

HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
 DT1502 10/2010 s.66.29(7) Wis. Stats.

Proposal Number:

21

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Portage	1166-12-80	WISC 2018 020	Plainfield - Stevens Point STH 54 to North 2 nd Street	IH 39
Portage	6414-00-73		Plover - Waupaca Hoover Avenue to Harding Avenue	STH 54

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, \$ 100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: December 12, 2017 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code SAMPLE NOT FOR BIDDING PURPOSES
Contract Completion Time August 3, 2018	
Assigned Disadvantaged Business Enterprise Goal 10 %	
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)

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

 (Date Commission Expires)

Notary Seal

 (Bidder Signature)

 (Print or Type Bidder Name)

 (Bidder Title)

For Department Use Only

Type of Work Asphaltic milling, removing concrete surface partial depth, removing pavement, asphaltic pavement, base patching, base aggregate, high friction surface treatment, culvert maintenance, ITS, permanent signing, pavement marking.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

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.

Effective with August 2015 Letting

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:
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. 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 P.M. 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:
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, 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:
 1. Have a properly executed annual bid bond on file with the department.
 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 1. Download the latest schedule of items reflecting all addenda from the Bid ExpressTM web site.
 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
 4. Submit the bid before the hour and date the Notice to Contractors designates.
 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

Bidder

Name

BN00

Proposals: 1, 12, 14, & 22

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

C 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)

March 2010

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]

DECEMBER 2000

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

Instructions for Certification

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

modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

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

Special Provisions

Table of Contents

Article	Description	Page #
1.	General.....	3
2.	Scope of Work.	3
3.	Prosecution and Progress.	3
4.	Lane Rental Fee Assessment.	6
5.	Traffic.	7
6.	Holiday Work Restrictions.	11
7.	Other Projects.....	11
8.	Erosion Control.....	11
9.	Railroad Insurance and Coordination - Wisconsin Central Ltd (CN).....	12
10.	Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.....	14
11.	Environmental Protection, Aquatic Exotic Species Control.....	14
12.	Public Convenience and Safety.	15
13.	Archaeological and Historical Findings.....	15
14.	Utilities.....	16
15.	Environmental Protection - Dewatering.	17
16.	Base Patching.....	17
17.	Removing Endwall, Item 204.9060.S.01.....	17
18.	Removing Corrugated Steel Culvert Pipe and Restoring Cut End, Item 204.9090.S.01.	18
19.	Removing Concrete Surface Partial Depth, Item 204.0109.S.	18
20.	Preparing the Foundation.....	19
21.	QMP Base Aggregate.	20
22.	Dense Graded Base.....	28
23.	Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.....	28
24.	QMP HMA Pavement Nuclear Density.....	29
25.	HMA Pavement Percent Within Limits (PWL) QMP.	36
26.	Polymer Overlay, Item 509.5100.S.....	44
27.	Reconstructing Inlets.	50
28.	Water.....	51
29.	Field Facilities.....	51
30.	Traffic Control.	51
31.	Temporary Portable Rumble Strips, Item 643.0310.S.....	52
32.	Nighttime Work Lighting-Stationary.....	53
33.	Marking Outfall Epoxy.....	55
34.	Install Conduit Into Existing Item, Item 652.0700.S.....	55
35.	Intelligent Transportation Systems (ITS) – Control of Materials.....	56
36.	Intelligent Transportation Systems – General Requirements.	57
37.	Power Connection to Existing Traffic Signal Cabinet.....	62
38.	Install Pole Mounted Cabinet, Item 673.0225.S.....	62

39.	Grading, Shaping and Finishing for Crossdrain Restoration, Item SPV.0060.01; Station 298+40"QA", Item SPV.0060.02; Station 294+35"QB", Item SPV.0060.03.	63
40.	Flexible Tubular Marker Posts Left In Place, Item SPV.0060.04; Flexible Tubular Marker Bases Left In Place, Item SPV.0060.05.	64
41.	Install Solar Power System Assembly, Item SPV.0060.06.	65
42.	Install Wireless Ethernet Bridge, Item SPV.0060.07.	66
43.	HMA Percent Within Limits (PWL) Test Strip Volumetrics, Item SPV.0060.08; HMA Percent Within Limits (PWL) Test Strip Density Item SPV.0060.09.....	67
44.	Sawing Pavement Deck Preparation Areas, Item SPV.0090.01.....	74
45.	Concrete Curb & Gutter 30-Inch Type A, Item SPV.0090.02.....	75
46.	Resin Binder High Friction Surface Treatment, Item SPV.0180.01.....	75
47.	Fast Set Deck Patching, Item SPV.0180.02.....	80
48.	Appendix A.....	82

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1166-12-80, Plainfield – Stevens Point, STH 54 to North 2nd Street, IH 39, Portage County, Wisconsin and Project 6414-00-73, Plover – Waupaca, Hoover Avenue to Harding Avenue, STH 54, Portage 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, 2018 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 (20170615)

2. Scope of Work.

The work under this contract shall consist of asphaltic milling, removing concrete surface partial depth, HMA pavement, high friction surface coating, culvert maintenance, permanent signing, pavement marking and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

Begin work within ten 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.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule. Coordinate all work activities to minimize lane closure length on IH 39.

IH 39 lane and ramp closures have the following restrictions:

Northbound: Station 903+20 to Station 1270+00; Southbound: Station 903+20 to Station 1270+00

Lane closures are permitted during the following times:

	Northbound	Southbound
Monday to Thursday	12:00 AM to 11:59 PM	12:00 AM to 11:59 PM
Friday	12:00 AM to 12:00 PM, 9:00 PM to 11:59 PM	12:00 AM to 12:00 PM, 7:00 PM to 11:59 PM
Saturday to Sunday	12:00 AM to 9:00 AM, 8:00 PM to 11:59 PM	12:00 AM to 6:00 AM, 8:00 PM to 11:59 PM

NB: Station 1270+00 to Station 1510+09; SB: Station 1270+01 to Station 1510+09

Lane closures are permitted during the following times:

	Northbound	Southbound
Monday to Thursday	12:00 AM to 6:00 AM, 6:00 PM to 11:59 PM	12:00 AM to 6:00 AM, 6:00 PM to 11:59 PM
Friday	12:00 AM to 6:00 AM, 9:00 PM to 11:59 PM	12:00 AM to 6:00 AM, 7:00 PM to 11:59 PM
Saturday to Sunday	12:00 AM to 9:00 AM, 8:00 PM to 11:59 PM	12:00 AM to 6:00 AM, 8:00 PM to 11:59 PM

Shoulder closures adjacent to the driving lane outside the above listed times are permitted during the following times:

	Northbound	Southbound
Monday to Thursday	6:00 AM to 6:00 PM	6:00 AM to 6:00 PM
Friday	Not Allowed	Not Allowed
Saturday to Sunday	Not Allowed	Not Allowed

Ramp closures are permitted during the following times:

	Northbound	Southbound
Monday to Thursday	12:00 AM to 6:00 AM, 8:00 PM to 11:59 PM	12:00 AM to 6:00 AM, 8:00 PM to 11:59 PM
Friday	12:00 AM to 6:00 AM	12:00 AM to 6:00 AM
Saturday	Not Allowed	Not Allowed
Sunday	10:00 PM to 11:59 PM	10:00 PM to 11:59 PM

STH 54 lane closures are permitted during the following times:

Monday to Thursday	12:00 AM to 11:59 PM
Friday	12:00 AM to 12:00 PM
Saturday	Not Allowed
Sunday	10:00 PM to 11:59 PM

No work or lane closures are permitted on STH 54 or STH 54 ramps before June 11, 2018.

Project 1166-12-80:

Perform work in stage 1 and stage 2 within a specified segment of roadway. A segment may consist of the entire project length or any portion there-of, as agreed to with the engineer:

Stage 1: Perform mill and overlay on the passing lane and median shoulder of IH 39 northbound and southbound. Install base aggregate on the median shoulder. Install centerline pavement marking prior to opening both lanes to traffic.

Stage 2: Perform mill and overlay on the driving lane, driving lane shoulder, and the STH 54 and USH 10 ramps. Install base aggregate on the driving lane shoulder. Other work completed during this stage includes culvert maintenance, pavement marking, guardrail replacement and inlet reconstruction at the USH 10/IH 39 northbound on ramp. Install high friction surface treatment and polymer overlay after completing asphalt paving within those areas.

Complete base patching asphaltic on ramps and ramp terminals during a nighttime ramp closure during stage 1 or stage 2.

Stage 3A: Install rumble strips on the passing lane shoulder and centerline grooved wet reflective pavement marking.

Stage 3B: Install rumble strips on the driving lane shoulder on the southern half of the project.

Project 6414-00-73:

Stage 1: Install asphalt widening at the entrance ramp to southbound IH 39.

Stage 2: Remove concrete pavement, install base course, asphaltic pavement binder layers and temporary pavement marking on the STH 54 southbound right turn lane.

Stage 3: Mill partial depth concrete and asphalt lanes, asphalt base patching, and remove asphalt shoulders. Install temporary centerline same day, and binder layers for asphalt shoulders.

Stage 4: Install asphalt overlay and pavement marking.

Prosecution and progress meetings will be held once a week. The contractor's superintendent or an appointed representative shall attend and provide an update of the next week's operations, including proposed closures.

Northern Long-eared Bat (*Myotis septentrionalis*)

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. 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).

If additional construction activities beyond what was originally specified are required to complete the work, approval from the engineer, following coordination with WisDOT REC, is required prior to initiating these activities.

Silt Fence

Install silt fence prior to May 1 to prevent adverse impacts to turtles.

Permanent Signing

For existing Type I or Type II signs designated in the plans to be moved or removed and replaced, perform the work required at each location within the same working day.

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 Prosecution and Progress article.

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

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

B Lane Rental Fee Assessment

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

- \$2000 per lane, per direction of travel, per hour broken into 15 minute increments
- \$1000 per ramp, 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 prior to the completion of specified work in the contract, additional liquidated damages will be assessed according to standard spec 108.11 or as specified within this contract.
stp-108-065 (20161130)

5. Traffic.

Project 1166-12-80:

IH 39 shall remain open to traffic during construction. Lane, shoulder and ramp closures are allowed on IH 39 as indicated in the Prosecution and Progress article of these provisions.

Stage 1: Shift traffic onto the driving lane shoulder. Signing will direct vehicles to straddle rumble strips. Apply same day center line pavement marking before opening the closed passing lane. Use drums to delineate the edge of roadway during weekdays when there is no edge line pavement marking. Apply edge line marking before Friday at 6:00 AM.

Stage 2: Shift traffic onto the passing lane shoulder. Use drums to delineate the edge of roadway during weekdays when there is no edge line pavement marking. Apply edge line marking before Friday at 6:00 AM. Drums are allowed to be temporarily moved 4 feet past the centerline during paving. Return drums to the original position immediately upon completion of paving operation. There will be a width restriction during this stage of 11 feet

during the lane closure. Ramp closures are allowed during stage 2 while milling and paving through the ramp merge area or for ramp paving and other ramp work.

When a ramp is closed, the ramps for the opposite direction of travel at the same interchange will remain open. Ramp closures are not permitted at the same time on consecutive interchanges. Ramp traffic will be detoured using IH 39 and interchanges north and south of the closure.

USH 10 westbound on ramp to IH 39 northbound and the STH 54 ramps will be allowed to operate on a milled surface for up to 48 hours. Use drums spaced at 100 feet to delineate each edge of the roadway while the edge line is not installed.

Upon removal of the guardrail, guardrail along the USH 10 westbound on ramp to IH 39 northbound will be allowed to remain incomplete for oneweekday, not including Friday. Use drums spaced at 25 feet to delineate the edge of roadway while the guardrail remains uninstalled.

Stage 3A: Close the passing lane to complete work in this stage.

Stage 3B: Close the driving lane to complete work in this stage. Ramp closures are not allowed to perform stage 3B work.

Stage 3A and stage 3B can be completed in any order.

Project 6414-00-73:

STH 54 shall remain open to traffic during construction. Lane and shoulder closures are allowed on STH 54 as indicated in the Prosecution and Progress article of these provisions.

Stage 1: Use flaggers to install asphalt widening at the IH 39 southbound on ramp intersection.

Stage 2: Install temporary lane shift 2 feet north of existing centerline. Reduce traffic to a single lane using flaggers to temporarily close a lane. Close the STH 54 to southbound IH 39 ramp turn lane. Reduce traffic to a single lane using flaggers to temporarily close a lane.

Stage 3: Reduce traffic to a single lane using flaggers. Traffic is allowed to operate on a milled surface for three consecutive days maximum with approval of the engineer. Apply same day centerline pavement marking before opening the roadway to traffic.

Stage 4: Reduce traffic to a single lane using flaggers. Apply same day centerline pavement marking before opening the roadway to traffic.

General

Conduct operations in a manner that will cause the least interference to traffic. This includes the following restrictions:

- Plan work to minimize the duration and number of lane closures necessary at any given location.
- If multiple lane closures exist in the same direction of travel, provide a minimum of two miles between lane closures.
- The engineer reserves the right to order the opening of a closed lane at any time.
- Do not disturb, remove or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer. Any damage done to the above items as a result of construction operations will be repaired or replaced at the contractor's expense.
- A lane or shoulder closure is required when performing any work, hauling or delivering materials to and from the work zone on IH 39 and/or STH 54.
- Move drums beyond the outside edge of the gravel shoulder prior to weekend lane closure restriction.
- Do not use maintenance crossovers to make U-turns unless both adjacent passing lanes are closed simultaneously.

Signal Adjustments

Coordinate the signal adjustments at the each of the intersections listed below as shown in the plans and table below prior to detouring traffic. Contact Ken Radke, WisDOT NC Region Electrician, (715) 459-4264, seven working days prior to needing adjustments to the traffic signals.

Intersection	Adjustment by Electrician
USH 10/STH 66/IH 39 southbound ramp	Turn off green and yellow left arrow on STH 66 westbound
CTH HH/IH 39 northbound ramp	Turn off green and yellow left arrow on CTH HH eastbound
CTH HH/IH 39 southbound ramp	Turn off green and yellow left arrow on CTH HH westbound
CTH B/IH 39 northbound ramp and CTH B/IH 39 southbound ramp	Both ramp signals to be in flashing mode, yellow for through traffic on CTH B, red for northbound and southbound ramp terminals

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')	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 $\geq 16'$)	MINIMUM NOTIFICATION
Lane and shoulder 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.
stp-108-057 (20161130)

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 last 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.

Coordinate with Regional Traffic Section to identify the construction stages that have approved temporary regulatory speed zones documented in a Temporary Speed Zone Declaration. Primary contact phone number is (715) 421-8024, secondary contact number: (715) 459-4788.

Contact the Region Traffic Section at least 14-calendar days before installing the temporary speed zone. After installation of the temporary speed zone is complete, notify the Regional Traffic Section with the field location(s) of the temporary speed zone.
stp-643-012 (20160607)

6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 39, IH 39 ramps and STH 54 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 periods:

- From noon Thursday, May 24, 2018 to 6:00 AM Tuesday, May 29, 2018 for Memorial Day;
- From noon Friday, June 29, 2018 to 6:00 AM Monday, July 9, 2018 for Independence Day;
- From noon Thursday, August 30, 2018 to 6:00 AM Tuesday, September 4, 2018 for Labor Day.

stp-107-005 (20050502)

7. Other Projects.

Work is scheduled to occur on:

STH 54 between the STH 54 interchange ramps, on bridge B-49-13, project 166-12-71. Work includes concrete overlay of the deck and the approach slab and permanent signing. Completion date is June 1, 2018

Work may be occurring concurrently on:

IH 39 between Waushara County O and STH 54, project 1166-05-79. Work includes crack sealing asphaltic pavement.

BUS 51 from Tommy's Turnpike to Minnesota Avenue, projects 6414-00-80, 6414-00-81, 6414-00-84, 6414-00-85;

At the intersection of BUS 51/Division Street and Northpoint Drive. Work includes reconstructing the intersection to a roundabout. The intersection may be closed to traffic during construction which may include the closing of the BUS 51 on and off ramps. The project is being completed by the City of Stevens Point.

8. Erosion Control.

Add the following to standard spec 107.20:

Perform construction operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil stripping operation through the subsequent grading and finishing to minimize the period of exposure to erosion.

Replace topsoil on disturbed areas, including spot locations such as cross drains, driveways, guardrail and terminals, and intersections, immediately after grading is completed within those areas. Complete finishing operations, which includes seed, fertilizer, mulch and any other permanent erosion control measures required, within seven calendar days after the placement of topsoil.
(NCR 107.03-10152014)

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:

Jackie Macewicz, Manager
Public Works
1625 Depot Street
Stevens Point, WI 54481
Telephone (715) 345-2503
E-mail: Jackie.macewicz@cn.ca.

Also send a copy to the following:

Stephen Kienitz
NC Region Railroad Coordinator
510 N Hanson Lake Road
Rhineland, WI 54501
Telephone (715) 365-5762
E-mail: stephen.kienitz@dot.wi.gov.

Include the following information on the insurance document:

#	Route Name	City/ County	Crossing ID	RR Subdivision	RR Milepost
1	I-39	Stevens Point, Portage	692 534B	Neenah	246.35
2	I-39	Plover, Portage	281 490T	Plover	80.03

A.2 Train Operation

Approximately 24 through freight trains operate daily at up to 60 mph at crossing 692 534B. Approximately 6 through freight trains operate weekly at up to 10 mph at crossing 281 490T.

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

Construction Contact

Jackie Macewicz, Manager Public Works; 1625 Depot St., Stevens Point, WI 54481; Telephone (715) 345-2503; E-mail jackie.macewicz@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: Mary Ellen Carmody, CN, 24002 Vreeland Road, Flat Rock, MI 48134; Telephone (734) 783-4533. The form can be obtained at:

<http://www.cn.ca/en/delivering-responsibly/safety/erailsafe/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 Ms. Carmody 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.

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 (20170615)

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

The department has obtained a US Army Corps of Engineers Section 404 Permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the region office by contacting Mark Steidl at (715) 421-8043. Methods of operations, including preparatory work, staging, site clean-up or storing materials, causing impacts to other wetlands or waters are not permitted.

If the contractor chooses a method of construction that is not covered by the department's 404 Permit, obtain the proper additional permits required from the US Army Corps of Engineers. It is the contractor's responsibility to determine if additional permits are required. Obtain the additional permits prior to beginning construction operations requiring the permits. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the additional permits. The contractor must be aware that the US Army Corps of Engineers may not grant the additional permits.
(NCR 107.07-10152014)

11. 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 prior to 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. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf for disinfection:

1. Prior to 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 prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
 - a. Washing with ~212° F water (steam clean), or
 - b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - c. 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)

12. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

Notify the following organizations and departments at least two business days before road closures, lane closures or detours are put into effect:

Portage County Sheriff's Department
Wisconsin State Patrol
Town of Hull
Town of Plover
City of Stevens Point
Village of Plover
Village of Whiting
Stevens Point Area School District

The Portage County Sheriff's Department 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor.

(NCR 107.05-10152014)

13. Archaeological and Historical Findings.

Add the following to standard spec 107.25:

Do not run or store equipment, stockpile materials, setup materials processing or plant sites, excavate or in any way disturb areas outside of the grading limits adjacent to the following locations:

(1) Parallel to IH 39 from Station 1054+66 to 1084+38 LT (47PT282 (Lake Clar-Re) uncataloged cemetery and 47PT375 (To The East) uncataloged cemetery). Work in this area consists of milling 2 inches of asphalt pavement and overlaying with 2 inches of asphalt pavement. No excavation expected within this location.

(2) Abuts IH 39 from Station 1494+29 to 1095+54 RT (47PT138 archeological site). Work in this area consists of milling 2 inches of asphalt pavement and overlaying with 2 inches of asphalt pavement. No excavation expected within this location.

(3) Within the IH 39 mainline grading limits from Station 1338+48 to 1343+20 LT (47PT331 (Oakwood Cemetery) uncataloged cemetery). Work in this area consists of milling 2 inches of asphalt pavement and overlaying with 2 inches of asphalt pavement. No excavation expected within this location.

14. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.
107-065 (20080501)

1166-12-80:

The following utilities are located within or near the project limits and no conflicts are anticipated:

ANR Pipeline Company - Gas
ATC Management, Inc. - Electric
Charter Communications - Communication Line
Packerland Broadband - Communication Line
Wisconsin Public Service Corporation - Electricity
Wisconsin Public Service Corporation - Gas/Petroleum

6414-00-73:

The following utilities are located within or near the project limits and no conflicts are anticipated:

ATC Management, Inc. - Electric
AT&T Wisconsin - Communication Line
Charter Communications - Communication Line
Wisconsin Public Service Corporation - Electricity
Wisconsin Public Service Corporation - Gas/Petroleum

15. Environmental Protection - Dewatering.

Add the following to standard spec 107.18:

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

Guidance on Dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061, "Dewatering". This document can be found at the WisDNR website: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material and removal of the dewatering system and is incidental to contract work. (NCR 107.13-04012016)

16. Base Patching.

Add the following to standard spec 390.2:

Furnish dense graded base conforming to the requirements specified under standard spec 305.

Add the following to standard spec 390.5(2):

Payment for bid items under this section includes providing and compacting dense graded base.

17. Removing Endwall, Item 204.9060.S.01.

A Description

This special provision describes removing concrete and steel apron endwalls according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Endwall in units of each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Endwall	EACH

stp-204-025 (20150630)

18. Removing Corrugated Steel Culvert Pipe and Restoring Cut End, Item 204.9090.S.01.**A Description**

This special provision describes removing a portion of a corrugated steel culvert pipe and restoring the cut end in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)**C Construction**

Repair damaged zinc coating on cuts according to AASHTO M36.

D Measurement

The department will measure Removing Corrugated Steel Culvert Pipe and Restoring Cut End along the length of the culvert pipe in LF, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.01	Removing Corrugated Steel Culvert Pipe and Restoring Cut End	LF

Payment is full compensation for cutting culvert pipe and repairing zinc coating.
stp-204-025 (20150630)

19. Removing Concrete Surface Partial Depth, Item 204.0109.S.**A Description**

This special provision describes removing a portion of the concrete surfaces as shown on the plans according to standard spec 204, and as hereinafter provided.

B (Vacant)

C Construction

C.1 Equipment

Use a machine that provides a surface finish acceptable to the engineer. Shroud the machine to prevent discharge of any loosened material into adjacent work areas or live traffic lanes.

Use a machine that is equipped with electronic devices that provide accurate depth, grade and slope control, and acceptable dust control system.

C.2 Methods

Remove existing concrete to the depths as shown on the plan by grinding, planing, chipping, sawing, milling, or by using other methods approved by the engineer.

Perform the removal operation in such a manner as to preclude damage to the remaining pavement and results in a reasonable uniform plane surface free of excessive large scarification marks and having a uniform transverse slope.

The sequence of removal operations shall be such that no exposed longitudinal joints 2 inches or more in depth remain during non-working hours. Windrowing or storing of the removed material on the roadway will only be permitted in conjunction with a continuous removal and pick-up operation. During non-working hours, clear the roadway of all materials and equipment.

The removed pavement shall become the property of the contractor. Properly dispose of it according to standard spec 204.3.1.3.

D Measurement

The department will measure Removing Concrete Surface Partial Depth in area by the square foot of surface area, removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0109.S	Removing Concrete Surface Partial Depth	SF

Payment is in full compensation for removing the concrete; and for disposing of materials. stp-204-041 (20080902)

20. Preparing the Foundation.

Replace standard spec 211.3.1 (3) with the following:

Unless specified otherwise, fill holes, ruts, and other depressions in the foundation with materials similar to those existing in the foundation, except on existing concrete use asphaltic materials matching the proposed overlaying surface. Excavate and remove high places to the required lines, grade, and section.

21. QMP Base Aggregate.

A Description

A.1 General

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed and paid for under the Aggregate Detours, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
 1. Production and placement control and inspection.
 2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx>

A.2 Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a contract quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

A.2.1 Quality Control Plan

- (1) Submit an abbreviated quality control plan consisting of the following:
 1. Organizational chart including names, telephone numbers, current certification(s) with HTCP number(s) and expiration date(s), and roles and responsibilities of all persons involved in the quality control program for material under affected bid items.

A.2.2 Contractor Testing

1.

Contract Quantity	Minimum Required Testing per source
≤ 6000 tons	One stockpile test prior to placement, and two production or one loadout test. ^{[1] [2]}
> 6000 tons and ≤ 9000 tons	One stockpile and Three placement tests ^[3] [4] [5]

^[1] Submit production test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

^[2] If the actual quantity overruns 6,000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

^[3] If the actual quantity overruns 9000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

^[4] For 3-inch material or lift thickness of 3-inch or less, obtain samples at load-out.

^[5] Divide the aggregate into uniformly sized sublots for testing

2. Stockpile testing for concrete pavement recycled in place will be sampled on the first day of production.

3. Until a four point running average is established, individual placement tests will be used for acceptance. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.

4. Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

A.2.3 Department Testing

(1) The department will perform testing as specified in B.8 except as follows:

- Department stockpile verification testing prior to placement is optional for contract quantities of 500 tons or less.

B Materials

B.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

- (1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation as follows:

Required Certification Level:	Sampling or Testing Roles:
Transportation Materials Sampling Technician (TMS) Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling ^[1]
Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

^[1] Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

- (2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.3 Laboratory

- (1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388

<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/qual-labs.aspx>

B.4 Quality Control Documentation

B.4.1 General

- (1) Submit base aggregate placement documentation to the engineer within 10 business days after completing base placement. Ensure that the submittal is complete, neatly organized, and includes applicable project records and control charts.

B.4.2 Records

- (1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within one business day after obtaining a sample. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within one business day after obtaining a sample. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 1. Contractor individual QC tests.
 2. Department QV tests.
 3. Department IA tests.
 4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV placement tests, include only QC placement tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Perform one stockpile test from each source prior to placement.
- (3) Test gradation once per 3000 tons of material placed or fraction thereof. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples or lift thickness of 3-inch or less from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only

material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

- (4) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for seven calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (5) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (6) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (7) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:
Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11
- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
 1. Control limits are at the upper and lower specification limits.
 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

- (1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.
- (2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

- (1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.
- (2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

- (1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after four additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after four additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to

determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

- (1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within two business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 1. Perform one stockpile test from each source prior to placement.
 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates or for a lift thickness of 3-inch or less, the department will collect samples at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
 1. Split sample testing.
 2. Proficiency sample testing.
 3. Witnessing sampling and testing.
 4. Test equipment calibration checks.
 5. Reviewing required worksheets and control charts.
 6. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this 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.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay according to CMM 8-10.5.2 for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.
stp-301-010 (20170615)

22. Dense Graded Base.

Supplement standard spec 305.3.2 as follows:

Include a rubber tired roller to compact all base aggregate shoulders 3 feet or less in width and the associated gravel inslopes.

23. Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.

A Description

This special provision describes reheating the abutting edge of the previously compacted layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction

C.1 Equipment

Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints

Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted layer in the adjacent lane as follows:

- Reheat the joint to within 60 degrees F (15 degrees C) of the mix temperature at the paver auger. Measure joint temperature immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

D Measurement

The department will measure Reheating HMA Pavement Longitudinal Joints by the linear foot, acceptably completed, as measured along each joint for each layer of asphalt placed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF

Payment is full compensation for furnishing all the work required under this bid item.
stp-460-015 (20140630)

24. 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 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. Obtain the CMM from the department's web site at:
<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>
- (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/mrs>

B Materials

B.1 Personnel

- (1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.
- (2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.2 Testing

- (1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter position. Perform each test for 4 minutes of nuclear gauge count time.

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges from the department's approved product list at <http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm>.
- (2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.
- (3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:
Materials Management Section
3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: (608) 243-5998

B.3.2 Comparison of Nuclear Gauges

B.3.2.1 Comparison of QC and QV Nuclear Gauges

- (1) Select a representative section of the compacted pavement prior to or on the first day of paving for the comparison process. The section does not have to be the same mix design.
- (2) Compare the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the comparison on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.

- (3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft³. Measure and record the density on the 5 additional test sites for each gauge.
- (4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft³ and repeat comparison process from B.3.2.1 (2).
- (5) Furnish one of the QC gauges passing the allowable comparison tolerances to perform density testing on the project.

B.3.2.2 Comparison Monitoring

- (1) After performing the gauge comparison specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform comparison monitoring of the QC, QV, and all back-up gauges at the project reference site.
- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft³ of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft³ of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

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) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.

- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full subplot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate subplot for that partial quantity.
- (5) Randomly select test locations for each subplot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.
- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

Lane Width	No. of Tests	Transverse Location
5 ft or less	1	Random
Greater than 5 ft to 9 ft	2	Random within 2 equal widths
Greater than 9 ft	3	Random within 3 equal widths

Table 1

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

- (1) A lot represents a combination of the total daily tonnage for each layer and target density.
- (2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one subplot for each layer.
- (3) If a side road, crossover, turn lane, or ramp is 1500 feet or longer, determine sublots and random test locations as specified in B.4.1.1.
- (4) If a side road, crossover, turn lane, or ramp is less than 1500 feet long, determine sublots using a maximum of 750 tons per subplot and perform the number of random tests as specified in Table 2.

Side Roads, Turn Lanes, Crossovers, Ramps, Roundabouts: Sublot/Layer tonnage	Minimum Number of Tests Required
25 to 100 tons	1
101 to 250 tons	3
251 to 500 tons	5
501 to 750 tons	7

Table 2

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 according to 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 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- (2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted 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 according to 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 2 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 according to standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

- (1) The department will administer density incentives according to standard spec 460.5.2.3.

stp-460-020 (20161130)

25. HMA Pavement Percent Within Limits (PWL) QMP.

A Description

This special provision describes percent within limits (PWL) pay determination, providing and maintaining a contractor Quality Control (QC) Program, department Quality Verification (QV) Program, required sampling and testing, dispute resolution, corrective action, pavement density, and payment for HMA pavements. Pay is determined by statistical analysis performed on contractor and department test results conducted according to the Quality Management Program (QMP) as specified in standard spec 460, except as required below.

B Materials

Conform to the requirements of standard specs 450, 455, and 460 except where superseded by this special provision. The department will allow only one mix design for each HMA mixture type per layer required for the project, unless approved by the engineer. The use of more than one mix design for each HMA pavement layer will require the contractor to construct a new test strip in accordance with HMA Pavement Percent Within Limits (PWL) QMP Test Strip Volumetrics and HMA Pavement Percent Within Limits (PWL) QMP Test Strip Density articles at no additional cost to the Department.

Replace standard spec 460.2.8.2.1.3.1 for contracts with 5000 Tons of Mixture or Greater with the following:

460.2.8.2.1.3.1 Contracts under Percent within Limits

- (1) Furnish and maintain a laboratory at the plant site fully equipped for performing contractor QC testing. Have the laboratory on-site and operational before beginning mixture production.
- (2) Obtain random samples and perform tests according to Appendix A Test Methods & Sampling for HMA Pavement PWL QMP. Obtain HMA mixture samples from trucks at the plant. For the subplot in which a QV sample is collected, the QC sample shall be discarded, and the QC team shall test a split of the QV sample.
- (3) Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per subplot. All QC samples shall provide the following: QC, QV, and Retained. The contractor shall take possession and test the QC portions. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. Additional sampling details are found in Appendix A. Samples shall be labeled in accordance with Appendix A. Additional handling instructions for retained samples are found in CMM 8-36.

(4) Use the test methods identified below to perform the following tests at a frequency greater than or equal to that indicated:

- Blended aggregate gradations in accordance with AASHTO T 30
- Asphalt content (AC) in percent according to AASHTO T 308 (ignition oven) or AASHTO T 164 (chemical extraction)
- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166.
- Maximum specific gravity (Gmm) according to AASHTO T 209.
- Air voids (Va) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R35.

(5) Lot size shall consist of 3750 tons with sublots of 750 tons. Test each design mixture at a frequency of 1 test per 750 tons of mixture type produced and placed on the project. Add a random sample for any fraction of 750 tons at the end of a project. Partial lots with less than three subplot tests will be included into the previous lot for data analysis/acceptance and pay. Volumetric lots will include all tonnage of mixture type under specified bid item unless otherwise specified in the plan.

(6) Conduct field tensile strength ratio tests according to AASHTO T283, without freeze-thaw conditioning cycles, on each qualifying mixture in accordance with CMM 8-36.6.14. Test each full 50,000 ton production increment, or fraction of an increment, after the first 5,000 tons of production. Perform required increment testing in the first week of production of that increment. If field tensile strength ratio values are below the spec limit, notify the engineer. The engineer and contractor will jointly determine a corrective action.

Delete standard spec 460.2.8.2.1.5 and 460.2.8.2.1.6

Replace standard spec 460.2.8.2.1.7 Corrective Action with the following:

460.2.8.2.1.7 Corrective Action

(1) Material must conform to the following action and conformance limits based on individual QC and QV test results (tolerances relative to JMF):

ITEM	ACTION LIMITS	CONFORMANCE LIMITS
Percent passing given sieve:		
37.5-mm	+/- 8.0	
25.0-mm	+/- 8.0	
19.0-mm	+/- 7.5	
12.5-mm	+/- 7.5	
9.5-mm	+/- 7.5	
2.36-mm	+/- 7.0	
75-µm	+/- 3.0	
AC in percent	- 0.5	
Va		- 1.5 & +2.0
VMA in percent ^[1]	- 0.5	-1.0

^[1] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

(2) QV samples will be tested for air voids, VMA, Gmm, Gmb, and AC.

(3) Notify the engineer if any individual test result falls outside the action limits, investigate the cause and take corrective action to return to within action limits. If two consecutive test results fall outside the action limits, stop production. Production may not resume until approved by the engineer. Additional QV samples may be collected upon resuming production, at the discretion of the engineer. Additional QV tests must meet action limits or be subject to production stop and/or remove and replace.

(4) For any additional tests outside the random number testing conducted for volumetrics, the data collected will not be entered into PWL calculations. However, additional QV testing shall meet the tolerances for material acceptance as specified in the Standard Specification and this document.

(5) Remove and replace nonconforming material at no additional expense to the department. The engineer may allow nonconforming material to remain in place with a price reduction. The department will pay for the nonconforming HMA Pavement allowed to remain in place at 50 percent of the contract unit price. Nonconforming material is defined as any individual QC or QV tests results outside the conformance limits or a PWL value < 50.

Replace standard spec 460.2.8.3.1.2 Personnel Requirements with the following:

460.2.8.3.1.2 Personnel Requirements

(1) The department will provide at least one HTCP-certified HMA technician, certified at a level appropriate for sampling and mixture production control testing, to observe QV sampling of project mixtures.

(2) Under departmental observation, a contractor HMA technician certified at a level appropriate for sampling and mixture production control testing will collect and split samples.

(3) A department HMA technician certified at a level appropriate for sampling and mixture production control testing will ensure that all sampling is performed correctly and conduct testing, analyze test results, and report resulting data.

(4) The department will provide an organizational chart to the contractor before mixture production begins. The organizational chart will include names, telephone numbers, and current certifications of all QV testing personnel. The department will update the chart with appropriate changes, as they become effective.

Replace standard spec 460.2.8.3.1.4 Department Verification Testing Requirements with the following:

460.2.8.3.1.4 Department Verification Testing Requirements

(1) HTCP-certified department personnel will obtain QV random samples by directly supervising HTCP-certified contractor personnel sampling from trucks at the plant. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield three splits for all random sampling per subplot. All QV samples shall provide the following: QC, QV, and Retained. The department will observe the splitting and take

possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. The department will take possession of retained samples accumulated to date each day QV samples are collected. Retention of samples will be provided until surpassing the analysis window of up to 5 lots, as defined in 460.2.8.3.1.7(2) of this document. Additional sampling details are found in Appendix A.

(2) The department will verify product quality using the test methods specified here in 460.2.8.3.1.4(3). The department will identify test methods before construction starts and use only those methods during production of that material unless the engineer and contractor mutually agree otherwise.

(3) The department will perform all testing conforming to the following standards:

- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166.
- Maximum specific gravity (Gmm) according to AASHTO T 209.
- Air voids (Va) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R 35.
- Asphalt Content (AC) in percent by ignition oven according to AASHTO T 308 or by chemical extraction according to AASHTO T 164.

(4) The department will randomly test each design mixture at the minimum frequency of one test for each lot.

Delete standard spec 460.2.8.3.1.6

Replace standard spec 460.2.8.3.1.7 Dispute Resolution with the following:

460.2.8.3.1.7 Data Acceptance for Volumetrics

(1) Acceptance of test data for pay determination will be contingent upon QC and QV test results. Statistical analysis will be conducted on Gmm and Gmb test results for calculation of Va. If either Gmm or Gmb analysis results in non-comparable data as described in 460.2.8.3.1.7(2), subsequent testing will be performed for both parameters as detailed in the following paragraph.

(2) The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Additional comparisons incorporating the first 3 lots of data will be performed following completion of the 4th and 5th lots (i.e., lots 1-3, 1-4, and 1-5). A rolling window of 5 lots will be used to conduct F & t comparison for the remainder of the project (i.e., lots 2-6, then lots 3-7, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025. If the F- and t-tests report comparable data, the QC and QV data sets are determined to be statistically similar and QC data will be used to calculate the Va used in PWL and pay adjustment calculations. If the F- and t-tests result in non-comparable data, proceed to the *dispute resolution* steps found below. Dispute resolution via further investigation is as follows:

[1] The Retained portion of the split from the most recent lot in the analysis window (specifically the subplot identifying that variances or means do not compare) shall be referee tested by the bureau's AASHTO accredited laboratory and certified personnel. If the non-comparison occurs following Lot 3, 4, or 5, all previous lots

are subject to referee testing. Referee test results will replace the QV data of the subplot(s).

^[2] Statistical analysis will be conducted with referee test results replacing QV results.

- i. If the F- and t-tests indicate variances and means compare, no further testing is required for the lot and QC data will be used for PWL and pay factor/adjustment calculations.
- ii. If the F- and t-tests indicate non-comparable variances or means, the QV portion of the random QC sample will be tested by the department's regional lab for the remaining 4 sublots of the lot which the F- and t- tests report not comparing. The department's region lab and the referee test results will be used for PWL and pay factor/adjustment calculations.

^[3] The contractor may choose to *dispute* the regional test results on a lot basis. In this event, the retained portion of each subplot will be referee tested by the department's AASHTO accredited laboratory and certified personnel. The referee Gmm and Gmb test results will supersede the regional lab results for the disputed lot.

- i. If referee testing results in an increased calculated pay factor, the department will absorb the cost of the additional referee testing.
- ii. If referee testing of a disputed lot results in an equal or lower calculated pay factor, the contractor pays for the additional referee testing at \$2,000/lot.

⁽³⁾ The department will notify the contractor of the referee test results within 3 working days after receipt of the samples by the department's AASHTO accredited laboratory. The intent is to provide referee test results within 7 calendar days from completion of the lot.

⁽⁴⁾ The department will determine mixture conformance and acceptability by analyzing referee test results, reviewing mixture project data, and inspecting the completed pavement according to Standard Spec, this special provision, and accompanying Appendix A.

⁽⁵⁾ Nonconforming mix (i.e., resulting in a PWL value less than 50 or not meeting the requirements of 460.2.8.2.1.7 as modified here within) may be subject to remove and replace, at the discretion of the engineer. Replacement may be conducted on a subplot basis. If an entire PWL subplot is removed and replaced, the test results of the newly placed material shall replace the original data for the subplot. Any remove and replace shall be performed at no additional cost to the department. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test will be conducted and under such circumstances will be entered into the data analysis and pay determination.] If the engineer approves the nonconforming material to remain in place, it will be paid at 50% of the HMA Pavement contract unit price. The extent of nonconforming mix shall be determined by following the dispute resolution process detailed in 460.2.8.3.1.7(2) of this document. The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this nonconforming material.

Delete standard spec 460.2.8.3.1.8 Corrective Action.

C Construction

Replace standard spec 460.3.3.2 Pavement Density Determination with the following:

460.3.3.2 Pavement Density Determination

- ⁽¹⁾ The engineer will determine the target maximum density using department procedures described in CMM 8-15. The engineer will determine density as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.
- ⁽²⁾ Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.
- ⁽³⁾ A lot is defined as 7500 lane feet with sublots of 1500 lane feet (excluding shoulder, even if paved integrally) and placed within a single layer for each location and target maximum density category indicated in table 460-3. The contractor is required to complete 3 tests randomly per subplot and the department will randomly conduct one (1) QV test per subplot. A partial quantity less than 1500 lane feet will be included with the previous subplot. Partial lots with less than three sublots will be included into the previous lot for data analysis/acceptance and pay, by the engineer. If density lots/sublots are determined prior to construction of the test strip, any random locations within the test strip shall be omitted. Exclusions such as shoulders and appurtenances shall be tested in accordance with CMM 8-15. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to Table 460-3.
- ⁽⁴⁾ The three QC locations per subplot will represent the outside, middle, and inside of the paving lane. Each location will be measured with two one-minute gauge readings oriented 180 degrees from one another, in the same footprint as detailed in Appendix A. Each location will be the average of the two readings. If the two readings exceed 1.0 lb/ft³ of one another, a third reading shall be conducted in the same orientation as the first reading. In this event, all three readings shall be averaged, the initial of the three readings which falls farthest from the average value discarded, and the remaining two values averaged to represent the location for the gauge. Multiple locations are not to be averaged together.
- ⁽⁵⁾ QV nuclear testing will consist of a randomly selected location per subplot. The QV is also comprised of two one-minute readings, averaged as described in standard spec 460.3.3.2(4) above.
- ⁽⁶⁾ A certified nuclear density technician shall identify random locations and perform the testing. The responsible certified technician shall ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly, or at the completion of each lot.
- ⁽⁷⁾ For any additional tests outside the random number testing conducted for density, the data collected will not be entered into PWL calculations. However, additional QV testing must meet the tolerances for material acceptance as specified in the Standard Specification and this document. If additional density data identifies nonconforming material, proceed in accordance with CMM 8-15.11.

Replace standard spec 460.3.3.3 Waiving Density Testing with Acceptance of Density Data with the following:

460.3.3.3 Acceptance of Density Data

⁽¹⁾ Acceptance of test data for pay determination will be contingent upon test results from both the contractor (QC) and the department (QV).

⁽²⁾ As random density locations are paved, the data shall be recorded in the PWL spreadsheet for analysis in chronological order. The engineer, upon completion of the analysis lot, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Analysis will use a set alpha value of 0.025.

- i. If the F- and t-tests indicate variances and means compare, the QC and QV data sets are determined to be statistically similar and QC data will be used for PWL and pay adjustment calculations.
- ii. If the F- and t-tests indicate variances or means do not compare, the QV data will be used for subsequent calculations.

⁽³⁾ The department will determine mixture density conformance and acceptability by analyzing test results, reviewing mixture project data, and inspecting the completed pavement according to standard spec, this document, and accompanying Appendix.

⁽⁴⁾ Density resulting in a PWL value less than 50 or not meeting the requirements of 460.3.3.1 is non-conforming and may be subject to remove and replace at no additional cost to the department, at the discretion of the engineer.

- i. Replacement may be conducted on a subplot basis. If an entire PWL subplot is removed and replaced, the test results of the newly placed material shall replace the original data for the subplot.
- ii. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test must be conducted and under such circumstances will be entered into the data analysis and pay determination.]
- iii. If the engineer approves the nonconforming material to remain in place, it will be paid for at 50% of the HMA Pavement contract unit price. The extent of nonconforming density is addressed in accordance with CMM 8-15.11. The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this nonconforming material.

D Measurement

The department will measure the HMA Pavement bid items acceptably completed by the ton as specified in standard spec 450.4 and as follows in standard spec 460.5 as modified here within.

E Payment

Replace standard spec 460.5.2 HMA Pavement with the following:

460.5.2 HMA Pavement

460.5.2.1 General

⁽¹⁾ Payment for HMA Pavement Type LT, MT, and HT mixes is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for HMA PWL QMP testing and aggregate source testing; for warm mix asphalt additives or processes; for stabilizer, hydrated lime and liquid antistripping agent, if required; and for all materials including asphaltic materials.

⁽²⁾ If provided for in the plan quantities, the department will pay for a leveling layer, placed to correct irregularities in an existing paved surface before overlaying, under the pertinent paving bid item. Absent a plan quantity, the department will pay for a leveling layer as extra work.

460.5.2.2 Calculation of Pay Adjustment for HMA Pavement using PWL

⁽¹⁾ Pay adjustments will be calculated using 65 dollars per ton of HMA pavement. The analysis template, including data, will be provided to the contractor by the department as soon as practicable upon completion of each lot. The department will pay for measured quantities of mix based on this price multiplied by the following pay adjustment calculated in accordance with the *Calculations* worksheet of the WisDOT PWL Analysis Template:

PAY FACTOR FOR HMA PAVEMENT AIR VOIDS & DENSITY	
<i>PERCENT WITHIN LIMITS</i>	<i>PAYMENT FACTOR, PF</i>
<i>(PWL)</i>	<i>(percent of \$65/ton)</i>
> 90 to 100	$PF = ((PWL - 90) * 0.4) + 100$
≥ 50 to 90	$(PWL * 0.5) + 55$
<50	50% ^[1]

where PF is calculated per air voids and density, denoted PF_{air voids} & PF_{density}

^[1] Any material resulting in PWL value of 50 or less shall be removed and replaced unless the engineer allows for such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density shall be in accordance with Table 460-3. Pay adjustment will be determined on a lot basis and will be computed as shown in the following equation.

$$\text{Pay Adjustment} = (\text{PF}-100)/100 \times (\text{WP}) \times (\text{tonnage}) \times (\$65/\text{ton})^*$$

*Note: If Pay Factor <50, the contract unit price will be used in lieu of \$65/ton

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids (PF_{air voids}) and density (PF_{density}) will be determined. PF_{air voids} will be multiplied by the total tonnage placed (i.e., from truck tickets), and PF_{density} will be multiplied by the calculated tonnage used to pave the mainline only (i.e., travel lane) as determined in accordance with CMM 8-15.

The department will pay incentive for air voids and density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

Note: PWL value determination is further detailed in the *Calculations* worksheet of the WisDOT PWL Analysis Template.

bts-HMA PWL QMP (20171002)

26. **Polymer Overlay, Item 509.5100.S.**

A Description

This special provision describes furnishing and applying two layers of a two-component polymer overlay system to the bridge decks shown on the plans. The minimum total thickness of the overlay system shall be ¼”.

B Materials

B.1 General

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

B.2 Polymer Resin

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

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

^A Uncured, mixed polymer binder.

^B Cured, mixed polymer binder.

The required properties of the polymer resin when mixed with aggregate:

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

^C Based on samples cured or aged and tested at 75°F

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

B.3 Aggregates

Furnish natural or synthetic aggregates that are non-polishing, clean, free of surface moisture, fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and meet the following properties and gradation requirements:

Aggregate Properties:

Property	Requirement	Test Method
Moisture Content*	½ of the measured aggregate absorption, %	ASTM C566
Hardness	³ 6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face and 80% with at least 2 fractured faces of material retained on No.16	ASTM D5821
Absorption	≤1%	ASTM C128

* Sampled and tested by the department prior to placement.

Gradation:

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

B.5 Approval of Bridge Deck Polymer Overlay System

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

B.5.1 Product Data Sheets and Specifications

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

B.5.2 Certified Report of Test or Analysis

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

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

C Construction

C.1 General

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

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

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

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

C.2 Deck Preparation

C.2.1. Deck Repair

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to repair the concrete deck will be paid for under other items. Ensure that products used for deck patching are compatible with the polymer overlay system.

NOTE: Some polymer systems require concrete patch material to be in place a minimum of 28-days before overlaying - contact polymer manufacturer before completing deck patching/repair.

C.2.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ASTM C1593. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of ¼ inches or more is greater than 50% of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

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

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

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

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

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

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

C.2.3 Transitional Area

If shown on the plans, create a transitional area approaching transverse expansion joints and ends of the deck using an approved mechanical or blasting method. Remove ¼" to 5/16" of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

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

C.3 Application of the Overlay

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

- a. Ambient air temperature is below 50°F or above 100°F;
- b. Deck temperature is below 50°F;
- c. Moisture content in the deck exceeds 4.5% when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured according to ASTM D4263;
- d. Rain is forecasted during the minimum curing periods listed under C.5;
- e. Materials component temperatures below 65°F or above 99°F;
- f. Concrete age is less than 28 days unless approved by the engineer.
- g. The deck temperature exceeds 100°F.
- h. If the gel time is 10 minutes or less at the predicted high air temperature for the day.

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

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed

for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place, but will require additional applications before opening to traffic.

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

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

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

C.4 Application Rates

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

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

^A The minimum total applications rate is 7.5 GAL/100 SF.

^B Application of aggregate shall be of sufficient quantity to completely cover the polymer.

C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

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

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

C.6 Repair of Polymer Overlay

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.5100.S	Polymer Overlay	SY

Payment is full compensation for preparing the surface; for tensile bond testing; for creating the transitional area; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials. Concrete Deck Repair will be paid for separately.
stp-509-030 (20170615)

27. Reconstructing Inlets.

Add the following to standard spec 611.3

Construct Concrete Curb and Gutter as specified in standard spec 601.

Construct Concrete Sidewalk as specified in standard spec 602.

Add the following to standard spec 611.5.3(1):

Payment for bid items under this section includes providing concrete curb and gutter, concrete sidewalk, and expansion joints; for placing, finishing, protecting and curing; and sawing joints.

28. Water.

Provide the necessary environmental protection against aquatic exotic species control and pathogens if water source(s) is/are from surface waters of the state.
(NCR 624.01-12152015)

29. Field Facilities.

Add the following to standard spec 642.2.1(3):
Provide a water cooler to dispense the bottled drinking water.

Add the following to standard spec 642.3:

Set up the field office within seven days after notice from the engineer.

Provide a parking area large enough to park a minimum of six cars directly adjacent to the field office. The parking area and approach to the field office shall be well drained and consist of a crushed base aggregate or an existing paved surface and shall be ready for use within seven days after the field office is set up.
(NCR 642.02-04062016)

30. Traffic Control.

Add the following to standard spec 643.3.1:

Lighting devices shall be covered or rendered inoperative when not in use.

Provide the engineer, Stevens Point and Plover Police Department(s), Portage County Sheriff's Department, and the State Patrol District Headquarters responsible for that county the current telephone number(s) the contractor or their representative can be contacted at, at all times, in the event a safety hazard develops. Repair, replace or restore the damaged or disturbed traffic control devices within two hours from the time notified or made aware of the damaged or disturbed traffic control devices.

Do not park or store equipment, vehicles, or construction materials within 30 feet of the edge of the traffic lane of any roadway during non-working hours.

Utilize two-way radios, and/or additional flag persons, within lane closure areas and at public road intersections, in order to positively direct, control, and safeguard traffic through the work zone.

An additional flag person is required at all moving construction operations involving milling, paving, and shouldering. The additional flag person is required to be located at the area of the moving operation to guide traffic around the equipment and personnel working at the moving operation.

Promptly replace all state owned signs that are removed by the contractor due to interference with construction operations. At no time may stop signs be removed or moved without flag persons present.

(NCR 643.01-04062016)

31. Temporary Portable Rumble Strips, Item 643.0310.S.

A Description

This special provision describes providing, relocating, maintaining, and removing temporary portable rumble strips.

B Materials

Furnish RoadQuake2 or Roadquake2F temporary portable rumble strips, by Plastic Safety Systems. Do not use alternate products or methods without preapproval by the Bureau of Traffic Operations.

C Construction

C.1 Placement

Provide rumble strips where the plans show or the engineer directs as follows:

1. Before placing rumble strips, clean the roadway of sand and other materials that may cause slippage.
2. Place one end of the rumble strips 6 inches from the roadway centerline. Extend the strips perpendicular to the direction of travel. Ensure strips lay flat on the roadway surface.
3. Only one series of rumble strips, placed before the first work zone, is required per direction of travel for multiple work zones spaced 1 mile or less apart. Work zones spaced greater than 1 mile apart require a separate series of rumble strips.

C.2 Maintenance

Maintain rumble strips as follows:

1. If rumble strips slide, become out of alignment, or are no longer in the wheel path of approaching vehicles during the work period, thoroughly clean both sides of the rumble strips and reset on a clean roadway.
2. Repair or replace damaged rumble strips immediately.

D Measurement

The department will measure temporary portable rumble strips as a single lump sum 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
643.0310.S	Temporary Portable Rumble Strips	LS

Payment is full compensation for providing, relocating, maintaining or replacing, and removing temporary portable rumble strips.
stp-643-020 (20161130)

32. Nighttime Work Lighting-Stationary.

A Description

Provide 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 prior to 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)

33. Marking Outfall Epoxy.

Add the following to standard spec 646.3.1.1:

Locate and stake all outfalls before milling the pavement with existing outfall markings.

Add the following to standard spec 646.5(2):

Payment for bid items under this section includes locating and staking outfalls.

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

A Description

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

B Materials

Use 2 inch nonmetallic conduit, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

C Construction

Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for the entering conduit(s) at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place.

D Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
652.0700.S	Install Conduit Into Existing Item	EACH

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections.
stp-652-070 (20100709)

35. 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
Camera Pole 50-FT
Camera Assembly
Pole Mounted Cabinet
Ethernet Switch
Solar Power System Assembly
Wireless Ethernet Bridge
Fiber Optic Termination Panel
Fiber Optic Cable Outdoor Plant 6-Count

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

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

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

Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

Design/Shop Drawings

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

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

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

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

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again. stp-670-005 (20150630)

36. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

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

Unusual aspects of this project include:

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

A.2 Surge Protection

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

B Materials

B.1 General

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

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

B.2 Outdoor Equipment

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

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

B.3 Custom Equipment

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

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

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

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

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

the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

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

B.4 Environmental Conditions

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

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

B.5 Patch Cables and Wiring

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber

optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

B.6 Surge Protection

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

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

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

C Construction

C.1 Thread Protection

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

C.2 Cable Installation

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

C.3 Wiring

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

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

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

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

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

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

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

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

C.4 System Operations

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

C.5 Surge Protection

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

D Measurement

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

E Payment

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

stp-670-010 (20100709)

37. Power Connection to Existing Traffic Signal Cabinet.

Coordinate power connection from CCTV-49-0011 and CCTV-49-0012 to the existing traffic signal cabinet at the CTH B and CTH HH interchanges. Contact Ken Radke, WisDOT NC Region Electrician, (715) 459-4264, seven working days prior to needing to connect power conductor wires.

38. Install Pole Mounted Cabinet, Item 673.0225.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 according to standard spec 652.

C Construction

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as shown in the plans, 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
673.0225.S	Install Pole Mounted Cabinet	EACH

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for furnishing all testing.
stp-673-010 (20100630)

39. Grading, Shaping and Finishing for Crossdrain Restoration, Item SPV.0060.01; Station 298+40"QA", Item SPV.0060.02; Station 294+35"QB", Item SPV.0060.03.

A Description

This special provision describes grading, shaping and finishing all disturbed areas resulting from resetting and/or replacing existing culvert pipe and apron endwalls as shown in the plans and hereinafter provided. Perform all work and furnish and use material that is according to the pertinent sections of the standard specifications, and as hereinafter provided.

B (Vacant)**C Construction**

Properly dispose of all surplus and unsuitable material from ditch cleaning operations according to standard spec 205.3.12.

D Measurement

The department will measure Grading, Shaping and Finishing for Cross Drain Restoration by a unit of work at each restoration site, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Grading, Shaping and Finishing for Crossdrain Restoration	EACH
SPV.0060.02	Grading, Shaping and Finishing for Crossdrain Restoration, Station 298+40"QA"	EACH
SPV.0060.03	Grading, Shaping and Finishing for Crossdrain Restoration, Station 294+35"QB"	EACH

Payment is full compensation for furnishing all grading, shaping, and ditching; and for furnishing and placing fill, topsoil or salvaged topsoil, fertilizer and seed.

Erosion mat and silt fence will be measured and paid for under the pertinent items provided in the contract.

40. Flexible Tubular Marker Posts Left In Place, Item SPV.0060.04; Flexible Tubular Marker Bases Left In Place, Item SPV.0060.05.

A Description

This special provision describes providing and installing flexible tubular marker posts and bases that will be left in place and become the department's property.

B Materials

B.1 Flexible Tubular Marker Posts

Furnish 48-inch yellow reflectorized flexible tubular marker posts from the department's approved products list. Ensure that posts are free of burns, discoloration, contamination, and other objectionable marks or defects that affect appearance or serviceability.

Provide new and unused flexible tubular marker posts.

B.2 Flexible Tubular Marker Bases

Provide a surface mounted assembly that bolts to the pavement surface using an engineer-approved or specified bolt adhesive system with at least four stainless steel bolts. Provide a base designed to hold the post securely using locking pins, or other devices, to withstand a series of direct wheel impacts with speeds up to 65 mph.

C Construction

C.1 Flexible Tubular Marker Posts

Furnish and install flexible tubular marker posts at locations the plans show. Attach the posts to the base using a locking pin or other engineer-approved system.

C.2 Flexible Tubular Marker Bases

Furnish and install tubular marker bases at locations the plans show. Use bases designed for permanent installation that resist twisting or displacement from impact forces, and do not pose a hazard to vehicles.

D Measurement

The department will measure Tubular Marker Posts Left In Place and Tubular Marker Bases Left In Place as each individual installation, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Flexible Tubular Marker Posts Left In Place	EACH
SPV.0060.05	Flexible Tubular Marker Bases Left In Place	EACH

Payment for Tubular Marker Post Left in Place and Tubular Marker Bases Left In Place is full compensation for providing and installing flexible tubular marker posts and bases including required hardware.

41. Install Solar Power System Assembly, Item SPV.0060.06.

A Description

This special provision describes installing a state-furnished solar power system assembly on a pole and connecting the power to devices on the pole as shown on the plans or as directed by the engineer.

B Materials

Materials will include department-furnished materials and contractor furnished materials.

Department-furnished materials include the following:

- One solar power system consisting of 3-85W panels, 2-120 Amp-Hour batteries, a solar power controller, and one solar power cabinet to house the batteries and controller.
- Two Wireless Ethernet Bridges (installation paid for under other pay items).

Contractor furnished materials include mounting hardware, wires, and connectors.

C Construction

Solar Power System Installation:

Install the solar panels facing south on the pole with the devices to be powered. If a compass is used, a correction must be made for the difference between magnetic north and true north. Install the solar panels at a tilt angle of approximately 60 degrees. The tilt angle shall be considered the angle from horizontal to the front, or face of the solar panel.

Mount the cabinet to the pole by the two cast aluminum mounting brackets which are already attached to the back of the cabinet. The brackets shall be attached to the pole using stainless steel bands or U-bolts.

Install the cabling, ensuring that cables enter the cabinet only through the bottom, and that strain relief fittings are used to seal cable entrance points. Connect the panel to the charge controller, connecting the white wire to the positive (+) terminal and the black wire to the negative terminal (-).

D Measurement

The department will measure Install Solar Power System Assembly as each individual unit, acceptably completed, consisting of one solar power assembly, acceptably installed and powering the 5.8 GHz Ethernet Bridges.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Install Solar Power System Assembly	EACH

Payment is full compensation for providing the contractor furnished materials, assembling the department-furnished and contractor furnished materials, installing the assembly, calibrating the detector, connecting the detector to the modem, and integrating it into the existing ITS system, making the assembly functional.

42. Install Wireless Ethernet Bridge, Item SPV.0060.07.

A Description

This special provision describes installing a state-furnished, or salvaged, wireless Ethernet bridge access point or subscriber unit at a new or existing cabinet or new or existing pole.

B Materials

Materials will include department-furnished materials and contractor furnished materials.

Department-furnished or salvaged, materials include the following:

- One Ethernet bridge with integral antenna.
- One Ethernet bridge power converter.
- One Ethernet bridge mounting bracket.

Contractor-furnished materials include the following:

- Mounting hardware.
- Outdoor rated Category 6 communications cable (see plans for whether the cable is a crossover cable).
- Inline network cable surge suppressor.

C Construction

Bond the surge suppressor to the cabinet grounding system.

Install the wireless Ethernet bridge in a point-to-point or point-to-multipoint configuration as shown on the plans and as directed by the engineer.

Use the manufacturer's set-up software to configure the Ethernet bridge radio for its intended use. Use the signal strength indicator on the radio to find the optimum position. Also perform a frequency analysis to determine the optimal hop pattern of the radios and test the continuity of the link by polling the radios using the software provided. The position of the radio and the hop pattern shall be adjusted until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies

identified in the frequency analysis. Deliver 3 copies of the final test results for signal strength, frequency analysis, and test polling.

D Measurement

Install Wireless Ethernet Bridge will be measured as a unit, completely installed and operational.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Install Wireless Ethernet Bridge	EACH

Payment is full compensation for installing, setting up, configuring, and testing the wireless Ethernet bridge radio, surge suppressor, cables, and connections; and transportation.

43. HMA Percent Within Limits (PWL) Test Strip Volumetrics, Item SPV.0060.08; HMA Percent Within Limits (PWL) Test Strip Density Item SPV.0060.09.

A Description

This special provision describes the Hot Mix Asphalt (HMA) density and volumetric testing tolerances required for an HMA test strip. An HMA test strip is required for projects constructed under HMA Percent Within Limits (PWL) QMP. A test strip is required for each pavement layer placed over a specific, uniform underlying material, unless specified otherwise in the plans. Each project is restricted to a single mix design for each mix type required (e.g., upper layer and lower layer may have different mix type specified).

Perform work according to standard spec 460 and as hereinafter modified.

B Materials

Use materials conforming to HMA Pavement Percent Within Limits (PWL) QMP special provision.

C Construction

C.1 Test Strip

Notify the department at least 5 calendar days in advance of construction of the test strip. On the first day of production for a test strip, produce approximately 750 tons of HMA. (Note: tonnage shall be adjusted to accommodate natural break points in the project.) Test strips shall be located in a section of the roadway to allow a representative rolling pattern (i.e. not a ramp or shoulder, etc.).

C.1.1 Sampling and Testing Intervals

C.1.1.1 Volumetrics

Laboratory testing will be conducted from a split sample yielding three components, with portions designated for QC (quality control), QV (quality verification), and retained.

During production for the test strip, HMA mixture samples shall be obtained from trucks prior to departure from the plant. Three split samples shall be collected during the production of test strip material. Sampling and splitting shall be in accordance with Appendix A: *Sampling for WisDOT PWL QMP*. These three samples will be randomly selected by the engineer from each *third* of the test strip tonnage (T), excluding the first 50 tons:

<u>Sample Number</u>	<u>Production Interval (tons)</u>
<u>1</u>	50 to $\frac{T}{3}$
<u>2</u>	$\frac{T}{3}$ to $\frac{2T}{3}$
<u>3</u>	$\frac{2T}{3}$ to T

C.1.1.2 Density

Required field tests include contractor QC and department QV nuclear density gauge tests and pavement coring.

The engineer will identify two zones in which gauge/core correlation is to be performed. These two zones will be randomly selected within each *half* of the test strip length. (Note: Density zones shall not overlap and must have a minimum of 100 feet between the two zones; therefore random numbers may be shifted (evenly) in order to meet these criteria.) Each zone shall consist of five locations across the mat as identified in Appendix A. The following shall be determined at each of the five locations within both zones:

- two one-minute nuclear density gauge readings for QC team*
- two one-minute nuclear density gauge readings for QV team*
- pavement core sample

*If the two readings exceed 1.0 lb/ft³ of one another, a third reading shall be conducted in the same orientation as the first reading. [In this event, the engineer will average all three readings, discard the initial of the three readings which falls farthest from the average value and then average the remaining two values to represent the location for the gauge.]

Both QV and QC teams shall have two nuclear density gauges present for correlation at the time the test strip is constructed. The above testing shall be conducted in accordance with Appendix A: *Test Methods & Sampling for PWL QMP HMA Pavements*.

All test reports shall be submitted to the department upon completion, and approved before paving resumes.

C.1.2 Field Tests

C.1.2.1 Density

Daily standardization of gauges on reference blocks and a project reference site shall be performed in accordance with CMM 8-15. A standard count shall be performed for each gauge on the material placed for the test strip, prior to any additional data collection. Nuclear gauge readings and pavement cores shall be used to determine nuclear gauge correlation in accordance with Appendix A. The two to three readings for the five locations across the mat for each of two zones shall be provided to the engineer. The engineer will analyze the readings of each gauge relative to the densities of the cores taken at each location. The engineer will determine the average difference between the nuclear gauge density readings and the measured core densities to be used as a constant offset value. This offset will be used to adjust raw density readings of the specific gauge for the remainder of the project and shall appear on the density data sheet along with gauge and project identification. An offset is specific to the mix and layer, therefore a separate value shall be determined for each layer of each mix placed over a differing underlying material for the project. This constitutes correlation of that individual gauge for the given layer. Two gauges per team are not required to be onsite daily after completion of the test strip. Any data collected without a correlated gauge will not be accepted.

The contractor is responsible for coring the pavement from the footprint of the density tests. Coring and filling of pavement core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Testing of cores shall be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following laboratory testing and will be responsible for any verification testing at the discretion of the engineer.

Each core 150 mm (6 inches) in diameter shall be taken at locations identified in Section C.1.1.2. Each random core shall be full thickness of the layer placed. Core densities shall be determined in accordance with AASHTO T 166. Thoroughly dry pavement cores in accordance with ASTM D 7227. The target maximum density to be used in determining core density is the average of the three volumetric/mix Gmm values from the test strip multiplied by 62.24 lb/ft³. (In the event mix and density portions of the test strip procedure are separated, the mix portion must be conducted prior to density determination. The target maximum density to determine core densities shall then be the Gmm four-test running average from the end of the previous day's production multiplied by 62.24 lb/ft³.)

Fill all core holes with non-shrink rapid-hardening grout, mortar or concrete, or with HMA. When using grout, mortar or concrete, remove all water from the core holes prior to filling. Mix the mortar or concrete in a separate container prior to placement in the hole. If HMA is used, fill all core holes with hot-mix matching the same day's production mix type at same day compaction temperature +/- 20 F. The core holes shall be dry and coated with tack before filling, filled with a top layer no thicker than 2.25 inches, lower layers not to exceed 4 inches, and compacted with a Marshall hammer or similar tamping device using approximately 50 blows per layer. The finished surface shall be flush with the pavement surface. Any deviation in the surface of the filled core holes greater than 1/4 inch at the time of final

inspection will require removal of the fill material to the depth of the layer thickness and replacement.

All applicable laboratory and field testing associated with a test strip shall be completed prior to any additional mainline placement of the mix for the associated test strip. All test reports shall be submitted to the department upon completion, and approved before paving resumes. The department will notify the contractor within 24 hours from start of test strip regarding approval to proceed with paving, unless an alternate time frame is agreed upon in writing with the department.

[Exclusions such as shoulders and appurtenances shall be tested in accordance with CMM 8-15. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to Table 460-3.]

C.1.3 Laboratory Tests

C.1.3.1 Volumetrics

Obtain random samples according to Appendix A. Obtain HMA mixture samples from trucks at the plant. Perform tests the same day as taking the sample.

Bulk specific gravities shall be determined for cores in accordance with AASHTO T 166. The bulk specific gravity values determined from field cores shall be used to calculate a correction factor (i.e., offset) for each QC and QV nuclear density gauge. The correction factor will be used throughout the remainder of the layer. QC and QV teams may wish to scan with additional gauges at the locations detailed in C.1.1 above, as only gauges used during the test strip correlation phase will be allowed on the remainder of the project.

C.2 Acceptance

C.2.1 Volumetrics

Conform to the following limits based on individual QC and QV test results (tolerances based on initial JMF/mix design):

ITEM	CONFORMANCE LIMITS
Percent passing given sieve:	
37.5-mm	+/- 8.0
25.0-mm	+/- 8.0
19.0-mm	+/- 7.5
12.5-mm	+/- 7.5
9.5-mm	+/- 7.5
2.36-mm	+/- 7.0
75-µm	+/- 3.0
Asphaltic content in percent	- 0.5
Air Voids	-1.5 & +2.0
VMA in percent ^[1]	- 1.0
Maximum specific gravity	+/- 0.024

^[1] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in [table 460-1](#).

QV test results will be determined for air voids and VMA, Gmm, and Gmb, and AC.

Calculation of air voids shall use either the QC, QV, or retained split sample test results, as identified by conducting the paired t-test with the WisDOT PWL Analysis Template.

If QC and QV test results do not correlate as determined by the paired t-test, the retained split sample will be tested by the department's AASHTO accredited laboratory and HTCP certified personnel as a referee test. Additional investigation shall be conducted to identify the source of the difference between QC and QV data. Referee data will be used to determine material acceptance and pay.

C.2.2 Density

Compact all layers of test strip HMA mixture to the applicable density shown in the following table:

TABLE 460-3 MINIMUM REQUIRED DENSITY^[1]

LAYER	MIXTURE TYPE	
	LT & MT	HT
LOWER	93.0 ^[2]	93.0 ^[3]
UPPER	93.0	93.0

^[1] If any individual core density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material per CMM 8-15.11.

^[2] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

^[3] Minimum reduced by 1.0 percent for lower layer constructed directly on crushed aggregate or recycled base courses.

Nuclear density gauges are acceptable for use on the project only if correlation is completed for that gauge during the time of the test strip and the department issues documentation of acceptance stating the correlation offset value specific to the gauge and mix design. The offset is not to be entered into any nuclear density gauge as it will be applied by the department-provided Field Density Worksheet.

C.2.3 Test Strip Acceptance

The department will evaluate material acceptance and make pay adjustments based on the PWL value of air voids and density for the test strip. The QC core densities and QC and QV mix results will be used to determine the PWL values as calculated in accordance with Appendix A.

The PWL values for air voids and density shall be calculated after determining core densities. An acceptable test strip is defined as the individual PWL value for air voids and density both above 75, and an acceptable gauge-to-core correlation.

If either PWL value for the test strip is below 50, the material is nonconforming and the test strip is unacceptable. Material allowed to remain in place requires another test strip prior to additional paving. If material is removed, a new test strip shall replace the previous one at no additional cost to the department. For simultaneously conducted density and volumetric test strip components, the following must be achieved:

- i. Passing/Resolution of Split Sample Comparison
- ii. Volumetrics/mix PWL value > 75
- iii. Density PWL value > 75
- iv. Acceptable correlation

If not conducted simultaneously, the mix portion of a test strip must accomplish (i) & (ii), while density must accomplish (iii) & (iv). If any applicable criteria are not achieved for a given test strip, the engineer, with authorization from the Department's Bureau of Technical Services, will direct an additional test strip (or alternate plan approved by the Department) be conducted to prove the criteria can be met prior to additional paving of that mix. For a density-only test strip, mix acceptance will be according to main production, i.e., HMA Pavement Percent Within Limits (PWL) QMP special provision.

D Measurement

The department will measure HMA Percent Within Limits (PWL) Test Strip as each unit of work, acceptably completed as passing the required air void, VMA, asphalt content, gradation, and density correlation for a Test Strip. Material quantities shall be determined in accordance with standard spec 450.4 and detailed here within.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH
SPV.0060.09	HMA Percent Within Limits (PWL) Test Strip Density	EACH

These items are intended to compensate the contractor for the construction of the test strip for projects paved under the HMA Pavement Percent Within Limits QMP article.

Payment for HMA Percent Within Limits (PWL) Test Strip Volumetrics is full compensation for volumetric sampling, splitting, and testing; for proper labeling, handling, and retention of split samples.

Payment for HMA Percent Within Limits (PWL) Test Strip Density is full compensation for collecting and measuring of pavement cores, acceptably filling core holes, providing of nuclear gauges and operator(s), and all other work associated with completion of a core-to-gauge correlation, as directed by the engineer.

Acceptable HMA mixture placed on the project as part of a volumetric or density test strip will be compensated by the appropriate HMA Pavement bid item with any applicable pay adjustments.

Pay adjustment will be calculated using 65 dollars per ton of HMA pavement. The department will pay for measured quantities of mix based on \$65/ton multiplied by the following pay adjustment calculated in accordance with Appendix A.

The department will adjust pay for each test strip as follows:

PAY ADJUSTMENT FOR HMA PAVEMENT AIR VOIDS & DENSITY

PERCENT WITHIN LIMITS

PAYMENT FACTOR, PF

(PWL)

(percent of \$65/ton)

> 90 to 100

$PF = ((PWL - 90) * 0.4) + 100$

≥ 50 to 90

$(PWL * 0.5) + 55$

<50

50%^[1]

where,

PF is calculated per air voids and density, denoted PF_{air voids} & PF_{density}

^[1] Material resulting in PWL value of 50 or less shall be removed and replaced, unless the engineer allows for such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density will be in accordance with Table 460-3 as modified here within. Pay adjustment will be determined for an acceptably completed test strip and will be computed as shown in the following equation.

$$\text{Pay Adjustment} = (PF-100)/100 \times (WP) \times (\text{tonnage}) \times (\$65/\text{ton})^*$$

*Note: If Pay Factor <50, the contract unit price will be used in lieu of \$65/ton

The following weighted percentage (WP) values will be used for the corresponding parameter:

<u>Parameter</u>	<u>WP</u>
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids ($PF_{\text{air voids}}$) and density (PF_{density}) will be determined. $PF_{\text{air voids}}$ will be multiplied by the total tonnage produced (i.e., from truck tickets), and PF_{density} will be multiplied by the calculated tonnage used to pave the mainline only (i.e., excluding shoulder) as determined in accordance with CMM 8-15.

The department will pay incentive for air voids under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

bts-PWL Test Strip (20171002)

44. Sawing Pavement Deck Preparation Areas, Item SPV.0090.01.

A Description

This special provision describes sawing the boundaries of the existing concrete on the bridge deck that has been sounded and marked for deck preparation. These boundaries will be at least 2-inches and not greater than 6-inches outside of the unsound or disintegrated areas of concrete, as directed or marked by the engineer in the field.

B (Vacant)

C Construction

Make the saw cuts, a minimum of 1-inch in depth, at the locations marked.

Use a diamond blade for sawing that will allow the concrete to be sawed dry. Upon completion of the daily sawing, remove the dust deposits from the deck.

D Measurement

The department will measure Sawing Pavement Deck Preparation Areas by the linear foot, acceptably completed.

The department will not measure for payment over-cuts, cuts made beyond the limits marked in the field.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Sawing Pavement Deck Preparation Areas	LF

Payment is full compensation for making all saw cuts; and for debris disposal.

45. Concrete Curb & Gutter 30-Inch Type A, Item SPV.0090.02.

A Description

This special provision describes constructing concrete curb and gutter in accordance to the requirements of standard spec 601, the details shown in the plans, and as hereinafter provided.

B Materials

Furnish concrete material conforming to standard spec 501.

C Construction

Conform to standard spec 601.3

D Measurement

The department will measure Concrete Curb & Gutter 30-Inch Type A by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Concrete Curb & Gutter 30-Inch Type A	LF

Payment is full compensation for foundation excavation and preparation; special construction required at driveway and alley entrances, or curb ramps; for providing materials, including concrete, expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site.

46. Resin Binder High Friction Surface Treatment, Item SPV.0180.01.

A Description

This special provision describes providing a high friction surface treatment (HFST) composed of aggregate in a resin binder on HMA or concrete pavements.

B Materials

B.1 Resin Binder

Supply a two-part thermosetting resin binder which is compatible with the pavement type, bonds to the pavement surface, holds the aggregate firmly in place in a broad range of climates including below-freezing temperatures, and meets the requirements specified in Table 1. Supply a primer if recommended by the resin binder manufacturer.

Table 1. Resign Binder Properties

Property	Requirements	Test Method*
Viscosity	7 – 30 poises	ASTM D2556 1-pint specimen
Gel Time	10-minute minimum	ASTM C881 60g mass
Ultimate Tensile Strength	2,000 – 5,000 psi @ 7 days	ASTM D638 Type 1 specimen
Elongation at Break	30% - 70% @ 7 days	ASTM D638 Type 1 specimen
Compressive Strength	≥ 1000 psi @ 3 hrs and ≥ 5000 psi @ 24 hours	ASTM D695**
Water Absorption	≤ 1.0 % @ 24-hr	ASTM D570 24-hr immersion
Shore D Hardness	60 – 80 @ 7 days	ASTM D2240*** Type 1 precision, Type D method
Cure Rate	≤ 3 hours (Dry Through Time)	ASTM D1640 50-55 wet mil thickness***
Adhesive Strength	250 psi @ 24 hours or 100% substrate failure	ASTM C1583***

* Prepare samples per manufacturer's recommendations; cure all specimens $73 \pm 2^\circ$ F and at $50 \pm 2^\circ$ F; and test all specimens at $73 \pm 2^\circ$ F.

** 2" x 2" cubes made of 2.75 parts of 20-30 mesh sand to 1 part mixed resin binder; use plastic inserts in oversized molds to produce 2" cubes.

*** Conduct testing on applicable pavement type.

B.2 Aggregates

Furnish calcined bauxite aggregate that is fractured or angular in shape; resistant to polishing and crushing; clean and free of surface moisture; free from silt, clay, asphalt, or other organic materials; compatible with the resin binder; and meet the properties and gradation requirements in Tables 2 and 3. Check with resin binder manufacturer for any compatibility requirements or concerns.

Table 2. Aggregate Properties

Property	Requirements	Test Method*
Moisture Content	≤ 0.2%	AASHTO T 255
Fine Aggregate Angularity	≥ 45%	AASHTO T 304, Method A
Micro-Deval	≤ 15% loss	ASTM D7428
LA Wear	≤ 10% loss @ 100 revolutions and ≤ 25% loss @ 500 revolutions	AASHTO T 96
Freeze-Thaw Soundness	≤ 9% loss @ 50, 16, or 25 cycles using Procedure A, B, or C, respectively	AASHTO T 103

Table 3. Aggregate Gradation (AASHTO T27)

Sieve Size	% Passing by Weight
No. 4	100
No. 6	95
No. 16	0-5
No. 30	0-1

B.3 Approval of High Friction Surface Treatment

A minimum of 20 working days before applying HFST, submit product data sheets and specifications from the manufacturer, and a certified test report from an independent laboratory verifying that the resin binder and the calcined bauxite aggregate meet all the requirements specified in Tables 1, 2 and 3. Documents must be dated within three years.

If resin binder has not been previously used in Wisconsin, also submit a list of at least five reference projects where the resin binder has been used for similar applications and in locations that have similar climatic conditions as Wisconsin. Supply a description of the projects along with contact information of the facility owner.

If the engineer requests, provide samples of the resin binder and aggregate for department testing before applying HFST.

C Construction

C.1 General

The contractor will provide documentation showing HFST application experience from at least three previous projects completed for WisDOT or other agencies.

Conduct a meeting with the resin binder manufacturer representatives before applying HFST to establish procedures for maintaining optimum working conditions and coordination of the work. Submit recommended application procedures, including quality control practices, to the engineer for approval. Ensure that a resin binder manufacturer representative is on site to provide technical assistance and quality assurance during surface preparation and for application of HFST.

Ensure that the resin binder components maintain their original properties during storage and handling. Store all aggregate in a dry environment and protect from contaminants on the job site.

C.2 Pavement Surface Preparation

C.2.1 Pavement Surface Repair

Remove visibly unsound or disintegrated areas of the pavement surface as the plans show or the engineer directs.

Check with resin binder manufacturer to ensure that products used for pavement repairs or patches are compatible with the resin HFST. Ensure that any new concrete or repairs have cured for 14 days before placing the HFST.

C.2.2 Surface Preparation

Cover and protect utilities, drainage structures, expansion joints on bridge decks, and other structures within or adjacent to the application location to prevent materials from adhering to or entering those structures.

Remove pavement markings that are within the treatment area. Cover existing pavement markings adjacent to the application if they are to remain in place.

Seal all joints and cracks, or any portion of cracks that are greater than 1/4 inch wide, with a joint sealant conforming to ASTM D6690. Apply sealant flush with, or just below, the pavement surface. Do not overfill and ensure excess joint sealant is not visible on the pavement surface.

After all pavement repairs or patches have cured for 14 days, and no more than 24 hours before HFST application, prepare a concrete pavement surface by shot blasting to roughen the surface texture. Ensure the pavement surface has no grease, oil, curing compound, loosely bonded mortar, pavement marking, or other foreign matter resting on the pavement surface.

Completely remove any grease, oil, pavement marking, or other foreign matter resting on an HMA pavement surface that could prevent proper bonding of the resin binder by shot blasting. Shot blast entire HMA pavement surfaces that are less than 30 days old prior to cleaning and installing HFST.

Sufficiently clean HMA and concrete pavement surfaces by vacuum-sweeping and blowing, with oil-free compressed air, just before applying HFST. Compressors must be equipped with functioning oil/water separators. Cleaning must be done the same day that HFST will be applied. Ensure the surface is clean, completely dry, and free of all dust, oil, debris and other material that might interfere with the bond between the resin binder and the existing pavement surface.

If the engineer requires additional verification of adequate surface preparation of the pavement, test the bond strength according to ASTM C1583. The surface is acceptable if the tensile bond strength is greater than or equal to 250 psi, or failure is in the substrate. Repeat shot blasting, cleaning, and testing, if needed, until passing test results are obtained or the surface is acceptable to the engineer.

Keep vehicles and unnecessary equipment off the cleaned surface; only allow HFST application equipment on the clean surface. Apply HFST as soon as possible after pavement surface preparations are completed.

Abide by the established quality control practices and adhere to any additional manufacturer recommendations for surface preparation. Request that the engineer inspect and approve the pavement surface immediately prior to placing the HFST.

C.3 Application of HFST

Do not apply the HFST if any of the following exists:

- Pavement surface is wet, damp, or has received rainfall in the previous 24 hours.
- Pavement surface is not sufficiently clean.
- Ambient air or pavement surface temperature is below 50° F or below the manufacturer's recommendations
- If the anticipated weather conditions would prevent adequate curing of the HFST.
- Rain is predicted before HFST completion or proper cure is achieved.
- Pavement preparation is inadequate or didn't pass pull-off test.

Close treatment areas to traffic until HFST is completely cured and pavement surface has been vacuum-swept.

Construct HFST to the full width of the existing pavement surface, or as the plans show or engineer directs. Extend the HFST application 2'-3' into the shoulders if application site is on a curve, Apply as a single layer 1/8 inch to 1/4 inch thick.

Apply a primer to the pavement surface if recommended by the resin binder manufacturer, and according to their application recommendations. Abide by the established quality control practices and adhere to any additional manufacturer recommendations for HFST application.

Blend and mix the resin binder components at the manufacturer's specified ratio using equipment capable of providing the desired results.

Apply the resin binder uniformly over the pavement surface manually or with automated equipment at a uniform thickness of 50-65 mils (25-32 ft²/gal). Use enough resin to cover the pavement surface and sufficiently embed half the thickness of the aggregate; do not apply so much that it covers the aggregate and creates a slick surface. Adjust application rate, as needed, based on the pavement surface type, profile, and condition.

If using automated equipment, ensure that the equipment features positive displacement, volumetric metering, and is capable of storing, mixing, heating, monitoring, and distributing the binder components at the proper mix ratio. Adjust the pressure and the speed of the equipment to achieve the proper application thickness. If applying the binder by hand, use a serrated edged squeegee to spread the resin binder and provide uniform coverage at the proper thickness.

Do not contaminate the wet binder or allow the binder material to separate or cure, and impair bonding of the aggregate.

Immediately after applying the resin binder, distribute a sufficient quantity of dry calcined bauxite aggregate to completely cover the resin binder by hand broadcasting or by using a standard chip spreader or equivalent machine. Ensure aggregate is placed within 5 minutes of the resin binder placement, before it begins to cure. When broadcasting, sprinkle or drop the aggregate onto the resin binder vertically. Do not distribute aggregate in a way that

will cause it to roll in the resin binder before coming to a rest; do not push the aggregate into position with a broom or any other hand tool. If using a chip spreader, the machine shall follow closely behind the crew or equipment applying the resin binder. Immediately cover any visible wet or bare spots, or areas with excessive binder, with additional calcined bauxite aggregate before the resin binder begins to set.

Allow the HFST to properly cure, adhering to manufacturer recommendations for minimum cure times at applicable temperatures.

After the HFST is fully cured, remove excess loose surface aggregate by sweeping, blowing, or vacuuming. Do not tear or otherwise damage the surface. Excess calcined bauxite aggregate that is recovered by a vacuum sweeper can be reused if clean, uncontaminated and dry. Remove and replace damaged areas or areas with excess or insufficient aggregate coverage. Clean expansion joints, utilities, and drainage structures of all debris before opening to traffic.

Additionally, within 3 to 7 days after opening to traffic, vacuum sweep the pavement surface to remove loosened aggregate from the high friction surface area, the shoulders, and any other areas within and immediately adjacent to the HFST site.

D Measurement

The department will measure Resin Binder High Friction Surface Treatment 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.0180.01	Resin Binder High Friction Surface Treatment	SY

Payment for Resin Binder High Friction Surface Treatment is full compensation for testing materials; for preparing the pavement surface; for providing the HFST; for cleanup; and for vacuum sweeping and disposing of excess material after the completion and again three to seven days after completion.

The department will pay for pavement repairs, joint and crack sealing, and traffic control separately under other contract bid items or, absent the appropriate bid items, as extra work.

47. Fast Set Deck Patching, Item SPV.0180.02.

A Description

This special provision describes furnishing, placing and curing a rapid setting non-shrink patch material on the sawed deck preparation areas of the concrete bridge deck. Perform the work conforming to standard spec 509.

B Materials

Furnish a rapid setting non-shrink material designed for repairing concrete decks. The material shall be capable of obtaining a minimum compressive strength of 3000 psi within three hours. The patch material must be compatible with the existing concrete deck, reinforcing steel, and the Polymer Overlay product; and have a proven record of at least five successful applications in climates similar to Wisconsin. The use of chloride accelerators or other corrosion inducing products is prohibited.

A minimum of ten working days prior to construction, submit the manufacturer's product data sheets, material sources, mix designs, and supporting performance documentation to the engineer for approval.

C Construction

Clean and prepare the area to be patched according to the manufacturer's recommendations and as follows. After sawed deck preparation work is complete, blast clean the area and any exposed reinforcing steel. Thoroughly clean the surface upon which the new patch material is to be placed by brooming and using air pressure to remove all loose particles and dust. Apply a bonding agent, as necessary and as recommend by the patch material manufacturer, to surfaces to be covered by patch material.

Place patch material to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Where a polymer overlay is not to be placed over the patch, finish the surface by tining or applying exposed angular aggregate as approved by the engineer. Where a polymer overlay will be placed over the patch, shotblast the patching in the same fashion as the remainder of the bridge deck.

Submit certified test results from an independent lab showing that the patch material obtained 3000 psi within 3 hours of placement.

D Measurement

The department will measure Fast Set Deck Patching 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.0180.02	Fast Set Deck Patching	SY

Payment is full compensation for furnishing, hauling, preparing, placing, finishing, curing, and protecting all materials.

48. Appendix A

TEST Methods & Sampling for HMA Pavement PWL QMP.

The following procedures are included to the HMA Pavement Percent Within Limits (PWL) Quality Management Program (QMP) special provision:

- WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip
- WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production
- Sampling for WisDOT HMA PWL QMP

WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip

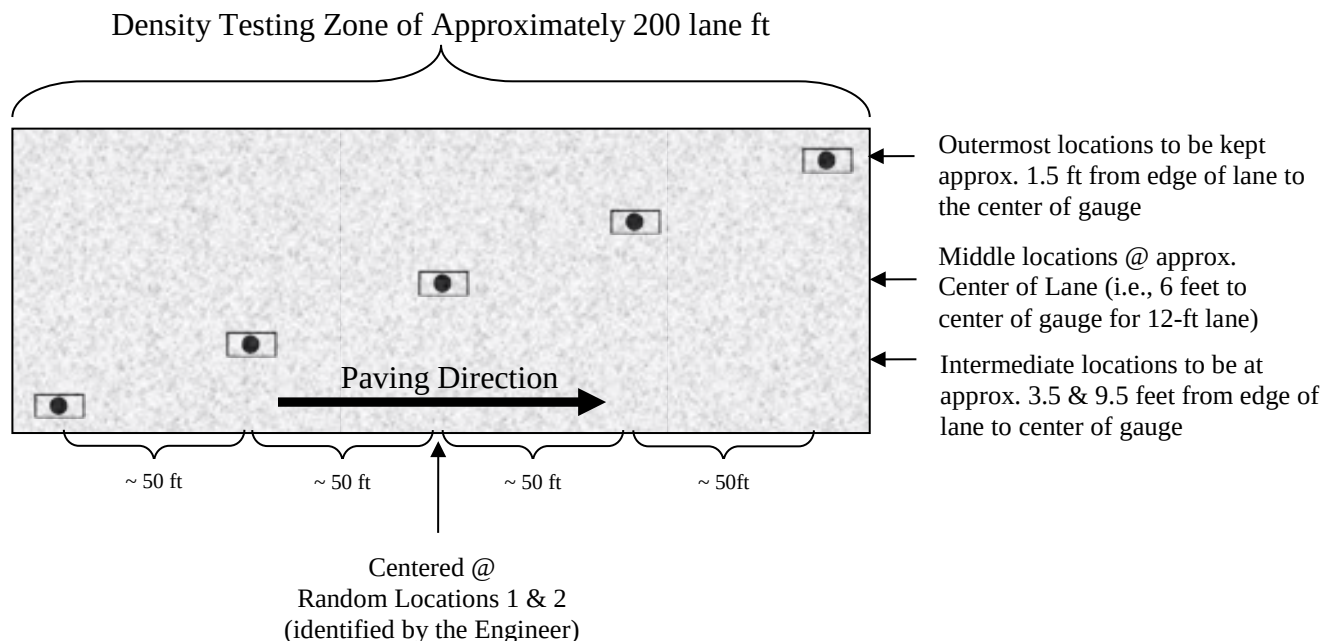


Figure 1: Nuclear/Core Correlation Location Layout

The zones are supposed to be undisclosed to the contractor/roller operators. The engineer will not lay out density/core test sites until rolling is completed and the cold/finish roller is beyond the entirety of the zone. Sites are staggered across the 12-foot travel lane, and do not include shoulders. The outermost locations should be 1.5-feet from the center of the gauge to the edge of lane. [NOTE: This staggered layout is only applicable to the test strip. All mainline density locations after test strip should have a longitudinal- as well as transverse-random number to determine location as detailed in the *WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production* section of this document.]

Individual locations are represented by the  symbol as seen in Figure 1 above. The symbol is two-part, comprised of the nuclear test locations and the location for coring the pavement, as distinguished here:



The nuclear site is the same for QC and QV readings for the test strip, i.e., the QC and QV teams are to take nuclear density gauge readings in the same footprint. Each of the QC and QV teams are to take a minimum of two one-minute readings per nuclear site, with the gauge rotated 180 degrees between readings, as seen here:



Figure 2: Nuclear gauge orientation for (a) 1st one-minute reading and (b) 2nd one-minute reading

Photos should be taken of each of the 10 core/gauge locations of the test strip. This should include gauge readings (pcf) and a labelled core within the gauge footprint. If a third reading is needed, all three readings should be recorded and documented. Only raw readings in pcf should be written on the pavement during the test strip, with a corresponding gauge ID/SN (generalized as QC-1 through QV-2 in the following Figure) in the following format:



Figure 3: Layout of raw gauge readings as recorded on pavement

Each core will then be taken from the center of the gauge footprint, and will be used to correlate each gauge with laboratory-measured bulk specific gravities of the pavement cores. One core in good condition must be obtained from each of the 10 locations. If a core is damaged at the time of extracting from the pavement, a replacement core should be taken immediately adjacent to the damaged core, i.e., from the same footprint. If a core is damaged during transport, it should be recorded as damaged and excluded from the correlation. Coring after traffic is on the pavement should be avoided. The contractor is responsible for coring of the pavement. Coring and filling of core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Core density testing will be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following initial testing and is responsible for any verification testing.

Each core 150 mm (6 inches) in diameter will be taken at locations as identified in Figure 1. Each random core will be full thickness of the layer being placed. The contractor is responsible for thoroughly drying cores obtained from the mat in accordance with ASTM D 7227 prior to using specimens for in-place density determination in accordance with AASHTO T 166.

Cores must be taken before the pavement is open to traffic. Cores are cut under Department/project staff observation. Relabel each core immediately after extruding, or ensure that labels applied to pavement prior to cutting remain legible. The layer interface should also be marked immediately following extrusion. Cores should be cut at this interface, using a wet saw, to allow for density measurement of only the most recently placed layer. Cores should be protected from excessive temperatures such as direct sunlight. Also, there should be department custody (both in transport and storage) for the cores until they are tested, whether that be immediately after the test strip or subsequent day if agreed upon between Department and Contractor. Use of concrete cylinder molds works well to transport cores. Cores should be placed upside down (flat surface to bottom of cylinder mold) in the molds, one core per mold, cylinder molds stored upright, and ideally transported in a cooler. Avoid any stacking of pavement cores.

WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production

For nuclear density testing of the pavement beyond the test strip, QC tests will be completed at three locations per subplot, with a subplot defined as 1500 lane feet. The three locations will represent the outside, middle, and inside of the paving lane (i.e., the lane width will be divided into thirds as shown by the dashed longitudinal lines in Figure 3 and random numbers will be used to identify the specific transverse location within each third in accordance with CMM 8-15). Longitudinal locations within each subplot shall be determined with 3 independent random numbers. The PWL Density measurements do not include the shoulder and other appurtenances. Such areas are tested by the department and are not eligible for density incentive. Each location will be measured with two one-minute gauge readings oriented 180 degrees from one another, in the same footprint as detailed in Figure 2 above. Each location requires a minimum of two readings per gauge. QV nuclear testing will consist of one randomly selected location per subplot. The QV is also comprised of two one-minute readings. This is depicted as follows, with QC test locations shown as solid lines and QV as dashed.

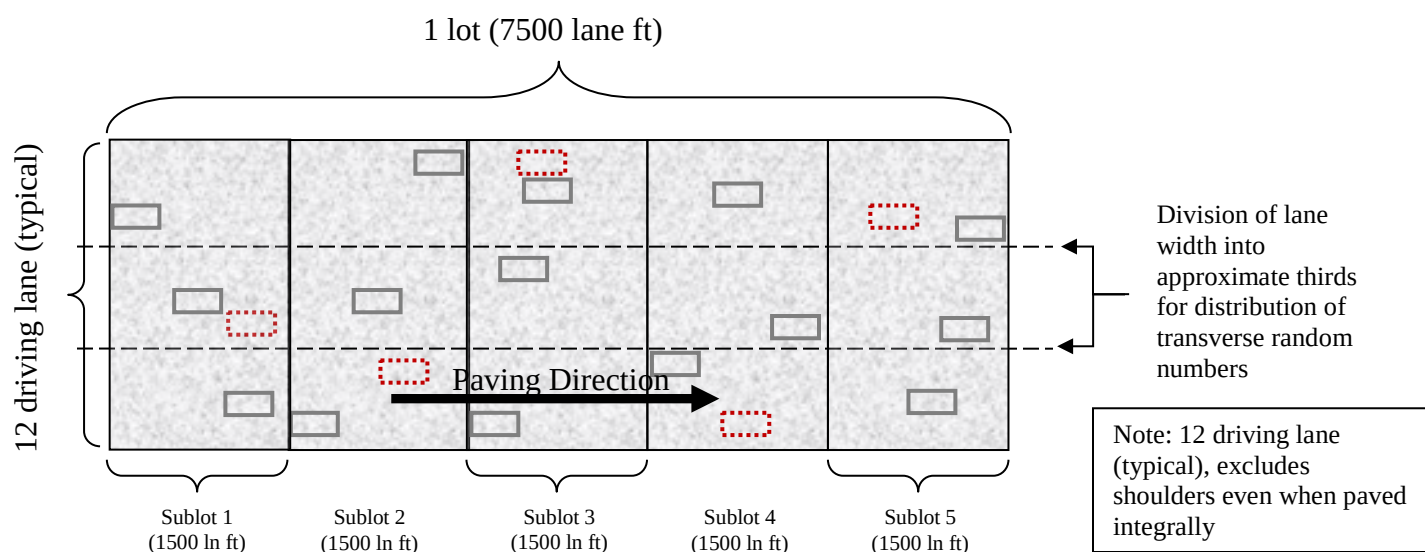


Figure 5: Locations of main lane HMA density testing (QC=solid lines, QV=dashed)

QC and QV nuclear density gauge readings will be statistically analyzed in accordance with the following section of this Appendix. (Note: For density data, if F- and t-tests compare, QC data will be used for the subsequent calculations of PWL value and pay determination. However, if an F- or t-test does not compare, the QV data will be used in subsequent calculations.)

Sampling for WisDOT HMA PWL QMP

Delete CMM 8-36.4 Sampling Hot Mix Asphalt and replace with the following to update subplot tonnages:

Sampling Hot Mix Asphalt

At the beginning of the project, the contractor determines the anticipated tonnage to be produced. The frequency of sampling is 1 per 750 tons (subplot) for QC and 1 per 3750 tons (lot or 5 sublots) for QV as defined by the PWL QMP SPV. A test sample is obtained randomly from each subplot. The contractor must submit the random numbers for all mix sampling to the department before production begins.

Example 1

Expected project production is 12,400 tons. The number of required samples is determined based on this expected production (per PWL QMP SPV) and is determined by the random sample calculation.

Sample 1 – from 50 to 750 tons
Sample 2 – from 751 to 1500 tons
Sample 3 – from 1501 to 2250 tons
Sample 4 – from 2251 to 3000 tons
Sample X –
Sample 16 – from 11,251 to 12,000 tons
Sample 17 – from 12,001 to 12,400 tons

The approximate location of each sample within the prescribed sublots is determined by selecting random numbers using ASTM Method D-3665 or by using a calculator or computerized spreadsheet that has a random number generator. The random numbers selected are used in determining when a sample is to be taken and will be multiplied by the subplot tonnage. This number will then be added to the final tonnage of the previous subplot to yield the approximate cumulative tonnage of when each sample is to be taken.

To allow for plant start-up variability, the procedure calls for the first random sample to be taken at 50 tons or greater per production day (not intended to be taken in the first two truckloads). Random samples calculated for 0-50 ton should be taken in the next truck (51-75 ton).

This procedure is to be used for any number of samples per project.

If the production is less than the final randomly generated sample tonnage, then the random sample is to be collected from the remaining portion of that subplot of production. If the randomly generated sample is calculated to be within the first 0-50 tons of the subsequent day of production, it should be taken in the next truck. Add a random sample for any fraction of 750 tons at the end of the project. Lot size will consist of 3750 tons with sublots of 750 tons. Partial lots with less than three subplot tests will be included into the previous lot, by the engineer.

It's intended that the plant operator not be advised ahead of time when samples are to be taken. If the plant operator is involved in recording a Pb (%AC) to match up with the mix sample tonnage, then notification need not be earlier than 60 minutes before the mix sample being taken.

If belt samples are used during troubleshooting, the blended aggregate will be obtained when the mixture production tonnage reaches approximately the sample tonnage. For plants with storage silos, this could be up to 60 minutes in advance of the mixture sample that's taken when the required tonnage is shipped from the plant.

Delete CMM 8-36.4.2.1 through 8-36.4.2.3 and replace with the following PWL Split Sample Sizes

PWL Split Sample Sizes

- Minimum sample sizes are referenced below and are guidance for meeting requirements for test completion.

Mixture NMAS	Minimum Individual Sample Size
$\leq 12.5\text{mm}$ (1/2")	35 lb (4 x 35 = 140 lb)
19.0mm - 25.0mm (3/4" – 1")	50 lb (4 x 50 = 200 lb)
$\geq 37.5\text{mm}$ (1-1/2")	80 lb (4 x 80 = 320 lb)

- The total sample for larger NMAS (nominal maximum aggregate size) mixtures will be enough to provide the required minimum testing sample size as defined in Figure 6.

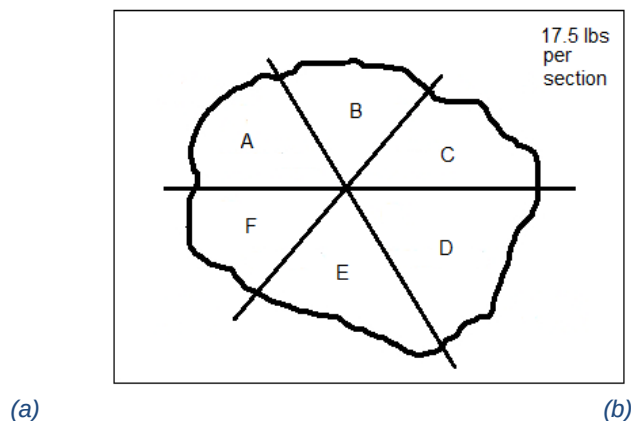
Delete 8-36.5.1.1 Step 1 and replace with the following Initial Splitting of Sample

Initial Splitting of Sample

For QC sample reduction the HMA sample in the containers is mixed and quartered. The quartering process should then proceed as follows:

- Collect the minimum sample size given in the *PWL Split Sample Size* section above. Split the sample into "Test" and "Retained" samples. Place entire sample on table, quickly re-mix and split to minimize temperature loss. Split the Test & Retained samples as shown on Figure 6. For 1/2" mixes start with at least a total of 105 lb of HMA.

Figure 6 Superpave Sample for 105 lb for three-way split for QC, QV, and retained samples



- ii. For a three-way split shown in Figure 3, *diagonal sections*, as indicated on the sketch, must be combined to form the QV sample (A+D), retained sample (B+E) and the QC test sample (C+F). The retained sample must be bagged, labeled, and stored in a safe dry place. The retained samples may be tested using the “rule of retained” (see “Definitions” section).
- iii. The QC & QV test samples are then further split for the specified tests. Continue the splitting process in *Further Reduction of Samples to Test Sizes* for the test materials until individual samples are in the oven.

Delete CMM 8-36.5.2 Use of Alternative Sampling / Quartering Devices (ex: Quartermaster) and replace with the following:

Use of Alternative Sampling / Quartering Devices (ex: Quartermaster)

Use of other devices to assist in the sampling and splitting procedures may be used with approval of the department. The Quartermaster is one such device. A picture of a Quartermaster device is shown in Figure 7.

Figure 7 Quartermaster Quartering Device



Example 3

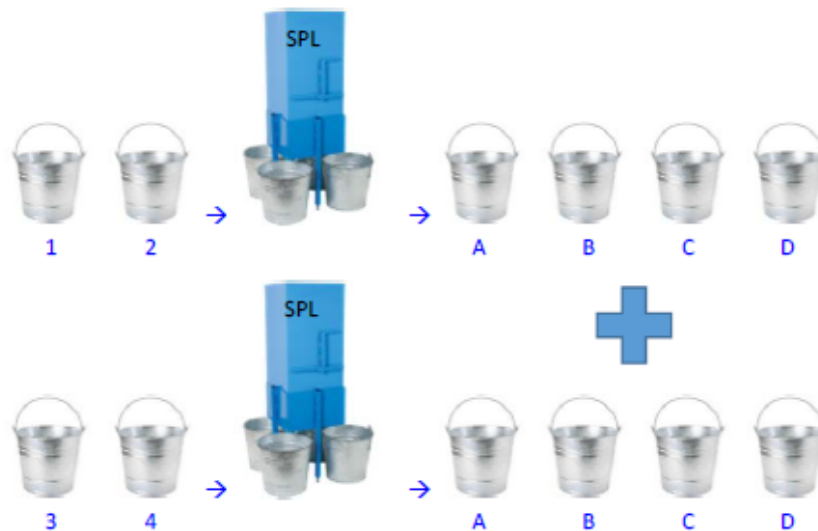
If a quartermaster is used to reduce a PWL split sample into the proper quantities, it is required to collect four times the minimum sample size shown in *PWL Split Sample Sizes* (e.g. 4 x 35 is approximately 140 lb), use the selected device to split, and discard the extra quadrant of material. The quartermaster is used to blend the asphalt mixture to minimize any segregation during the splitting process. The following steps help to ensure uniform splits for each party/quadrant and should be followed for each PWL sample collected.

Figure 8 PWL Sample Splitting with Quartermaster

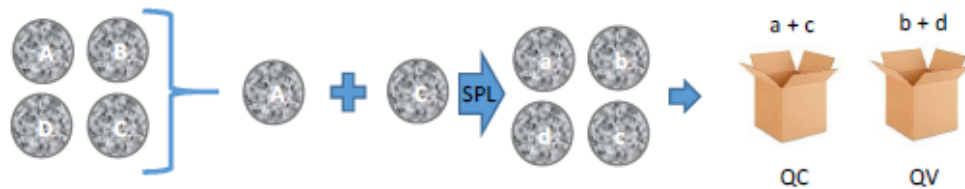
Step 1: Grab 4 buckets of loose mix from truck (if using a Department-approved mechanical sampling device & increased-capacity hopper, place the minimum material sample weight requirement in the hopper and skip to step 3):



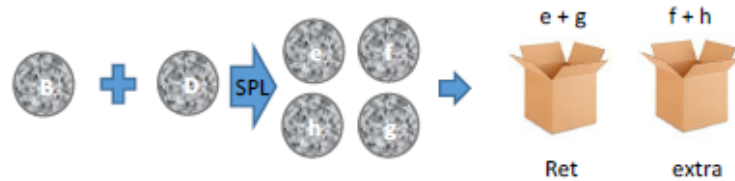
Step 2: Send Buckets 1 & 2 thru Quartermaster to fill half of each A thru D. Then split Buckets 3 & 4 to fill remaining half of buckets A thru D.



Step 3: Recombine Opposite Corner Buckets A & C, to yield a, b, c, & d. Then recombine opposite corners (a&c, b&d) to yield first two box samples.



Step 4: Recombine Opposite Corner Buckets B & D, to yield e, f, g, & h. Then recombine opposite corners (e&g, f&h) to yield remaining two box samples.



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

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

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

I. BASIC CONCEPTS

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

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 8 (number) TrANS Graduate(s) be utilized on this contract.

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 5 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

I. RATIONALE AND SPECIAL NOTE

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

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.*

II. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

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

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

IV. TRANS TRAINING

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

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

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

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

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical 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-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE [DBE] PROGRAM IMPLEMENTATION

1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
 - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
 - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance.
<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>
 - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
 - i. Produce accurate and complete quotes.
 - ii. Understand highway plans applicable to their work.
 - iii. Understand specifications and contract requirements applicable to their work.
 - iv. Understand contracting reporting requirements.
 - (2) Wisconsin DOT 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, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
 - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:
<http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

2. Definitions

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

- a. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **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.
- e. **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.
- f. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

a. Department's DBE Evaluation Process

WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.

b. Documentation Submittal

The contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at DBE_Alert@dot.wi.gov (DBE_Alert@dot.wi.gov) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

(1) **Bidder Meets DBE Goal**

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage calculation. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

(2) **Bidder Does Not Meet DBE Goal**

- i. If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Efforts Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith efforts submission.
- ii. The department will evaluate the bidder's good faith effort request and notify the bidder of one of the following:
 - (a) If the department grants a good faith efforts, the bid is eligible for contract execution with respect to DBE commitment.
 - (b) If the department rejects the good faith efforts request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith efforts request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

c. **Bidder Fails to Submit Documentation**

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

5. Department's Criteria for Good Faith Effort

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

The department will only approve a contractor's good faith efforts if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith efforts will be granted. The bidder must demonstrate, on the DT1202 that they have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

- a. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. 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.

b. Prime Contractors should:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT- approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
- (2) Prime contractors may 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. Requesting assistance with outreach is not a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: DOTDBESupportServices@dot.wi.gov.
- (3) Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a 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 A.* 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's 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 you are seeking quotes to DOTDBESupportServices@dot.wi.gov.
 - ii. SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
 - (a) Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
 - (b) Solicit quotes at least 10 calendar days prior to the letting date, at least two Fridays before the letting, 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) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up 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 Bid Express SBN Record of Subcontractor Outreach Effort.

c. Evaluate DBE quotes Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.

- (1) Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are 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 and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
- (2) In striving to meet an assigned DBE contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

- (3) **Special Circumstance** - Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not 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.
- d. Immediately after notification of contract award, the prime submits all '**Commitment to Subcontract**' forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
- (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
 - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
 - (3) Photocopies or electronic copies of all written solicitations to DBE's. A printed copy of SBN solicitation is acceptable.
 - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
 - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

6. 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, a prime contractor and the regular dealer of 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 in cases where the prime has submitted the DBE and material 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 is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE 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 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 form or 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 supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE'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 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 contractors negotiated unit price.

7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 5 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

8. Department's Criteria for DBE Participation

Directory of DBE firms

- a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:
<http://wisconsin.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

9. Counting DBE Participation

Assessing DBE Work

- a. 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 unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. 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:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a 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 engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE certified 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.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he 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.

10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether 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 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 contract work and it 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.

11. 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>

12. 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 provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

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, count **100%** percent of the cost of the materials or supplies 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.

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 have historically been 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, or fees or transportation charges for the delivery of materials or supplies required on a job site.
- (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.

When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and 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.* Please respond to the following questions and submit with your DBE Commitment Form.

1. What is the product or material?
2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
3. Which contract line items were referenced to develop this quote?
4. What is the amount of material or product used on the project?

13. Credit Evaluation for DBE Primes

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

14. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces for DBE credit.

15. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be 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.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

16. DBE Replacement or Termination

Contractual Requirement

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

Contractor Considerations

- a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] 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.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. 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 is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
 - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
 - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
 - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent* to request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
 - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
 - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days 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 manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
 - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

The Request to Replace or Terminate a DBE

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

1. Contract ID number.
2. Wisconsin DOT Contract Project Manager name and contact information.
3. DBE name and work type and/or NAICS code.
4. Contract's progress schedule.
5. Reason(s) for requesting that the DBE be replaced or terminated.
6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

Examples of Good Causes to Replace a DBE 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.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Evaluation and Response to the Request

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at DBE_Alert@dot.wi.gov or by calling 608-267-3849.

17. DBE Utilization beyond the approved DBE Commitment Form DT1506

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- Send an email to the DBE Engineer at DBE_Alert@dot.wi.gov describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally.
If the scope change added work for a participating DBE; list the date and reason for the scope change.
- Forward a complete, signed Attachment 'A' form to the DBE Office at DBE_Alert@dot.wi.gov. A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.
The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

18. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

19. Payment

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

APPENDIX A

Sample Contractor Solicitation Letter Page 1

This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS
FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR
SUBJECT: REQUEST FOR DBE QUOTES
LET DATE & TIME
DATE: MONTH DAY YEAR
CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at <http://roadwaystandards.dot.wi.gov/hcci/>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. **Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.** We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <http://roadwaystandards.dot.wi.gov/hcci/>

All questions should be directed to:

Project Manager, John Doe,

Phone: (000) 123-4567

Email: Joe@joetheplumber.com

Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ☐ Yes, we will be quoting on the projects and 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's Contact Person

DBE Contractor Contact Person

Phone: _____

Fax: _____

Email: _____

Phone: _____

Fax: _____

Email: _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

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

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B

BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

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 do as thorough a job as possible 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 C

Types of Efforts considered in determining GFE

This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities.
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively.
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal.
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract.
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D

Good Faith Effort Evaluation Guidance

Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make 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, it is up to you 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. 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: meeting quantitative formulas is not required.
- 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. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must 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 to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - 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.
 - 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. 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 employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
 - 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, you may take into account the performance of other bidders in meeting the contract. 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 reasonable 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.

Appendix E

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 completion at a later time.
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 is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

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.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588.

ADDITIONAL SPECIAL PROVISION 4

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 may also withhold routine 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.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

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 and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

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.

ADDITIONAL SPECIAL PROVISION 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

104.10.1 General

Replace paragraph four with the following effective with the December 2017 letting:

- (1) Subsection 104.10 specifies a 2-step process for contractors to follow in submitting a cost reduction incentive (CRI) for modifying the contract in order to reduce direct construction costs computed at contract bid prices. The initial submittal is referred to as a CRI concept and the second submittal is a CRI proposal. The contractor and the department will equally share all savings generated to the contract due to a CRI as specified in 104.10.4.2(1). The department encourages the contractor to submit CRI concepts.

104.10.4.2 Payment for the CRI Work

Replace paragraph four with the following effective with the December 2017 letting:

- (1) The department will pay for completed CRI work as specified for progress payments under 109.6. The department will pay for CRI's under the Cost Reduction Incentive administrative item. When all CRI costs are determined, the department will execute a contract change order that does the following:
1. Adjusts the contract time, interim completion dates, or both.
 2. Pays the contractor for the unpaid balance of the CRI work.
 3. Pays the contractor 50 percent of the net savings resulting from the CRI, calculated as follows:

$$NS = CW - CRW - CC - DC$$

Where:

NS = Net Savings

CW = The cost of the work required by the original contract that is revised by the CRI. CW is computed at contract bid prices if applicable.^[1]

CRW = The cost of the revised work, computed at contract bid prices if applicable.^[1]

CC = The contractor's cost of developing the CRI proposal.

DC = The department's cost for investigating, evaluating, and implementing the CRI proposal.

^[1] The department may adjust contract bid prices that, in the engineer's judgement, do not represent the fair value of the work deleted or proposed.

108.11 Liquidated Damages

Replace paragraphs two and three with the following effective with the December 2017 letting:

- (2) This deducted sum is not a penalty but is a fixed, agreed, liquidated damage due the department from the contractor for the added cost of engineering and supervision resulting from the contractor's failure to complete the work within the contract time.
- (3) Unless enhanced in the special provisions, the department will assess the following daily liquidated damages

LIQUIDATED DAMAGES			
ORIGINAL CONTRACT AMOUNT		DAILY CHARGE	
FROM MORE THAN	TO AND INCLUDING	CALENDAR DAY	WORKING DAY
\$0	\$250,000	\$850	\$1700
\$250,000	\$500,000	\$815	\$1630
\$500,000	\$1,000,000	\$1250	\$2500
\$1,000,000	\$2,000,000	\$1540	\$3080
\$2,000,000	—	\$2070	\$4140

- (1) Operate profilers within the manufacturer's recommended speed tolerances. Perform profile runs in the direction of travel. Measure the longitudinal profile of each wheel track of each lane. The wheel tracks are 6.0 feet apart and centered in the traveled way of the lane.
-

203.3.2.2 Removal Operations

Replace the entire text with the following effective with the December 2017 letting:

203.3.2.2.1 General

- (1) Except as specified below for closing culverts, remove the entire top slab of box culverts and the entire superstructure of other culverts and bridges designated for removal. Completely remove existing piles, cribs, or other timber construction within the limits of new embankments, or remove these structures to an elevation at least 2 feet below finished ground line. Remove sidewalls or substructure units in water to an elevation no higher than the elevation of the natural stream or lake bed, or, if grading the channel is required under the contract or the plans, to the proposed finished grade of the stream or lake bed. Remove sidewalls or substructure units not in water down to at least 2 feet below natural or finished ground line.
- (2) If extending or incorporating existing culverts and bridges in the new work, remove only those parts of the existing structure as necessary to provide a proper connection to the new work. Saw, chip, or trim the connecting edges to the required lines and grades without weakening or damaging the remaining part of the structure. During concrete removal, do not damage reinforcing bars left in place as dowels or ties incorporated into the new work.
- (3) Remove pipe culverts designated for salvage in a way that prevents damage to the culverts.
- (4) Dismantle steel structures or parts of steel structures designated for salvage in a way that avoids damage to the members. If the contract specifies removing the structure in a way that leaves it in a condition suitable for re-erection, matchmark members with durable white paint before dismantling. Mark pins, bolts, nuts, loose plates, etc., similarly to indicate their proper location. Paint pins, bolts, pinholes, and machined surfaces with a department-approved rust preventative. Securely wire loose parts to adjacent members, or label and pack them in boxes.
- (5) Remove timber structures or parts of timber structures designated for salvage in a way that prevents damage to the members.
- (6) If the engineer approves, the contractor may temporarily use materials designated for salvage in falsework used to construct new work. Do not damage or reduce the value of those materials through temporary use.

203.3.2.2.2 Deck Removal

- (1) Protect the work as specified in 107.14 during deck removal. Minimize debris falling onto water surfaces and wetlands as the contract specifies in 107.18 or in the special provisions. Also, minimize debris falling on the ground and roadway.
- (2) Do not damage existing bar steel reinforcement, girders, or other components that will be incorporated in new work. Remove decks on prestressed concrete girders using a hydraulic shear or other engineer-approved equipment. Thoroughly clean, realign, and retie reinforcement as necessary.
- (3) After deck removal is complete, notify the engineer to request a damage survey. Point out damage to the engineer. Allow one business day for the engineer to complete the damage survey. If damage is identified, the department will determine if repairs or girder restoration will be allowed.
- (4) If the department allows girder restoration, have a professional engineer registered in the State of Wisconsin analyze the effect of the damage to the bridge, make recommendations, and prepare signed and sealed computations and structural details required to restore girders to their previous structural capacity. Submit the restoration proposal, including analysis and structural details, to the department and design engineer of record. The department will accept or reject the restoration proposal within 3 business days. Do not begin restoration work until the department allows in writing.
- (5) The engineer will not extend contract time to assess or remediate contractor caused damage.

203.5.1 General

Replace the entire text with the following effective with the December 2017 letting:

- (2) Payment is full compensation for breaking down and removing; costs associated with contractor-caused damage; required salvaging, storing, and disposing of materials; and, unless the contract specifies granular backfill, for backfilling.
-

415.2.3 Expansion Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish expansion joint filler conforming to AASHTO M153, AASHTO M213, ASTM D7174, or ASTM D8139 in lengths equal to the pavement lane width and of the thickness and height the plans show. Where dowel bars are required, use filler with factory-punched holes at the dowel bar locations and with a diameter not greater than 1/8 inch larger than the nominal dowel bar diameter.
-

415.3.20 Filling Joints

Replace paragraph two with the following effective with the December 2017 letting:

- (2) Clean joints of laitance, curing compound, and other contaminants before filling. Saw construction joints at least 3/4 inches deep before filling. Sawing is not required for tooled joints in curb and gutter. Sandblast or waterblast exposed joint faces using multiple passes as required to clean joint surfaces of material that might prevent bonding. Blow clean and dry with oil-free compressed air immediately before filling.
- =====
-

415.5.1 General

Replace paragraph two with the following effective with the December 2017 letting:

- (6) Payment for Concrete Pavement Joint Filling is full compensation for filling concrete pavement joints; filling adjacent curb and gutter joints; and for sawing.
-

440.3.4.2 Contractor Testing

Replace paragraph two with the following effective with the December 2017 letting:

- (2) Coordinate with the engineer at least 24 hours before making profile runs for acceptance unless the engineer approves otherwise. The department may require testing to accommodate staged construction or if corrective action is required.
-

502.2.7 Preformed Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use preformed joint filler conforming to AASHTO M153, AASHTO M213, ASTM D7174, or ASTM D8139.
-

502.3.7.8 Floors

Replace paragraph fourteen with the following effective with the December 2017 letting:

- (14) Unless specified otherwise, transversely tine finish the floors of structures with approach pavements designed for speeds of 40 mph or greater as specified in 415.3.8.3, except make the tining 1/8 inch in depth and do not perform tining within 12 inches of gutters. The contractor may apply a broom finish, described below, instead of the artificial turf drag finish required before tining. The contractor may perform tining manually, if it obtains a finish satisfactory to the engineer. Perform tining within 20 degrees of the centerline of bearing of the substructure units on bridge decks having skew angles of 20 degrees or greater.

614.2.1 General

Add the following as paragraph ten effective with the December 2017 letting:

- (10) Furnish guardrail reflectors from the department's APL.

614.3.2.1 Installing Posts

Add the following as paragraph five effective with the December 2017 letting:

- (5) Provide post-mounted reflectors every 100 feet with one at the beginning and end of each run and a minimum of three reflectors per run.

614.5 Payment

Replace paragraph four with the following effective with the December 2017 letting:

- (4) Payment for the Steel Thrie Beam, Steel Plate Beam Guard, Guardrail Stiffened, MGS Guardrail, Short Radius, and various transition bid items is full compensation for providing guardrail and transitions including post-mounted reflectors; for repairing damaged zinc coatings; and for excavating, backfilling, and disposing of surplus material.

641.2.9 Overhead Sign Supports

Replace paragraph three with the following effective with the December 2017 letting:

- (3) Provide steel pole shafts, mast arms or trusses, and luminaire arms zinc coated according to ASTM A123. The contractor may provide either straight or tapered pole and arm shafts unless the plans specify otherwise. Provide bolts and other hardware conforming to 641.2.2.

642.2.2.1 General

Replace the entire text with the following effective with the December 2017 letting:

- (1) Provide each field office with two rooms, separated by an interior door with a padlock. Ensure that each room has a separate exterior door and its own air conditioner. Locate the office where a quality internet connection can be achieved.
- (2) Provide long distance telephone service via a land line for exclusive department use that has the following:
 - Two programmable touch-tone phones, one of which is cordless. Ensure that phone operations will not interfere with other telecommunications equipment.
 - Voice mail service or an answering machine.
- (3) Provide high-speed internet service for exclusive department use via cable or DSL connection with a modem/router and capable of supporting cloud enabled file sharing, voice over internet protocol (VoIP), video conferencing, and web based applications. Ensure that system meets the following:
 - Includes a wireless network for the field office.
 - Can accommodate IPsec based VPN products.
 - Has a bandwidth range as follows:

Field office with 1-5 staff:	A minimum connection speed of 5 Mbps download and 1 Mbps upload. If a cable or DSL option is not available the contractor may provide a personal hotspot using cell phone tethering or other device able to achieve the specified minimum speeds inside the field office.
Field office with 6 or more staff:	A minimum connection speed of 10 Mbps + 1/2 Mbps per user download and 5 Mbps upload.
Projects over 500 million dollars:	A minimum connection speed of 20 Mbps + 1/2 Mbps per user download and 10 Mbps upload. Coordinate network setup at the leased office with the WisDOT network team.
- (4) Provide and maintain a Windows 7 and Windows 10 compliant multi-function device with copy, print, and scan capabilities that can accommodate both 8 1/2" x 11" and 11" x 17" paper. Replenish paper, toner cartridges, and other supplies before fully expended. Ensure that department staff can connect to the device either directly or through the field office wireless network.

- (5) Equip with a drafting table with a drafter's stool. Except as specified in 642.2.2.4, provide 2 ergonomically correct office chairs in working condition with, at a minimum, the following:
1. Five-legged base with casters.
 2. Seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge.
 3. High backrest with no arms or adjustable arms.

645.2.2.2 Geotextile, Type SAS (Subgrade Aggregate Separation)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	170 lb
Minimum puncture strength	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 70
Minimum permittivity	ASTM D4491	0.35 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.4 Geotextile, Type DF (Drainage Filtration)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish fabric conforming with the physical requirements of either schedule A, schedule B, or schedule C as the contract specifies.

SCHEDULE A TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	110 lb
Minimum puncture strength	ASTM D6241	200 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 µm
Minimum permittivity	ASTM D4491	0.70 s ⁻¹

SCHEDULE B TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 µm
Minimum permittivity	ASTM D4491	1.35 s ⁻¹

SCHEDULE C TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	600 µm
Minimum permittivity	ASTM D4491	1.00 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.6 Geotextile, Type R (Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	205 lb
Minimum puncture strength	ASTM D6241	400 lb
Minimum apparent breaking elongation	ASTM D4632	15%

Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.7 Geotextile, Type HR (Heavy Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength, lb	ASTM D4632	305 lb
Minimum puncture strength, lb	ASTM D6241	500 lb
Minimum apparent breaking elongation, %	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.40, s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.8 Geotextile, Type C (Modified SAS)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Grab tensile strength, lb	ASTM D4632	205 lb
Puncture strength, lb	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 50
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

715.3.1.3 Department Verification Testing

Replace paragraph one with the following effective with the December 2017 letting:

- (1) The department will perform verification testing as specified in 701.4.2 with additional testing as required to obtain at least 1 verification test per lot for air content, slump, temperature, and compressive strength.

Errata

Make the following corrections to the standard specifications:

106.3.3.1 General

Correct errata by changing "acceptance" to "approval."

- (1) For manufactured products or assemblies, the department may base approval on a product certification or require both a product certification and production plant certification.
-

205.3.1 General

Correct errata by deleting paragraph three to reflect current practice to incorporate suitable materials.

- (3) Replace unsuitable material with satisfactory material. Trim and finish the roadway. Maintain the work done under 205 in a finished condition until acceptance.
-

521.2 Materials

Correct errata by deleting bullet three and including aluminum coated pipe in bullet one.

- (1) Furnish corrugated steel pipe and steel apron end walls as follows:
- Corrugated steel culvert pipe, steel apron endwalls, aluminum coated corrugated steel culvert pipe, and other components conforming to AASHTO M36.
 - Polymer coated corrugated steel culvert pipe and pipe arch fabricated from zinc coated sheet steel conforming to AASHTO M218. Before fabrication, coat the sheets on both sides with polymer protective coating grade 250/250 according to AASHTO M246. Fabricate the pipe according to AASHTO M245.
-

614.3.2.2 Installing Rail

Correct errata for splice location and allow punching or drilling holes and slots.

- (1) Install rail with lap splices in the direction of traffic. Ensure that the number and dimensions of holes and bolts conforms to the plan details for new splices. Place the round head of bolts on the traffic side.
- (2) Cut rails to length by shearing or sawing; do not use cutting torches. Drill or punch bolt holes and slots; ensure that they are burr free. After installation, cut anchor bolts that project more than one inch from the nut to 1/2 inch from the nut; deburr the threaded end of cut bolts.
-

618.1 Description

Correct errata by deleting designated detours from the scope of Maintenance and Repair of Haul Roads.

- (1) This section describes maintaining, repairing, and restoring all public roads, streets, drainage facilities, and other components used for hauling by contractor, subcontractor, or supplier to support work for a department contract to its pre-haul condition. Public roads and streets shall be limited to those not a part of the State Trunk Highway System and from now on called haul roads.

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. 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).
 6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- 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:

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated 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. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

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 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the 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.

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, 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 who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

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

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

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring 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, national origin, age or disability. The following procedures shall be followed:

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

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

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

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor 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 contracting agency deems appropriate.

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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

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

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

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

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

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

2. Withholding

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

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

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

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

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

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

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

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

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

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

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

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

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

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

9. Disputes concerning labor standards. 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 he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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" 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:

(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.

2. 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. 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.

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

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 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.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

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 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 1, 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

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

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

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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.

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.

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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

2. Instructions for Certification - Lower Tier 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)

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

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

this transaction originated may pursue available remedies, including suspension and/or debarment.

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

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

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

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

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

* * * * *

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 20).

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

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

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

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

3. The prospective participant also agrees by submitting 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.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

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).

SEPTEMBER 2002

**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.

APRIL 2013

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.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

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.

Effective with February 2017 Letting

**WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF
TRANSPORTATION AND SYSTEM DEVELOPMENT**

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I.** Prevailing Wage Rates, Hours of Labor, and Payment of Wages
- II.** Payroll Requirements
- III.** Postings at the Site of the Work
- IV.** Wage Rate Distribution
- V.** Additional Classifications

**I. PREVAILING WAGE RATES, HOURS OF LABOR AND PAYMENT OF
WAGES**

The U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) attached hereto and made a part hereof furnishes the prevailing wage rates pursuant to Section 84.062 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 84.062, Stats. Apprentices shall be paid at rates not less than those prescribed in their apprenticeship contract.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, 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 shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 16.856 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly base rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half:

January 1

Last Monday in May

July 4

First Monday in September

Fourth Thursday in November

December 25

The day before if January 1, July 4 or December 25 falls on a Saturday, and

The day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, euclid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truckdrivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 84.062 of the Wisconsin Statutes.

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. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 84.062 of the Wisconsin Statutes.
- b. A copy of the U.S. Department of Labor (Davis-Bacon, Minimum Wage Rates).
- c. 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. WAGE RATE REDISTRIBUTION

A contractor or subcontractor performing work subject to a Davis-Bacon wage determination may discharge its minimum wage obligations for the payment of both straight time wages and fringe benefits by (1) paying both in cash, (2) making payments or incurring costs for bona fide fringe benefits, or (3) by a combination thereof. Thus, under the Davis-Bacon a contractor may offset an amount of monetary wages paid in excess of the minimum wage required under the determination to satisfy its fringe benefit obligations. See 40 USC 3142(d) and 29 CFR 5.31.

V. ADDITIONAL CLASSIFICATIONS

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5(a)(1)(ii)). The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination.

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

- a. The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- b. The classification is utilized in the area by the construction industry; and
- c. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

General Decision Number: WI170010 10/06/2017 WI10

Superseded General Decision Number: WI20160010

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: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	02/03/2017
2	02/10/2017
3	02/24/2017
4	03/17/2017
5	03/31/2017
6	04/21/2017
7	04/28/2017
8	06/02/2017
9	06/23/2017
10	07/14/2017
11	07/21/2017
12	07/28/2017
13	08/11/2017
14	08/25/2017
15	09/08/2017
16	09/22/2017
17	10/06/2017

BRWI0001-002 06/01/2016

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 31.84	20.95

BRWI0002-002 06/01/2016		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 37.04	19.70

BRWI0002-005 06/01/2016		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.07	20.51


```

-----
BRWI0003-002 06/01/2016
BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

Rates          Fringes
BRICKLAYER.....$ 32.22          20.57
-----
BRWI0004-002 06/01/2016
KENOSHA, RACINE, AND WALWORTH COUNTIES

Rates          Fringes
BRICKLAYER.....$ 36.59          21.49
-----
BRWI0006-002 06/01/2016
ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

Rates          Fringes
BRICKLAYER.....$ 33.04          19.75
-----
BRWI0007-002 06/01/2016
GREEN, LAFAYETTE, AND ROCK COUNTIES

Rates          Fringes
BRICKLAYER.....$ 33.53          20.95
-----
BRWI0008-002 06/01/2016
MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

Rates          Fringes
BRICKLAYER.....$ 36.98          20.62
-----
BRWI0011-002 06/01/2016
CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates          Fringes
BRICKLAYER.....$ 32.22          20.57
-----
BRWI0019-002 06/01/2016
BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

Rates          Fringes
BRICKLAYER.....$ 31.98          20.81
-----
BRWI0034-002 06/01/2015
COLUMBIA AND SAUK COUNTIES

Rates          Fringes
BRICKLAYER.....$ 32.86          17.22
-----
CARP0087-001 05/01/2016
BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys
35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

Rates          Fringes
Carpenter & Piledrivermen.....$ 36.85          18.39
-----
CARP0252-002 06/01/2016

```

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00

 CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

 CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

 CARP0361-004 05/01/2016

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 34.57	18.16

 CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

 ELEC0014-002 06/01/2017

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, TREMPLEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.01	19.69

 ELEC0014-007 06/05/2017

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer		
Installer/Technician.....	\$ 25.81	14.01
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 06/01/2017

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 38.50	30%+10.57

ELEC0158-002 06/05/2017

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausaukee 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
Electricians:.....	\$ 31.48	19.18

ELEC0159-003 06/05/2017

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
Electricians:.....	\$ 37.75	20.96

ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under \$180,000.....	\$ 30.18	18.42

ELEC0242-005 06/04/2017

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 35.90	25.64

ELEC0388-002 05/30/2016

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 30.69	26.00% +10.05

ELEC0430-002 06/01/2017

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 37.32	21.07

ELEC0494-005 06/01/2017

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 37.51	24.42

ELEC0494-006 06/01/2017

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 32.06	21.88

ELEC0494-013 06/01/2015

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 16.47	14.84
Technician.....	\$ 26.00	17.70

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 06/01/2017

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 31.15	18.22

ELEC0890-003 06/01/2017

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE,

RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.25	19.34

ELEC0953-001 07/01/2015		

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 42.14	32% + 5.00
(2) Heavy Equipment Operator.....	\$ 40.03	32% + 5.00
(3) Equipment Operator.....	\$ 33.71	32% + 5.00
(4) Heavy Groundman Driver..	\$ 26.78	14.11
(5) Light Groundman Driver..	\$ 24.86	13.45
(6) Groundsman.....	\$ 23.18	32% + 5.00

ENGI0139-005 06/05/2017		

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 39.27	22.05
Group 2.....	\$ 38.77	22.05
Group 3.....	\$ 38.27	22.05
Group 4.....	\$ 38.01	22.05
Group 5.....	\$ 37.72	22.05
Group 6.....	\$ 31.82	22.05

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.

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2017

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 31.24	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2017

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	26.97

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2017

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.....	\$ 34.50	23.82

IRON0498-005 06/01/2016

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 36.29	30.77

IRON0512-008 05/01/2017

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 36.50	26.45

IRON0512-021 05/01/2017

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.04	26.45

LAB00113-002 06/05/2017		

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 26.80	21.34
Group 2.....	\$ 26.95	21.34
Group 3.....	\$ 27.15	21.34
Group 4.....	\$ 27.30	21.34
Group 5.....	\$ 27.45	21.34
Group 6.....	\$ 23.29	21.34

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 06/05/2017

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 26.05	21.34
Group 2.....	\$ 26.15	21.34
Group 3.....	\$ 26.20	21.34
Group 4.....	\$ 26.40	21.34
Group 5.....	\$ 26.25	21.34
Group 6.....	\$ 23.14	21.34

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 06/05/2017

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 25.86	21.34
Group 2.....	\$ 26.01	21.34
Group 3.....	\$ 26.21	21.34
Group 4.....	\$ 26.18	21.34
Group 5.....	\$ 26.51	21.34
Group 6.....	\$ 23.00	21.34

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 06/05/2017

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.....	\$ 30.71	16.79
Group 2.....	\$ 30.81	16.79
Group 3.....	\$ 30.86	16.79
Group 4.....	\$ 31.06	16.79
Group 5.....	\$ 30.91	16.79
Group 6.....	\$ 27.34	16.79

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 06/05/2017

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 30.99	16.79
Group 2.....	\$ 31.09	16.79
Group 3.....	\$ 31.14	16.79
Group 4.....	\$ 31.34	16.79
Group 5.....	\$ 31.19	16.79
Group 6.....	\$ 27.34	16.79

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 05/02/2016

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 29.86	16.35
Spray, Sandblast, Steel....	\$ 30.46	16.35
Repaint:		
Brush, Roller.....	\$ 28.36	16.35
Spray, Sandblast, Steel....	\$ 28.96	16.35

* PAIN0108-002 06/01/2017

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 33.74	18.95
Spray & Sandblast.....	\$ 34.74	18.95

PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,
SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

PAIN0781-002 06/01/2017

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 30.60	22.80
Brush.....	\$ 30.25	22.80
Spray & Sandblast.....	\$ 31.00	22.80

PAIN0802-002 06/01/2017

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 28.25	17.72

PREMIUM PAY:
 Structural Steel, Spray, Bridges = \$1.00 additional per
 hour.

PAIN0802-003 06/01/2017

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.....	\$ 24.89	12.05

PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95
Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

PAIN1011-002 06/01/2017

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 24.86	12.23

PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40

Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2017

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 27.40	20.48
3 or more Axles; Euclids Dumptor & Articulated, Truck Mechanic.....	\$ 27.55	20.48

WELL DRILLER.....	\$ 16.52	3.70

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

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular

rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial

contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

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

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

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

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

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

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

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

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

=====

END OF GENERAL DECISION

March 2017

**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.



Proposal Schedule of Items

Page 1 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

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	204.0100 Removing Pavement	682.000 SY	_____.	_____.
0004	204.0109.S Removing Concrete Surface Partial Depth	80,158.000 SF	_____.	_____.
0006	204.0110 Removing Asphaltic Surface	1,315.000 SY	_____.	_____.
0008	204.0120 Removing Asphaltic Surface Milling	3,171.000 SY	_____.	_____.
0010	204.0125 Removing Asphaltic Surface Milling	57,151.000 TON	_____.	_____.
0012	204.0150 Removing Curb & Gutter	10.000 LF	_____.	_____.
0014	204.0155 Removing Concrete Sidewalk	4.000 SY	_____.	_____.
0016	204.0165 Removing Guardrail	1,112.000 LF	_____.	_____.
0018	204.0180 Removing Delineators and Markers	591.000 EACH	_____.	_____.
0020	204.0185 Removing Masonry **P**	3.600 CY	_____.	_____.
0022	204.9060.S Removing (item description) 01. Endwall	19.000 EACH	_____.	_____.
0024	204.9090.S Removing (item description) 01. Corrugated Steel Culvert Pipe & Restore Cut End	1.500 LF	_____.	_____.
0026	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 1166-12-80	LS	LUMP SUM	_____.
0028	211.0100 Prepare Foundation for Asphaltic Paving (project) 02. 6414-00-73	LS	LUMP SUM	_____.
0030	211.0400 Prepare Foundation for Asphaltic Shoulders	32.900 STA	_____.	_____.



Proposal Schedule of Items

Page 2 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

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	211.0500 Prepare Foundation for Base Aggregate	6.000 STA	_____.	_____.
0034	213.0100 Finishing Roadway (project) 01. 1166-12-80	1.000 EACH	_____.	_____.
0036	213.0100 Finishing Roadway (project) 02. 6414-00-73	1.000 EACH	_____.	_____.
0038	305.0110 Base Aggregate Dense 3/4-Inch	12,037.000 TON	_____.	_____.
0040	305.0120 Base Aggregate Dense 1 1/4-Inch	131.000 TON	_____.	_____.
0042	305.0500 Shaping Shoulders	2,459.000 STA	_____.	_____.
0044	390.0203 Base Patching Asphaltic	281.000 SY	_____.	_____.
0046	416.0610 Drilled Tie Bars	4.000 EACH	_____.	_____.
0048	440.4410 Incentive IRI Ride	92,160.000 DOL	1.00000	92,160.00
0050	455.0605 Tack Coat	39,705.000 GAL	_____.	_____.
0052	460.2000 Incentive Density HMA Pavement	12,000.000 DOL	1.00000	12,000.00
0054	460.2005 Incentive Density PWL HMA Pavement	26,200.000 DOL		_____.
0056	460.2010 Incentive Air Voids HMA Pavement	26,200.000 DOL		_____.
0058	460.4110.S Reheating HMA Pavement Longitudinal Joints	115,635.000 LF	_____.	_____.
0060	460.5224 HMA Pavement 4 LT 58-28 S	7,968.000 TON	_____.	_____.
0062	460.6224 HMA Pavement 4 MT 58-28 S	49,449.000 TON	_____.	_____.



Proposal Schedule of Items

Page 3 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	460.6424 HMA Pavement 4 MT 58-28 H	2,248.000 TON	_____.	_____.
0066	465.0110 Asphaltic Surface Patching	2,060.000 TON	_____.	_____.
0068	465.0310 Asphaltic Curb	53.000 LF	_____.	_____.
0070	465.0315 Asphaltic Flumes	8.000 SY	_____.	_____.
0072	465.0400 Asphaltic Shoulder Rumble Strips	168,974.000 LF	_____.	_____.
0074	509.0301 Preparation Decks Type 1	4.000 SY	_____.	_____.
0076	509.0302 Preparation Decks Type 2	2.000 SY	_____.	_____.
0078	509.5100.S Polymer Overlay	1,104.000 SY	_____.	_____.
0080	520.8700 Cleaning Culvert Pipes	16.000 EACH	_____.	_____.
0082	521.0348 Apron Endwalls for Culvert Pipe Sloped Cross Drains Steel 48-Inch 4 to 1	1.000 EACH	_____.	_____.
0084	521.0657 Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 57x38-Inch 6 to 1	1.000 EACH	_____.	_____.
0086	522.0112 Culvert Pipe Reinforced Concrete Class III 12-Inch	4.000 LF	_____.	_____.
0088	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	17.000 EACH	_____.	_____.
0090	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	1.000 EACH	_____.	_____.
0092	524.0130 Culvert Pipe Salvaged 30-Inch	8.000 LF	_____.	_____.



Proposal Schedule of Items

Page 4 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	524.0136 Culvert Pipe Salvaged 36-Inch	64.000 LF	_____.	_____.
0096	524.0618 Apron Endwalls for Culvert Pipe Salvaged 18-Inch	1.000 EACH	_____.	_____.
0098	524.0630 Apron Endwalls for Culvert Pipe Salvaged 30-Inch	3.000 EACH	_____.	_____.
0100	524.0636 Apron Endwalls for Culvert Pipe Salvaged 36-Inch	4.000 EACH	_____.	_____.
0102	602.0405 Concrete Sidewalk 4-Inch	30.000 SF	_____.	_____.
0104	606.0200 Riprap Medium	8.000 CY	_____.	_____.
0106	611.0430 Reconstructing Inlets	1.000 EACH	_____.	_____.
0108	614.0010 Barrier System Grading Shaping Finishing	1.000 EACH	_____.	_____.
0110	614.2300 MGS Guardrail 3	963.000 LF	_____.	_____.
0112	614.2330 MGS Guardrail 3 K	130.000 LF	_____.	_____.
0114	614.2610 MGS Guardrail Terminal EAT	1.000 EACH	_____.	_____.
0116	614.2620 MGS Guardrail Terminal Type 2	1.000 EACH	_____.	_____.
0118	618.0100 Maintenance And Repair of Haul Roads (project) 01. 1166-12-80	1.000 EACH	_____.	_____.
0120	619.1000 Mobilization	1.000 EACH	_____.	_____.
0122	624.0100 Water	120.000 MGAL	_____.	_____.



Proposal Schedule of Items

Page 5 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	628.1504 Silt Fence	556.000 LF	_____.	_____.
0126	628.1520 Silt Fence Maintenance	556.000 LF	_____.	_____.
0128	628.1905 Mobilizations Erosion Control	2.000 EACH	_____.	_____.
0130	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH	_____.	_____.
0132	628.2004 Erosion Mat Class I Type B	682.000 SY	_____.	_____.
0134	628.2008 Erosion Mat Urban Class I Type B	182.000 SY	_____.	_____.
0136	628.7010 Inlet Protection Type B	1.000 EACH	_____.	_____.
0138	628.7555 Culvert Pipe Checks	5.000 EACH	_____.	_____.
0140	628.7570 Rock Bags	25.000 EACH	_____.	_____.
0142	633.0100 Delineator Posts Steel	698.000 EACH	_____.	_____.
0144	633.0500 Delineator Reflectors	934.000 EACH	_____.	_____.
0146	633.5200 Markers Culvert End	24.000 EACH	_____.	_____.
0148	634.0612 Posts Wood 4x6-Inch X 12-FT	10.000 EACH	_____.	_____.
0150	634.0614 Posts Wood 4x6-Inch X 14-FT	137.000 EACH	_____.	_____.
0152	634.0616 Posts Wood 4x6-Inch X 16-FT	39.000 EACH	_____.	_____.
0154	634.0618 Posts Wood 4x6-Inch X 18-FT	71.000 EACH	_____.	_____.
0156	634.0620 Posts Wood 4x6-Inch X 20-FT	63.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 6 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0158	635.0300 Sign Supports Replacing Base Connection Bolts	34.000 EACH	_____.	_____.
0160	637.1220 Signs Type I Reflective SH	6,962.000 SF	_____.	_____.
0162	637.1230 Signs Type I Reflective F	49.000 SF	_____.	_____.
0164	637.2210 Signs Type II Reflective H	2,651.340 SF	_____.	_____.
0166	637.2230 Signs Type II Reflective F	835.750 SF	_____.	_____.
0168	638.2102 Moving Signs Type II	13.000 EACH	_____.	_____.
0170	638.2601 Removing Signs Type I	62.000 EACH	_____.	_____.
0172	638.2602 Removing Signs Type II	176.000 EACH	_____.	_____.
0174	638.3000 Removing Small Sign Supports	223.000 EACH	_____.	_____.
0176	642.5001 Field Office Type B	1.000 EACH	_____.	_____.
0178	643.0300 Traffic Control Drums	18,371.000 DAY	_____.	_____.
0180	643.0310.S Temporary Portable Rumble Strips	1.000 LS	_____.	_____.
0182	643.0420 Traffic Control Barricades Type III	1,470.000 DAY	_____.	_____.
0184	643.0705 Traffic Control Warning Lights Type A	1,986.000 DAY	_____.	_____.
0186	643.0715 Traffic Control Warning Lights Type C	1,086.000 DAY	_____.	_____.
0188	643.0800 Traffic Control Arrow Boards	135.000 DAY	_____.	_____.



Proposal Schedule of Items

Page 7 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0190	643.0900 Traffic Control Signs	4,573.000 DAY	_____.	_____.
0192	643.0920 Traffic Control Covering Signs Type II	132.000 EACH	_____.	_____.
0194	643.1051 Traffic Control Signs PCMS with Cellular Communications	383.000 DAY	_____.	_____.
0196	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0198	645.0120 Geotextile Type HR	31.000 SY	_____.	_____.
0200	646.1005 Marking Line Paint 4-Inch	21,241.000 LF	_____.	_____.
0202	646.1020 Marking Line Epoxy 4-Inch	224,722.000 LF	_____.	_____.
0204	646.1040 Marking Line Grooved Wet Ref Epoxy 4-Inch	64,092.000 LF	_____.	_____.
0206	646.3040 Marking Line Grooved Wet Ref Epoxy 8-Inch	19,251.000 LF	_____.	_____.
0208	646.4505 Marking Line Same Day Paint 4-Inch	14,915.000 LF	_____.	_____.
0210	646.5020 Marking Arrow Epoxy	13.000 EACH	_____.	_____.
0212	646.5120 Marking Word Epoxy	4.000 EACH	_____.	_____.
0214	646.5520 Marking Outfall Epoxy	614.000 EACH	_____.	_____.
0216	646.6120 Marking Stop Line Epoxy 18-Inch	124.000 LF	_____.	_____.
0218	646.7220 Marking Chevron Epoxy 24-Inch	1,352.000 LF	_____.	_____.
0220	646.9000 Marking Removal Line 4-Inch	969.000 LF	_____.	_____.



Proposal Schedule of Items

Page 8 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0222	650.8000 Construction Staking Resurfacing Reference	132,557.000 LF	_____.	_____.
0224	650.9910 Construction Staking Supplemental Control (project) 01. 1166-12-10	LS	LUMP SUM	_____.
0226	650.9910 Construction Staking Supplemental Control (project) 02. 6414-00-73	LS	LUMP SUM	_____.
0228	650.9920 Construction Staking Slope Stakes	115.000 LF	_____.	_____.
0230	652.0125 Conduit Rigid Metallic 2-Inch	30.000 LF	_____.	_____.
0232	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,915.000 LF	_____.	_____.
0234	652.0605 Conduit Special 2-Inch	735.000 LF	_____.	_____.
0236	652.0700.S Install Conduit into Existing Item	2.000 EACH	_____.	_____.
0238	653.0164 Pull Boxes Non-Conductive 24x42-Inch	16.000 EACH	_____.	_____.
0240	654.0105 Concrete Bases Type 5	1.000 EACH	_____.	_____.
0242	654.1150 Concrete Bases Camera Pole 50-FT	6.000 EACH	_____.	_____.
0244	655.0510 Electrical Wire Traffic Signals 12 AWG	1,475.000 LF	_____.	_____.
0246	655.0525 Electrical Wire Traffic Signals 6 AWG	3,600.000 LF	_____.	_____.
0248	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. CCTV-49-0010	LS	LUMP SUM	_____.
0250	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. CCTV-49-0013	LS	LUMP SUM	_____.



Proposal Schedule of Items

Page 9 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0252	656.0200 Electrical Service Meter Breaker Pedestal (location) 03. CCTV 49-0015	LS	LUMP SUM	_____.
0254	656.0500 Electrical Service Breaker Disconnect Box (location) 01. CCTV 49-0010	LS	LUMP SUM	_____.
0256	656.0500 Electrical Service Breaker Disconnect Box (location) 02. CCTV 49-0011	LS	LUMP SUM	_____.
0258	656.0500 Electrical Service Breaker Disconnect Box (location) 03. CCTV 49-0012	LS	LUMP SUM	_____.
0260	656.0500 Electrical Service Breaker Disconnect Box (location) 04. CCTV 49-0013	LS	LUMP SUM	_____.
0262	656.0500 Electrical Service Breaker Disconnect Box (location) 05. CCTV 49-0014	LS	LUMP SUM	_____.
0264	656.0500 Electrical Service Breaker Disconnect Box (location) 06. CCTV 49-0015	LS	LUMP SUM	_____.
0266	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	1.000 EACH	_____.	_____.
0268	657.0322 Poles Type 5-Aluminum	1.000 EACH	_____.	_____.
0270	670.0100 Field System Integrator	LS	LUMP SUM	_____.
0272	670.0200 ITS Documentation	LS	LUMP SUM	_____.
0274	671.0300 Fiber Optic Cable Marker	5.000 EACH	_____.	_____.
0276	673.0225.S Install Pole Mounted Cabinet	6.000 EACH	_____.	_____.
0278	677.0150 Install Camera Pole 50-FT	6.000 EACH	_____.	_____.
0280	677.0200 Install Camera Assembly	6.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 10 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0282	678.0006 Install Fiber Optic Cable Outdoor Plant 6-CT	1,735.000 LF	_____.	_____.
0284	678.0400 Fiber Optic Termination	12.000 EACH	_____.	_____.
0286	678.0600 Install Ethernet Switches	5.000 EACH	_____.	_____.
0288	690.0150 Sawing Asphalt	268.000 LF	_____.	_____.
0290	690.0250 Sawing Concrete	1,050.000 LF	_____.	_____.
0292	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,500.000 HRS	5.00000	12,500.00
0294	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	2,880.000 HRS	5.00000	14,400.00
0296	SPV.0060 Special 01. Grading, Shaping, and Finishing for Crossdrain Restoration	24.000 EACH	_____.	_____.
0298	SPV.0060 Special 02. Grading, Shaping, and Finishing for Crossdrain Restoration Sta 298+40"QA"	1.000 EACH	_____.	_____.
0300	SPV.0060 Special 03. Grading, Shaping, and Finishing for Crossdrain Restoration Sta 294+34"QB"	1.000 EACH	_____.	_____.
0302	SPV.0060 Special 04. Flexible Tubular Marker Posts Left In Place	25.000 EACH	_____.	_____.
0304	SPV.0060 Special 05. Flexible Tubular Marker Bases Left In Place	25.000 EACH	_____.	_____.
0306	SPV.0060 Special 06. Install Solar Power System Assembly	1.000 EACH	_____.	_____.



Proposal Schedule of Items

Page 11 of 11

Proposal ID: 20171212021 Project(s): 1166-12-80, 6414-00-73

Federal ID(s): WISC 2018020, N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	SPV.0060 Special 07. Install Wireless Ethernet Bridge	10.000 EACH	_____.	_____.
0310	SPV.0060 Special 08. HMA Percent Within Limits (PWL) Test Strip Volumetrics	1.000 EACH	_____.	_____.
0312	SPV.0060 Special 09. HMA Percent Within Limits (PWL) Test Strip Density	1.000 EACH	_____.	_____.
0314	SPV.0090 Special 01. Sawing Pavement Deck Preparation Areas	40.000 LF	_____.	_____.
0316	SPV.0090 Special 02. Curb & Gutter 30-Inch Type A Modified	10.000 LF	_____.	_____.
0318	SPV.0180 Special 01. Resin Binder High Friction Surface Treatment	7,921.000 SY	_____.	_____.
0320	SPV.0180 Special 02. Fast Set Deck Patching	4.000 SY	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH SCHEDULE OF ITEMS HERE