material non-detrimental to the tendon or bar.
- Capable of withstanding abrasion, impact, and bending during handling and installation.
- Enable the tendon to elongate during testing and stressing.
- Allow the tendon to remain unbonded after lock-off.

Use Type I, II, or III Portland cement conforming to AASHTO M85 for grout. The corrosion inhibiting grease must conform to the requirements of section 3.2.5 of the PTI, "Specification for Unbonded Single Strand Tendons".

Fabricate heat shrinkable tubes from a radiation crosslinked polyolefin tube internally coated with an adhesive sealant. Before shrinking, the tube must have a nominal wall thickness of 24 mils. The adhesive sealant inside the tube must have a nominal thickness of 20 mils.

Fabricate ground anchor tendons from a single bar. Additionally, the ground anchor tendons must conform to the following:

- Steel bars conforming to AASHTO M275, or ASTM A722.
- Seven-wire, low relaxation strands conforming to M203.

Use steel couplers capable of developing 95 percent of the minimum specified ultimate tensile strength of the tendon.

Use a sheath as part of the corrosion protection system for the unbonded length portion of the tendon.

Fabricate the sheath from one of the following:

- A polyethylene tube pulled or pushed over the prestressing steel. The polyethylene must be Type II, III, or IV as defined by ASTM D1248 (or approved equal). The tubing must have a minimum wall thickness of 60 mils plus/minus 10 mils.

- A hot-melt extruded polypropylene tube. The polypropylene must be cell classification PP 210 B5554211 as defined by ASTM D4101 (or approved equal). The tubing must have a minimum wall thickness of 60 mils plus/minus 10 mils.
- A hot-melt extruded polyethylene tube. The polyethylene must be high density Type III as defined by ASTM D3350 and ASTM D1248 (or approved equal). The tubing must have a minimum wall thickness of 60 mils plus/minus 10 mils.
- Steel tubing conforming to ASTM A500, minimum wall thickness of 0.20 inches.
- Steel pipe conforming to ASTM A53, Schedule 40 minimum.
- Plastic pipe conforming to ASTM A1185, Schedule 40 minimum.
- A corrugated tube conforming to the requirement of the tendon bond length encapsulation.

Spacers must permit grout to freely flow up the drill hole. Fabricate spacers from plastic, steel, or material that is non-detrimental to the prestressing steel. Do not use wood. A combination centralizer-spacer may be used.

Fabricate the trumpet used to provide a transition from the anchorage to the unbonded length corrosion protection from a steel pipe or tube conforming to the requirements of ASTM A53 for pipe or ASTM A500 for tubing. The trumpet must have a minimum wall thickness of 0.125 inches for diameters up to four inches and 0.20 inches for larger diameters.

Use potable water for mixing grout.

Fabricate tendons conforming to the following specifications.

- The tendons may be either shop or field fabricated from prestressing steel and materials conforming to the requirements of the Materials subsection of these special provisions. Fabricate the tendon as shown on the approved working drawings.
- The cement grout cover must provide corrosion protection of the tendon.
- Position spacers so their center-to-center spacing does not exceed ten feet. In addition, locate the upper spacer a maximum of five feet from the top of the tendon bond length, and locate the lower spacer a maximum of five feet from the bottom of the tendon bond length.
- The minimum unbonded length of the bar tendon must be 15 feet or as indicated on the plans or the approved working drawings, whichever is greater. The unbonded length must extend a minimum of 5 feet beyond the critical failure surface measured from the lowest subgrade level from the back of the retaining wall in the soil mass being retained by the wall. If the entire drill hole (tendon bond length and unbonded length) is grouted in one operation, then for the corrosion protection of the unbonded length provide either a sheath completely filled with corrosion inhibiting grease or grout, or a heat shrinkable tube internally coated with an elastic adhesive. If grease is used under the sheath, make provisions to prevent the grease from escaping at the ends of the sheath. The grease must completely coat the tendon, fill the void between the tendon and the sheath, and fill the interstices between the wires of the seven-wire strands. Provide a transition between the bond length and the unbonded length corrosion protection as illustrated in the working drawings. If the sheath is grout filled, a separate bond breaker must be provided. The bond breaker must prevent the tendon from bonding to the grout surrounding the unbonded length. If a grease-filled sheath corrosion protection is provided and the drill hole above the bond length is grouted after the ground anchor has been locked off, then grout the tendon inside a second sheath.
- The total anchor length must not be less than the minimum length indicated on the plans or the approved working drawings.
- Size the bearing plates so that:
 1. The bending stresses in the plate do not exceed the yield strength of the steel when a load equal to 95 percent of the minimum specified ultimate tensile strength of the tendon is applied;
 2. The average bearing stress on the concrete does not exceed that recommended in section 3.1.7 of the PTI, "Guide Specification for Post-Tensioning Materials".
- Weld the trumpet to the bearing plate. The trumpet must have an inside diameter equal to or larger than the hole in the bearing plate. The trumpet must be long enough to accommodate movements of the structure during testing and stressing. For strand tendons with encapsulation over the unbonded length, the trumpet must be long enough to enable the tendon to make a transition from the diameter of the tendon in the unbonded length to the diameter of the tendon at the anchorhead

without damaging the encapsulation. Trumpets filled with corrosion-inhibiting grease must have a permanent Buna-N synthetic rubber or approved equal seal provided between the trumpet and the unbonded length corrosion protection. Trumpets filled with grout must have a temporary seal provided between the trumpet and the unbonded length corrosion protection or the trumpet must overlap the unbonded length corrosion protection by a minimum of one foot and fit tightly over the unbonded length corrosion protection.

Damage to the prestressing steel because of abrasions, cuts, nicks, welds and weld splatter will be cause for rejection by the engineer. Protect the prestressing steel if welding is to be performed in the vicinity. Grounding of welding leads to the prestressing steel is forbidden. Protect the prestressing steel from dirt, rust or deleterious substances. If heavy corrosion or pitting is noted, the engineer will reject the affected tendons.

Use care in handling and storing the tendons at the site. Before inserting a tendon in the drill hole, the contractor and the engineer will examine the tendon for damage to the encapsulation and the sheathing. If, in the opinion of the engineer, the smooth sheathing has been damaged, repair it with ultra high molecular weight polyethylene tape.

C Construction

C.1 Anchor Installation

C.1.1 General

Unless otherwise directed, select the drilling method, pressure grouting, post grouting, the grouting procedure, and the grouting pressure used for the installation of the ground anchor.

C.1.2 Drilling Method

Unless otherwise directed, the contractor may choose to utilize rotary drilling with casing, duplex or dual rotary drilling method, rotary drilling with stabilizing fluid, percussion drilling with casing, hollow stem auger drilling or driven casing provided that the anchor hole is maintained in a stable condition at all times, preventing collapse or excessive over-excavation of soils. Pervasive hole caving or ground loss problems must be repaired by grouting at the contractor's expense to prevent damage to the adjacent ground mass and supported structures.

At the ground surface, locate the drill hole within twelve inches of the location shown on the plans or the approved working drawings. Locate the drill hole so the longitudinal axis of the drill hole and the longitudinal axis of the tendon are parallel. In particular, do not drill the ground anchor hole in a location that requires the tendon to be bent in order to enable the bearing plate to be connected to the supported structure. At the point of entry, the horizontal angle made by the ground anchor and the structure must be within plus/minus three degrees of a line drawn perpendicular to the plane of the structure unless otherwise shown on the plans or approved working drawings. Do not extend the ground anchors beyond the right-of-way or easement limits shown on the plans.

The tendon must be inserted into the drill hole to the desired depth without difficulty. When the tendon cannot be completely inserted, remove the tendon from the drill hole and clean or redrill the hole to permit insertion. Do not drive or otherwise force partially inserted tendons into the hole.

C.1.3. Grouting Method

Use a neat cement grout. The cement must not contain lumps or other indications of hydration. Admixtures, if used, must be mixed conforming to the manufacturer's recommendations.

Use grouting equipment that produces a grout free of lumps and undispersed cement. Use a positive displacement grout pump. The pump must be equipped with a pressure gauge in order to monitor grout pressures. The pressure gauge must be capable of measuring pressures of at least 150 psi or twice the actual grout pressures used by the contractor whichever is greater. The grouting equipment must be sized to enable the grout to be pumped in one continuous operation. The mixer must be capable of continuously agitating the grout.

Inject the grout from the lowest point of the drill hole. The grout may be pumped through grout tubes, casing, hollow-stem-augers, or drill rods. The grout may be placed before or after insertion of the tendon. Record the quantity of the grout and record the grout pressures. The grout pressures and grout takes must be controlled to prevent uncontrolled heave or fracturing.

The grout above the top of the bond length may be placed at the same time as the bond length grout but it may not be placed under pressure. The grout at the top of the drill hole must not contact the back of the structure or the bottom of the trumpet.

Upon completion of grouting and post grouting, the grout tube may remain in the hole but it shall be filled with grout. Do not load the tendon for a minimum of three days after grouting.

C.2 Installation of Trumpet and Anchorage

The corrosion protection surrounding the unbonded length of the tendon must extend up beyond the bottom seal of the trumpet or one foot into the trumpet if no trumpet seal is provided. If the protection does not extend beyond the seal or sufficiently far enough into the trumpet, extend the corrosion protection or lengthen the trumpet.

The corrosion protection surrounding the unbonded length of the tendon must not contact the bearing plate or the anchor head during testing and stressing. If the protection is too long, trim the corrosion protection to prevent contact.

Completely fill the trumpet with corrosion inhibiting grease or grout. Trumpet grease can be placed any time during construction. Place trumpet grout after the ground anchor has been tested and stressed. Demonstrate to the engineer that the procedures selected for placement of either grease or grout will produce a completely filled trumpet.

Cover all anchorages permanently exposed to the atmosphere with a corrosion inhibiting grease-filled or grout-filled cover. Demonstrate to the engineer that the procedures selected for placement of either grease or grout will produce a completely filled cover.

C.3 Anchor Testing

C.3.1 General

Test each ground anchor. Do not apply any load greater than 10 percent of the factored design load to the ground anchor prior to testing. The maximum test load must not exceed 80 percent of the minimum specified ultimate tensile strength of the tendon. The test load must be simultaneously applied to the entire tendon. Stressing of single elements of multi-element tendons is not permitted.

Supply the following testing equipment:

- A dial gauge or veneer scale capable of measuring to 0.01 inches used to measure the ground anchor movement. The movement-measuring device must have a minimum travel equal to the theoretical elastic elongation of the total anchor length at the maximum test load and it must have adequate travel so the ground anchor movement may be measured without resetting the device.
- A hydraulic jack and pump used to apply the test load. The jack and a calibrated pressure gauge must be used to measure the applied load. The jack and pressure gauge must be calibrated as a unit by an independent firm. The calibration must have been performed within forty-five business days of the date submitted. Testing cannot commence until the engineer has approved the calibration. The pressure gauge must be graduated in 100-psi increments or less. The ram travel of the jack must not be less than the theoretical elastic elongation of the total anchor length at the maximum test load.
- A calibrated reference pressure gauge must also be kept at the site. Calibrate the reference gauge with the test jack and pressure gauge.

C.3.2 Performance Tests

Install and conduct the performance tests. The anchors for the performance test must be similar to the production anchors shown on the plans, and must be selected as directed by the engineer. Record the encountered soil information through the entire depth of drilling holes. Submit performance test results and soil information to the engineer for approval. If the tested anchor(s) fail(s) to pass the performance tests, at least five workdays shall be allowed for the engineer to evaluate the test anchor(s) and the soil condition. Additional performance tests may be required upon request from the engineer. The additional performance test(s), as required, and time for the engineer to evaluate the test anchor(s), will be included in the work and will not be paid for separately. Do not order material for production anchors until the approval of the performance test results are given.

Conduct performance tests in accordance to the following procedures on five percent of the ground anchors or a minimum of three ground anchors per wall, whichever is greater. The engineer will select the ground anchors to be performance tested. Test the remaining ground anchors in accordance to the proof test procedures.

Conduct performance tests by incrementally loading and unloading the ground anchor in accordance to the following schedule. Raise the load from one increment to another immediately after recording the ground anchor movement. Measure and record the ground anchor movement to the nearest 0.01 inches with respect to an independent fixed reference point at the alignment load and at each increment of load. Monitor the load with a pressure gauge. Place the reference pressure gauge in series with the pressure gauge during each performance test. If the load determined by the reference pressure gauge and the load determined by the pressure gauge differ by more than ten percent, recalibrate the jack, pressure gauge and reference pressure gauge at no expense to the department. At load increments other than the maximum test load, hold the load just long enough to obtain the movement reading.

Performance Test Schedule

Load
AL
0.20 FDL*
AL
0.20 FDL
0.40 FDL*
AL
0.20 FDL
0.40 FDL
0.60 FDL*
AL
0.20 FDL
0.40 FDL
0.60 FDL
0.75 FDL
AL
0.20 FDL
0.40 FDL
0.60 FDL
0.75 FDL
1.00 FDL*
AL
0.20 FDL
0.40 FDL
0.60 FDL
0.75 FDL
0.90 FDL
1.15 FDL* (Max. test load)
Reduce to lock-off load – 0.60 FDL

Where, AL = Alignment Load

FDL = Factored Design Load for Tieback

* = Graph required

Hold the maximum test load in a performance test for ten minutes. Repump the jack as necessary in order to maintain a constant load. Start the load-hold period as soon as the maximum test load is applied. Measure and record at 1, 2, 3, 4, 5, 6, and 10 minutes the ground anchor movement with respect to a fixed reference. If the ground anchor movement between one minute and ten minutes exceeds 0.04 inches, hold the maximum test load for an additional 50 minutes. If the load-hold period is extended, record the ground anchor movement at 15, 20, 25, 30, 45 and 60 minutes.

Plot the ground anchor movement versus load for each load increment marked with an asterisk (*) in the performance test schedule and plot the residual movement of the tendon at each alignment load verses the highest previously applied load.

C.3.3 Proof Tests

Perform the proof test by incrementally loading the ground anchor in accordance to the following schedule. Raise the load from one increment to another immediately after recording the ground anchor movement. Measure and record the ground anchor movement to the nearest 0.01 inches with respect to an independent

fixed reference point at the alignment load and at each increment of load. Monitor the load with a pressure gauge. At load increments other than the maximum test load, hold the load just long enough to obtain the movement reading.

Hold the maximum test load in a proof test for ten minutes. Repump the jack as necessary in order to maintain a constant load. Start the load-hold period as soon as the maximum test load is applied. Measure and record the ground anchor movement with respect to a fixed reference at 1, 2, 3, 4, 5, 6, and 10 minutes. If the ground anchor movement between 1 minute and 10 minutes exceeds 0.04 inches, hold the maximum test load for an additional 50 minutes. If the load-hold period is extended, record the ground anchor movements at 15, 20, 25, 30, 45 and 60 minutes.

Proof Test Schedule

Load
AL
0.20 FDL
0.40 FDL
0.60 FDL
0.75 FDL
1.00 FDL
1.15 FDL (Max. test load)
Reduce to lock-off load – 0.60 FDL

Where, AL = Alignment Load

FDL = Factored Design Load for Tieback

Plot the ground anchor movement versus load for each load increment in the proof test.

Submit proof tests for review by the engineer within 7 days of testing.

C.3.4 Ground Anchor Load Test Acceptance Criteria

A performance- or proof-tested ground anchor with a 10-minute load-hold period is acceptable if the:

- The tieback resists the maximum test load with less than 0.04-inches of movement between 1 minute and 10 minutes.
- The total elastic movement of the tendon measured at the anchor head obtained from a proof or performance test must exceed 80 percent of the theoretical elastic elongation of the stressing or unbonded length for load increments 0.25 DL and above.
- The total movement of tendon must not exceed 100 percent of the theoretical elastic elongation of the unsupported length plus 50 percent of the supported length.

A performance- or proof-tested ground anchor with a 60-minute load-hold period or a creep-tested ground anchor is acceptable if the:

- Ground anchor carries the maximum test load with a creep rate that does not exceed 0.08 inches/log cycle of time; and
- Total movement at the maximum test load exceeds 80 percent of the theoretical elastic elongation of the unbonded length.

If the total movement of the ground anchors at the maximum test load does not exceed 80 percent of the theoretical elastic elongation of the unbonded length, replace the ground anchor at no additional cost to the department.

Ground anchors that have a creep rate greater than 0.08-inches/log cycle of time can be incorporated in the finished work at a load equal to one-half its failure load. The failure load is the load carried by the ground anchor after the load has been allowed to stabilize for ten minutes.

When a ground anchor fails, modify the design and/or the construction procedures. These modifications may include, but are not limited to, installing replacement ground anchors, reducing the factored design load by increasing the number of ground anchors, modifying the installation methods, increasing the bond length or changing the ground anchor type. Any modifications of design or construction procedures including installing additional anchors shall be at the contractor's expense and at no additional charge to the department.

Upon completion of the test, reduce the load to the lock-off load indicated on the plans and transfer the load to the anchorage device. The ground anchor may be completely unloaded prior to lock off. After transferring the load and before removing the jack, record a lift-off reading. The lift-off reading must be within ten percent of the specified lock-off load. If the load is not within ten percent of the specified lock-off load, reset the anchorage and record another lift-off reading. Repeat this process until the desired lock-off load is obtained.

D Measurement

The department will measure Tieback Anchors by each individual tieback anchor acceptably completed, that are capable of carrying the load specified on the plans, which includes a proof test of each anchor.

The department will measure Tieback Anchor Performance Tests by each individual performance test, 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.0060.403	Tieback Anchors	EACH
SPV.0060.404	Tieback Anchor Performance Tests	EACH

Payment for Tieback Anchors and Tieback Anchor Performance Tests is full compensation for drilling; grouting; furnishing all steel, bearing plates and corrosion-protection materials required and tensioning; testing; and for designing and providing additional or remediation anchors for failed ground anchors.

116. Outlet Control Manhole 4X4-FT, Item SPV.0060.801.

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 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.0060.801	Outlet Control Manhole 4X4-FT	EACH

Payment is full compensation for furnishing and installing Outlet Control Manhole and all incidentals to complete the work.

117. Outlet Control Manhole 5X5-FT, Item SPV.0060.802.

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 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.0060.802	Outlet Control Manhole 5X5-FT	EACH

Payment is full compensation for furnishing and installing Outlet Control Manhole and all incidentals to complete the work.

118. Pavement Cleanup Project 1090-39-70, Item SPV.0075.001.

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 & SB)
- STH 164 (NB & SB)
- Center Dr
- Woodland Lane
- 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 1090-39-70) 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.0075.001	Pavement Cleanup Project 1090-39-70	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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119. Animal Carcass Removal, Item SPV.0075.002.

A Description

This special provision describes removal and relocation of animal carcasses encountered within the work zone.

B Materials

Provide appropriate personal protective equipment for the removal of animal carcasses from the roadway.

C Construction

Collect animal carcasses from live lanes of traffic and shoulders as directed by the engineer. Complete animal carcass removal utilizing lane closures or mobile operations per SDD "Traffic Control, Short Duration Mobile Operations", during off peak hours as shown in the Freeway Lane Requirements. Remove animal carcasses within two (2) calendar days of notification by the engineer.

Provide adequate equipment to secure the animal carcasses to the vehicle or trailer to prevent animal carcass and animal residue from falling off.

Prepare a location map to relocate the carcasses to the nearest interchange outside the limits of any work zone with vegetated ramp shoulder slopes at least 300 feet from the mainline gore, for approval by the engineer. Place animal carcasses on the outside shoulder, outside the aggregate and within vegetation to obscure visibility from the traveling public, for pick up and disposal by others. Notify the engineer of the number and location of the carcasses to be picked up.

Notify the engineer prior to start and upon completion of the removal operations.

D Measurement

The department will measure Animal Carcass Removal by the HOUR that the contractor is actively picking up from the roadway, relocating, and dropping off the carcasses.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0075.002	Animal Carcass Removal	HR

Payment is full compensation for mobilization; traffic control, materials, equipment, loading, unloading, and delivery of animal carcasses to an engineer approved location; and submitting hourly invoices. The cost for lane closures and mobile operations, SDD "Traffic Control, Short Duration Mobile Operations", including vehicles and traffic control shall be incidental to the Animal Carcass Removal bid item. The department shall make no payment for time to set up and removal of traffic control and is considered incidental to the Animal Carcass Removal bid item.

120. Sealing Cracks and Joints with Hot-Applied Sealant, Item SPV 0085.001.

A Description

This special provision describes sealing primary crack and joints along their entire length of HMA and Portland cement concrete pavements, at locations shown in the contract documents or as directed by the engineer.

Primary cracks are defined as those cracks greater than or equal to 0.25-inches (6-mm) wide.

B Materials

B.1 Sealant Material

Use a sealant material meeting the requirements of ASTM D6690 Type II: Joint and Crack Sealants, Hot Applied, for Asphalt and Concrete Pavements, modified to require that the bond strength test be run at - 20° F (the unmodified ASTM D6690 Type II allows this test to be run at 0° F). Deliver the sealant in the manufacturer's original sealed container legibly marked with the following information:

- Manufacturer's name
- Trade name of sealant
- Manufacturer's batch or lot number
- ASTM D6690, Type II
- Minimum application temperature
- Maximum (or safe) heating temperature

Prior to commencing work, provide the engineer with a certificate of compliance along with a copy of the manufacturer's recommendations pertaining to heating and application of the sealant.

B.2 Equipment

Equipment used in the performance of this work is subject to the engineer's approval.

- **Air Compressor** shall be portable and have a minimum rated capacity of 100 ft³ of air per minute at 90-psi pressure at the nozzle, and have sufficient hose to maintain a continuing operation without interruption. The unit shall also be equipped with traps that will maintain the compressed air free of oil and water.
- **High Pressure Air Lance or Hot Air Lance** shall be designed specifically for use in cleaning highway pavement and to remove debris, dirt, and dust from the cracks.
- **Hand tools** shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools that may be satisfactorily used to accomplish this work.
- **Squeegees** shall be of a flexible rubber type, in the shape of a "vee" (V), and capable of contacting materials up to 450° F without damage to it or materials.
- **Pouring Pots** shall be equipped with mobile carriage, and have a flow control valve that allows all cracks to be filled to refusal so as to eliminate all voids or entrapped air and not leave unnecessary surplus crack sealer on pavement surfaces.
- **Melting Kettle** shall be constructed as a double lined boiler with space between the inner and outer shells filled with oil or other material for heat transfer. The material for transferring heat shall have a flash point of not less than 600° F. Positive temperature control and mechanical agitation will be provided. Direct heating shall not be used. When using, maintain the temperature of the sealing compound within the range specified by the manufacturer. The kettle shall be equipped with thermostatic controls calibrated between 200° F and 550° F.

C Construction

C.1 General

Prior to commencing work, complete all pavement repairs that are included in the contract and are adjacent to pavement cracks.

Furnish all equipment that is necessary for cleaning and sealing the pavement cracks. Use equipment meeting the description and performance requirements described herein and approved by the engineer.

Replace pavement markings that become covered or obliterated with the sealant, or both, at no additional cost to the department. Place the centerline marking, including no-passing zones on the same day that existing marking are obliterated, if the road is open to all traffic and if the surface is capable of retaining markings. Re-mark lane lines and edge lines within a timely manner.

C.2 Crack Preparation

Prepare cracks for sealing on the same day that they are to be sealed.

Use a high-pressure air lance or hot air lance to thoroughly clean cracks to a minimum depth of ½-inch (13-mm) of dust, dirt, foreign material, sand, and any other extraneous materials immediately prior to sealing. Do not burn, scorch, or ignite the adjoining pavement when using a hot air lance.

Install suitable traps or devices on the compressed air equipment to prevent moisture and oil from contaminating the crack surfaces. Maintain these devices and ensure that they are functioning properly.

Protect the public from potentially objectionable and/or hazardous airborne debris.

C.3 Sealant Melting

Heat and melt the sealant in a melter specified in B.2 Equipment.

Do not apply direct heat to the sealant. If and when using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure that heat is not radiated to the pavement surface.

Do not use sealant material heated beyond the safe heating temperature.

If the manufacturer's recommendations allow the sealant to be reheated or heated in excess of six hours, recharge the melter with fresh material amounting to at least 20 percent of the volume of the material remaining in the melter.

C.4 Sealing

Perform sealing when ambient air temperature is at or above 40° F (5° C).

Seal the crack by placing the applicator wand in or directly over the crack opening and carefully discharge the sealant. Strike-off the sealant flush with the pavement surface using a squeegee or using a sealing shoe pressed firmly against the pavement. Only a narrow thin film of material measuring from 1.0 inches to 3.0 inches (25 mm to 75 mm) wide is allowed on the pavement surface after sealing the crack.

A low pressure, light spray of water may be used to accelerate cooling of the sealant. Blotting the sealant with fine aggregate is not allowed. Remove and dispose of sealant in excess of the specified thin "film" dimensions or that has not bonded to both sides of the crack.

Do not allow traffic on the sealed cracks until the seal has cured so as not to track. Clean sealed cracks damaged from traffic with high pressure air and reseal them to meet the specified thin film amount at no additional cost to the department.

The finished work shall produce a watertight crack sealed flush with the pavement surface.

D Measurement

The department will measure Sealing Cracks and Joints with Hot-Applied Sealant by the number of pounds of sealant used to properly seal cracks. Prior to starting work each shift, the contractor shall supply and visually verify with the engineer an inventory, in containers, of sealant material. At the end of each shift, the contractor shall supply and visually verify with the engineer the ending inventory, in containers, of sealant material. The quantity of sealant used will be determined by counting the number of containers used each night multiplied by the indicated pounds of sealant contained in each container.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.001	Sealing Cracks and Joints with Hot-Applied Sealant	LB

Payment is full compensation for furnishing and placing the sealant; preparing the pavement surface; and replacing pavement markings.

121. Marking Epoxy 6-inch Black Non Grooved, Item SPV 0090.001.

A Description

This special provision describes applying epoxy black marking conforming to standard spec 646, as the plans show, and as follows.

B Materials

Furnish 6" black epoxy pavement marking materials conforming of standard spec 646.

C Construction

Apply 6' black epoxy conforming to standard spec 646.3.

D Measurement

The department will measure Marking Contrast Epoxy 6-Inch Black non grooved by the linear foot acceptably completed, measured once as the length of the centerline of the completed installation.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Marking Epoxy 6-inch Black Non Grooved	LF

Payment is full compensation for providing replacement marking.

122. Glare Screens Temporary, Item SPV.0090.002.

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
Valtir	15601 Dallas Parkway, Suite 525, Addison, Texas, 75001
Carsonite A Valmont Company	19845 U.S. Highway 76, Newberry, South Carolina, 29108
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.0090.002	Glare Screens Temporary	LF

Payment is full compensation for furnishing, installing, maintaining and removing the Glare Screens Temporary.

**123. Concrete Curb and Gutter 30-Inch Special, Item SPV.0090.003;
Concrete Curb and Gutter 60-Inch Special, Item SPV.0090.004.**

A Description

This special provision describes furnishing all labor, materials, and equipment necessary to construct Concrete Curb and Gutter Special to the dimensions and at the locations indicated on the plans.

B Materials

Furnish materials according to standard spec 601.2.

C Construction

Construct Concrete Curb and Gutter Special according to the details shown in the plan and standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter Special 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.0090.003	Concrete Curb and Gutter 30-Inch Special	LF
SPV.0090.004	Concrete Curb and Gutter 60-Inch Special	LF

Payment is full compensation for furnishing all labor, materials, and equipment necessary to complete the work as described in standard spec 601.5.

124. Concrete Barrier Temporary Precast Left in Place, Item SPV.0090.005.

A Description

This special provision describes leaving in place temporary precast reinforced concrete barrier conforming to the shape, dimensions, and details the plans show and in accordance to the pertinent provisions of standard spec 603, these special provisions, and as hereinafter provided.

Concrete Barrier Temporary Precast Contractor Left in Place becomes property of the department after final acceptance by the engineer.

Concrete barrier shall be new at initial delivery. Ownership identification shall include the department (DOT).

B (Vacant)

C Construction

Complete work in accordance to standard spec 603.3.2. Maintain the barrier until the contract is substantially complete.

D Measurement

The department will measure Concrete Barrier Temporary Precast Left in Place by the linear foot, acceptably completed, measured along the base of the barrier after final installation in its left-in-place 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.0090.005	Concrete Barrier Temporary Precast Left in Place	LF

Payment is full compensation for leaving Concrete Barrier Temporary Precast on the project site.

Furnishing concrete barrier temporary, initial delivery, installation, reinstallation, trucking between worksites, transitions between temporary and permanent barriers, and anchoring will be paid for separately under the bid items provided for in the contract.

125. Outdoor Rated Network Cable, Item SPV.0090.200.

A Description

This special provision describes furnishing and installing outdoor rated network cable in new conduit, as paid for with other items in this contract, or existing conduit, as shown on the plans or as directed by the engineer.

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.

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.

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 the measured quantity at the contract unit price each under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.200	Outdoor Rated Network Cable	LF

Payment is full compensation for furnishing, installing, and testing the outdoor rated network cable; for connecting the cable to the devices at each end of the cable; and for all labor, transportation, and incidentals necessary to complete the work.

126. Fiber Optic Warning Tape, Item SPV.0090.301.

A Description

This special provision describes furnishing and installing fiber optic warning tape above all conduit containing fiber optic cable.

B Materials

Provide underground warning mesh that is constructed of polypropylene and is fluorescent orange in color. Provide 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

C Construction

Lay underground warning mesh above all underground conduits, 12-inches below grade.

The width of the warning mesh shall be the same as the width of the trench. Lay directly above the underground warning mesh, a 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

D Measurement

The department will measure Fiber Optic Warning Tape in length by the linear foot of tape, measured along the centerline of the conduit.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.301	Fiber Optic Warning Tape	LF

Payment is full compensation for furnishing and installing the marking tape and properly disposing of surplus materials.

127. Saw Cutting and Chipping Concrete, Item SPV.0090.401.

A Description

This special provision describes creating longitudinal channels in the surface of the existing concrete slabs as directed by the engineer.

B (Vacant)

C Construction

C.1 Work Prior to Cleaning Decks Bid Item

Within the slab strengthening areas indicated on the plans, locate and mark existing longitudinal reinforcing bars using ground penetrating radar (GPR) or other acceptable means. Mark and locate existing transverse reinforcing bars in the immediate vicinity of holes to be drilled for adhesive anchors.

Lay out proposed saw cutting lines to create channels having a width and transverse spacing as indicated on the plans. The channels shall be centered as near as practical between the existing longitudinal reinforcing bars located near the piers.

Wet cut the sides of each channel to the depth and width as shown on the plans. Saw cutting directly over the existing longitudinal reinforcing steel is not allowed. Perform saw cuts prior to milling the bridge slab.

Remove sawing sludge after completing each longitudinal channel cut. Do not allow sludge or resulting residue to enter a live lane of traffic, storm sewer, stream, lake, reservoir, marsh, or wetland. Dispose of sludge at an acceptable material disposal site located off the project limits or, if the engineer allows, within the project limits.

C.2 Work After Cleaning Decks Bid Item

After slab milling has been completed, remove concrete from the channel areas by chipping with a jackhammer no larger than the 30-lb (14 kg) class to the depth shown on the plans. The bottom of the channel shall remain rough with a maximum amplitude of ¼". Sandblast all exposed surfaces in the channel and clean all exposed surfaces of saw slurry and loose material. Use high pressure air to clean the surface of all loose particles and dust. Dispose of all loose material at an acceptable material disposal site located off the project limits or, if the engineer allows, within the project limits.

D Measurement

The department will measure Saw Cutting and Chipping Concrete in length by the linear foot acceptably completed. Linear feet are to be measured along the length of the channels and include both saw cuts required to construct the channel.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.401	Saw Cutting and Chipping Concrete	LF

Payment is full compensation for locating and marking existing reinforcing steel, saw cutting, chipping, cleaning the channel, and disposing of all waste materials.

128. Pipe Underdrain 6-Inch Special, Item SPV.0090.402.

A Description

This special provision describes providing necessary subsurface drainage by constructing trenches, placing the required geotextile fabric, installing the designated pipes or drainage devices, connecting the underdrain to receiving structures, providing cored connection holes, back-plastering and or mortaring connections to storm sewer structures (both on the external and internal sides of the receiving structure), providing and installing PVC or HDPE fittings, and caps or plugs ,for excavating, plowing, backfilling the trenches with the specified backfill material in accordance to standard spec 310, 612 and 645, salvaging; disposing of surplus material; and restoring the work site as shown on the plans and details, and as hereinafter provided.

B Materials

B.1 Base Aggregate

Use only base aggregate open graded conforming to standard spec 310.2.

B.2 Geotextile Fabric

Utilize geotextile fabric consisting of Type DF Schedule A and conforming to standard spec 645.2.4. Completely wrap the installation trench with geotextile fabric.

C Construction

(Vacant)

D Measurement

The department will measure Pipe Underdrain 6-Inch Special by the linear foot acceptably completed. The department will measure along the centerline of the pipe, center to center of junctions and fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.402	Pipe Underdrain 6-Inch Special	LF

Payment is full compensation for providing, handling, and placing all materials, including pipe, base aggregate open graded, geotextile fabric Type DF Schedule A, providing cored connections, making all necessary connections to the receiving structures, performing back-plastering and or mortaring of underdrain connections to storm sewer structures, providing and installing all fittings, and caps or plugs; for furnishing all excavating, plowing, and re-compacting, salvaging; disposing of surplus material; and restoring the work site.

129. Cleaning Storm Sewer, Item SPV.0090.801.

A Description

This special provision describes the removal and disposal of accumulated sand, gravel, and other debris in existing storm sewer structures and pipes.

B (Vacant)

C Construction

A vacuum/jetting truck must be used that is considered standard within the storm sewer cleaning industry. Lift and move storm sewer structure lid/grate, remove sand, gravel, and other debris trapped in the inlet structure, and reinstall lid/grate. Follow all applicable OSHA requirements pertaining to confined spaces. Inlets may be connected to existing storm sewer systems and as such the absence of hazardous atmospheric conditions in the system cannot be guaranteed. Mechanized vacuum/excavation equipment is required.

Perform cleaning from upstream to downstream storm sewer structure whenever possible. Vacuum any wastewater and debris from the inlet and pipe cleaning/jetting activities from within the storm sewer structure. All material must be removed from the downstream storm sewer structure. Use a plug device to prevent material from passing from one section to another.

D Measurement

The department will measure Cleaning Storm Sewer by the linear foot acceptably completed.

This measurement equals the distance along the centerline of the pipe, from the pipe end at a free outlet to the center of the end catch basin, manhole, inlet, junction or other drainage structure; or from center to center of catch basins, end manholes, inlets, other drainage structures or junctions. The department will make no deduction from these measured lengths for intermediate catch basins, manholes, inlets, other drainage structures, junctions, or fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.801	Cleaning Storm Sewer	LF

Payment is full compensation for moving and reinstallation of the storm sewer structure lid/grate, removal and disposal off-site of the debris from the storm sewer structure and pipes, and all associated labor, safety measures or equipment including but not limited to a plug device and vacuum/jetting truck.

130. Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 38X60-Inch, Item SPV.0090.802.

A Description

This special provision describes providing new storm sewer pipe.

B Materials

Furnish pipe consistent with the diameter and class the bid item indicates.

Conform to standard spec 608.

C Construction

Conform to standard spec 608.

D Measurement

The department will measure Storm Sewer Pipe by the linear foot acceptably completed.

This measurement equals the distance along the centerline of the pipe, from the pipe end at a free outlet to the center of the end catch basin, manhole, inlet, junction or other drainage structure; or from center to center of catch basins, end manholes, inlets, other drainage structures or junctions. The department will make no deduction from these measured lengths for intermediate catch basins, manholes, inlets, other drainage structures, junctions, or fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.802	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 38X60-Inch	LF

Payment is full compensation for providing storm sewer; for joint seals, wraps and couplers; for concrete collars not required under 520.3.1(5) or 608.3.3(10); for excavating, except for rock excavation; for providing and removing sheeting and shoring; for constructing the foundation; for backfilling; for cleaning out; and for restoring the site.

131. Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 48X76-Inch, Item SPV.0090.803.

A Description

This special provision describes providing new storm sewer pipe.

B Materials

Furnish pipe consistent with the diameter and class the bid item indicates.

Conform to standard spec 608.

C Construction

Conform to standard spec 608.

D Measurement

The department will measure Storm Sewer Pipe by the linear foot acceptably completed.

This measurement equals the distance along the centerline of the pipe, from the pipe end at a free outlet to the center of the end catch basin, manhole, inlet, junction or other drainage structure; or from center to center of catch basins, end manholes, inlets, other drainage structures or junctions. The department will make no deduction from these measured lengths for intermediate catch basins, manholes, inlets, other drainage structures, junctions, or fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.803	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 48X76-Inch	LF

Payment is full compensation for providing storm sewer; for joint seals, wraps and couplers; for concrete collars not required under 520.3.1(5) or 608.3.3(10); for excavating, except for rock excavation; for providing and removing sheeting and shoring; for constructing the foundation; for backfilling; for cleaning out; and for restoring the site.

132. Reinforced Concrete Drainage Channel, Item SPV.0090.804.

A Description

This special provision describes constructing a reinforced concrete drainage channel behind retaining wall R-67-172.

B Materials

Furnish concrete for drainage channel confirming to standard spec 501.

Furnish reinforcement conforming to standard spec 505.

Furnish expansion joint filler conforming to standard spec 415.2.3.

C Construction

Place and secure steel reinforcement and tie bars in their plan position before placing concrete. Place and cure the concrete conforming to standard spec 415.3.

D Measurement

The department will measure Reinforced Concrete Drainage Channel 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.0090.804	Reinforced Concrete Drainage Channel	LF

Payment is full compensation for providing, placing, finishing and curing concrete; for steel reinforcement and tie bars; and for excavating, preparing the subgrade and aggregate base, and backfilling.

133. Timber Lagging, Item SPV.0110.401.

A Description

Work under this item consists of furnishing, delivering, and installing all timber lagging for soldier pile walls. Perform work according to pertinent parts of the standard specifications, the plans, and these special provisions.

B Materials

Use materials that conform to lumber as specified in standard spec 507 except that preservative treatments according to standard spec 507.2.2.6 are not required and untreated lumber may be used. Use Douglas fir or Southern pine construction grade rough-cut lumber with a minimum thickness of 3-inches. Where necessary provide certification that the timber conforms to the grade, species, and other specified requirements.

Ensure that the lagging size provided has sufficient strength to resist all loads applied to it during construction.

C Construction

Place timber lagging from the top-down in sufficiently small lifts immediately after excavation to prevent erosion of materials into excavation. Before placing lagging, smooth the soil face to create a contact surface for the lagging. Backfill and compact large voids behind the lagging. Maintain a minimal gap between each vertically adjacent board for drainage between adjacent lagging sections. Never place lagging in tight contact to adjacent lagging.

D Measurement

The department will measure Timber Lagging by the 1000-foot board measure, acceptably completed. The department will compute the measured quantity from the theoretical pay limits the contract plans show. The department will make no allowance for wall area constructed above or below the theoretical pay limits. All work beyond the theoretical pay limits is incidental to the cost of work. The department will make no allowance for as-built quantities.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0110.401	Timber Lagging	MBM

Payment is full compensation for designing, furnishing, framing, and installing the timber lagging.

134. Field Facilities Office Space, Item SPV.0135.001.

A Description

This special provision describes furnishing, equipping, and maintaining a field office as required in the contract at engineer-approved locations conforming to standard spec 642 and as follows.

B Materials

Provide Field Facilities Office Space conforming to standard spec 642.2.1 except delete paragraphs (1), (8), and (10).

Replace standard spec 642.2.1(4) with the following:

Provide and maintain suitable interior sanitary facilities conforming to State and local health requirements, in clean and good working condition, and stock with sanitary supplies for the duration of the contract. Furnish office space in an existing office building or existing building converted to office space with a minimum of 1200 square feet. The facility shall have no fee parking with a minimum parking for 15 cars. The space shall include a meeting room with a minimum of 350 square feet. The exterior door(s) shall have locks in good working order and keys provided for all field staff. The office space shall be located within 2 miles of the construction project.

Equip the office as specified in standard spec 642.2.2.1 except delete paragraph (1), (4), and (5) and add the following:

1. 5 suitable office desks with drawers and locks.
2. 5 ergonomically correct office chairs in working condition with at a minimum: 5-legged base with casters, seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge, and high backrest with no arms or adjustable arms.
3. 4 six foot folding tables.
4. 1 ten foot folding table.
5. 5 two-drawer file cabinets.
6. 3 four-shelf bookcases.
7. 20 folding chairs.

Provide and maintain a Windows 10 compliant multi-function device with the following capabilities:

1. Copy, print, and scan capabilities that accommodate 8 1/2" x 11" and 11" x 17" paper.
2. Color and black & white.
3. 1,200 sheet standard paper capacity.
4. 1200 x 1200 dpi print resolution.
5. 45 pages per minute print speed.
6. 1200 dpi scan resolution.
7. 150 images per minute scan speed.
8. Scan modes: E-mail, folder, USB, FTP.

Replenish paper, toner cartridges, and other supplies before fully expended. Ensure that the department staff can connect to the device either directly or through the field office wireless network.

Provide for the professional cleaning of the field office during regular business hours twice monthly. Provide clearly marked recycling and waste receptacles within the field office, and separate recycling and waste dumpsters near the field office. Cover outdoor containers to keep out rain, snow, and wind-driven debris. Provide regularly scheduled recycling and waste pick-up.

C Construction

Conform to standard spec 642.3 except delete paragraph (2).

D Measurement

The department will measure Field Facilities Office Space by the month, or partial month where applicable, 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.0135.001	Field Facilities Office Space	MON

Payment is full compensation for providing, equipping, securing, and maintaining the facility; for parking, for telecommunications equipment, installation, and service fees; and for providing bottled water, utilities, fuel, ventilation, and toilet facilities as required, either independently or jointly with the field laboratory, for the time specified in 642.3.

The department will pay for the cost of telecommunications usage fees incurred by department staff.

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135. Removing Loose Concrete Overhead, Item SPV.0165.401.

A Description

This special provision describes removing overhead concrete that is visually delaminated or deteriorated on structures as shown on the plans or as directed by the engineer, and applying a migrating corrosion inhibitor to existing and new areas of exposed steel reinforcing and spalled concrete. This work shall be according to the pertinent parts of standard spec 517 and the details as shown in the plans.

B Materials

Furnish a migrating corrosion inhibitor for vertical, horizontal and overhead applications that is according to the pertinent requirements of standard spec 517, and with the following typical physical properties:

- Color appearance: clear yellow viscous liquid,
- pH: 9.0 - 9.7 (neat),
- Density: 8.6 – 8.8 lb./gal. (1.03 – 1.05 kg/liter),
- Viscosity (or flow) similar to syrup and higher than water.
- Odor: slight ammonia smell.
- Non-volatile content: 20 – 27%.

Migrating corrosion inhibitor provided in this section shall conform to the requirements for each type and class of concrete required, with the following typical physical properties and requirements:

- Organic liquid.
- Water-based.
- Non-flammable.
- Non-vapor barrier.
- Non-toxic, oral LD 50 2000 g/kg maximum, or lower.
- Protects both anodic and cathodic areas.
- Does not contain calcium nitrate.
- Non-polluting after flushing or dilution.
- Non-harmful to plant life after flushing or dilution.
- Approved for potable water applications by NSF Standard 61.
- Certified for potable water applications by Underwriters laboratories.
- Not carcinogenic under occupational Safety and Health Agency, NTP, or IARC.

- Seven-year minimum usage experience as a migrating corrosion inhibitor.
- Confirmed effective by ASTM G – 109.
- Proven effective as reported by the Strategic Highway Research Program funded by the United States of America, Department of Transportation (DOT), federal government and state DOT's.

C Construction

C.1 Preparation

Remove all visually delaminated and deteriorated overhead concrete from the underside and bottom corners of the slab. Saw cutting of edges is not needed. Concrete and adjacent surfaces should be dry, clean, and free of all dirt, oil, grease, efflorescence, sealers, coatings, curing compounds, and membranes. Clean existing spalled surfaces and spalled surfaces created by overhead concrete removals on the slab underside by stream cleaning, water blasting, sandblasting, or shot blasting. Use an air compressor with water and oil trap to ensure the cleaning method does not apply materials intended for removal. Use brush, broom, sweeper, or air compressor on surfaces as final cleaning before application. Use brush, broom, sweeper, or air compressor to chase cracks as final cleaning before application. Do not apply if the ambient temperature near the applied concrete surface is expected to be below freezing water temperature within 12 hours of application.

C.1 Preparation

Use the corrosion inhibitor for overhead surface applications. Apply the solution by spray (conventional airless or hand pressure spray equipment), roller, squeegee, or paintbrush. Apply a rate of 150 square feet per gallon (3.7 square meters per liter). Minimal dry time is required and is usually minutes after treatment. Use of concrete substrate, such as for traffic, may resume when treatment is dry to touch.

D Measurement

The department will measure Removing Loose Concrete Overhead 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.0165.401	Removing Loose Concrete Overhead	SF

Payment is full compensation for concrete removal and disposal, cleaning preparation, furnishing, and for applying the product.

136. Geocomposite Drain Board, Item SPV.0165.402.

A Description

This special provision describes supplying and installing prefabricated geocomposite drain board as indicated on the plans. Perform work according to pertinent provisions of the standard specifications, the plans, and as hereinafter provided.

B Materials

Furnish materials that conform to the following properties in Table 1:

TABLE 1

Physical Properties	Test Method	Value
Thickness	n/a	0.25 inch
Flow Capacity (at 3,600 psi with I = 1)	ASTM D 4716 (mod)	9 gpm/ft
Geotextile Tensile Strength	ASTM D 4632	100 lb
Compressive Strength	ASTM D 1621 (mod)	10,000 lbs/SF
Mullen Burst	ASTM D 3786	Min. 200 lb
Apparent Opening Size	ASTM D 4751	70
Flow Rate	ASTM D 4491	Min. 140 gpm/SF

C Construction

Handle the prefabricated geocomposite drainage board in such a manner as to ensure the geocomposite is not damaged in any way. Take care during the placement of the geocomposite not to entrap dirt or excessive dust in the geocomposite that could cause clogging of the drainage system. Deliver, store, and handle the geocomposite according to manufacturer's recommendations. Place and secure geocomposite against the retaining wall back face as indicated on the plans with the fabric facing outward towards the backfill. Make seams and overlaps between adjacent boards according to the manufacturer's recommendations and specifications.

D Measurement

The department will measure Geocomposite Drain Board in area 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.0165.402	Geocomposite Drain Board	SF

Payment is full compensation for furnishing, installing, and trimming all materials; and for furnishing all equipment, fasteners, and incidentals necessary to complete the contract work.

No payment will be made for repairs to the geocomposite or for overlap of drain elements.

137. Excavation of Phragmites Contaminated Soil, Item SPV.0180.001.**A Description**

This special provision describes excavating soils designated in the plans as containing Phragmites as directed by the engineer, hauling and disposing excavated material to a DNR licensed landfill site, backfilling the excavated area, and decontamination of equipment.

B Materials

Furnish backfill material in accordance with standard spec 207.2.

C Construction

Complete excavation of phragmites in a fully dewatered and isolated work area.

Excavate soils as delineated in the plan to a minimum depth of 24-inches to remove all plant root matter or as directed by the engineer. Allow a minimum of 10 days between the Herbicide Application and excavation of phragmites contaminated soil. Haul excavated material to a licensed landfill site. Decontaminate equipment per Environmental Protection, Aquatic Exotic Species Control article of these special provisions.

D Measurement

The department will measure Excavation of Phragmites Contaminated Soil by the square yard, acceptably completed. The quantity measured for payment shall equal the actual number of square yards of excavated area as measured 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.0180.001	Excavation of Phragmites Contaminated Soil	SY

Payment is full compensation for dewatering, isolating work area, excavating, loading, hauling and wasting material, providing and placing backfill material, and decontamination of equipment. Payment for Herbicide Application, Seeding and Mulch will be paid under respective bid items.

138. Herbicide Application, Item SPV.0180.002.

A Description

This special provision describes providing the application of a post-emergence herbicide.

B Materials

Furnish post-emergence herbicide that is in accordance to the pertinent requirements of standard spec 632.2.12.

C Construction

Apply in accordance to manufacturer's instructions and applicable laws and regulations. Allow a minimum of 10 days between the application and excavation of phragmites contaminated soil. Apply herbicide when weeds are actively growing, avoiding early spring, late fall and periods of drought.

D Measurement

The department will measure Herbicide Application 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
SPV.0180.002	Herbicide Application	SY

Payment is full compensation for furnishing and applying herbicide.

139. HPC Pavement 10 1/2-Inch, Item SPV.0180.003.

A Description

This special provision describes specialized material and construction requirements for high performance concrete used in mainline pavement. Conform to standard spec 415, 501, 710, and 715 as modified in this special provision.

B Materials

415.2 Materials

415.2.1 Concrete

Replace standard spec 415.2.1(1) with the following:

- (1) Furnish grade A concrete conforming to 501 except develop a concrete mixture to follow 501.3.2.3 and as modified for class I pavement concrete in 715. Provide QMP for class I pavement concrete as specified in 715.

415.2.2 Reinforcement

Add the following to standard spec 415.2.2:

- (2) Furnish High Performance Dowel Bars from the APL.

501.2.7.3 Coarse Aggregates

501.2.7.3.1 General

Replace standard spec 501.2.7.3.1 with the following:

- (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.
- (2) Use clean, hard, durable crushed stone or crushed gravel 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 5 weeks prior to paving to collect a sample of the coarse aggregates proposed for the project. The department and contractor will jointly obtain and split samples with the department taking immediate possession of the department's splits. The sampler must be HTCP certified to sample aggregates. The department will perform tests according to 106.3.4.2.2.3 once per calendar year for coarse aggregates used in high-performance concrete mixes. Only the department test results will be used for coarse aggregate acceptance.
- (5) The department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete pavement.
- (6) For coarse aggregates with marginal freeze-thaw soundness test results per standard spec 106.3.4.2.2.1, the department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete pavement.

501.2.7.3.2 Physical Properties

Replace standard spec 501.2.7.3.2(1) 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]	WTM T96	30
Sodium Sulfate Soundness (R-4, 5 cycles) ^[1]	WTM T104	6
Freeze-Thaw Soundness ^[1]	WTM T103	10
Lightweight Pieces ^{[1] [2]}	WTM T113	2.0

^[1] Coarse aggregate sizes used in the Portland Cement Concrete mixture design (DT2221 Concrete Mixture Design – Optimized Aggregate Gradation) will be tested individually and the results weighted by the blend percentage listed in the mix design. Do not consider fine aggregate percentage as part of the weighted result.

^[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(1) with the following:

- (1) Furnish aggregates that conform to the following:

Deleterious Substance	Test Method	Maximum Percent by Weight
Coal, clay lumps, shale, and other deleterious substance	Visual	3.0
Flat or elongated pieces based on a 3:1 ratio ^[1]	WTM D4791	15.0
Materials passing the No. 200 sieve	WTM T11	1.5

710.5 Sampling and Testing

710.5.5 Strength

Replace standard spec 710.5.5(1) with the following:

- (1) Cast all 6-inch x 6-inch x 21-inch beams in a set from the same sample. Do not cast more than one set of specimens from a single truckload of concrete. Mark each specimen to identify the lot and subplot or location on the project it represents.

Add the following to standard spec 710.5.5:

- (4) Cast an additional set of three 6"x12" cylinders for concrete surface resistivity.

715.2.1 General

Replace standard spec 715.2.1(4) with the following:

- (4) The regional materials engineer must review and approve the submitted mix design within 7 business days of receiving the mix design submittal and complete Project Staff Review section of mix design certification within DT2220 or DT2221.

715.3 Testing and Acceptance

715.3.1 Class I Concrete Testing

715.3.1.1 General

Replace standard spec 715.3.1.1 (1) with the following:

- (1) Provide slump, air content, concrete temperature, and strength test results as specified in 710.5. Provide a battery of QC tests, consisting of results for each specified property, using a single sample randomly located within each subplot. Cast 3 specimens for strength evaluation.

715.3.1.1.1 Flexural Strength

Replace standard spec 715.3.1.1.1(1) with the following:

- (1) Cast 3 beams for flexural strength acceptance testing at 28 days.

715.3.1.1.2 Surface Resistivity

Replace standard spec 715.3.1.1.2 (1) with the following:

- (1) Test concrete surface resistivity according to AASHTO T358. Submit the resistivity to the nearest tenth into MRS for information only. Perform this testing at least once per lot.

715.3.2 Strength Evaluation

715.3.2.1 General

Replace standard spec 715.3.2.1 (1) with the following:

- (1) The department will make pay adjustments for strength on a lot-by-lot basis using the flexural strength of contractor QC beams.

715.5 Payment

715.5.1 General

Replace standard spec 715.5.1 with the following:

- (1) The department will pay incentive for strength under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
715.0715	Incentive Flexural 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 Flexural Strength Concrete Pavement administrative item.

- (4) The department will adjust pay for each lot using PWL of the 28-day subplot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows

- Flexural strength of 650 psi for pavements

- (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 strength results to the department electronically using the MRS software. The department will validate 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.

Delete standards spec 715.5.2.1.

C Construction

415.3.7 Jointing

415.3.7.1 General

Add the following to standard spec 415.3.7.1:

- (9) Treat sawed surfaces and at least 1" on both sides of transverse joints and longitudinal joints with a silane joint sealer found on the department's Concrete Protective Surface Treatments approved products list. Conform to the manufacturer's recommendations for use of the product.
- (10) The contractor shall perform a field trial under the department's observation to demonstrate the application method for the silane treatment of the joint. The field trial can be done with bricks or cinder blocks and shall be constructed in a way that represents a sawed concrete joint. The field trial must show the proposed application method can consistently treat the surfaces of the joint and 1" on both sides of the joint.
- (11) Clean the saw cut by water blast and air to thoroughly remove cutting residue prior to application of the silane treatment.

415.3.8 Surface Finishing

415.3.8.2 Design Speed Less Than 40 MPH

Add the following to standard spec 415.3.8.2:

- (4) Once the curing compound has been applied, do not alter the surface texture unless the engineer directs or allows otherwise.

415.3.8.3 Design Speed - 40 MPH and Higher

415.3.8.3.1 General

Add the following to standard spec 415.3.8.3.1:

- (5) Once the curing compound has been applied, do not alter the surface texture unless the engineer directs or allows otherwise.

415.3.12 Curing Concrete

415.3.12.1 General

Add the following to standard spec 415.3.12.1:

- (3) Cure all concrete within 75 minutes from the time concrete is discharged from the truck, unless the contractor can show the engineer there is still free water on the surface.

501.3.2.4.3.3 Extended Delivery Time

Delete standard spec 501.3.2.4.3.3(1).

501.3.5 Ready-Mixed Concrete

501.3.5.1 General

Replace standard spec 501.3.5.1(1) 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(3) with the following:

- (3) Deliver and completely discharge the concrete within the following limits, 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.

Delivered in Agitating Vehicles:

- 60 minutes regardless of the concrete temperature at placement and the contractor use of a department-approved retarder.

Delivered in Non-Agitating Vehicles:

- 30 minutes if the concrete temperature is 85 F or higher at placement, and the contractor does not use a department-approved retarder.
- 45 minutes if the concrete temperature is 60 F to less than 85 F at placement, and the contractor does not use a department-approved retarder.
- 60 minutes if the concrete temperature is less than 60 F at placement.
- 60 minutes if the concrete temperature is 60 F or higher at placement, and the contractor uses a department-approved retarder

501.3.8.2 Hot Weather Concreting

501.3.8.2.1 General

Replace standard spec 501.3.8.2.1 with the following:

- (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 90 F, do not place concrete for items covered in this special provision.
- (3) If the air temperature exceeds 80 F, ensure that the base material is in a moist condition during concrete placement. Water the base, as required, not less than 6 hours before placing the concrete. If the base material subsequently dries, moisten it by sprinkling water just before placing the concrete. Sprinkle the water to avoid forming pools.
- (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.

D Measurement

The department will measure HPC Pavement 10 1/2-Inch by square yards, acceptably completed, in accordance with standard spec 415 and as modified herein.

E Payment

Conform to standard spec 415.5 and as modified in this special provision.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.003	HPC Pavement 10 1/2-Inch	SY

The department will pay separately for the following bid items: 715.0715 Incentive Flexural Strength Concrete Pavement. Payment for is full compensation for providing pavement; for preparing the foundation, unless provided otherwise; 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 High Performance Dowel Bars within concrete placed under the contract. The department will pay separately for tie bars and High Performance Dowel Bars used to connect the work to concrete not placed under the contract under the Drilled Tie Bars and Drilled High Performance Dowel Bars bid items and 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.

140. HPC Pavement 8 1/2-Inch, Item SPV.0180.004.

A Description

This special provision describes specialized material and construction requirements for high performance concrete used in side road pavement, service ramps and shoulders. Conform to standard spec 415, 501, 710, and 715 as modified in this special provision.

B Materials

415.2 Materials

415.2.1 Concrete

Replace standard spec 415.2.1(1) with the following:

- (1) Furnish grade A concrete conforming to 501 except develop a concrete mixture to follow 501.3.2.3 and as modified for class I pavement concrete in 715. Provide QMP for class I pavement concrete as specified in 715.

501.2.7.3 Coarse Aggregates

501.2.7.3.1 General

Replace standard spec 501.2.7.3.1 with the following:

- (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.
- (2) Use clean, hard, durable crushed stone or crushed gravel 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 5 weeks prior to paving to collect a sample of the coarse aggregates proposed for the project. The department and contractor will jointly obtain and split samples with the department taking immediate possession of the department's splits. The sampler must be HTCP certified to sample aggregates. The department will perform tests according to 106.3.4.2.3 once per calendar year for coarse aggregates used in high-performance concrete mixes. Only the department test results will be used for coarse aggregate acceptance.
- (5) The department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete pavement.
- (6) For coarse aggregates with marginal freeze-thaw soundness test results per standard spec 106.3.4.2.2.1, the department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete pavement.

501.2.7.3.2 Physical Properties

Replace standard spec 501.2.7.3.2 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]	WTM T96	30
Sodium Sulfate Soundness (R-4, 5 cycles) ^[1]	WTM T104	6
Freeze-Thaw Soundness ^[1]	WTM T103	10
Lightweight Pieces ^{[1] [2]}	WTM T113	2.0

^[1] Coarse aggregate sizes used in the Portland Cement Concrete mixture design (DT2221 Concrete Mixture Design – Optimized Aggregate Gradation) will be tested individually and the results weighted by the blend percentage listed in the mix design. Do not consider fine aggregate percentage as part of the weighted result.

^[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 (1) with the following:

- (1) Furnish aggregates that conform to the following:

Deleterious Substance	Test Method	Maximum Percent by Weight
Coal, clay lumps, shale, and other deleterious substance	Visual	3.0
Flat or elongated pieces based on a 3:1 ratio ^[1]	WTM D4791	15.0
Materials passing the No. 200 sieve	WTM T11	1.5

710.5 Sampling and Testing

710.5.5 Strength

Replace standard spec 710.5.5(1) with the following:

- (2) Cast all 6-inch x 6-inch x 21-inch beams in a set from the same sample. Do not cast more than one set of specimens from a single truckload of concrete. Mark each specimen to identify the lot and subplot or location on the project it represents.

Add the following to standard spec 710.5.5:

- (5) Cast an additional set of three 6"x12" cylinders for concrete surface resistivity.

715.2.1 General

Replace standard spec 715.2.1 with the following:

- (4) The regional materials engineer must review and approve the submitted mix design within 7 business days of receiving the mix design submittal and complete Project Staff Review section of mix design certification within DT2220 or DT2221.

715.3 Testing and Acceptance

715.3.1 Class I Concrete Testing

715.3.1.1 General

Replace standard spec 715.3.1.1 (1) with the following:

- (1) Provide slump, air content, concrete temperature, and strength test results as specified in 710.5. Provide a battery of QC tests, consisting of results for each specified property, using a single sample randomly located within each subplot. Cast 3 specimens for strength evaluation.

715.3.1.1.1 Flexural Strength

Replace standard spec 715.3.1.1.1(1) with the following:

- (1) Cast 3 beams for flexural strength acceptance testing at 28 days.

715.3.1.1.2 Surface Resistivity

Replace standard spec 715.3.1.1.2 (1) with the following:

- (1) Test concrete surface resistivity according to AASHTO T358. Submit the resistivity to the nearest tenth into MRS for information only. Perform this testing at least once per lot.

715.3.2 Strength Evaluation

715.3.2.1 General

Replace standard spec 715.3.2.1 (1) with the following:

- (2) The department will make pay adjustments for strength on a lot-by-lot basis using the flexural strength of contractor QC beams.

715.5 Payment

715.5.1 General

Replace standard spec 715.5.1 with the following:

- (1) The department will pay incentive for strength under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
715.0715	Incentive Flexural 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 Flexural Strength Concrete Pavement administrative item.

- (4) The department will adjust pay for each lot using PWL of the 28-day subplot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows

- Flexural strength of 650 psi for pavements

- (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 strength results to the department electronically using the MRS software. The department will validate 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.

Delete standard spec 715.5.2.1.

C Construction

415.3.7 Jointing

415.3.7.1 General

Add the following to standard spec 415.3.7.1:

- (9) Treat sawed surfaces and at least 1" on both sides of transverse joints and longitudinal joints with a silane joint sealer found on the department's Concrete Protective Surface Treatments approved products list. Conform to the manufacturer's recommendations for use of the product.
- (10) The contractor shall perform a field trial under the department's observation to demonstrate the application method for the silane treatment of the joint. The field trial can be done with bricks or cinder blocks and shall be constructed in a way that represents a sawed concrete joint. The field trial must show the proposed application method can consistently treat the surfaces of the joint and 1" on both sides of the joint.
- (11) Clean the saw cut by water blast and air to thoroughly remove cutting residue prior to application of the silane treatment.

415.3.8 Surface Finishing

415.3.8.2 Design Speed Less Than 40 MPH

Add the following to standard spec 415.3.8.2:

- (4) Once the curing compound has been applied, do not alter the surface texture unless the engineer directs or allows otherwise.

415.3.8.3 Design Speed - 40 MPH and Higher

415.3.8.3.1 General

Add the following to standard spec 415.3.8.3.1:

- (5) Once the curing compound has been applied, do not alter the surface texture unless the engineer directs or allows otherwise.

415.3.12 Curing Concrete

415.3.12.1 General

Add the following to standard spec 415.3.12.1:

- (3) Cure all concrete within 75 minutes from the time concrete is discharged from the truck, unless the contractor can show the engineer there is still free water on the surface.

501.3.2.4.3.3 Extended Delivery Time

Delete 501.3.2.4.3.3 paragraph one.

501.3.5 Ready-Mixed Concrete

501.3.5.1 General

Replace standard spec 501.3.5.1(1) 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(3) with the following:

- (3) Deliver and completely discharge the concrete within the following limits, 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.

Delivered in Agitating Vehicles:

- 60 minutes regardless of the concrete temperature at placement and the contractor use of a department-approved retarder.

Delivered in Non-Agitating Vehicles:

- 30 minutes if the concrete temperature is 85 F or higher at placement, and the contractor does not use a department-approved retarder.
- 45 minutes if the concrete temperature is 60 F to less than 85 F at placement, and the contractor does not use a department-approved retarder.
- 60 minutes if the concrete temperature is less than 60 F at placement.
- 60 minutes if the concrete temperature is 60 F or higher at placement, and the contractor uses a department-approved retarder

501.3.8.2 Hot Weather Concreting

501.3.8.2.1 General

Replace standard spec 501.3.8.2.1 with the following:

- (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 90 F, do not place concrete for items covered in this special provision.
- (3) If the air temperature exceeds 80 F, ensure that the base material is in a moist condition during concrete placement. Water the base, as required, not less than 6 hours before placing the concrete. If the base material subsequently dries, moisten it by sprinkling water just before placing the concrete. Sprinkle the water to avoid forming pools.
- (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.

D Measurement

The department will measure HPC Pavement 8 1/2-Inch by square yards, acceptably completed, in accordance with standard spec 415 and as modified herein.

E Payment

Conform to standard spec 415.5 and as modified in this special provision.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.004	HPC Pavement 8 1/2-Inch	SY

The department will pay separately for the following bid items: 715.0715 Incentive Flexural Strength Concrete Pavement. Payment for is full compensation for providing pavement; for preparing the foundation, unless provided otherwise; 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 and 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.

141. Compost, Item SPV.0180.005.

A Description

This special provision describes providing and placing compost as shown in the plans and as hereinafter provided.

B Materials

Provide Class A Compost according to the requirements of the Wisconsin Department of Natural Resources Specification 'Compost for Storm Water Management', number S100, and as follows:

Compost shall meet the standards of Class A Compost as described in s. NR 502.12(16), Wis. Adm. Code, with the following additional requirements:

1. Particle size: 98% of the compost shall pass through 3/4-inch screen, and
2. Organic matter/ash content: ≥40% organic matter and <60% ash content, and
3. Physical contaminants: <1% combined glass, metal, and plastic.
4. Carbon to Nitrogen Ratio – 10-20:1 C:N ratio.
5. pH – Between 6 and 8.
6. Soluble Salts – Electrical conductivity below 10 dS m⁻¹ (mmhos cm⁻¹)
7. Moisture Content – Between 35% and 50% by weight.
8. Maturity – The compost shall be resistant to further decomposition and free of compounds, such as ammonia and organic acids, in concentrations toxic to plant growth.
9. Residual Seeds and Pathogens – Pathogens and noxious seeds shall be minimized.
10. Pathogens – The compost shall meet the Class A requirements for pathogens as specified in NR 204.07(6)(a), Wis. Adm. Code.
11. Other Chemical Contaminants – The compost shall meet the high-quality pollutant concentrations as specified in s. NR 204.07(5)(c), Wis. Adm. Code.

Definition of Ash: Measure of inert material after heating to 550 degrees Celsius. Provide a certification that the compost meets NR 502.12(16), Wis. Adm. Code. Remove any nonconforming compost and replace at no cost to the department.

C Construction

C.1 Placement and Settling of Drainage Basin Compost

Place 4-inches of compost on top of the existing fill material, as shown on the plan.

Rototill the 4-inches of compost into approximately 8-inches of the native fill layer to the final elevation shown on the plans.

Methods to induce mild settling of the compost layer, such as lightly tamping, may be used to prepare a stable planting medium. Vibrating-style plate compactors or other vibratory compactors are not allowed to induce settling.

C.2 Compaction Avoidance

Acceptable equipment for constructing the compost includes light equipment with turf type tires and/or marsh equipment or wide-track loaders.

During placement of the compost, avoid compaction beyond that allowed in this special provision.

C.3 Compaction Remediation

If compaction occurs, beyond that allowed in this special provision, re-fracture the soil to a depth of at least 12 inches. If smearing occurs, correct the smeared areas of the interface by raking or rototilling. Restore compacted or smeared areas at no additional cost to the department.

D Measurement

The department will measure Compost 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
SPV.0180.005	Compost	SY

Payment is full compensation for providing, stockpiling, loading, hauling, placing, and rototilling the material; for providing necessary protection from construction site runoff; for restoration of disturbed areas if necessary; and for re-fracturing compacted areas if necessary.

142. Abutment Seat Cleaning and Sealing, Item SPV.0180.401.

A Description

This special provision describes cleaning the top surfaces of concrete abutments and sealing them as the plans show and as the engineer directs.

B Materials

For bridge seat protection/sealing, coat the tops of abutments with a type of epoxy resin the manufacturer recommends for sealing exterior concrete surfaces, subject to the engineer's approval.

C Construction

C.1 Blast Cleaning Operation

Blast clean the top surface of the abutment according to SSPC SP-13 and ASTM D4259 for an abrasive blast cleaning to a surface roughness and finish as the engineer directs. Before abrasive blast cleaning operations are to begin, prepare a representative trial area on the abutment surface, and have the method of blast cleaning approved by the engineer. Provide means of protecting bearings and girders such that their coatings/paint are not removed or damaged during blasting operations.

C.2 Water Cleaning Operation

After abrasive blast cleaning operations are completed, clean the prepared pier cap surface with water according to ASTM D4258. Remove with this water cleaning all dust and loose material from the top surface of the abutments to be coated with epoxy for bridge seat protection. Provide an adequate drying time of at least 24 hours before coating with epoxy. Remove all loose concrete, dirt, dust, or blast material that remains in the area around the abutment, as the engineer directs.

D Measurement

The department will measure Abutment Seat Cleaning and Sealing by the square yard, acceptably completed.

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.0180.401	Abutment Seat Cleaning and Sealing	SY

Payment is full compensation for abrasive blast cleaning; for water cleaning; for all additional cleanup of the concrete surfaces and surrounding abutment areas; and for furnishing and applying bridge seat protection.

143. HMA Longitudinal Joint Repair, Item SPV.0195.001.

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 4 LT 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 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.0195.001	HMA Longitudinal Joint Repair	TON

Payment for the HMA Longitudinal Joint Repair item 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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ADDITIONAL SPECIAL PROVISION 1 (ASP 1) HIGHWAY CONSTRUCTION SKILLS TRAINING (HCST) 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 include: 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).

The Wisconsin Department of Transportation OJT program was originally established in 1995. Highway Construction Skills Training (HCST) was previously known as Transportation Alliance for New Solutions (TrANS) and underwent a name change in early 2023. HCST is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities, and disadvantaged persons as laborers and apprentices in the highway skilled trades. Candidate preparation and contractor coordination services (OJT Supportive Services) are provided by contracted community-based organizations.

I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or advancement to apprenticeship of Highway Construction Skills Training (HCST) graduates and employing eligible trainees in qualifying trades will be made as follows:

- 1) **On-the-Job Training, Item ASP.1T0G, ASP 1 HCST Graduate.** At the rate of \$5.00 per hour on Federal-aid projects when HCST graduates are initially hired, or seasonally rehired, as unskilled laborers or equivalent.
Eligibility and Duration: To the employing contractor, for up to 2,000 hours or two years, whichever comes first from the point of initial hire as a HCST placement.
Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 18 HCST Graduate(s) be utilized for 27000 hours on this contract.
- 2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of \$5.00 per hour on Federal-aid projects at the point when an employee who came out of the HCST Program is subsequently entered into an apprenticeship contract in a qualifying trade.
Eligibility and Duration: To the employing contractor, for the length of time that the HCST graduate is in apprenticeship status.
Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 7 HCST Apprentice(s) be utilized for 7000 hours on this contract.
- 3) The maximum duration of reimbursement is two years as a HCST graduate plus time in apprentice status.
- 4) If a HCST 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 Department of Transportation Labor Development Specialist at the phone number listed below.

- 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 HCST 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 HCST 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 HCST 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 HCST 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).

NOTE: 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 page 2 Dated January 2012 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 HCST graduate or a HCST apprentice. The compliance specialists utilize the information on the Certified Payrolls to track the hours accumulated by HCST Graduates and HCST 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. HCST 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. HCST 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 ensure that this training special provision is made applicable to such subcontract. Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training

special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not. No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons, and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation 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-Office of Business Opportunity & Equity Compliance (OBOEC). A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT OBOEC - Labor Development, 141 NW Barstow Street, Suite 411, PO Box 798, Waukesha, WI 53187.

VI. PROGRAM CONTACTS

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ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM IMPLEMENTATION

Authority

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

Requirements

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

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

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

Description

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

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

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

- (2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:
 - Produce accurate and complete quotes
 - Understand highway plans applicable to their work
 - Understand specifications and contract requirements applicable to their work
 - Understand contracting reporting requirements
- (3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: <http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

1. Definitions

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

- a. **Assigned DBE Contract Goal:** The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.
- b. **Bid Shopping:** In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.
- c. **DBE:** Disadvantaged Business Enterprise – A for-profit small business concern where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations.
- d. **DBE Commitment:** The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal. The prime contractor will have the option to submit the DT1506 digitally, as an entry with the bid in Bid Express, or as an attachment to the bid.
- e. **DBE Utilization:** The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of the DBE Commitment, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved DBE Commitment, and those submitted after approved commitment with Attachment A.
- f. **Good Faith Effort:** Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.
- g. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- h. **Reasonable Price:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.
- i. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- j. **Tied quote:** Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

2. WisDOT DBE Program Compliance

a. Documentation Submittal

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

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

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

b. Verification of DBE Commitment

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

(1) DBE Goal Met

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

(2) DBE Goal Not Met

- a) If the bidder indicates a bid percentage on the DBE Commitment that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) within 24-hours of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. The Department will review the bidder's DBE Commitment and evaluate the bidder's good faith efforts submission.
- b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:
 1. *Approve* the request (adequate documentation of GFE has been submitted) - no conditions placed on the contract with respect to the DBE Commitment;
 2. *Deny* the request (inadequate documentation of GFE has been submitted) - the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.

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

Supplemental good faith effort documentation must be submitted through eSubmit.

3. Department's Criteria for Good Faith Effort Documentation

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

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

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

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

- (1) Documents that it has obtained enough DBE participation to meet the goal; OR
- (2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

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

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

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

a. Solicitation Guidance for Prime Contractors:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.
- (2) As needed, request assistance with DBE outreach and follow-up by contacting the Department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE_Alert@dot.wi.gov
- (3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.
- (4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix B.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE firms to do work in a prime contractor's area of specialization.

- i. Solicit quotes from certified DBE firms who match possible items to subcontract using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which quotes are being sought to DBE_Alert@dot.wi.gov
- ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): <https://www.bidx.com/wi/main>, postal mail, email, fax, and phone.
 - a. Contractors must ask DBE firms for a response in their solicitations. See *Sample Contractor Solicitation Letter*, Appendix B. This letter may be included as an attachment to the sub-quote request.
 - b. Solicit quotes at least 10 calendar days prior to the letting date to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
 - c. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the solicitation.
- iii. Upon request, provide interested DBE firms with adequate information about plans, specifications, and the requirements of the contract by letter, information session, email, phone call, and/or referral.
- iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit, or insurance if requested.
- v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - a. Email to all prospective DBE firms in relevant work areas
 - b. Phone call log to DBE firms who express interest via written response or call
 - c. Fax/letter confirmation
 - d. Signed copy of record of subcontractor outreach effort

b. Guidance for Evaluating DBE quotes

- (1) Quote evaluation practices required to evaluate DBE quotes:
 - i. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).
- (2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:
 - i. Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, **a discussion** between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
 - a. In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
 - b. Additional evaluation - Evaluation of DBE quotes with tied bid items. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples:

- i Compare bid items common to both quotes, noting the reasonableness in the price comparison.
- ii Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

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

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

- (1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.
- (2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
- (3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.
- (4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.
- (5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.
- (6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials
- (7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

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

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

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

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

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

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

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

5. Determining DBE Eligibility

Directory of DBE firms

- a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at: <http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.
- c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

6. Counting DBE Participation

Assessing DBE Work

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

- a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.
- b. The Department counts fees and commissions the DBE subcontractor charges for providing bona fide professional, technical, consultant, or managerial services. The Department also counts fees and commissions the DBE charges for providing bonds or insurance. The Department will only count costs the program engineer deems reasonable based on experience or prevailing market rates.
- c. If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.
- d. The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.
- e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.

- f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it is committing/contracting the DBE to do. Note that the Department encourages the Prime Contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- g. The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment A forms for additional DBE firms.
- h. See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

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

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

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

7. Credit Evaluation for Trucking

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

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

See Section 8 for Broker credit.

8. Credit Evaluation for Manufacturers, Suppliers, Brokers

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

a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, **100%** percent of the cost of the materials or supplies counts toward DBE goals.

b. Regular Dealers of Material and/or Supplies

- (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications

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

- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
 - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.
- (4) When DBE suppliers are contracted, additional documentation must accompany the DBE Commitment and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with documentation of the calculations used as the basis for the purchase agreement, subcontract, or invoice. WisDOT recognizes that the amount on the Attachment A form may be more or less than the amount on the invoice per b.(1) above.
 - i. The bidder should respond to the following questions and include with submission of form DT1506 or the DBE Commitment entered with bid:
 - a. What is the product or material?
 - b. Is this item in the prime's inventory or was the item purchased when contract was awarded?
 - c. Which contract line items were referenced to develop this quote?
 - d. What is the amount of material or product used on the project?
- (5) Supplies purchased in **bulk** from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.
 - i. To ensure that the appropriate credit is assigned, follow the procedure below:
 - a. When DBE suppliers are contracted for bulk supply or commodity purchases, an invoice or bill-of-sale that includes names of the contractor and the DBE supplier should be submitted to the DBE Office via eSubmit (preferred during letting) or the DBE_Alert email box. The supply/commodity credit may be applied during the federal fiscal year (October- September) in which the purchase was made.
 - b. When the contractor intends to apply the credit to a particular project, submit a copy of the original invoice, documentation of the calculations for supplies/commodities to be used on the project, and an Attachment A. Indicate on the Attachment A:
 - c. This supply/commodity is in the prime's inventory or pre-paid in case of commodities
 - d. The full value of the original invoice submitted to the DBE Office, above in (1)
 - e. The amount of material or product used on this project
 - f. Fuel estimate listed on Attachment A will be recorded as a deduction from the full fuel purchase amount shown on the invoice
 - ii. DBE Office Process (Applies only to bulk purchases)
 - a. Supply/Commodity commitment is received
 - b. Engineer verifies amount listed on invoice and enters the full amount into spreadsheet
 - c. The amount of credit applied for each project is updated on the spreadsheet until the bulk purchase is exhausted
 - d. Engineer informs contractor when full amount of bulk purchase has been applied

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

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.
- (2) Brokerage fees are calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site.
- (4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

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

a. Issuing a Contract Change Order

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

b. Contractor Considerations

- (1) A prime contractor cannot modify the DBE Commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DBE Commitment without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.
- (2) If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.
- (3) The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.
- (4) In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason, or is terminated from a contract, the Prime Contractor must undertake efforts to maintain its commitment to the assigned DBE goal.
- (5) The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.
 - i. Before the Prime Contractor can request modification to the approved DBE Commitment, the Prime Contractor must:
 - a. Make every effort to fulfill the DBE Commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor's expectations for successful performance on the contract. Document these efforts in writing.

- b. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor's intent to request to modify the Commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.
- c. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who has been approved for DBE credit on a contract, including preparation and coordination efforts.
- d. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, to respond, in writing. EXCEPTION: The Prime Contractor must provide a verifiable reason for a response period shorter than five days. For example, a WisDOT project engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.
- e. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

c. Request to Modify DBE Subcontracting Commitment

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

- (1) Project ID number
- (2) WisDOT Contract Project Engineer's name and contact information
- (3) DBE subcontractor name and work type and/or NAICS code
- (4) Contract's progress schedule
- (5) Reason(s) for requesting that the DBE subcontractor be replaced or terminated
- (6) Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

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

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

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

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

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

d. Evaluation and Response to the Request

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

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

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

e. DBE Utilization beyond the approved DBE Commitment

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

- (1) Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DBE Commitment based on the email/discussion and the new Attachment A.
- (2) When adding to an existing DBE Commitment, submit a new Attachment A to the DBE Alert mailbox
- (3) OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete"

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

Special note on trucking

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

10. Commercially Useful Function

- a. Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.
- b. The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.

- c. A DBE firm is performing a commercially useful function if the following conditions are met:
 - (1) For contract work, the DBE is responsible for executing a distinct portion of the work and is carrying out its responsibilities by actually performing, managing, and supervising that work.
 - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.
- d. Offsite Hauling – when DBE truck will haul between a pit and plant or location other than the construction site associated with the commitment
 - (1) Indicate Offsite Hauling on Attachment A
 - (2) Discuss offsite hauling at weekly progress meetings with Project Engineer (PE)
 - (3) PE conducts spot checks of pits/plants to verify DBE truck is hauling and/or verifying hauling log
 - (4) Prime should be prepared to submit haul tickets, plant/pit tickets, timecards, and other pertinent documentation if requested by PE or DBE Office

11. Credit Evaluation for DBE Primes

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

12. Joint Venture

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

13. Mentor-Protégé

- a. If a DBE performs as a participant in a mentor-protégé agreement, the Department will credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit is evaluated and confirmed by the DBE Office for any contracts on which the mentor-protégé team identifies itself to the DBE Office as a current participant of the Mentor-Protégé Program.
 - (1) DBE credit may only be awarded to a non-DBE mentor firm for using its own protégé firm for less than one half of its goal on any contract; and
 - (2) Not award DBE credit to a non-DBE mentor firm for using its own protégé firm for more than every other contract performed by the protégé firm.
- c. A DBE protégé firm may be eligible for conditional NAICS code extension for training with the mentor. Request permission from the DBE Office- Certification area.
- d. Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

14. Use of Joint Checks

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

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

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

- a. The Prime Contractor must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
 - (1) Request should be made when the DBE Commitment or the Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
 - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
 - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
 - (4) The joint check for supplies must be strictly for the cost of approved supplies.
- b. The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an 'extra participant' in the transaction. The DBE firm's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following:
 - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price, and delivery of materials.
 - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the [Application to Use Joint Checks](#) after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor.
 - (1) The Prime Contractor agrees to furnish the check used for the payment of materials/supplies under the contract.
 - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractor's negotiated unit price.

15. Payment

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

Appendix A

Substantive Conversation Guidelines

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

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.

Appendix B

Sample Contractor Solicitation Letter Page 1

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

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

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

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

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

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

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

When are quotes due?

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

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

Why partner with [Prime Contractor]?

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

Sample Contractor Solicitation Letter Page 2*(This sample is provided as a guide, not a formatting requirement)***REQUEST FOR QUOTE****[Prime Contractor]****Letting Date: [Month] [Day], [Year]****Project IDs: 1234-56-00 (Proposal #1) & 1234-01-78 (Proposal #6)**

Please check all that apply:

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

Prime Contractor Contact: _____

DBE: _____

Phone: _____

Fax: _____

Email: _____

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

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

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

Sample Contractor Solicitation Email - Simplified

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

ATTENTION DBEs

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

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

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

- Please review the attachments **[attach Solicitation Letter]** and respond with your intent to quote (or not) along with the work items you are interested in performing and respond via fax or email by date. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Please include labor, equipment, material, and related bonding or insurance.
- If you have any questions regarding bonding, credit, insurance, equipment and/or materials/supplies, please feel free to call [Prime Contractor] and ask for [Contact]. **(Include if your company is willing to answer these types of DBE questions)**
- Plans and Specifications can be found: **WisDOT HCCI Website: List webpage where plans are located**
- If you do choose to quote, please make every effort to have your quote into our office by time and date. Make sure the correct letting date, project number, unit price and extension are included in your quote.
- Should you have questions regarding the mentioned project, please call our office at (414) 555-5555 and we will direct you to the correct estimator/project manager.
Our office hours are 7:30 a.m. - 5:00 p.m.

Thank you – we look forward to working with your company on this project!

Prime Contractor
Project Manager
Direct: 414-555-5555
Cell: 414-555-5556

Sample Contractor Solicitation Email to **non-DBE** WisDOT Subcontractors - Simplified

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

ATTENTION WisDOT SUBCONTRACTORS

[Prime Contractor] is considering bidding on the below projects for the XX/XX/20XX WisDOT Bid Letting:

Project	Proposal	County	Region	DBE Goal
1234-56-00	2	Dodge	SW	6.00%
1234-01-78	11	Adams	NC	3.00%
1234-00-99	20	Buffalo	NW	5.00%
1234-00-98	33	Portage	NC	6.00%

The above projects have DBE goals and [Prime Contractor] is committed to DBE inclusion with every project. As such, we are requesting:

- All WisDOT Subcontractors to **solicit and utilize** DBEs in your quotes.
- DBE participation can be achieved through purchasing materials from DBE suppliers, using DBE subcontractors and/or DBE trucking firms or any combination of these.
- If there is an opportunity to untie an item in your quote so a DBE can be utilized, please look for those opportunities as well.
- Your quote will be evaluated based on the amount of DBE participation your company is able to provide when compared to other quotes for the same work.

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

Should you have questions regarding the mentioned project, the Project Manager contact is: [Name] [Phone Number] [Email]

Thank you for utilizing DBEs who are trusted industry partners with WisDOT projects.

Prime Contractor
Project Manager

Direct: 414-555-5555
Cell: 414-555-5556

Appendix C

Small Business Network (SBN) Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for later completion.
2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE preferred request.
 - d. Add attachments to sub-quotes.
3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. The DBE will provide free SBN accounts to DBEs when requested. Use DBE_Alert@dot.wi.gov to request an account. **DBE firms can:**

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
 - c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
 - c. Add attachments to a sub-quote.
 - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime.
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to www.bidx.com and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.

Appendix D

Good Faith Effort Evaluation Measures *by categories referenced in DBE regulations*

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met or if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- Review and response to DBE quotes including provision of information about plans, specifications, and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's 30%
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (*points added for each day prior to letting*)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- Evidence of negotiation with the DBE firm about current and future Let opportunities
- Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements

GFE Evaluation Rubric – Phase 1 – Initial Review

DT1202	Examples	Rating	OBOEC Feedback
Solicitation Documentation	<p>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.</p> <p><i>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)</i></p>		
Selected Work Items Documentation	<p>All work items are broken out into economically feasible units to facilitate DBE participation.</p> <p><i>Such as: Selected work items are specific to each proposal and clearly identified in all solicitation(s)</i></p>		
Documentation of Project Information provided to Interested DBEs	<p>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.</p> <p><i>Such as: Project information is clearly identified in all solicitation(s)</i></p>		
Documentation of Negotiation with Interested DBEs	<p>Provide sufficient evidence demonstrating that good faith negotiations took place during the bid letting.</p> <p><i>Such as: Documented attempts with DBEs or on behalf of DBEs to increase DBE participation</i></p>		
Documentation of Sound Reason for Rejecting DBEs	<p>Provide sufficient evidence demonstrating that DBEs are rejected for sound reasons.</p> <p><i>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.</i></p>		
Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials	<p>Documented assistance in both solicitation(s) and outreach to DBEs.</p>		
Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support	<p>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.</p> <p><i>Such as: Variety of activities that translate into meaningful DBE participation</i></p>		
Documentation of other GFE activities	<p><i>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</i></p>		
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) Conducting 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 SUBCONTRACT TO DBE

Wisconsin Department of Transportation

Proposal # _____

County: _____

DBE Goal Achieved:	0.00 %
--------------------	--------

[illegible]

**COMMITMENT TO SUBCONTRACT TO DBE
ATTACHMENT A**

CONFIRMATION OF PARTICIPATION

Project I.D.:	Proposal Number:
Letting Date:	

Name of DBE Firm Participating in this Contract:	
Name of the Prime/Subcontractor who hired the DBE Firm: <i>(list all names of tiers if more than one)</i>	
Type of Work or Type of Material Supplied:	
Total Subcontract Value:	Total DBE Credit Value:

FOR PRIME CONTRACTORS ONLY: I certify that I made arrangements with the participating DBE firm to perform the type of work listed or supply the material indicated above for the subcontract value listed above.	Prime Contractor Representative's Signature
	Prime Contractor Representative's Name (Print Name)
	Prime Contractor (Print Company Name)
	Date

FOR PARTICIPATING DBE FIRMS ONLY: I certify that I made arrangements with the Prime Contractor or the Hiring Contractor to perform the type of work or supply the material indicated above for the subcontract value listed above. FOR DBE TRUCKING FIRMS ONLY: I certify that I will utilize, for DBE credit, only trucks listed on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks as listed below.	Participating DBE Firm Representative's Signature	Date
	Participating DBE Firm Representative's Name (Print Name)	
	Participating DBE Firm (Print Company Name)	
	DBE Firm's Address:	

# Owned Trucks	# Leased Trucks	# DBE-Owned Leased Trucks	# Non-DBE-Owned Leased Trucks

☐ Off site Hauling

**DOCUMENTATION OF GOOD FAITH EFFORT**
 Wisconsin Department of Transportation
 DT1202 3/2020


Project ID *****	Proposal No. *****	Letting *****
Prime Contractor *****	County *****	
Person Submitting Document *****	Telephone Number *****	
Address *****	Email Address *****	

All bidders must undertake necessary and reasonable steps to achieve the assigned DBE contract goal per federal regulatory guidance at 49 CFR Part 26. Bidders use this form to document all efforts employed to meet the assigned goal as a record of contractor good faith efforts (GFE). Refer to ASP3 or 49 CFR Part 26 for guidance on actions that demonstrate good faith effort.

It is critical to list all efforts, attach documentation, and follow the instructions to complete this submission. Documentation of good faith effort includes copies of each DBE and non-DBE subcontractor quote submitted to the bidder for the same line items. Utilize the sample documentation logs to document and organize efforts.

Submit good faith effort documentation per ASP-3 guidelines.

Instructions: Provide a narrative description of all activities pursued to demonstrate good faith efforts, any corresponding documentation, and applicable explanation on separate pages. Include the following items, organized in the order listed below.

1.→ Solicitation Documentation:

a.→ Purpose: To identify all reasonable and available activities the bidder performed to solicit the interest of all certified DBEs who have the capacity and ability to perform work on the project. All solicitation efforts should begin as early as possible to ensure DBEs have ample time to respond and ask questions.

b.→ Action: Identify and list all activities engaged in to solicit DBEs using all reasonable and available means such as written notice and follow-up communications; substantive conversations; pre-bid meetings; networking events; market research; advertising.

2.→ Selected Work Items Documentation:

a.→ Purpose: To ensure that all work items are broken out into economically feasible units to facilitate DBE participation. This must occur even when you prefer to perform the work yourself.

b.→ Action: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.

3.→ Documentation of Project Information provided to Interested DBEs:

a.→ Purpose: To provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.

b.→ Action: Provide DBEs access to plans, specifications, and other contract requirements. Early solicitation allows ample opportunity to provide project information, links to Let advertisements, and substantive engagement with DBEs.

4.→ Documentation of Negotiation with Interested DBEs:

a.→ Purpose: To ensure that negotiations with interested DBEs were made in good faith providing evidence as to why agreements could not be reached for DBEs to perform work.

b.→ Action: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts. A bidder using good business judgment considers a number of factors in negotiating with all subcontractors, and the firm's price and capabilities in addition to contract goals are taken into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for failing to meet the DBE goal as long as costs are reasonable. (see 49 CFR Part 26 Appendix A)

5.→ Documentation of Sound Reason for Rejecting DBEs:

a.→ Purpose: To ensure that bidders avoid rejecting DBEs as unqualified without sound reasons. Reasons for rejection must be based on thorough investigation of DBE capabilities.

b.→ Action: Provide sufficient evidence to demonstrate that DBE was rejected for sound reasons such as past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, other tangible factors.

6.→ Documentation of Assistance to Interested DBEs--Bonding, Credit, Insurance, Equipment, Supplies/Materials:

a.→ Purpose: To assist interested DBEs in obtaining bonds, lines of credit, insurance, equipment, supplies, materials, and other assistance or services.

b.→ Action: Assist interested DBEs in obtaining bonding, lines of credit or insurance, and provide technical assistance or information related to plans, specifications, and project requirements. Assist DBEs in obtaining equipment, supplies, materials or other services related to meeting project requirements (excluding supplies or equipment the DBE purchases from the prime).

7.→ Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support:

a.→ Purpose: To effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well as participation in activities that support DBE business development.

b.→ Action: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Return to:
 Wisconsin Department of Transportation
 DBE Program Office
 PO Box 7965
 Madison, WI 53707-7965
 DBE_Alert@dot.wi.gov

I certify that I have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, as demonstrated by my responses and as specified in Additional Special Provision 3 (ASP-3).

I certify that the information given in the Documentation of Good Faith Efforts is true and correct to the best of my knowledge and belief.

I further understand that any willful falsification, fraudulent statement, or misrepresentation will result in appropriate sanctions, which may involve debarment and/or prosecution under applicable state (Trans 504) and Federal laws.

		(Bidder/Authorized Representative Signature)

		(Print Name)

		(Title)

Good Faith Effort--Sample Documentation Logs

The sample logs below are provided as guides rather than exhaustive list. See ASP3, Appendix A for additional examples of demonstrable good faith efforts. Attach documentation for each activity listed.

Acceptable forms of documentation include copies of solicitations sent to DBEs, notes from substantive conversations and negotiations with DBEs, copies of advertisements placed, email communications, all quotes received from DBEs and from all subcontractors who were considered alongside DBE quotes, proof of attendance at applicable networking events; flyers for events or workshops for DBEs offered by the prime, and other physical records of good faith efforts activities.

SOLICITATION LOG

Date	Activity	Name of DBE Solicited	Follow-up
4/1/2020	Sent May-Let solicitation	Winterland Electric	Spoke with Mark Winterland on 4/15/20 to ask if he would quote.

SELECTED WORK ITEMS SOLICITED LOG

Work Type	DBE Firm	Contact Person	Date	Contact Mode
Pavement Marking	ABC Marking	Leslie Lynch	4/1/2020	Email; phone
	#1 Marking Co.	Mark Smart	4/1/2020	Email; left VM
Electrical	Winterland Electric	Tabitha Tinker	4/3/2020	Email, left VM
	Superstar Wiring	Jose Huascar	4/3/2020	Email; phone

INFORMATION PROVIDED LOG

Request Date	DBE Firm	Information Requested & Provided	Response Date
4/1/2020	Winterland Electric	Requested info on electrical requirements; provided plan and link to specs	4/3/2020
4/21/2020	Absolute Construction	Wanted to know how and when supplies are paid for by WisDOT; referred to spec that covers stockpiling	4/21/2020

NEGOTIATIONS LOG

Date	DBE Firm	Contact Name	Work Type	Quotes Rec'd?	Considered for project?	If not selected, why?
4/12/2020	ABC Landscape	John Dean	Erosion Control	Yes	No	Cannot perform all items
4/17/2020	Wild Ferns	Sandy Lynn	Erosion Control	Yes	Yes	
4/20/2020	#1 Marking	Mark Smart	Electrical	Yes	Yes	

ASSISTANCE LOG

Date	DBE Firm	Contact Person	Assistance Provided
4/1/2020	ABC Sawing	Jackie Swiggle	Informed DBE on how to obtain bonding
4/17/2020	Supreme Construction	Winston Walters	Provided contact for wholesale supply purchase

OUTREACH & BUSINESS DEVELOPMENT LOG

Date	Agency/Organization Contacted	Contact Person	Assistance Requested
4/1/2020	Women in Construction	LaTonya Klein	Contact information for woman-owned suppliers
4/28/2020	WBIC	Sam Smith	Asked for information to provide to DBE regarding financing programs through WBIC

Official Form DT1202 can be found here: <https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx>

ADDITIONAL SPECIAL PROVISION 4

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor is not allowed to withhold retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Acceptance and Final Payment

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work.

ADDITIONAL SPECIAL 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 \$2.55 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:

$$FA = \frac{CFI}{BFI} - 1 \times Q \times BFI$$

(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

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Additional Special Provision 6 (ASP-6)
Modifications to the standard specifications

Make the following revisions to the standard specifications.

104 Scope of Work

104.6.1.2.3 Drop-Off Protection

Replace subsection with the following effective with the November 2025 letting.

- (1) Eliminate vertical drop-offs greater than 2 inches and edge slopes steeper than 3:1 between adjacent lanes open to traffic.
- (2) If the roadway remains open to through traffic during construction and a greater than 2-inch drop-off occurs within 3 feet or less from the edge of the traveled way, eliminate the drop-off within 48 hours after completing that day's work. Provide aggregate shoulder material compacted to a temporary 3:1 or flatter cross slope from the surface of the pavement edge.
- (3) Unless the engineer allows otherwise address drop-offs when they exist greater than 3 and less than 8 feet from the travelled way as follows:
 - Delineate vertical drop-offs 2 inches or greater and edge slopes steeper than 3:1 with drums, barricades, and signs, by the end of the workday.
 - Eliminate vertical drop-offs 2 inches or greater and edge slopes steeper than 3:1 within 72 hours or before a weekend or holiday whichever comes first.
 - Eliminate or use temporary concrete barrier to protect vertical drop-offs 4-inches or greater after 72 hours or before a weekend or holiday whichever comes first.
- (4) If a 4-inch or greater vertical drop-off or an edge slope steeper than 3:1 exists greater than 8 and less than 15 feet from the traveled way, delineate that drop-off or edge slope with drums, barricades, and signs by the end of the workday.
- (5) If a 12-inch or greater vertical drop-off exists greater than 8 and less than 15 feet from a traveled way with a posted speed limit of 55 mph or greater, eliminate or use temporary concrete barrier to protect that drop-off within 72 hours or before a weekend or holiday whichever comes first.

104.6.1.2.4 Hazard Protection on Roads Open to All Traffic

Replace subsection with the following effective with the November 2025 letting.

- (1) On roads open to all traffic; conform to the following construction clear zone requirements:
 - Posted speeds 45 mph or less: within 8 feet of the travelled way.
 - Posted speeds from 45 mph to 55 mph inclusive: within 10 feet of the travelled way.
 - Posted speeds above 55 mph: within 15 feet of the travelled way.
- (2) Remove all construction debris, stored materials, and equipment not in use from the construction clear zone; or if the engineer allows, delineate and shield with concrete barrier.
- (3) Delay removal of existing permanent roadside safety devices until necessary. When located within the construction clear zone and not shielded by concrete barrier, use temporary traffic control drums to delineate bridge abutments, concrete barrier blunt ends, sign bridge foundations, drainage structures, and slopes exposed by removing permanent protective measures.
 - For exposed bridge abutments, concrete barrier blunt ends, sign bridge foundations, and drainage structures, eliminate the need for delineation within 5 calendar days.
 - For exposed slopes steeper than 3:1, eliminate the need for delineation within 14 calendar days, or duration approved by the engineer.

107 Legal Relations and Responsibility to the Public

Add section 107.27 (Drones or Unmanned Aircraft Systems (UAS)) effective with the November 2024 letting.

107.27 Drones or Unmanned Aircraft Systems (UAS)

107.27.1 Licensing and Compliance

- (1) Obtain and possess the necessary Federal Aviation Administration (FAA) licenses and certifications to operate drones commercially (<https://www.faa.gov/uas>).
- (2) Comply with all FAA regulations, airspace restrictions, and local laws. Operators of small drones that are less than 55 pounds for work or business must follow all requirements as listed in Title 14, Chapter 1, Subchapter

F, Part 107 of the Code of Federal Regulations (14 CFR) and obtain a remote pilot certificate (https://www.faa.gov/uas/commercial_operators).

- (3) Comply with Wisconsin State Statute 942.10. Limit operations to the specific approved purpose and employ reasonable precautions to avoid capturing images of the public except those that are incidental to the project.
- (4) Provide copies of waivers required for specific project conditions to the engineer prior to any flight.

107.27.2 Flight Approval, Safety, and Incident Reporting

- (1) Submit information in 107.27.2(2) to obtain written drone flight approval from the engineer at least 3 business days prior to operating a drone within the right-of-way. Do not operate a drone within the right-of-way unless approved by the engineer.
- (2) Drone flight application for review and approval must include:
 - UAS pilot information and qualifications, images of certification
 - UAS drone information and FAA tail numbers
 - Max/ Min allowable flight parameters (weather)
 - Specifics of flight mission: capture scope
 - Estimated flight duration
 - Pre-flight checklist
 - Site-specific parameters
 - Notification protocols - Federal/Local/Agency/Owner/Responsible in Charge
 - Confirmation and verification of approved operators and hardware
 - Flight plan map diagram (including launch and landing location)
 - FAA-Airspace flight map classification and confirmation with graphics
 - UAS incident management protocol
- (3) If contractor is requesting multiple types of the same flight, a simplified request can be submitted listing weekly flight plan.
- (4) Safety measures must include but are not limited to:
 - Regular training and updates on drone regulations are required and must be provided upon request.
 - Drones must be operated in accordance with safety guidelines, including maintaining a safe distance from people, structures, vehicles, etc.
 - Conduct a pre-flight safety assessment, considering weather conditions, airspace restrictions, and potential hazards.
 - Emergency procedures (e.g., drone malfunction, loss of control) must be documented and followed.
 - All incidents must be reported to the engineer.
- (5) If the drone has an incident during flight, report the following to the engineer:
 - Incident background and details.
 - FAA (14 CFR 107.9) and NTSB (49 CFR 870) notification protocol.
 - Contractor internal notification protocol.

107.27.3 Insurance Requirements

- (1) Maintain drone liability insurance with the following limits.
 - 1. For drones weighing 10 pounds or less, a liability policy with a minimum limit of \$1,000,000.00 is required.
 - 2. For drones weighing more than 10 pounds and less than or equal to 20 pounds, a liability policy with a minimum limit of \$2,000,000.00 is required.
 - 3. For drones weighing more than 20 pounds, notify engineer and department will determine appropriate liability policy coverage levels based on size, use, location, and other risk factors.

305 Dense Graded Base

305.3.3.3 Shoulders Adjacent to Asphaltic Pavement or Surfacing

Replace subsection with the following effective with the November 2025 letting.

- (1) If the roadway is closed to through traffic during construction, construct the aggregate shoulders before opening the road.
- (2) If the roadway remains open to through traffic during construction, conform as specified in 104.6.1.2.3.
- (3) Provide and maintain signing and other traffic protection and control devices, as specified in 643, until completing shoulder construction to the required cross-section and flush with the asphaltic pavement or surfacing.

310 Open-Graded Base**310.2 Materials**

Replace paragraph (2) with the following effective with the November 2025 letting.

- (2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (% passing by weight)**AASHTO No. 67^[1]**

SIEVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
2-inch	-
1 1/2-inch	-
1-inch	100
3/4-inch	90 - 100
1/2-inch	-
3/8-inch	20 - 55
No. 4	0 - 10
No. 8	0 - 5
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	-

^[1] Size according to AASHTO M43.

415 Concrete Pavement**415.3.16.4.1.2 Magnetic Pulse Induction**

Replace subsection with the following effective with the November 2025 letting.

- (1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.
- (2) The department will establish a project reference plate at the start of each paving stage. The department will notify the contractor of project reference plate locations before testing. The department will measure the project reference plate before each day of testing.
- (3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings fall within the 80 to 50 percent pay range.
- (4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable. Department will determine limits of unacceptable pavement by performing the following:
 - The engineer will test each consecutive plate stationed ahead and behind until the thickness test result is plan thickness or greater.
 - The engineer will direct the contractor to core the hardened concrete to determine the extent of the unacceptable area. In each direction, the contractor shall take cores at points approximately 20 feet from the furthest out of specification plate towards the plate that is plan thickness of greater. Once a core is within 80 to 100 percent pay range, the coring is complete and the limits of unacceptable pavement extend from the stationing between the core test results of 80 to 100 percent payment, inclusive of all unacceptable core and plate test results.
 - Perform coring according to WTM T24. The department will evaluate the results according to AASHTO T148
 - Fill core holes with concrete or mortar.

416 Concrete Pavement - Repair and Replacement**416.2 Materials****416.2.1 General**

Replace paragraph (3) with the following effective with the November 2025 letting.

- (3) The contractor may use accelerating admixtures for concrete placed under SHES bid items as follows:
1. If using calcium chloride,
 - AASHTO M144, type S as grade N1 or grade N2, class A.
 - AASHTO M144, type L in a concentration of approximately 30 percent for premixed solutions.
 2. If using non-chloride accelerators, conform to:
 - AASHTO M194, type C accelerating admixtures.
 3. Do not exceed the manufacturer's recommended maximum dosage.
 4. If the engineer requests, provide a written copy of the manufacturer's dosage recommendations.

416.2.4 Special High Early Strength Concrete Pavement Repair and Replacement**416.2.4.1 Composition and Proportioning of Concrete**

Add paragraph (4) to subsection effective with the November 2025 letting.

- (4) The contractor may use pre-packaged horizontal rapid set concrete patch material from the APL for partial and full-depth pavement repairs instead of specified grades of concrete.

506 Steel Bridges**506.3.12.3 High-Strength Bolts****506.3.12.3.1 Materials**

Replace subsection with the following effective with the November 2025 letting.

- (1) Install bolts according to AASHTO LRFD Bridge Construction Specifications, article 11.5.5, with the following exceptions:
1. If connections are assembled, install bolts with a hardened washer under the nut or bolt head, whichever is the element turned in tightening.
 2. If using oversized holes, 2 hardened washers are required, one under the bolt head and one under the nut.
 3. Bring the bolted parts into solid contact bearing before final tightening. Use not less than 25 percent of the total number of bolts in a joint to serve as fitting up bolts.
 4. For steel diaphragms on prestressed concrete bridges do the following:
 - 4.1. For steel-to-steel connections within diaphragms:
 - Tension by the turn-of-nut method.
 - 4.2. For steel-to-concrete girder connections:
 - No PIV or field rotational capacity (RoCAP) testing is required.
 - Tighten as the plan details specify.
- (2) Before fasteners are delivered to the site, provide documentation of rotational capacity testing in accordance with ASTM F3125, Annex A2, Rotational Capacity (RoCap) Test. The fasteners must be received in packages that match the fastener assembly combination as tested. If documentation of RoCap testing is not received; then perform this testing in the field prior to installation.
- (3) Install bolt, nut, and washer combinations from the same rotational-capacity lot.
- (4) Check galvanized nuts to verify that a visible dyed lubricant is on the threads and at least one bolt face.
- (5) Ensure that uncoated bolts are oily to the touch over their entire surface when delivered and installed.
- (6) Provide and use a Skidmore-Wilhelm Calibrator or an acceptable equivalent tension measuring device at each job site during erection. Perform pre-installation verification (PIV) testing in the field conforming to the procedures enumerated in department form DT2114 no earlier than 14 calendar days prior to permanent bolting. Submit 2 copies of form DT2114 to the engineer.
- (7) Prior to installation, ensure that the fastener condition has not changed due to accumulation of rust or dirt, weathering, mixture of tested assembly lots, or other reasons. If changes have occurred, including cleaning and re-lubricating of weathered bolts, the engineer will require re-qualification using RoCap testing in the field, for a minimum of two fastener assemblies of each combination to be used in permanent bolting, and PIV re-testing.

- (8) Additional RoCap or PIV tests are required whenever the condition of the fasteners or understanding of the bolting crew is in question by the Engineer. Do not allow permanent bolting until PIV testing is completed.
- (9) Tighten threaded bolts by the turn-of-nut method while holding the bolt head. Where clearance is an issue, the contractor may tighten the bolt head while holding the nut.
- (10) The contractor may use alternate tightening methods if the engineer approves before use.
- (11) The contractor may use a flat washer if the surface adjacent to and abutting the bolt head or nut does not have a slope of more than 1:20 with respect to a plane normal to the bolt axis. For slopes greater than 1:20, use smooth, beveled washers to produce parallelism.
- (12) Snug all bolts during installation according to AASHTO LRFD Bridge Construction Specifications, article 11.5.5.4.1.
- (13) Tighten each fastener to provide, if all fasteners in the joint are tight, at least the minimum bolt tension as follows:

TABLE 506-1 BOLT TENSION

BOLT SIZE	REQUIRED MINIMUM BOLT TENSION ^[1]
1/2-inch.....	12 kips
5/8-inch.....	19 kips
3/4-inch.....	28 kips
7/8-inch.....	39 kips
1-inch	51 kips
1 1/8-inch.....	64 kips
1 1/4-inch.....	81 kips
1 3/8-inch.....	97 kips
1 1/2-inch.....	118 kips

^[1] Equal to the proof load by the length measurement method as specified in ASTM F3125 for grade A35 bolts.

- (14) Do not reuse galvanized F3125 A325 bolts. The contractor may reuse uncoated F3125 A325 bolts, if the engineer approves, but not more than once. The department will not consider re-tightening previously tightened bolts that become loosened by the tightening of adjacent bolts as reuse.

506.3.19 Welding

Replace subsection title and text with the following effective with the November 2025 letting.

506.3.19.4 Welding Inspection

- (1) Inspect welding according to the current edition of AWS D1.5. Unless specified otherwise, test butt welds in main members by either the radiographic or the ultrasonic method.
- (2) Test fillet welds and groove welds not covered otherwise in main members in a non-destructive manner by the magnetic particle method according to ASTM E709, utilizing the yoke method. This includes, but is not limited to, a minimum of 12 inches in every 10 feet or portion thereof of each weld connecting web to flange, bearing stiffener to web or flange, framing connection bar to web or flange, and longitudinal stiffener to web or vertical bar.

506.3.31 Cleaning of Surfaces

506.3.31.2 Coated Surfaces

Replace subsection with the following effective with the November 2025 letting.

- (1) Blast clean structural steel and ferrous metal products to be coated as specified in 517.3.1.3.3.
- (2) Blast clean steel that will be encased in concrete to SSPC-SP 6 standards or cleaner.

506.3.32 Painting Metal

Replace subsection with the following effective with the November 2025 letting.

- (1) Unless the contract provides otherwise, apply 3 coats of paint to structural steel and ferrous metal products. Furnish and apply paints according to the epoxy system or as specified in the special provisions. The requirements for this system are set forth in 517.
- (2) For structural steel, including weathering steel, and miscellaneous metals that will be encased in concrete, paint as specified in 517.3.1.
- (3) For galvanized surfaces paint as specified in 517.3.1.
- (4) Use the 3-coat epoxy system to paint the end 6 feet of structural weathering steel at the abutments, the 6 feet on each side of piers, joints, downspouts, hinges, and galvanized bearings in contact with weathering

steel. Use a coat of brown urethane matching AMS Standard 595A: AMS-STD 20059. Apply one coat of zinc-rich paint to surfaces of expansion joint assemblies and other surfaces not in contact with the weathering steel but inaccessible after assembly or erection.

- (5) Do not paint structural steel to be welded before completing welding. If welding only in the fabricating shop and subsequently erecting by bolting, coat it after completing shop welding. Apply one coat of weldable primer or other engineer-approved protective coating to steel surfaces to be field welded after completing shop welding and shop fabrication. Protect machine-finished surfaces that do not receive a paint or galvanizing from contamination during the cleaning and painting process.
- (6) Upon fabrication and acceptance, coat pins and pinholes with a plastic or other engineer-approved coating before removing from the shop.
- (7) Mark members weighing 3 tons or more with their weights on areas that will be encased in concrete, or paint with a compatible paint on zinc-rich primer, or mark with soapstone on an epoxy-coated surface. Wait until material is dry, inspected, and approved for shipment before loading for shipment.

509 Concrete Overlay and Structure Repair

509.2 Materials

Replace subsection with the following effective with the November 2025 letting.

- (1) Furnish a neat cement bonding grout. Mix the neat cement in a water-cement ratio approximately equal to 5 gallons of water per 94 pounds of cement. Pre-packaged non-shrink grout from the APL may be used instead of site mixed or ready mixed grout.
- (2) Furnish grade E conforming to 501 for overlays.
- (3) Furnish grade C or E concrete conforming to 501 for surface repairs. The contractor may increase the slump for grade E concrete to a maximum of 4 inches. For vertical and overhead repairs, use pre-packaged vertical and overhead repair material from the APL unless a different material is approved by the engineer in writing.
- (4) Furnish grade C or E concrete conforming to 501 for joint repairs, curb repairs, and full-depth deck repairs; except as follows:
 1. The contractor may increase slump of grade E concrete to 3 inches.
 2. The contractor may use ready-mixed concrete.
- (5) Provide QMP for class II ancillary concrete as specified in 716 if using concrete mixtures conforming to 501.

513 Railing

513.2.3 Steel Railing

Replace subsection with the following effective with the November 2025 letting.

- (1) Furnish steel railing components as follows:

Structural steel	506.2.2
High strength bolts	506.2.5
Steel guardrail	614.2
Round structural steel tubing for steel pipe railing	ASTM A500 grade B
Structural steel tubing used with other steel railings	ASTM A500 grade B or C
- (2) Furnish a two-coat paint system from the APL for structure painting systems under paint - galvanized surfaces.

517 Paint and Painting

517.3.1.3.3 Blast Cleaning

517.3.1.3.3.2 Epoxy Coating System

Replace subsection with the following effective with the November 2025 letting.

- (1) Blast clean structural steel receiving this coating to a near-white finish according to SSPC-SP 10.
- (2) Solvent clean oil and grease on surfaces receiving this coating according to SSPC-SP 1 and blast clean to a near-white finish according to SSPC-SP 10.
- (3) Remove fins, tears, slivers, and burred or sharp edges present on any steel member, or that appears during blasting, by grinding then re-blast the area to a one to 2 mils surface shape.

-
- (4) If using abrasives for blast cleaning, use either clean dry sand, steel shot, mineral grit, or manufactured grit of a gradation that produces a uniform one to 2 mils profile as measured with a department-approved impregnated surface profile tape.
 - (5) Remove abrasive and paint residue from steel surfaces with a commercial grade vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. If using the double blowing method, vacuum the top surfaces of structural steel, including top and bottom flanges; longitudinal stiffeners, splice plates, and hangers after completing the double blowing operations. Ensure that the steel is dust free when applying primer. Apply the primer within 8 hours after blast cleaning.
 - (6) Protect freshly coated surfaces from later blast cleaning operations. Brush any blast damaged primed surfaces with a non-rusting tool, or if visible rust occurs, re-blast to a near white condition. Clean the brushed or blast cleaned surfaces and re-prime within the manufacturer's recommended time.
 - (7) When coating galvanized surfaces, ensure tie-coat adhesion by brush blasting the cleaned surface according to SSPC-SP7 to create a slight angular surface profile according to manufacturer's recommendations of 1 mil to 1.5 mils. Blasting must not fracture the galvanized finish or remove dry film thickness. For the tie- and top-coat, furnish an epoxy coating system from the APL for paint systems for galvanized surfaces.

517.3.1.3.5 Galvanizing

Add subsection effective with the November 2025 letting.

- (1) After fabrication, blast clean assemblies per SSPC-SP6 and galvanize according to ASTM A123.
-

526 Temporary Structures

526.3.4 Construction, Backfilling, Inspection and Maintenance

Replace subsection with the following effective with the November 2025 letting.

- (1) Construct temporary structures conforming to 500. Backfill conforming to 206.3.13 with structure backfill conforming to 210.2.
- (2) Temporary highway bridges open to traffic less than or equal to 24 months: inspect temporary bridges conforming to the National Bridge Inspection Standards (NBIS) and the department's Structure Inspection Manual (SIM) before opening to traffic. Perform additional inspections, as the department's SIM requires, based on structure type, condition, and time in service. Submit inspection reports on department form DT2007 to the engineer and electronic copies to the Bureau of Structures (BOS) Maintenance Section. Ensure that a department-certified qualified team leader performs the inspections.
- (3) Temporary highway bridges open to traffic greater than 24 months: complete additional inspections and inventory data collection per the NBIS and SIM within 27 months of the bridge being opened to traffic. Contact the BOS to have a structure number assigned. Enter the inventory data and element level bridge inspection data in accordance with the SIM into WisDOT's Highway Structures Information System (HSIS) within 90 days of completing the field portion of the inspection. Continue to complete required inspections and data submittal at intervals according to the requirements of the NBIS and SIM.
- (4) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.5; do not place on the finished surface.

526.5 Payment

Replace paragraph (2) with the following effective with the November 2025 letting.

- (2) Payment for the Temporary Structure bid items is full compensation for providing a temporary structure including design and construction; for construction staking; for temporary shoring and other secondary structure items; for backfilling with structure backfill; for maintaining; and for removing when no longer needed. The department will pay 70 percent of the contract amount when open to traffic and the balance after structure removal and associated site restoration.

621 Landmark Reference Monuments

Remove Standard Specification 621 (Landmark Reference Monuments) effective with the November 2025 letting. Refer to updated information in standard specifications 680 and 682.

643 Traffic Control**643.1 Description**

Replace paragraph (1) with the following effective with the November 2025 letting.

- (1) This section describes providing, maintaining, repositioning, and removing temporary traffic control devices as follows:

Drums	Warning lights	42-inch cones
Barricades type III	Connected arrow boards	Portable changeable message signs
Flexible tubular markers	Signs	Channelizing curb system
Speed feedback trailers	Connected work zone start and end location markers	

643.2.2 Department's Approved Products List (APL)

Replace paragraph (1) with the following effective with the November 2025 letting.

- (1) Furnish materials from the APL as follows:

- | | |
|--|-------------------------------------|
| - Drums | - Connected arrow boards |
| - Barricades type III | - Sign sheeting |
| - Flexible tubular marker posts including bases | - 42-inch cone assemblies |
| - Warning lights and attachment hardware | - Portable changeable message signs |
| - Channelizing curb systems | - Speed feedback trailers |
| - Connected work zone start and end location markers | |

643.3 Construction**643.3.1 General**

Add paragraphs (10), (11), (12) and (13) effective with the November 2025 letting.

- (10) For connected devices provide a local specialist to respond to emergency situations within 2 hours of being notified. Equip local specialists with sufficient resources to correct deficiencies in the connected work zone devices.
- (11) Prior to deployment, test all connected devices with the engineer to ensure the device is showing in the WisDOT approved data feed. Send an email to DOTBTOWorkzone@dot.wi.gov to notify Bureau of Traffic Operations (BTO) that the devices have been turned on.
- (12) Provide a WisDOT approved data feed from connected devices and the remote management software, updated at least every minute.
- (13) If requested by the engineer, provide real-time status change alerts to a list of designated personnel via text or email or both. Send an alert each time a connected device is switched between operating modes which include the current operating mode, the previous operating mode, the date and time of the mode switch, and the location (latitude and longitude) of the device at the time of the mode switch in the alert.

643.3.3 Connected Arrow Boards

Revise subsection title, replace paragraph (3) and add paragraph (4) effective with the November 2025 letting.

- (3) The connected arrow board may be switched between the following pattern displays per the plan:
- Blank
 - Right arrow static
 - Right arrow flashing
 - Right arrow sequential
 - Left arrow static
 - Left arrow flashing
 - Left arrow sequential
 - Line flashing
 - Bi-directional arrow flashing.
- (4) When the connected arrow board is not displaying a pattern, the display shall be blank, and the connected arrow board transmits its status to the data feed. When a connected arrow board is switched to a pattern, the connected arrow board transmits its location and its current operating mode to the data feed.

643.3.7 Temporary Pavement Marking*Add paragraph (9) effective with the November 2025 letting.*

- (9) Install temporary markings on the final surface in the same location as permanent markings will be placed or as the plans show.

643.3.10 Connected Work Zone Start and End Location Markers*Add subsection effective with the November 2025 letting.*

- (1) Place work zone start location marker at the beginning of the work zone per plan or as the engineer directs. Clearly label the work zone start location marker so that it is easily distinguishable by field personnel.
- (2) Place work zone end location marker at the end of the work zone per plan or as the engineer directs. Clearly label the work zone end location marker so that it is easily distinguishable by field personnel.
- (3) Ensure the connected work zone start and end location markers operate continuously when deployed on the project.
- (4) Ensure the work zone location markers and connected arrow board are from the same manufacturer.
- (5) When the work zone start and end location markers are switched to the ON mode, verify the begin and end location markers transmit their location and identity as begin or end markers to the data feed.
- (6) Switch the work zone start and end location markers to OFF mode when temporary traffic control is removed, and the normal traveled way is restored.

643.4 Measurement**643.4.1 Items Measured by the Day***Add paragraphs (3) and (4) effective with the November 2025 letting.*

- (3) The department will measure Traffic Control Connected Arrow Boards by day for the days the device is reporting correct data.
- (4) The department will measure Traffic Control Connected Work Zone Start and End Location Markers by day per roadway segment for the days the devices are reporting correct data.

643.5 Payment**643.5.1 General***Replace paragraph (1) with the following effective with the November 2025 letting.*

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
643.0300	Traffic Control Drums	DAY
643.0420	Traffic Control Barricades Type III	DAY
643.0500	Traffic Control Flexible Tubular Marker Posts	EACH
643.0600	Traffic Control Flexible Tubular Marker Bases	EACH
643.0650	Traffic Control Channelizing Curb System	LF
643.0700 - 0799	Traffic Control Warning Lights (type)	DAY
643.0810	Traffic Control Connected Arrow Boards	DAY
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF
643.1050	Traffic Control PCMS	DAY
643.1051	Traffic Control PCMS with TMC Communications	DAY
643.1070 - 1079	Traffic Control Cones (height)	DAY
643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY
643.1500	Traffic Control Speed Feedback Trailer	DAY
643.3100 - 3299	Temporary Marking Line (material/type) (width)	LF
643.3300 - 3399	Temporary Marking Crosswalk (material) 6-Inch	LF
643.3500 - 3599	Temporary Marking Arrow (material)	EACH
643.3600 - 3699	Temporary Marking Word (material)	EACH
643.3700 - 3799	Temporary Marking Raised Pavement Marker (type)	EACH
643.3800 - 3899	Temporary Marking Stop Line (material) 18-Inch	LF
643.3900 - 3959	Temporary Marking Diagonal (material) 12-Inch	LF

643.3960 - 3999	Temporary Marking Removable Mask Out Tape (width)	LF
643.4100	Traffic Control Interim Lane Closure	EACH
643.5000	Traffic Control	EACH

646 Pavement Marking**646.3.1.1 General Marking**

Replace paragraph (7) with the following effective with the November 2025 letting.

- (7) Apply marking to the width and color the bid item indicates. Distribute beads uniformly across the line. Provide a sharp cutoff for both sides and ends of the marking with a uniform cross-section. Achieve straight alignment, not to exceed a 3/8-inch variation in any 40-foot section of travelled way. Do not damage existing marking that will remain in place.

646.3.1.6.2 Retroreflectivity

Replace paragraph (1) with the following effective with the November 2025 letting.

- (1) For grooved-in markings, the engineer will also evaluate the percent failing retroreflectivity at the end of the proving period. Ensure that the 180-day reflectivity, in millicandelas/lux/m², meets or exceeds the following:

		180 DAY DRY
<u>MATERIAL</u>	<u>COLOR</u>	<u>RETROREFLECTIVITY</u>
Epoxy	White	150
	Yellow	100
Wet Reflective Epoxy	White	250
	Yellow	150
Permanent Tape	White	400
	Yellow	335

646.3.2.4 Black Epoxy

Replace paragraph (1) with the following effective with the November 2024 letting.

- (1) Apply black epoxy in a grooved slot directly after the white marking. Apply epoxy at a wet mil thickness of 20. Apply black aggregate at or exceeding 25 pounds per gallon of epoxy. Do not apply glass beads to black epoxy.

650 Construction Staking**650.3.12 Supplemental Control Staking**

Replace paragraph (2) with the following effective with the November 2025 letting.

- (2) Document and provide to the engineer complete descriptions and reference ties of the control points, alignment points, and benchmarks to allow for quick reestablishment of the plan data at any time during construction and upon project completion. Document additional control on department form DT1291 as described in CMM 710, table 710-1.

680 Public Land Survey Monuments

Add section 680 (Public Land Survey Monuments) effective with the November 2025 letting.

680.1 Description

- (1) This section describes perpetuating US Public Land Survey System (USPLSS) monuments.

680.2 Materials

- (1) Furnish magnetic survey nails with center point a minimum of 2-1/2 inches long or engineer approved alternative.
 (2) Furnish minimum 3/4-inch reinforcement or 1 inch outside diameter (OD) iron pipe at least 24 inches long.
 (3) Furnish plastic survey marker cap with lettering that reads "Witness Monument".
 (4) Use alternative materials if requested and furnished by the county surveyor.

680.3 Construction**680.3.1 General**

- (1) Perform work under the direction and control of a professional land surveyor registered in the state of Wisconsin, following Wisconsin Administrative Code A-E 7 (https://docs.legis.wisconsin.gov/code/admin_code/a_e/7).

- (2) Preserve existing USPLSS monuments and witness monuments (ties) within the construction limits in their original position until monuments are verified and sufficiently tied off.

680.3.2 Pre-Construction

- (1) Notify the county surveyor at least 30 days prior to start of construction operations about all USPLSS monuments within the construction limits that might be disturbed.
- (2) Obtain the existing USPLSS Monument Record from the county surveyor. Verify existing monuments and witness monuments are in place and undisturbed.
- (3) Replace witness monuments that are missing or that could be disturbed by construction operations. Locate new witness monuments near the USPLSS monument but outside the construction limits. Submit a monument record as specified in 680.3.5.
- (4) Temporarily mark the location of all witness monuments to protect them during construction.

680.3.3 Removals

- (1) Remove or abandon existing monument and monument cover that interfere with construction operations. Remove and dispose of surplus excavation and materials as specified in 205.3.12.

680.3.4 Post-Construction

- (1) Verify the location of monuments and witness monuments when construction operations are complete.
- (2) Set new monuments and witness monuments where necessary. Recess magnetic survey nails 1/4 inch below the pavement surface for monuments located in pavement. Use reinforcement or iron pipe for monuments not in pavement and for witness monuments. Locate new witness monuments near the USPLSS monument and outside the roadbed. Install plastic caps on witness monuments.
- (3) Install marker posts next to all witness monuments if required and supplied by the county surveyor.
- (4) Omit setting monuments in the pavement if approved by the department's regional survey coordinator and county surveyor due to traffic or safety concerns.
- (5) Submit a monument record as specified in 680.3.5.

680.3.5 Monument Records

- (1) Submit a monument record on department form DT1291 to the county surveyor at locations where monuments were set. Provide a copy to the engineer and regional survey coordinator.

680.4 Measurement

- (1) The department will measure bid items under this section as each individual monument acceptably completed.

680.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
680.0100	Public Land Survey Monument Verify and Reset	EACH

- (2) Payment for the Public Land Survey Monument Verify and Salvage bid item is full compensation for providing all materials; for coordinating with county surveyors; for obtaining existing monument records; for verifying the existing location of monuments and witness monuments; for removing or abandoning existing monuments and monument covers; for resetting monuments; for setting or resetting temporary and permanent witness monuments; and for submitting monument records.

682 Geodetic Survey Monuments

Add section 682 (Geodetic Survey Monuments) effective with the November 2025 letting.

682.1 Description

- (1) This section describes salvaging geodetic survey discs and constructing geodetic survey monuments.

682.2 Materials

- (1) Furnish materials conforming to the following:

Concrete.....	501
Reinforcement	505.2
Foundation backfill	520.2

- (2) Furnish grade A concrete as modified in 716. Provide QMP for class III ancillary concrete as specified in 716.

682.3 Construction

- (1) Contact the WisDOT Geodetic Surveys Unit at (866) 568-2852 or "geodetic@dot.wi.gov" as required below.

682.3.1 Salvage Geodetic Survey Discs

- (1) Remove and salvage geodetic survey discs from existing structures or survey monuments being removed at the locations shown in the plan.
- (2) Notify the WisDOT Geodetic Surveys Unit 7 calendar days prior to removal operations.
- (3) Ship or deliver salvaged discs to following address:

WisDOT Bureau of Technical Services
 Geodetic Surveys Unit
 3502 Kinsman Boulevard
 Madison, WI 53704

Provide a tracking number to the Geodetic Surveys Unit upon shipment or contact the Geodetic Surveys Unit to schedule in-person delivery.

682.3.2 Geodetic Survey Monuments**682.3.2.1 Monument Location**

- (1) Stake the approximate location of monuments provided in the plan and contact the WisDOT Geodetic Surveys Unit 30 days prior to excavating holes for field verification and delivery of department furnished geodetic survey discs.

682.3.2.2 Placing Monuments

- (1) Excavate holes for monuments by use of a circular auger at the size and depth the plans show or as the engineer directs.
- (2) Remove and dispose of surplus excavation and materials as specified in 205.3.12.
- (3) Fill holes with concrete and strike off flush with the ground surface. Place circular forms and steel reinforcement in the concrete as the plans show. Place geodetic survey discs on monuments while the concrete is still plastic.

682.3.2.3 Protecting and Curing

- (1) Cure exposed portions of cast in place concrete monuments as specified in 415.3.12 except the contractor may use curing compound conforming to 501.2.8.
- (2) Protect placed concrete monuments as specified for concrete pavement as specified in 415.3.14
- (3) Protect cast in place concrete monuments from freezing for 7 days.

682.4 Measurement

- (1) The department will measure bid items under this section as each individual monument acceptably completed.

682.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
682.0100	Salvage Geodetic Survey Disc	EACH
682.0200	Geodetic Survey Monument	EACH

- (2) Payment for the Salvage Geodetic Survey Disc bid item is full compensation for removing and salvaging; and shipping or delivering the disc to the Geodetic Surveys Unit. Removing existing survey monuments will be paid separately under the Removing Concrete Bases bid item. Removing existing survey marker posts will be paid separately under the Removing Delineators and Markers bid item.
- (3) Payment for the Geodetic Survey Monument bid item is full compensation for staking; providing concrete; providing steel reinforcement; for placing department-furnished geodetic discs; and for excavating and backfilling.

710 General Concrete QMP**710.3 Certification Requirements**

Replace paragraph (1) and add paragraph (2) effective with the November 2025 letting.

- (1) Have a person certified from the Highway Technician Certification Program Portland Cement Concrete Technician 1 (HTCP - PCCTEC-1) or Assistant Certified Technician Program - Portland Cement Concrete (ACT-PCC) working under a certified technician, on the project site, prepared and equipped to perform required sampling and testing whenever placing concrete.

- (2) The department will have a certified HTCP Portland Cement Concrete Mix Design Certification (PCC MDC) technician to review and approve concrete mixes.

710.4 Concrete Mixes

Replace subsection with the following effective with the November 2025 letting.

- (1) The contractor is responsible for mix performance.
- (2) At least 7 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:
1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, air content, and SAM number.
 2. For cementitious materials and admixtures: type, brand, and source.
 3. For aggregates: absorption, oven-dried specific gravity, SSD bulk specific gravity, wear, soundness, light weight pieces, freeze thaw test results if required, and air correction factor. Submit component aggregate gradations, aggregate proportions, and target combined blended aggregate gradations using the following:
 - DT2220 for combined aggregate gradations.
 - DT2221 for optimized aggregate gradations.
 4. For optimized concrete mixtures:
 - Complete the worksheets within DT2221 according to the directions.
 - Ensure the optimized aggregate gradations and the optimized mix design conform to WisDOT specifications and pass the built-in tests within DT2221.
 - Verify slip-form mixture workability and conformance to specifications through required trial batching.
 - Submit the completed DT2221 to the engineer electronically. Include the trial batch test results with the mix design submittal.
 5. For high early strength (HES) concrete mixtures required by contract, complete the HES mix modification section in the DT2220 or DT2221 form.
- (3) Document mix adjustments daily during concrete production.
- (4) Prepare, notify, and submit mixture design modifications to the engineer. Do not place material until the documentation is submitted and, when required, written approval of the mixture design modifications.
- (5) Report concrete mix design modifications as classified in levels as specified in table 710-1.

TABLE 710-1 MIX DESIGN MODIFICATION NOTIFICATION

NOTIFICATION	LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Prepare, notify, and submit mix design to Engineer	Prior to use	3 business days prior to use	5 business days prior to use
Approval required before placement	No	Yes	Yes

- (6) A mix design modification is when any modification occurs for a specific level as specified in table 710-2.
- (7) Dependent on the modification performed, documentation is required to be submitted to the engineer as specified in table 710-3.
- (8) For HES concrete, conform as specified in table 710-4.
- (9) HES concrete is not eligible for 28-day strength incentives.
- (10) Submit concrete mix designs into MRS as specified in 701.1.2.7.

TABLE 710-2 MATERIAL MIX DESIGN MODIFICATIONS

MODIFICATION TYPE		LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Change in:	Water source	X		
	Cement source, type, or brand			X
	Total cementitious ^[1]			X
	Aggregate blend	X		
	Aggregate source			X
	SCM replacement rate		X	
	SCM type and supplier			X
	Fly ash source (different class)			X
	Fly ash source (same class for pavements and cast-in-place barriers)		X	
	Fly ash source (same class for structures)			X
	Slag source (same grade)		X	
	Chemical admixture manufacturer or product name ^[2]			X
Removal of:	SCM			X
	Type B or Type D chemical admixture	X ^[3]	X ^[4]	
Addition of:	Non-fading, color pigment	X		
	Type B or Type D chemical admixture	X ^[3]	X ^[4]	
	New SCM			X

^[1] If not HES/SHES concrete.

^[2] Not including Type B or Type D chemical admixture.

^[3] Furnished from the APL.

^[4] Not furnished from the APL.

TABLE 710-3 MIX DESIGN MODIFICATION DOCUMENTATION

NEW REQUIRED DOCUMENTATION	LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Results from trial batching if required			X
Amendment to the quality control plan	X	X	X
Water source name and report ^[1]	X		
Cement mill certification			X
WisDOT aggregate quality report			X
SCM mill certification		X	X
Chemical additive product data sheet	X	X	X
Updated DT2220 or DT2221 form	X	X	
New DT2220 or DT2221 form			X
New mixture ID: Contractor ID and WisDOT ID	X	X	X
New maturity curve	X ^[2]	X	X
New lot/sublot layout ^[3]		X ^[4]	X

^[1] Water for concrete report conforming to 501.2.6 for private wells or surface water sources.

^[2] Required only when using a retarder.

^[3] Required for HES concrete.

^[4] Required when changing the SCM replacement rate.

TABLE 710-4 OPTIONS FOR HES CONCRETE

SCENARIO	MIXTURE MODIFICATION	
When the contract requires, or the HES is directed by the department	OPTION 1 ^[1]	Add 94 to 282 lb/cy of cement ^[2]
	OPTION 2	Use Type III cement
When the engineer allows HES when requested by the contractor in writing	Add up to 282 lb/cy of cement ^[1,2]	

^[1] Adjust water to maintain workability without raising the w/cm ratio.

^[2] Add to a previously accepted mixture.

710.5.6.2 Contractor Control Charts

710.5.6.2.1 General

Replace subsection with the following effective with the November 2025 letting.

- (1) Test aggregate gradations during concrete production except as allowed for small quantities under 710.2. Perform required contractor testing using non-random samples.
- (2) Sample aggregates from either the conveyor belt or from the working face of the stockpiles.
- (3) Complete aggregate testing as specified in table 710-5. Submit one pre-placement test within five days before anticipated placement. Include this gradation on the control charts.
- (4) Report gradation test results and provide control charts to the engineer within 1 business day of obtaining the sample. Submit results to the engineer and electronically into MRS as specified in 701.1.2.7.
- (5) Conduct aggregate testing at the minimum frequency specified in table 710-5 for each mix design, except as allowed for small quantities in 710.2. The contractor's concrete production tests can be used for the same mix design on multiple contracts.

TABLE 710-5 QC AGGREGATE TESTING FREQUENCY

CONCRETE CLASSIFICATION	PRE-PLACEMENT TESTING	PLACEMENT TESTING	
Class I: Pavement	One pre-placement test per aggregate source	Hand Placement: ≤ 250 CY > 250 CY Slip Formed Placement ^[1] ≤ 1500 CY > 1500 CY	One test per cumulative 250 CY One test per day One test per day Two tests per day
Class I: Structures ^{[2], [3], [4]}		One test per cumulative 150 CY, maximum one test per day	
Class I: Cast-in Place Barrier		≤ 250 CY > 250 CY	One test per cumulative 250 CY One test per day
Class II: Base	One pre-placement test per aggregate source	One test per calendar week of production	
Class II: Structure Repair - Joints		One test per cumulative 150 CY, maximum one test per day	
Class II: Concrete Overlay		One test per 400 CY, minimum one test per 10 business days, maximum one test per day	
Class II: Pavement Repair			
Class II: Pavement Replacement			
Class II: Base Patching			
Class II: Ancillary			
Class II: Structure Repair – Curb & Surface ^[5]		Preplacement testing only	

^[1] Frequency is based on project daily production rate.

^[2] Aggregate gradation testing must be performed on a per contract basis. If multiple structures are on the same contract and use the same aggregate source, then the samples must be collected based on cumulative concrete contract quantities within the same concrete classification.

^[3] WTM T255 (Fine and Coarse) required for each aggregate sample.

[4] Calculate trial batch weights for each mix design when production begins and whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, adjust the batch weights to maintain the design w/cm ratio.

[5] Aggregate gradation must meet the gradation previously approved by the engineer.

710.5.6.3 Department Acceptance Testing

Replace subsection with the following effective with the November 2025 letting.

- (1) Department testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract as specified table 710-6. Aggregate gradation testing must be performed on a per contract basis.
- (2) The department will split each sample, test for acceptance, and retain the remainder for a minimum of 10 calendar days.
- (3) The department will obtain the sample and deliver to the regional testing lab in the same day. The department will report gradation test results to the contractor within 1 business day of being delivered to the lab. The department and contractor can agree to an alternative test result reporting timeframe. Document alternative timeframes in the contractor's quality control plan.
- (4) Additional samples may be taken at the engineer's discretion due to a changed condition.
- (5) If multiple bid items on the same contract use the same aggregate source, then the samples must be collected based on cumulative concrete contract quantities within the same concrete classification.
- (6) Department will test small quantities at the minimum frequency specified in table 710-7.

TABLE 710-6 QV AGGREGATE TESTING FREQUENCY

CONCRETE CLASSIFICATION	PLACEMENT TESTING
Class I: Pavement	One test per placement day for first 5 days of placement. - If all samples are passing, reduced testing frequency is applied. - Reduced frequency: One test per calendar week of placement
Class I: Structures	One test per 250 CY placed. - Minimum of one test per contract for substructure - Minimum of one test per contract for superstructure
Class I: Cast-in-Place Barrier	One test per 500 CY placed
Class II: Concrete Overlay	One test per 250 CY - Maximum one test per day
Class II: Base	No minimum testing
Class II: Structure Repair	
Class II: Pavement Repair	
Class II: Pavement Replacement	
Class II: Base Patching	
Class II: Ancillary	

TABLE 710-7 QV AGGREGATE TESTING FREQUENCY FOR SMALL QUANTITIES

CONCRETE CLASSIFICATION	PLACEMENT TESTING
Class I: Pavement	One test on the first day of placement.
Class I: Structures	
Class I: Cast-in-Place Barrier	

710.5.7 Corrective Action

710.5.7.1 Optimized Aggregate Gradations

Replace subsection with the following effective with the November 2025 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 or limits listed in the additional requirements for optimized aggregate gradation in 501.2.7.4.2 table 501-4, notify the other party immediately and do the following:

Option A:

1. Perform corrective action documented in the QC plan or as the engineer approves.
2. Document and provide corrective action results to the engineer as soon as they are available.
3. Department will conduct two tests within the next business day after corrective action. Department will provide test results to contractor after each test is complete.
4. 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.
5. If blended aggregate gradations are not within the tarantula curve limits by the second department test:
 - If the contract does not require optimized aggregate gradation under 501.2.7.4.2.1(2), stop concrete production and submit either a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design or a new combined aggregate gradation mix design.
 - If the contract requires optimized aggregate gradations under 501.2.7.4.2.1(2), stop concrete production and submit a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design.

Option B:

1. Submit a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design.
 2. Restart control charts for new mix design.
- (2) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a modified mix design or a new mix design.
- (3) Both the department and contractor must sample and test aggregate of the modified mix design or a new mix design at the frequency specified in 710.5.6.1.

710.5.7.2 Combined Aggregate Gradations

Replace subsection with the following effective with the November 2025 letting.

- (1) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by less than or equal to 1.0 percent on a single sieve size, do the following:
1. Notify the other party immediately.
 2. Perform corrective action documented in the QC plan or as the engineer approves.
 3. Document and provide corrective action results to the engineer as soon as they are available.
 4. The department will conduct two tests within the next business day after corrective action is complete.
 5. If blended aggregate gradations are within the combined aggregate gradation 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.
 6. If blended aggregate gradations are not within the combined aggregate gradation limits by the second department test, stop concrete production and submit a modified mix design or a new mix design.
- (2) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a modified mix design or a new mix design.
- (3) Both the department and contractor must sample and test aggregate of the modified mix design or a new mix design at the frequency specified in 710.5.6.1.

715 QMP Concrete Pavement, Cast-in-Place Barrier and Structures**715.3.1.2 Lot and Sublot Definition****715.3.1.2.1 General**

Replace subsection with the following effective with the November 2025 letting.

- (1) Designate the location and size of all lots before placing concrete. Ensure that no lot contains concrete of more than one mix design or placement method defined as follows:

Mix design change A modification to the mix requiring the engineer's approval under 710.4(5).
For paving and barrier mixes, follow 710.4(4) and 710.4(5) for concrete mixture design modifications.

Placement method Either slip-formed, not slip-formed, or placed under water.

- (2) Lots and sublots include ancillary concrete placed integrally with the class I concrete.

715.3.1.2.3 Lots by Cubic Yard

Replace paragraph (3) with the following effective with the November 2025 letting.

- (3) An undersized lot is eligible for incentive payment under 715.5 if the lot has 4 or more sublots for that lot.

715.3.2 Strength Evaluation

715.3.2.1 General

Replace subsection with the following effective with the November 2025 letting.

- (1) The department will make pay adjustments for strength on a lot-by-lot basis using the compressive strength of contractor QC cylinders or the flexural strength of contractor QC beams.
- (2) The department will evaluate the subplot for possible removal and replacement if the 28-day subplot average strength is:
 - Pavement (Compressive): < 2500 psi
 - Pavement (Flexural): < 500 psi
 - Structure: < f'_c - 500 psi ^[1]
 - Cast-in-Place Barrier: < f'_c - 500 psi ^[1]

^[1] f'_c is design strength found in plans or specials.

715.5 Payment

715.5.1 General

Replace paragraph (4) and add paragraphs (8) and (9) effective with the November 2025 letting.

- (4) The department will adjust pay for each lot using PWL of the 28-day subplot 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 super structures and barrier, or as shown in the plan details.
 - Compressive strength of 3500 psi for substructures and culverts, or as shown in the plan details.
- (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.
- (8) If the contractor combines concrete of varying specified strengths in a single lot/sublot, the highest specified strength of the related concrete shall be used to calculate pay incentive/disincentive.
- (9) The department will apply one price adjustment to a given quantity of material. If the quantity in question is subject to more than one nonconforming test, apply the adjustment with the greater price reduction. In the absence of exact quantities affected by the subplot test results, pay reductions will be applied to the entire subplot.

715.5.4 Pay Adjustments for Nonconforming Air Content, Temperature, and Delivery Time

Add subsection 715.5.4 (Pay Adjustments for Nonconforming Air Content, Temperature, and Delivery Time) effective with the November 2025 letting.

- (1) The department will adjust pay for each subplot with nonconforming QC air content and temperature test results as specified in table 715-2 and table 715-3. If the quantity in question is subject to more than one of the following conditions, apply the adjustment with the greater price reduction.
- (2) For high temperatures, the engineer may consider the effectiveness of the contractor's temperature control plan and the contractor's compliance with their temperature control plan before taking a price reduction.
- (3) A 25% price reduction to the concrete invoice price will be applied if concrete is placed after the delivery time exceeds the limit specified in 501.3.5.2.

TABLE 715-2 PRICE REDUCTIONS FOR NONCONFORMING AIR CONTENT

LIMITS (%)		PERCENT PRICE REDUCTION OF THE CONTRACT UNIT PRICE
Above Specification	≥ 0.5 ^[1]	10
	0.1 to 0.4 ^[1]	5
Below Specification	0.1 to 0.5	20
	0.6 to 1.0	30
	> 1.0	50 or remove and replace

^[1] Evaluate the strength data. If the strengths are acceptable, do not take a price reduction for high air content. Contractor is responsible to provide additional strength data, if necessary.

TABLE 715-3 PRICE REDUCTIONS FOR NONCONFORMING TEMPERATURE

LIMITS (F) ^[1]	PERCENT PRICE REDUCTION OF THE CONTRACT UNIT PRICE
≤ 5	10
> 5	25

^[1] Applies only for Concrete Structures and Cast-in-Place Barrier.

716 QMP Ancillary Concrete

716.2 Materials

716.2.1 Class II Concrete

Replace paragraph (2) with the following effective with the November 2025 letting.

(2) Perform random QC testing at the following frequencies:

1. Test air content, temperature, and slump a minimum of once per 100 cubic yards for each mix design and placement method.
2. Cast one set of 3 cylinders per 200 cubic yards for each mix design and placement method. Cast a minimum of one set of 3 cylinders per contract for each mix design and placement method. Random 28-day compressive strength cylinders are not required for HES or SHES concrete.
3. For deck overlays, perform tests and cast cylinders once per 50 cubic yards of grade E concrete placed.
4. For concrete base, one set of tests and one set of cylinders per 250 cubic yards.

The department will allow concrete startup test results for small quantities as specified in 710.2(1). Cast one set of 3 cylinders if using startup testing for acceptance.

716.2.2 Class III Concrete

Replace paragraph (1) with the following effective with the November 2025 letting.

- (1) Acceptance of class III concrete is based on DT2220/ DT2221 certification page. Submit the certificate of compliance at least 3 business days before producing concrete along with the initial concrete mix documentation as required under 710.4(2).

Bid Items

600 Bid Items

Add the following bid items effective with the November 2025 letting.

611.0613	Inlet Covers Type DW	EACH
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Remove the following bid items effective with the November 2025 letting.

621.0100	Landmark Reference Monuments	EACH
621.1100	Landmark Reference Monuments and Cast-Iron Covers	EACH
621.1200	Landmark Reference Monuments and Aluminum Covers	EACH

Remove the following bid items effective with the November 2025 letting.

643.0405	Traffic Control Barricades Type I	DAY
643.0410	Traffic Control Barricades Type II	DAY
643.0800	Traffic Control Arrow Boards	DAY

Add the following bid items effective with the November 2025 letting.

643.0810	Traffic Control Connected Arrow Boards	DAY
643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY

Add the following bid items effective with the November 2025 letting.

680.0100	Public Land Survey Monument Verify and Reset	EACH
682.0100	Salvage Geodetic Survey Disk	EACH
682.0200	Geodetic Survey Monuments	EACH

ERRATA

204.3.1.3 Salvaging or Disposal of Materials

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Dispose of concrete, stone, brick, and other material not designated for salvage as specified for disposing of materials under 203.3.5.

204.3.2.3 Removing Buildings

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Buildings removed and materials resulting from building removal become the contractor's property unless the contract specifies otherwise. Dispose of unclaimed and removed material as specified for disposing of materials in 203.3.5.

335.3.2 Rubblizing

Replace paragraph (6) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (6) Remove reinforcing steel exposed at the surface by cutting below the surface and disposing of the steel as specified in 203.3.5. Do not remove unexposed reinforcing steel.

335.3.3 Compacting

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Remove loose asphaltic patching material, joint fillers, expansion material, or other similar materials from the compacted surface. Also remove pavement or patches that have a maximum dimension greater than or equal to 6 inches that are either not well seated or projecting more than one inch. Dispose of removed material as specified in 203.3.5.

460.3.3.2 Pavement Density Determination

Replace change description annotation with the following to revise implementation date. This change is effective with the November 2025 letting.

Add information to 460.3.3.2(1) and (3). Add reference to CMM, WTM, and WTP H-002. WTP H-002 contains the subplot layouts formerly in CMM 815. Definition of a lot is now defined here (460.3.3.2(3)) instead of CMM. This change was implemented via ASP-6 with the February 2024 letting.

602.3.6 Concrete Rumble Strips

Replace paragraph (5) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (5) At the end of each workday, move equipment and material out of the clear zone and sweep or vacuum the traveled way pavement and shoulder areas. Sweep away or vacuum up milling debris before opening adjacent lanes to traffic. Dispose of waste material as specified in 203.3.5; do not place on the finished shoulder surface.

604.2 Materials

Replace paragraph (1) with the following information to remove line and link for crushed aggregate effective with the November 2024 letting. The crushed aggregate gradation information for slope paving is now found in 604.2(3).

- (1) Furnish materials conforming to the following:

Water.....	501.2
Select crushed material	312.2
Concrete.....	501
Reinforcement	505
Expansion joint filler	415.2.3
Asphaltic materials	455.2

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
6. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
7. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.

B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

- (1) Use the department's Civil Rights Compliance System (CRCS) for projects with a LET date on or before December 2024 and AASHTOWare Project Civil Rights and Labor (AWP CRL) for projects with a LET date on or after January 2025 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 or AWP CRL. 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 or AWP CRL 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, via the online AWP Knowledge Base, or by telephone. to schedule CRCS specific training. The AWP Knowledge Base is at: <https://awpkb.dot.wi.gov/>
- (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) For firms wishing to export payroll/labor data from their computer system, have their payroll coordinator contact:
 - For CRCS: Paul Ndon at paul.ndon@dot.wi.gov. Information about exporting payroll/labor data. Not every contractor's payroll system can produce 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>
 - For AWP CRL: Contact AWP Support at awpsupport@dot.wi.gov. Additional information can be found in the AWP Knowledge Base at <https://awpkb.dot.wi.gov/Content/crl/Payrolls-PrimesAndSubs/PayrollXMLFileCreationProcess.htm>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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

ATTACHMENTS

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

I. GENERAL

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

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

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

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

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

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

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

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

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

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

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

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

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

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

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

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

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

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

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

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

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

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

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

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

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

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

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

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

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

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

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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

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

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

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

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

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

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

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

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

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

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

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

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

10. Assurances Required:

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

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

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

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

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

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

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

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

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

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

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

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

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

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

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

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

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

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

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

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

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

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

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

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

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

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

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

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

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

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

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

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

2. Withholding (29 CFR 5.5)

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

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

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

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its procurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

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

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

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

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

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

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

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

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

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

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

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

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

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

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

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

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

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

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

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

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

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

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

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

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

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

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

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

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

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

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

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

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

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

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

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

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

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

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

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

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

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

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

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

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

3. Withholding for unpaid wages and liquidated damages

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

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

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

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

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

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

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

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

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

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

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

VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

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

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

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

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

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

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

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

1. Instructions for Certification – First Tier Participants:

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

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

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

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

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

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

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

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

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

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

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

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

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

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

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

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

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

3. Instructions for Certification - Lower Tier Participants:

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

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

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

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

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

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

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

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

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

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

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

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

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

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

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

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

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

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

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

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

XII. USE OF UNITED STATES-FLAG VESSELS:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NON-DISCRIMINATION PROVISIONS

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

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

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

Pertinent Non-Discrimination Authorities:

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

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

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

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

DOMESTIC MATERIALS PREFERENCE PROVISION

Domestic Materials Preference (in accordance with the Buy America Act per [23 CFR 635.410](#), and the Build America-Buy America Act (BABA) per [2 CFR Part 184](#), and [2 CFR Part 200](#)) shall be articles, materials, or supplies permanently incorporated in this project as classified in the following four categories, and as described in the Construction and Materials Manual (CMM):

1. Iron and Steel

To be considered domestic, all steel and iron products used, and all products predominantly manufactured from steel or iron must be produced in the United States in accordance with the steel and iron product standards in 23 CFR 635.410.

This includes smelting, coating, bending, shaping, and all other manufacturing processes performed on the product. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

Products that are predominantly iron or steel or a combination of both as defined in 23 CFR 635.410 are considered Steel and Iron products and must comply with this section.

2. Construction Materials

To be considered domestic, all construction materials used must be produced in the United States in accordance with the construction material standards in [2 CFR 184.6](#):

- Non-ferrous metals: All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
- Plastic and polymer-based products: All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
- Glass: All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
- Fiber optic cable (including drop cable): All manufacturing processes, from the initial ribbing (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
- Optical fiber: All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
- Lumber: All manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
- Drywall: All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
- Engineered wood: All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

3. Manufactured Products

To be considered domestic, all manufactured products used must be produced in the United States as defined in [23 CFR 635.410\(c\)\(1\)\(vii\)](#):

- For projects with let dates on or after October 1, 2025, the final step in the manufacturing process must occur in the United States.
- For projects with let dates on or after October 1, 2026, the final step in the manufacturing process must occur in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States must be greater than 55 percent of the total cost of all components of the manufactured product.

Manufactured products means articles, materials, or supplies that have been processed into a specific form and shape, or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. If an item is classified as an iron or steel product, an excluded material, or construction material, then it is not a manufactured product. An article, material, or supply classified as a manufactured product may include components that are iron or steel

products, excluded materials, or construction materials. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

Items that consist of two or more construction materials that have been combined together through a manufacturing process, and items that include at least one construction material combined with a material that is not a construction material (including steel/iron) through a manufacturing process are treated as manufactured products, rather than as construction materials.

Products that are classified as predominantly iron or steel do not meet the definition of a manufactured product and must comply with section 1.

With respect to precast concrete products **that are classified as manufactured products**, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of section 1. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.

With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property **and classified as manufactured products**, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of section 1. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

4. Temporary and Excluded Materials

Temporary materials, and excluded materials meeting the definition of Section 70917(c) Materials as defined in 2 CFR 184, do not have any domestic materials requirements. Section 70917(c) Materials means cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

The classification of an article, material, or supply as falling into one of the categories listed in this section will be made based on its status at the time it is brought to the work site for incorporation into the project. Except as otherwise provided, an article, material, or supply incorporated into an infrastructure project must meet the Domestic Material Preference for only the single category in which it is classified.

Requirements do not preclude a minimal use of foreign steel and iron provided the cost of such materials do not exceed 0.1 percent (0.1%) of the total contract cost or \$2500 whichever is greater. The total contract cost is the contract amount at award.

For each iron or steel product subject to meeting domestic materials requirements, that doesn't fully meet Buy America Act requirements, the following documentation must be provided by the Contractor to verify the foreign steel value. Ensure the threshold is not exceeded and place the documentation in the project files.

- Pay Item,
- Description of associated foreign iron or steel product, or component,
- Invoiced cost of associated foreign iron or steel product, or component, and
- Current cumulative list of all foreign iron or steel products with the total dollar amount of foreign products in relation to the total contract amount.

The minimal use of foreign iron or steel under the minimal usage threshold must be approved by the Engineer prior to incorporation into the project and any associated payment under the contract. The use of foreign iron or steel under the minimal usage threshold does not need to be approved by FHWA. This amount is not considered a waiver to the domestic materials requirements. The Contractor must ensure that the minimal usage amount is not exceeded.

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Domestic Material provision.

<https://wisconsindot.gov/rdw/cmm/cm-02-28.pdf>

Effective with October 2025 Letting

Upon completion of the project, certify to the engineer, in writing using department form DT4567 that all iron and steel, construction materials, and manufactured products conform to this domestic material provision.

Form DT4567 is available at: <https://wisconsindot.gov/Documents/formdocs/dt4567.docx>

Attach a list of foreign iron or steel and their associated costs to the certification form using the Domestic Material Exemption Tracking Tool, available at:

<https://wisconsindot.gov/hccidocs/contracting-info/buy-america-exemption-tracking-tool.xlsx>

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

Superseded General Decision Number: WI20240010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.75 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 2025.
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:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

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>.

1	02/07/2025
2	02/21/2025
3	05/23/2025
4	06/06/2025
5	06/27/2025
6	07/04/2025
7	07/11/2025
8	07/25/2025
9	08/15/2025
10	08/29/2025
11	09/05/2025
12	09/12/2025
13	09/19/2025

BRWI0001-002 06/01/2025

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND
VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 40.09	28.10

BRWI0002-002 06/01/2025		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 48.60	29.31

BRWI0002-005 06/01/2025		

ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK, COLUMBIA,
DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE,
JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON,
MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE,
POLK, PORTAGE, RUSK, SAUK, SHAWANO, SHEBOYGAN, ST. CROIX,
TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD
COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 46.01	29.31

BRWI0003-002 06/01/2024		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.45	27.41

BRWI0004-002 06/01/2025		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 44.71	28.90

BRWI0006-002 06/01/2025		

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.36	28.83

BRWI0007-002 06/01/2025		

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 40.34	29.49

BRWI0008-002 06/01/2025		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 45.72	27.42

BRWI0011-002 06/01/2024		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.45	27.41

BRWI0019-002 06/01/2025		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.50	28.69

BRWI0034-002 06/01/2025		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 41.17	28.66

CARP0068-011 05/05/2025		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys
35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 47.57	31.17
PILEDRIVERMAN.....	\$ 47.71	30.98

CARP0231-002 06/01/2025		

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA
COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 47.73	31.52

CARP0310-002 06/03/2024		

ADAMS, ASHLAND, BAYFIELD (Eastern 2/3), FOREST, IRON, JUNEAU, LANGLADE, LINCOLN, MARATHON, ONEIDA, PORTAGE, PRICE, SHAWANO (Western Portion of the County), TAYLOR, VILAS, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
Piledriver.....	\$ 42.44	28.44

CARP0314-001 06/02/2025		

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, JEFFERSON, LAFAYETTE, RICHLAND, ROCK, SAUK, AND WALWORTH COUNTIES

	Rates	Fringes
Carpenter.....	\$ 42.45	28.78
Piledrivermen.....	\$ 44.45	28.78

CARP0361-004 05/05/2025		

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 46.82	31.92

CARP0731-002 06/03/2024		

CALUMET (Eastern Portion of the County), FOND DU LAC (Eastern Portion of the County), MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
Piledriver.....	\$ 42.44	28.44

CARP0955-002 06/03/2024		

CALUMET (Western Portion of the County), FOND DU LAC (Western Portion of the County), GREEN LAKE, MARQUETTE, OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIIVER.....	\$ 42.44	28.44

CARP1056-002 06/01/2024		

ADAMS, ASHLAND, BARRON, BAYFIELD , BROWN, BUFFALO, BURNETT ,CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE,

DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT,
GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU,
KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC,
MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO,
ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E.
of Hwy. 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK,
SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX (E. of Hwy. 65),
TAYLOR, TREMPLEALEAU, VERNON, VILAS, WALWORTH, WASHBURN,
WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 42.00	28.85

CARP1074-002 06/03/2024		

BARRON, BURNETT, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, PEPIN,
PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65),
RUSK, SAWYER, ST. CROIX (E. of Hwy. 65), AND WASHBURN

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIVER.....	\$ 42.44	28.44

CARP1143-002 06/03/2024		

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEALEAU AND
VERNON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIVER.....	\$ 42.44	28.44

CARP1146-002 06/03/2024		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, MENOMINEE, OCONTO,
AND SHAWANO (Western Portion of the County) COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIVER.....	\$ 42.44	28.44

CARP2337-009 06/03/2024		

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA

	Rates	Fringes
PILEDRIVERMAN.....	\$ 42.21	34.07

ELEC0014-002 05/25/2025		

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, TREMPLEALEAU, VERNON, AND WASHBURN
COUNTIES

	Rates	Fringes
Electricians:.....	\$ 44.29	25.21

ELEC0014-007 05/25/2025		

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KENOSHA, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RACINE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX, TAYLOR, TREMPLEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO AND WOOD COUNTIES

	Rates	Fringes
Teledata System Installer Installer/Technician.....	\$ 31.17	20.08
Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).		

ELEC0127-002 06/01/2023		

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 46.05	30%+13.15

ELEC0158-002 06/01/2024		

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.25	29.75%+11.17

ELEC0159-003 05/26/2024		

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
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ELECTRICIAN.....	\$ 48.55	25.91
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ELEC0219-004 06/01/2019

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

Rates	Fringes
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Electricians:

Electrical contracts over \$180,000.....	\$ 33.94	21.80
Electrical contracts under \$180,000.....	\$ 31.75	21.73

ELEC0242-005 06/01/2025

DOUGLAS COUNTY

Rates	Fringes
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Electricians:.....	\$ 47.46	33.34
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ELEC0388-002 06/01/2024

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
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Electricians:.....	\$ 40.19	26%+12.45
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ELEC0430-002 06/01/2024

RACINE COUNTY (Except Burlington Township)

Rates	Fringes
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Electricians:.....	\$ 48.50	26.25
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ELEC0494-005 06/01/2025

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates	Fringes
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Electricians:.....	\$ 50.86	28.26
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ELEC0494-006 06/01/2025

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Rates	Fringes
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Electricians:.....\$ 45.20 25.27

ELEC0494-013 06/01/2025

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
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Sound & Communications

Installer.....	\$ 37.13	21.58
Technician.....	\$ 37.13	21.58

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, 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 05/26/2024

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
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Electricians:.....	\$ 40.00	22.69
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ELEC0890-003 06/01/2024

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
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Electricians:.....	\$ 43.65	25.95%+12.26
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ELEC0953-001 06/02/2019

	Rates	Fringes
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Line Construction:

(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment		

Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60

 ENGI0139-005 06/01/2025

	Rates	Fringes
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Power Equipment Operator

Group 1.....	\$ 48.37	30.30
Group 2.....	\$ 47.87	30.30
Group 3.....	\$ 46.77	30.30
Group 4.....	\$ 46.51	30.30
Group 5.....	\$ 46.22	30.30
Group 6.....	\$ 40.32	30.30

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; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing

machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender, day light machine

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2025

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 44.66	33.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2025

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 47.52	33.67

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2025

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.....	\$ 44.00	32.66

IRON0498-005 06/01/2025

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 48.74	49.65

IRON0512-008 05/01/2025		

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,
PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU
COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 46.35	36.86

IRON0512-021 05/01/2025		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 42.89	36.86

LAB00113-002 06/02/2025		

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 38.81	25.53
Group 2.....	\$ 38.96	25.53
Group 3.....	\$ 39.16	25.53
Group 4.....	\$ 39.31	25.53
Group 5.....	\$ 39.46	25.53
Group 6.....	\$ 35.30	25.53

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 Sawyer 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 06/02/2025

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 38.06	25.53
Group 2.....	\$ 38.16	25.53
Group 3.....	\$ 38.21	25.53
Group 4.....	\$ 38.41	25.53
Group 5.....	\$ 38.26	25.53
Group 6.....	\$ 35.15	25.53

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 Sawyer 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 06/02/2025

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 37.87	25.53
Group 2.....	\$ 38.02	25.53
Group 3.....	\$ 38.22	25.53
Group 4.....	\$ 38.19	25.53
Group 5.....	\$ 38.52	25.53
Group 6.....	\$ 35.02	25.53

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 Sawyer 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 06/02/2025

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, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN,
WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 43.77	19.97
Group 2.....	\$ 43.87	19.97
Group 3.....	\$ 43.92	19.97
Group 4.....	\$ 44.12	19.97
Group 5.....	\$ 43.97	19.97
Group 6.....	\$ 40.40	19.97

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; 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 Sawyer 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; Traffic Control

LAB00464-003 06/02/2025

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 44.05	19.97
Group 2.....	\$ 44.15	19.97
Group 3.....	\$ 44.20	19.97
Group 4.....	\$ 44.40	19.97
Group 5.....	\$ 44.25	19.97
Group 6.....	\$ 40.40	19.97

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 Sawyer 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 05/05/2025

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 38.17	27.26
Spray, Sandblast, Steel....	\$ 38.77	27.26
Repaint:		
Brush, Roller.....	\$ 36.67	27.26
Spray, Sandblast, Steel....	\$ 37.27	27.26

PAIN0108-002 06/01/2025

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 43.64	23.35
Spray & Sandblast.....	\$ 44.64	23.35

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, TREMPLEAU, AND
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

PAIN0781-002 06/01/2025

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 43.19	24.87
Brush.....	\$ 42.44	24.87
Spray & Sandblast.....	\$ 43.19	24.87

PAIN0802-002 06/01/2025

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 37.65	21.17

PREMIUM PAY:
 Structural Steel, Spray, Bridges = \$1.00 additional per
 hour.

PAIN0802-003 06/01/2025

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.....	\$ 37.65	21.17

PAIN0934-001 06/01/2025

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 40.62	26.37
Spray.....	\$ 41.62	26.37
Structural Steel.....	\$ 40.77	26.37

PAIN1011-002 06/01/2025

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 31.17	15.92

PLAS0599-002 06/01/2025

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area A.....	\$ 47.22	31.90
Area C.....	\$ 40.06	28.65
Area D.....	\$ 42.28	26.43
Area E.....	\$ 41.16	27.54
Area F.....	\$ 37.33	31.38

AREA DESCRIPTIONS:

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE,
SAWYER, AND WASHBURN COUNTIES

AREA C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA
CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND
VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA F: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2025

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 39.57	28.70
3 or more Axles; Euclids, Dumpton & Articulated, Truck Mechanic.....	\$ 39.72	28.70

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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by

computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION"

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.



Proposal Schedule of Items

Page 1 of 34

Proposal ID: 20260113056 Project(s): 1090-39-70

Federal ID(s): WISC 2026103

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	130.000 STA	_____.	_____.
0004	201.0205 Grubbing	351.000 STA	_____.	_____.
0006	203.0100 Removing Small Pipe Culverts	21.000 EACH	_____.	_____.
0008	203.0211.S Abatement of Asbestos Containing Material (structure) 001. B-67-122	1.000 EACH	_____.	_____.
0010	203.0335 Debris Containment Over Waterway (structure) 001. B-67-127	1.000 EACH	_____.	_____.
0012	203.0335 Debris Containment Over Waterway (structure) 002. B-67-128	1.000 EACH	_____.	_____.
0014	204.0100 Removing Concrete Pavement	230,010.000 SY	_____.	_____.
0016	204.0110 Removing Asphaltic Surface	6,140.000 SY	_____.	_____.
0018	204.0115 Removing Asphaltic Surface Butt Joints	1,743.000 SY	_____.	_____.
0020	204.0120 Removing Asphaltic Surface Milling	21,004.000 SY	_____.	_____.
0022	204.0150 Removing Curb & Gutter	2,317.000 LF	_____.	_____.
0024	204.0155 Removing Concrete Sidewalk	289.000 SY	_____.	_____.
0026	204.0157 Removing Concrete Barrier	9,126.000 LF	_____.	_____.
0028	204.0165 Removing Guardrail	4,518.000 LF	_____.	_____.
0030	204.0170 Removing Fence	3,850.000 LF	_____.	_____.



Proposal Schedule of Items

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Proposal ID: 20260113056 Project(s): 1090-39-70

Federal ID(s): WISC 2026103

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0190 Removing Surface Drains	7.000 EACH	_____.	_____.
0034	204.0195 Removing Concrete Bases	22.000 EACH	_____.	_____.
0036	204.0220 Removing Inlets	26.000 EACH	_____.	_____.
0038	204.0245 Removing Storm Sewer (size) 001. 12-Inch	790.000 LF	_____.	_____.
0040	204.0245 Removing Storm Sewer (size) 002. 15-Inch	63.000 LF	_____.	_____.
0042	204.0245 Removing Storm Sewer (size) 003. 18-Inch	2,529.000 LF	_____.	_____.
0044	204.0245 Removing Storm Sewer (size) 004. 24-Inch	179.000 LF	_____.	_____.
0046	204.0245 Removing Storm Sewer (size) 005. 30-Inch	622.000 LF	_____.	_____.
0048	204.0245 Removing Storm Sewer (size) 006. 36-Inch	97.000 LF	_____.	_____.
0050	204.0245 Removing Storm Sewer (size) 008. 48-Inch	470.000 LF	_____.	_____.
0052	204.0246 Removing Ancillary Structure (structure) 001. S-67-230	1.000 EACH	_____.	_____.
0054	204.0265 Abandoning Wells	2.000 EACH	_____.	_____.
0056	204.0270 Abandoning Culvert Pipes	1.000 EACH	_____.	_____.
0058	204.0280 Sealing Pipes	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 3 of 34

Proposal ID: 20260113056 Project(s): 1090-39-70

Federal ID(s): WISC 2026103

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	204.9060.S Removing (item description) 001. Pavement Terminal Anchors	18.000 EACH	_____.	_____.
0062	204.9060.S Removing (item description) 002. Barricade Rack and Barricades	2.000 EACH	_____.	_____.
0064	204.9060.S Removing (item description) 101. Lighting Units	5.000 EACH	_____.	_____.
0066	204.9060.S Removing (item description) 102. Removing Distribution Center	1.000 EACH	_____.	_____.
0068	204.9060.S Removing (item description) 301. Traffic Signals STH 164 & CTH ES	1.000 EACH	_____.	_____.
0070	204.9060.S Removing (item description) 302. Traffic Signals IH 43 Ramps & STH 164	1.000 EACH	_____.	_____.
0072	204.9060.S Removing (item description) 303. Loop Detector Lead-In Cable STH 164 & CTH ES	1.000 EACH	_____.	_____.
0074	204.9060.S Removing (item description) 304. Loop Detector Lead-In Cable IH 43 Ramaps & STH 164	1.000 EACH	_____.	_____.
0076	204.9060.S Removing (item description) 801. Apron Endwalls for Underdrain Reinforced Concrete	424.000 EACH	_____.	_____.
0078	204.9060.S Removing (item description) 802. Apron Endwalls	2.000 EACH	_____.	_____.
0080	204.9090.S Removing (item description) 801. Underdrain	135,392.000 LF	_____.	_____.
0082	205.0100 Excavation Common	418,723.000 CY	_____.	_____.



Proposal Schedule of Items

Page 4 of 34

Proposal ID: 20260113056 Project(s): 1090-39-70

Federal ID(s): WISC 2026103

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0084	205.3000.S Temporary Emergency Pullouts	4.000 EACH	_____.	_____.
0086	206.3001 Excavation for Structures Retaining Walls (structure) 001. R-67-172	1.000 EACH	_____.	_____.
0088	208.0100 Borrow	236.000 CY	_____.	_____.
0090	209.0200.S Backfill Controlled Low Strength	2.000 CY	_____.	_____.
0092	209.1100 Backfill Granular Grade 1	342.000 CY	_____.	_____.
0094	213.0100 Finishing Roadway (project) 001. 1090-39-70	1.000 EACH	_____.	_____.
0096	305.0110 Base Aggregate Dense 3/4-Inch	16,495.000 TON	_____.	_____.
0098	305.0120 Base Aggregate Dense 1 1/4-Inch	312,175.000 TON	_____.	_____.
0100	310.0110 Base Aggregate Open-Graded	246.000 TON	_____.	_____.
0102	311.0110 Breaker Run	323,724.000 TON	_____.	_____.
0104	415.0080 Concrete Pavement 8-Inch	252.000 SY	_____.	_____.
0106	415.0090 Concrete Pavement 9-Inch	233.000 SY	_____.	_____.
0108	415.0410 Concrete Pavement Approach Slab	1,844.000 SY	_____.	_____.
0110	415.6000.S Rout and Seal	162,600.000 LF	_____.	_____.
0112	416.0610 Drilled Tie Bars	310.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 5 of 34

Proposal ID: 20260113056 Project(s): 1090-39-70

Federal ID(s): WISC 2026103

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0114	416.0620 Drilled Dowel Bars	74.000 EACH	_____.	_____.
0116	416.1720 Concrete Pavement Replacement	87.000 SY	_____.	_____.
0118	450.4000 HMA Cold Weather Paving	7,750.000 TON	_____.	_____.
0120	455.0605 Tack Coat	7,605.000 GAL	_____.	_____.
0122	460.2000 Incentive Density HMA Pavement	32,740.000 DOL	1.00000	32,740.00
0124	460.5223 HMA Pavement 3 LT 58-28 S	25,189.000 TON	_____.	_____.
0126	460.5224 HMA Pavement 4 LT 58-28 S	26,131.000 TON	_____.	_____.
0128	465.0105 Asphaltic Surface	414.000 TON	_____.	_____.
0130	465.0110 Asphaltic Surface Patching	41.000 TON	_____.	_____.
0132	465.0120 Asphaltic Surface Driveways and Field Entrances	18.000 TON	_____.	_____.
0134	465.0125 Asphaltic Surface Temporary	10,494.000 TON	_____.	_____.
0136	465.0310 Asphaltic Curb	94.000 LF	_____.	_____.
0138	465.0315 Asphaltic Flumes	52.000 SY	_____.	_____.
0140	465.0510 Asphaltic Rumble Strips, Shoulder Divided Roadway	73,593.000 LF	_____.	_____.
0142	495.1000.S Cold Patch	50.000 TON	_____.	_____.



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0144	502.0110.S Concrete Masonry Soldier Pile Footings	276.000 CY	_____.	_____.
0146	502.0120.S Non-Shrink Grout	43.000 CF	_____.	_____.
0148	502.3101 Expansion Device	60.000 LF	_____.	_____.
0150	502.3200 Protective Surface Treatment	2,539.000 SY	_____.	_____.
0152	502.3205 Pigmented Surface Sealer Reseal	354.000 SY	_____.	_____.
0154	502.3210 Pigmented Surface Sealer	10.000 SY	_____.	_____.
0156	502.4205 Adhesive Anchors No. 5 Bar	140.000 EACH	_____.	_____.
0158	502.4206 Adhesive Anchors No. 6 Bar	76.000 EACH	_____.	_____.
0160	504.0500 Concrete Masonry Retaining Walls	210.000 CY	_____.	_____.
0162	505.0600 Bar Steel Reinforcement HS Coated Structures	30,960.000 LB	_____.	_____.
0164	505.0800.S Bar Steel Reinforcement HS Stainless Structures	4,180.000 LB	_____.	_____.
0166	506.0605 Structural Steel HS	167,290.000 LB	_____.	_____.
0168	506.2610 Bearing Pads Elastomeric Laminated	8.000 EACH	_____.	_____.
0170	506.3010 Welded Stud Shear Connectors 7/8x5-Inch	532.000 EACH	_____.	_____.
0172	506.7050.S Removing Bearings (structure) 001. B-67-0122	8.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0174	509.0301 Preparation Decks Type 1	221.000 SY	_____.	_____.
0176	509.0302 Preparation Decks Type 2	88.000 SY	_____.	_____.
0178	509.0500 Cleaning Decks	1,646.000 SY	_____.	_____.
0180	509.0505.S Cleaning Decks to Reapply Concrete Masonry Overlay	883.000 SY	_____.	_____.
0182	509.1000 Joint Repair	36.000 SY	_____.	_____.
0184	509.1200 Curb Repair	10.000 LF	_____.	_____.
0186	509.1500 Concrete Surface Repair	295.000 SF	_____.	_____.
0188	509.2000 Full-Depth Deck Repair	2.000 SY	_____.	_____.
0190	509.2500 Concrete Masonry Overlay Decks	245.000 CY	_____.	_____.
0192	509.9005.S Removing Concrete Masonry Deck Overlay (structure) 001. B-67-0122	833.000 SY	_____.	_____.
0194	513.9006.S Removing and Resetting Tubular Railing (structure) 001. B-67-0122	1.000 EACH	_____.	_____.
0196	516.0500 Rubberized Membrane Waterproofing	2.000 SY	_____.	_____.
0198	517.0601 Painting Epoxy System (structure) 001. R-67-172	1.000 EACH	_____.	_____.
0200	517.0901.S Preparation and Coating of Top Flanges (structure) 001. B-67-0122	1.000 EACH	_____.	_____.
0202	520.8000 Concrete Collars for Pipe	11.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0204	520.8700 Cleaning Culvert Pipes	24.000 EACH	_____.	_____.
0206	521.2005.S Surface Drain Pipe Corrugated Metal Slotted (inch) 001. 12-Inch	995.000 LF	_____.	_____.
0208	521.2005.S Surface Drain Pipe Corrugated Metal Slotted (inch) 002. 18-Inch	1,342.000 LF	_____.	_____.
0210	522.0130 Culvert Pipe Reinforced Concrete Class III 30-Inch	114.000 LF	_____.	_____.
0212	522.0142 Culvert Pipe Reinforced Concrete Class III 42-Inch	533.000 LF	_____.	_____.
0214	522.0424 Culvert Pipe Reinforced Concrete Class IV 24-Inch	1,125.000 LF	_____.	_____.
0216	522.0442 Culvert Pipe Reinforced Concrete Class IV 42-Inch	154.000 LF	_____.	_____.
0218	522.0448 Culvert Pipe Reinforced Concrete Class IV 48-Inch	32.000 LF	_____.	_____.
0220	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	4.000 EACH	_____.	_____.
0222	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	4.000 EACH	_____.	_____.
0224	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	9.000 EACH	_____.	_____.
0226	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	36.000 EACH	_____.	_____.
0228	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	7.000 EACH	_____.	_____.



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0230	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	4.000 EACH	_____.	_____.
0232	522.1042 Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	8.000 EACH	_____.	_____.
0234	522.1048 Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	4.000 EACH	_____.	_____.
0236	522.2624 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	2.000 EACH	_____.	_____.
0238	522.2648 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 48x76-Inch	1.000 EACH	_____.	_____.
0240	531.1100 Concrete Masonry Ancillary Structures Type NS	4.000 CY	_____.	_____.
0242	531.1140 Steel Reinforcement HS Ancillary Structures Type NS	520.000 LB	_____.	_____.
0244	531.2024 Drilling Shaft 24-Inch	22.000 LF	_____.	_____.
0246	531.2030 Drilling Shaft 30-Inch	68.000 LF	_____.	_____.
0248	531.2036 Drilling Shaft 36-Inch	154.000 LF	_____.	_____.
0250	531.2042 Drilling Shaft 42-Inch	118.000 LF	_____.	_____.
0252	531.2048 Drilling Shaft 48-Inch	28.000 LF	_____.	_____.
0254	531.4050 Foundation Camera Pole 50-FT	1.000 EACH	_____.	_____.



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0256	531.5340 Foundation Single-Shaft Type TC-IV (structure) 001. S-67-993	1.000 EACH	_____.	_____.
0258	531.5410 Foundation Single-Shaft Type TF-I (structure) 001. S-67-325	1.000 EACH	_____.	_____.
0260	531.5410 Foundation Single-Shaft Type TF-I (structure) 002. S-67-989	1.000 EACH	_____.	_____.
0262	531.5420 Foundation Single-Shaft Type TF-II (structure) 001. S-67-988	1.000 EACH	_____.	_____.
0264	531.5420 Foundation Single-Shaft Type TF-II (structure) 002. S-67-992	1.000 EACH	_____.	_____.
0266	531.5430 Foundation Single-Shaft Type TF-III (structure) 001. S-67-324	1.000 EACH	_____.	_____.
0268	531.5430 Foundation Single-Shaft Type TF-III (structure) 002. S-67-990	1.000 EACH	_____.	_____.
0270	531.5440 Foundation Single-Shaft Type TF-IV (structure) 001. S-67-991	1.000 EACH	_____.	_____.
0272	531.6010 Foundation Two-Shaft Type FC-I (structure) 001. S-67-322	1.000 EACH	_____.	_____.
0274	531.6010 Foundation Two-Shaft Type FC-I (structure) 002. S-67-323	1.000 EACH	_____.	_____.
0276	532.5340 Truss Cantilever 2-Chord Type IV (structure) 001. S-67-993	1.000 EACH	_____.	_____.
0278	532.5410 Truss Full Span 2-Chord Type I (structure) 001. S-67-325	1.000 EACH	_____.	_____.
0280	532.5410 Truss Full Span 2-Chord Type I (structure) 002. S-67-989	1.000 EACH	_____.	_____.



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0282	532.5420 Truss Full Span 2-Chord Type II (structure) 001. S-67-988	1.000 EACH	_____.	_____.
0284	532.5420 Truss Full Span 2-Chord Type II (structure) 002. S-67-992	1.000 EACH	_____.	_____.
0286	532.5430 Truss Full Span 2-Chord Type III (structure) 001. S-67-324	1.000 EACH	_____.	_____.
0288	532.5430 Truss Full Span 2-Chord Type III (structure) 002. S-67-990	1.000 EACH	_____.	_____.
0290	532.5440 Truss Full Span 2-Chord Type IV (structure) 001. S-67-991	1.000 EACH	_____.	_____.
0292	532.6010 Truss Cantilever 4-Chord Type I (structure) 001. S-67-322	1.000 EACH	_____.	_____.
0294	532.6010 Truss Cantilever 4-Chord Type I (structure) 002. S-67-323	1.000 EACH	_____.	_____.
0296	601.0409 Concrete Curb & Gutter 30-Inch Type A	7,816.000 LF	_____.	_____.
0298	601.0411 Concrete Curb & Gutter 30-Inch Type D	126.000 LF	_____.	_____.
0300	601.0551 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	455.000 LF	_____.	_____.
0302	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	5,114.000 LF	_____.	_____.
0304	601.0557 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	494.000 LF	_____.	_____.
0306	601.0588 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	1,400.000 LF	_____.	_____.



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0308	601.0590 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	375.000 LF	_____.	_____.
0310	601.0600 Concrete Curb Pedestrian	26.000 LF	_____.	_____.
0312	602.0410 Concrete Sidewalk 5-Inch	22,106.000 SF	_____.	_____.
0314	602.0505 Curb Ramp Detectable Warning Field Yellow	216.000 SF	_____.	_____.
0316	602.3010 Concrete Surface Drains	54.000 CY	_____.	_____.
0318	602.3210 Concrete Rumble Strips, Shoulder Divided Roadway	67,860.000 LF	_____.	_____.
0320	603.1142 Concrete Barrier Type S42	8,452.000 LF	_____.	_____.
0322	603.3213 Concrete Barrier Transition Type F32SF to S36	24.000 EACH	_____.	_____.
0324	603.3255 Concrete Barrier Transition Type F42SF to S42	4.000 EACH	_____.	_____.
0326	603.3535 Concrete Barrier Transition Type S36 to S42	24.000 EACH	_____.	_____.
0328	603.8000 Concrete Barrier Temporary Precast Delivered	83,648.000 LF	_____.	_____.
0330	603.8125 Concrete Barrier Temporary Precast Installed	85,328.000 LF	_____.	_____.
0332	603.8500 Anchoring Concrete Barrier Temporary Precast	1,500.000 LF	_____.	_____.
0334	604.0500 Slope Paving Crushed Aggregate	931.000 SY	_____.	_____.



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0336	604.0600 Slope Paving Select Crushed Material	16.000 SY	_____.	_____.
0338	604.9010.S Slope Paving Repair Crushed Aggregate	22.000 CY	_____.	_____.
0340	604.9015.S Reseal Crushed Aggregate Slope Paving	6,259.000 SY	_____.	_____.
0342	606.0050 Riprap Extra-Light	59.000 CY	_____.	_____.
0344	606.0100 Riprap Light	117.000 CY	_____.	_____.
0346	606.0200 Riprap Medium	233.000 CY	_____.	_____.
0348	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	1,004.000 LF	_____.	_____.
0350	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	715.000 LF	_____.	_____.
0352	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	698.000 LF	_____.	_____.
0354	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	908.000 LF	_____.	_____.
0356	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	85.000 LF	_____.	_____.
0358	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	147.000 LF	_____.	_____.
0360	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	390.000 LF	_____.	_____.
0362	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	753.000 LF	_____.	_____.



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0364	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	317.000 LF	_____.	_____.
0366	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	576.000 LF	_____.	_____.
0368	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	801.000 LF	_____.	_____.
0370	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	564.000 LF	_____.	_____.
0372	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	424.000 LF	_____.	_____.
0374	608.0448 Storm Sewer Pipe Reinforced Concrete Class IV 48-Inch	425.000 LF	_____.	_____.
0376	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	333.000 LF	_____.	_____.
0378	608.0518 Storm Sewer Pipe Reinforced Concrete Class V 18-Inch	217.000 LF	_____.	_____.
0380	608.2424 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	435.000 LF	_____.	_____.
0382	611.0430 Reconstructing Inlets	9.000 EACH	_____.	_____.
0384	611.0530 Manhole Covers Type J	10.000 EACH	_____.	_____.
0386	611.0545 Manhole Covers Type L	2.000 EACH	_____.	_____.
0388	611.0606 Inlet Covers Type B	11.000 EACH	_____.	_____.



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0390	611.0612 Inlet Covers Type C	5.000 EACH	_____.	_____.
0392	611.0624 Inlet Covers Type H	23.000 EACH	_____.	_____.
0394	611.0627 Inlet Covers Type HM	39.000 EACH	_____.	_____.
0396	611.0642 Inlet Covers Type MS	30.000 EACH	_____.	_____.
0398	611.0651 Inlet Covers Type S	7.000 EACH	_____.	_____.
0400	611.1005 Catch Basins 5-FT Diameter	12.000 EACH	_____.	_____.
0402	611.1006 Catch Basins 6-FT Diameter	5.000 EACH	_____.	_____.
0404	611.2004 Manholes 4-FT Diameter	2.000 EACH	_____.	_____.
0406	611.2005 Manholes 5-FT Diameter	3.000 EACH	_____.	_____.
0408	611.2010 Manholes 10-FT Diameter	4.000 EACH	_____.	_____.
0410	611.3003 Inlets 3-FT Diameter	2.000 EACH	_____.	_____.
0412	611.3004 Inlets 4-FT Diameter	38.000 EACH	_____.	_____.
0414	611.3220 Inlets 2x2-FT	4.000 EACH	_____.	_____.
0416	611.3230 Inlets 2x3-FT	21.000 EACH	_____.	_____.
0418	611.3901 Inlets Median 1 Grate	2.000 EACH	_____.	_____.
0420	611.3902 Inlets Median 2 Grate	14.000 EACH	_____.	_____.



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0422	611.8110 Adjusting Manhole Covers	1.000 EACH	_____.	_____.
0424	611.8115 Adjusting Inlet Covers	65.000 EACH	_____.	_____.
0426	611.8120.S Cover Plates Temporary	18.000 EACH	_____.	_____.
0428	612.0106 Pipe Underdrain 6-Inch	3,290.000 LF	_____.	_____.
0430	612.0206 Pipe Underdrain Unperforated 6-Inch	200.000 LF	_____.	_____.
0432	612.0212 Pipe Underdrain Unperforated 12-Inch	526.000 LF	_____.	_____.
0434	612.0406 Pipe Underdrain Wrapped 6-Inch	15.000 LF	_____.	_____.
0436	612.0700 Drain Tile Exploration	40.000 LF	_____.	_____.
0438	612.0806 Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	4.000 EACH	_____.	_____.
0440	614.0220 Steel Thrie Beam Bullnose Terminal	2.000 EACH	_____.	_____.
0442	614.0230 Steel Thrie Beam	175.000 LF	_____.	_____.
0444	614.0397 Guardrail Mow Strip Emulsified Asphalt	3,309.000 SY	_____.	_____.
0446	614.0905 Crash Cushions Temporary	8.000 EACH	_____.	_____.
0448	614.1100 MGS Guardrail Temporary Thrie Beam Transition	400.000 LF	_____.	_____.
0450	614.1200 MGS Guardrail Temporary Terminal EAT	10.000 EACH	_____.	_____.



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0452	614.2300 MGS Guardrail 3	2,420.000 LF	_____.	_____.
0454	614.2500 MGS Thrie Beam Transition	1,050.000 LF	_____.	_____.
0456	614.2610 MGS Guardrail Terminal EAT	29.000 EACH	_____.	_____.
0458	614.2620 MGS Guardrail Terminal Type 2	8.000 EACH	_____.	_____.
0460	616.0100 Fence Woven Wire (height) 001. 4-ft	2,514.000 LF	_____.	_____.
0462	616.0100 Fence Woven Wire (height) 002. 5-ft	130.000 LF	_____.	_____.
0464	616.0204 Fence Chain Link 4-FT	541.000 LF	_____.	_____.
0466	618.0100 Maintenance and Repair of Haul Roads (project) 001. 1090-39-70	1.000 EACH	_____.	_____.
0468	619.1000 Mobilization	1.000 EACH	_____.	_____.
0470	620.0300 Concrete Median Sloped Nose	971.000 SF	_____.	_____.
0472	624.0100 Water	225.000 MGAL	_____.	_____.
0474	625.0500 Salvaged Topsoil	511,879.000 SY	_____.	_____.
0476	627.0200 Mulching	41,151.000 SY	_____.	_____.
0478	628.1104 Erosion Bales	3,087.000 EACH	_____.	_____.
0480	628.1504 Silt Fence	16,863.000 LF	_____.	_____.
0482	628.1520 Silt Fence Maintenance	16,863.000 LF	_____.	_____.



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0484	628.1905 Mobilizations Erosion Control	19.000 EACH	_____.	_____.
0486	628.1910 Mobilizations Emergency Erosion Control	22.000 EACH	_____.	_____.
0488	628.2004 Erosion Mat Class I Type B	453,634.000 SY	_____.	_____.
0490	628.2008 Erosion Mat Urban Class I Type B	60,796.000 SY	_____.	_____.
0492	628.6505 Soil Stabilizer Type A	4.150 ACRE	_____.	_____.
0494	628.6510 Soil Stabilizer Type B	4.570 ACRE	_____.	_____.
0496	628.7005 Inlet Protection Type A	94.000 EACH	_____.	_____.
0498	628.7010 Inlet Protection Type B	147.000 EACH	_____.	_____.
0500	628.7015 Inlet Protection Type C	59.000 EACH	_____.	_____.
0502	628.7020 Inlet Protection Type D	31.000 EACH	_____.	_____.
0504	628.7504 Temporary Ditch Checks	3,863.000 LF	_____.	_____.
0506	628.7555 Culvert Pipe Checks	379.000 EACH	_____.	_____.
0508	628.7560 Tracking Pads	16.000 EACH	_____.	_____.
0510	628.7570 Rock Bags	150.000 EACH	_____.	_____.
0512	629.0210 Fertilizer Type B	301.000 CWT	_____.	_____.
0514	630.0110 Seeding Mixture No. 10	1,384.000 LB	_____.	_____.



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0516	630.0130 Seeding Mixture No. 30	20,412.000 LB	_____.	_____.
0518	630.0175 Seeding Mixture No. 75	78.000 LB	_____.	_____.
0520	630.0180 Seeding Mixture No. 80	114.000 LB	_____.	_____.
0522	630.0200 Seeding Temporary	1,111.000 LB	_____.	_____.
0524	630.0500 Seed Water	11,551.000 MGAL	_____.	_____.
0526	633.0100 Delineator Posts Steel	276.000 EACH	_____.	_____.
0528	633.0500 Delineator Reflectors	369.000 EACH	_____.	_____.
0530	633.1100 Delineators Temporary	209.000 EACH	_____.	_____.
0532	633.5200 Markers Culvert End	102.000 EACH	_____.	_____.
0534	634.0616 Posts Wood 4x6-Inch X 16-FT	75.000 EACH	_____.	_____.
0536	634.0618 Posts Wood 4x6-Inch X 18-FT	124.000 EACH	_____.	_____.
0538	634.0622 Posts Wood 4x6-Inch X 22-FT	182.000 EACH	_____.	_____.
0540	634.0809 Posts Tubular Steel 2x2-Inch X 9.5-FT	2.000 EACH	_____.	_____.
0542	635.0200 Sign Supports Structural Steel HS	1,080.000 LB	_____.	_____.
0544	635.0300 Sign Supports Replacing Base Connection Bolts	14.000 EACH	_____.	_____.



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Federal ID(s): WISC 2026103

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0546	636.0050.S Foundation Drilling (diameter) 001. 30-Inch Diameter	759.000 LF	_____.	_____.
0548	636.0050.S Foundation Drilling (diameter) 002. 36-Inch Diameter	1,086.000 LF	_____.	_____.
0550	637.1220 Signs Type I Reflective SH	2,915.000 SF	_____.	_____.
0552	637.2210 Signs Type II Reflective H	2,863.000 SF	_____.	_____.
0554	637.2215 Signs Type II Reflective H Folding	159.000 SF	_____.	_____.
0556	637.2230 Signs Type II Reflective F	700.000 SF	_____.	_____.
0558	638.2102 Moving Signs Type II	1.000 EACH	_____.	_____.
0560	638.2601 Removing Signs Type I	11.000 EACH	_____.	_____.
0562	638.2602 Removing Signs Type II	280.000 EACH	_____.	_____.
0564	638.3000 Removing Small Sign Supports	275.000 EACH	_____.	_____.
0566	638.3100 Removing Structural Steel Sign Supports	10.000 EACH	_____.	_____.
0568	638.4000 Moving Small Sign Supports	149.000 EACH	_____.	_____.
0570	638.4100 Moving Structural Steel Sign Supports	1.000 EACH	_____.	_____.
0572	643.0300 Traffic Control Drums	315,478.000 DAY	_____.	_____.
0574	643.0370.S Digital Speed Reduction System (DSRS)	76.000 DAY	_____.	_____.



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0576	643.0420 Traffic Control Barricades Type III	33,009.000 DAY	_____.	_____.
0578	643.0500 Traffic Control Flexible Tubular Marker Posts	502.000 EACH	_____.	_____.
0580	643.0600 Traffic Control Flexible Tubular Marker Bases	502.000 EACH	_____.	_____.
0582	643.0705 Traffic Control Warning Lights Type A	65,886.000 DAY	_____.	_____.
0584	643.0715 Traffic Control Warning Lights Type C	42,532.000 DAY	_____.	_____.
0586	643.0810 Traffic Control Connected Arrow Boards	1,071.000 DAY	_____.	_____.
0588	643.0900 Traffic Control Signs	145,114.000 DAY	_____.	_____.
0590	643.0920 Traffic Control Covering Signs Type II	390.000 EACH	_____.	_____.
0592	643.1000 Traffic Control Signs Fixed Message	760.000 SF	_____.	_____.
0594	643.1050 Traffic Control Signs PCMS	539.000 DAY	_____.	_____.
0596	643.1100.S Dynamic Late Merge System	416.000 DAY	_____.	_____.
0598	643.1205.S Basic Traffic Queue Warning System	216.000 DAY	_____.	_____.
0600	643.1220 Traffic Control Connected Work Zone Start and End Location Markers	1,555.000 DAY	_____.	_____.
0602	643.3170 Temporary Marking Line Epoxy 6-Inch	561,648.000 LF	_____.	_____.
0604	643.3270 Temporary Marking Line Epoxy 10-Inch	10,736.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0606	643.3760 Temporary Marking Raised Pavement Marker Type I	653.000 EACH	_____.	_____.
0608	643.3820 Temporary Marking Stop Line Epoxy 18-Inch	368.000 LF	_____.	_____.
0610	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0612	645.0111 Geotextile Type DF Schedule A	1,829.000 SY	_____.	_____.
0614	645.0120 Geotextile Type HR	761.000 SY	_____.	_____.
0616	645.0130 Geotextile Type R	847.000 SY	_____.	_____.
0618	645.0220 Geogrid Type SR	482,411.000 SY	_____.	_____.
0620	646.1020 Marking Line Epoxy 4-Inch	2,572.000 LF	_____.	_____.
0622	646.2020 Marking Line Epoxy 6-Inch	5,947.000 LF	_____.	_____.
0624	646.2025 Marking Line Grooved Black Epoxy 6-Inch	22,630.000 LF	_____.	_____.
0626	646.2040 Marking Line Grooved Wet Ref Epoxy 6-Inch	225,710.000 LF	_____.	_____.
0628	646.3020 Marking Line Epoxy 8-Inch	86.000 LF	_____.	_____.
0630	646.4025 Marking Line Grooved Black Epoxy 10-Inch	2,419.000 LF	_____.	_____.
0632	646.4040 Marking Line Grooved Wet Ref Epoxy 10-Inch	12,467.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0634	646.5020 Marking Arrow Epoxy	65.000 EACH	_____.	_____.
0636	646.5120 Marking Word Epoxy	17.000 EACH	_____.	_____.
0638	646.5220 Marking Symbol Epoxy	3.000 EACH	_____.	_____.
0640	646.5420 Marking Aerial Enforcement Bar Epoxy	20.000 EACH	_____.	_____.
0642	646.6120 Marking Stop Line Epoxy 18-Inch	521.000 LF	_____.	_____.
0644	646.6220 Marking Yield Line Epoxy 18-Inch	18.000 EACH	_____.	_____.
0646	646.7120 Marking Diagonal Epoxy 12-Inch	8,377.000 LF	_____.	_____.
0648	646.7220 Marking Chevron Epoxy 24-Inch	325.000 LF	_____.	_____.
0650	646.7320 Marking Chevron Epoxy 12-Inch	367.000 LF	_____.	_____.
0652	646.8120 Marking Curb Epoxy	157.000 LF	_____.	_____.
0654	646.8220 Marking Island Nose Epoxy	13.000 EACH	_____.	_____.
0656	646.8320 Marking Parking Stall Epoxy	2,028.000 LF	_____.	_____.
0658	646.9000 Marking Removal Line 4-Inch	45,116.000 LF	_____.	_____.
0660	646.9100 Marking Removal Line 8-Inch	82.000 LF	_____.	_____.
0662	652.0125 Conduit Rigid Metallic 2-Inch	15.000 LF	_____.	_____.
0664	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	10,317.000 LF	_____.	_____.



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0666	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	2,252.000 LF	_____.	_____.
0668	652.0605 Conduit Special 2-Inch	480.000 LF	_____.	_____.
0670	652.0615 Conduit Special 3-Inch	2,065.000 LF	_____.	_____.
0672	652.0700.S Install Conduit into Existing Item	2.000 EACH	_____.	_____.
0674	652.0800 Conduit Loop Detector	4,817.000 LF	_____.	_____.
0676	653.0135 Pull Boxes Steel 24x36-Inch	21.000 EACH	_____.	_____.
0678	653.0140 Pull Boxes Steel 24x42-Inch	60.000 EACH	_____.	_____.
0680	653.0222 Junction Boxes 18x12x6-Inch	2.000 EACH	_____.	_____.
0682	653.0900 Adjusting Pull Boxes	2.000 EACH	_____.	_____.
0684	653.0905 Removing Pull Boxes	29.000 EACH	_____.	_____.
0686	654.0101 Concrete Bases Type 1	25.000 EACH	_____.	_____.
0688	654.0105 Concrete Bases Type 5	38.000 EACH	_____.	_____.
0690	654.0120 Concrete Bases Type 10-Special	4.000 EACH	_____.	_____.
0692	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	_____.	_____.
0694	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0696	655.0230 Cable Traffic Signal 5-14 AWG	8,237.000 LF	_____.	_____.
0698	655.0240 Cable Traffic Signal 7-14 AWG	3,314.000 LF	_____.	_____.
0700	655.0260 Cable Traffic Signal 12-14 AWG	2,429.000 LF	_____.	_____.
0702	655.0265 Cable Traffic Signal 15-12 AWG	800.000 LF	_____.	_____.
0704	655.0305 Cable Type UF 2-12 AWG Grounded	1,618.000 LF	_____.	_____.
0706	655.0515 Electrical Wire Traffic Signals 10 AWG	43,479.000 LF	_____.	_____.
0708	655.0525 Electrical Wire Traffic Signals 6 AWG	435.000 LF	_____.	_____.
0710	655.0610 Electrical Wire Lighting 12 AWG	7,258.000 LF	_____.	_____.
0712	655.0620 Electrical Wire Lighting 8 AWG	13,790.000 LF	_____.	_____.
0714	655.0630 Electrical Wire Lighting 4 AWG	11,680.000 LF	_____.	_____.
0716	655.0640 Electrical Wire Lighting 1 AWG	18.000 LF	_____.	_____.
0718	655.0700 Loop Detector Lead In Cable	17,116.000 LF	_____.	_____.
0720	655.0800 Loop Detector Wire	16,337.000 LF	_____.	_____.
0722	655.0900 Traffic Signal EVP Detector Cable	3,186.000 LF	_____.	_____.
0724	656.0201 Electrical Service Meter Breaker Pedestal (location) 301. IH 43 Ramps & STH 164	1.000 EACH	_____.	_____.



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0726	656.0401 Electrical Service Main Lugs Only Meter Pedestal (location) 101. HL-67-BG	1.000 EACH	_____.	_____.
0728	656.0501 Electrical Service Breaker Disconnect Box (location) 001. CCTV670250	1.000 EACH	_____.	_____.
0730	657.0100 Pedestal Bases	25.000 EACH	_____.	_____.
0732	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	39.000 EACH	_____.	_____.
0734	657.0322 Poles Type 5-Aluminum	36.000 EACH	_____.	_____.
0736	657.0405 Traffic Signal Standards Aluminum 3.5-FT	5.000 EACH	_____.	_____.
0738	657.0420 Traffic Signal Standards Aluminum 13-FT	20.000 EACH	_____.	_____.
0740	657.0609 Luminaire Arms Single Member 4-Inch Clamp 6-FT	1.000 EACH	_____.	_____.
0742	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	38.000 EACH	_____.	_____.
0744	658.0173 Traffic Signal Face 3S 12-Inch	31.000 EACH	_____.	_____.
0746	658.0416 Pedestrian Signal Face 16-Inch	12.000 EACH	_____.	_____.
0748	658.5070 Signal Mounting Hardware (location) 001. IH 43 Ramps and STH 164	1.000 EACH	_____.	_____.
0750	659.1125 Luminaires Utility LED C	43.000 EACH	_____.	_____.
0752	659.1215 Luminaires Underdeck LED C	8.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0754	659.2230 Lighting Control Cabinets 240/480 30-Inch	1.000 EACH	_____.	_____.
0756	659.5000.S Lamp, Ballast, LED, Switch Disposal by Contractor	79.000 EACH	_____.	_____.
0758	661.0201 Temporary Traffic Signals for Intersections (location) 001. IH 43 Ramps and STH 164	1.000 EACH	_____.	_____.
0760	661.0201 Temporary Traffic Signals for Intersections (location) 002. STH 164 & CTH ES	1.000 EACH	_____.	_____.
0762	662.1024.S Ramp Closure Gates 24-FT	1.000 EACH	_____.	_____.
0764	662.1026.S Ramp Closure Gates 26-FT	1.000 EACH	_____.	_____.
0766	662.1028.S Ramp Closure Gates 28-FT	1.000 EACH	_____.	_____.
0768	662.1040.S Ramp Closure Gates 40-FT	1.000 EACH	_____.	_____.
0770	670.0101 Field System Integrator	2.000 EACH	_____.	_____.
0772	670.0201 ITS Documentation	2.000 EACH	_____.	_____.
0774	671.0132 Conduit HDPE 3-Duct 2-Inch	29,030.000 LF	_____.	_____.
0776	671.0232 Conduit HDPE Directional Bore 3-Duct 2-Inch	5,941.000 LF	_____.	_____.
0778	673.0105 Communication Vault Type 1	32.000 EACH	_____.	_____.
0780	673.1225.S Install Pole Mounted Cabinet	1.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0782	675.0300 Install Mounted Controller Microwave Detector Assembly	1.000 EACH	_____.	_____.
0784	677.0150 Install Camera Pole 50-FT	1.000 EACH	_____.	_____.
0786	677.0200 Install Camera Assembly	1.000 EACH	_____.	_____.
0788	678.0006 Install Fiber Optic Cable Outdoor Plant 6-CT	835.000 LF	_____.	_____.
0790	678.0012 Install Fiber Optic Cable Outdoor Plant 12-CT	2,670.000 LF	_____.	_____.
0792	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	37,470.000 LF	_____.	_____.
0794	678.0200 Fiber Optic Splice Enclosure	13.000 EACH	_____.	_____.
0796	678.0300 Fiber Optic Splice	148.000 EACH	_____.	_____.
0798	678.0400 Fiber Optic Termination	4.000 EACH	_____.	_____.
0800	678.0501 Communication System Testing	2.000 EACH	_____.	_____.
0802	678.0600 Install Ethernet Switches	3.000 EACH	_____.	_____.
0804	690.0150 Sawing Asphalt	6,669.000 LF	_____.	_____.
0806	690.0250 Sawing Concrete	905.000 LF	_____.	_____.
0808	715.0502 Incentive Strength Concrete Structures	4,266.000 DOL	1.00000	4,266.00
0810	715.0603 Incentive Strength Concrete Barrier	4,225.000 DOL	1.00000	4,225.00



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0812	715.0715 Incentive Flexural Strength Concrete Pavement	80,984.000 DOL	1.00000	80,984.00
0814	740.0440 Incentive IRI Ride	65,338.000 DOL	1.00000	65,338.00
0816	999.2000.S Installing and Maintaining Bird Deterrent System (station) 001. 368+44	1.000 EACH	_____.	_____.
0818	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	7,000.000 HRS	5.00000	35,000.00
0820	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	27,000.000 HRS	5.00000	135,000.00
0822	SPV.0060 Special 001. Baseline CPM Progress Schedule	1.000 EACH	_____.	_____.
0824	SPV.0060 Special 002. Monthly CPM Progress Schedule Updates	21.000 EACH	_____.	_____.
0826	SPV.0060 Special 003. Removing Bus Shelter	1.000 EACH	_____.	_____.
0828	SPV.0060 Special 004. Survey Project 1090-39-70	1.000 EACH	_____.	_____.
0830	SPV.0060 Special 005. Exposing Existing Infrastructure Paved Area	10.000 EACH	_____.	_____.
0832	SPV.0060 Special 006. Exposing Existing Infrastructure Unpaved Area	10.000 EACH	_____.	_____.
0834	SPV.0060 Special 007. Traffic Control Close-Open Freeway Entrance Ramp	2.000 EACH	_____.	_____.
0836	SPV.0060 Special 008. Traffic Control Full Freeway Closure	2.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0838	SPV.0060 Special 009. Traffic Control Local Road Lane Closures	2.000 EACH	_____.	_____.
0840	SPV.0060 Special 010. Emergency Response to Traffic Incident Involving Concrete Barrier Temporary	4.000 EACH	_____.	_____.
0842	SPV.0060 Special 011. Emergency Response to Traffic Incident Involving Crash Cushion	2.000 EACH	_____.	_____.
0844	SPV.0060 Special 012. Mobilizations Emergency Pavement Repair	4.000 EACH	_____.	_____.
0846	SPV.0060 Special 013. Temporary Concrete Barrier Gate, 24-FT	10.000 EACH	_____.	_____.
0848	SPV.0060 Special 014. Crash Cushions Temporary Left In Place	1.000 EACH	_____.	_____.
0850	SPV.0060 Special 015. Connect to Existing Inlet	2.000 EACH	_____.	_____.
0852	SPV.0060 Special 016. Drilled High Performance Dowel Bars	390.000 EACH	_____.	_____.
0854	SPV.0060 Special 101. Concrete Bases Type 5 Special	2.000 EACH	_____.	_____.
0856	SPV.0060 Special 102. Lighting System Survey (1090-39-70)	1.000 EACH	_____.	_____.
0858	SPV.0060 Special 200. Ground Rod	2.000 EACH	_____.	_____.
0860	SPV.0060 Special 301. Install Poles Type 10	4.000 EACH	_____.	_____.
0862	SPV.0060 Special 302. Install Monotube Arms 35-FT Type 9/10 Pole	3.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0864	SPV.0060 Special 303. Install Monotube Arms 45-FT Type 9/10 Pole	1.000 EACH	_____.	_____.
0866	SPV.0060 Special 304. Install Luminaire Arms Steel 15-FT	4.000 EACH	_____.	_____.
0868	SPV.0060 Special 305. Transport & Install State Furnished Traffic Signal Cabinet	1.000 EACH	_____.	_____.
0870	SPV.0060 Special 306. Transport Traffic Signal & Internal Lighting Materials	1.000 EACH	_____.	_____.
0872	SPV.0060 Special 307. Transport & Install State Furnished EVP Heads (STH 164 & CTH ES)	1.000 EACH	_____.	_____.
0874	SPV.0060 Special 308. Transport & Install State Furnished EVP Heads (IH 43 Ramps & STH 164)	1.000 EACH	_____.	_____.
0876	SPV.0060 Special 309. Transport & Install State Furnished FO Cable Pigtail 6-CT	2.000 EACH	_____.	_____.
0878	SPV.0060 Special 310. Concrete Control Cabinet Bases Type 9 Special Super P	1.000 EACH	_____.	_____.
0880	SPV.0060 Special 401. Tighten Bearing Anchor Bolt Nuts	2.000 EACH	_____.	_____.
0882	SPV.0060 Special 402. Cleaning and Sealing Concrete Girder	12.000 EACH	_____.	_____.
0884	SPV.0060 Special 403. Tieback Anchors	32.000 EACH	_____.	_____.
0886	SPV.0060 Special 404. Tieback Anchors Performance Tests	3.000 EACH	_____.	_____.



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0888	SPV.0060 Special 801. Outlet Control Manhole 4X4-FT	2.000 EACH	_____.	_____.
0890	SPV.0060 Special 802. Outlet Control Manhole 5X5-FT	4.000 EACH	_____.	_____.
0892	SPV.0075 Special 001. Pavement Cleanup Project 1090-39-70	300.000 HRS	_____.	_____.
0894	SPV.0075 Special 002. Animal Carcass Removal	10.000 HRS	_____.	_____.
0896	SPV.0085 Special 001. Sealing Cracks and Joints with Hot-Applied Sealant	561.000 LB	_____.	_____.
0898	SPV.0090 Special 001. Marking Epoxy 6-inch Black Non Grooved	673.000 LF	_____.	_____.
0900	SPV.0090 Special 002. Glare Screens Temporary	81,149.000 LF	_____.	_____.
0902	SPV.0090 Special 003. Concrete Curb and Gutter 30-Inch Special	821.000 LF	_____.	_____.
0904	SPV.0090 Special 004. Concrete Curb and Gutter 60-Inch Special	93.000 LF	_____.	_____.
0906	SPV.0090 Special 005. Concrete Barrier Temporary Precast Left In Place	427.000 LF	_____.	_____.
0908	SPV.0090 Special 200. Outdoor Rated Network Cable	95.000 LF	_____.	_____.
0910	SPV.0090 Special 301. Fiber Optic Warning Tape	2,108.000 LF	_____.	_____.
0912	SPV.0090 Special 401. Saw Cutting and Chipping Concrete	2,944.000 LF	_____.	_____.



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0914	SPV.0090 Special 402. Pipe Underdrain 6-Inch Special	631.000 LF	_____.	_____.
0916	SPV.0090 Special 801. Cleaning Storm Sewer	3,759.000 LF	_____.	_____.
0918	SPV.0090 Special 802. Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 38x60	572.000 LF	_____.	_____.
0920	SPV.0090 Special 803. Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 48x6	60.000 LF	_____.	_____.
0922	SPV.0090 Special 804. Reinforced Concrete Drainage Channel	541.000 LF	_____.	_____.
0924	SPV.0110 Special 401. Timber Lagging	19.000 MBM	_____.	_____.
0926	SPV.0135 Special 001. Field Facilities Office Space	29.000 MON	_____.	_____.
0928	SPV.0165 Special 401. Removing Loose Concrete Overhead	82.000 SF	_____.	_____.
0930	SPV.0165 Special 402. Geocomposite Drain Board	6,085.000 SF	_____.	_____.
0932	SPV.0180 Special 001. Excavation of Phragmites Contaminated Soil	11,466.000 SY	_____.	_____.
0934	SPV.0180 Special 002. Herbicide Application	11,466.000 SY	_____.	_____.
0936	SPV.0180 Special 003. HPC Pavement 10 1/2-Inch	224,754.000 SY	_____.	_____.
0938	SPV.0180 Special 004. HPC Pavement 8 1/2-Inch	42,865.000 SY	_____.	_____.
0940	SPV.0180 Special 005. Compost	2,528.000 SY	_____.	_____.



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0942	SPV.0180	28.000		
	Special 401. Abutment Seat Cleaning and Sealing	SY	_____.	_____.
0944	SPV.0195	447.000		
	Special 001. HMA Longitudinal Joint Repair	TON	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH ADDENDA HERE