

## HIGHWAY WORK PROPOSAL

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

Proposal Number:

22

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Chippewa	1190-05-75		Chippewa Falls - New Auburn CTH B to STH 64 (North & South Bnd)	USH 53

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, \$ 340,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: February 9, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time Sixty-five (65) Working Days	<b>SAMPLE</b> <b>NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date \_\_\_\_\_

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(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 Milling, SMA pavement, asphaltic surface special, polymer overlay, concrete masonry culverts, pavement markings, permanent signing.	
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](http://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 Express<sup>TM</sup> web site.
  2. Use Expedite<sup>TM</sup> software to enter a unit price for every item in the schedule of items.
  3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
  4. Submit the bid before the hour and date the Notice to Contractors designates.
  5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

**Bidder**

**Name**

**BN00**

**Proposals: 1, 12, 14, & 22**

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

- (5) In addition to the reasons specified in [section 102](#) of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
1. The check code printed on the bottom of the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same on each page.
  2. The check code printed on the printout of the Expedite<sup>TM</sup> 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

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 1190-05-75 USH 53, from Chippewa Falls to New Auburn, limits of CTH B to STH 64 (North and South Bnd) in Chippewa 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, 2016 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 (20150630)

### **2. Scope of Work.**

The work under this contract shall consist of concrete pavement repair, HMA pavement, SMA pavement, asphaltic surface, polymer overlays, pavement marking, permanent signing 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 time frame for construction of the project within the 2016 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. 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.

#### **Northern Long-eared Bat (*Myotis septentrionalis*)**

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees and structures (bridges, culverts, buildings). 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.



Notify the Project Leader 14 days in advance of any work on box culverts or bridges between April 1 and September 30 to allow time for department to complete the Bat Presence Structure Inspection Form.

If bats or evidence of bats are not found during the inspection, construction may proceed.

If bats or evidence of bats are found during the inspection, construction activities affecting the structure's roosting potential must stop until the WisDOT Regional Environmental Coordinator completes consultation with the Wisconsin Department of Natural Resources (WDNR) and/or United States Fish and Wildlife Service (USFWS).

#### **Lane Closure Restrictions**

Do not close through lanes at any time of the times as noted below:

- Pre-Memorial Day and Post Labor Day – no restrictions.
- Memorial Day through Labor Day
  - USH 53 Northbound (Northbound): Friday 12:00 PM – 7:00 PM
  - USH 53 Southbound (Southbound): Sunday 10:00 AM – 6:00 PM
  - USH 53 Northbound and USH 53 Southbound: Saturdays 10:00 AM – 2:00 PM

Both lanes must remain open at these times, if necessary construct a temporary wedge joint as detailed in the plans to keep both lanes open.

#### **4. Traffic.**

USH 53, STH 40 and STH 64 will remain open to traffic at all times during construction. The project will be constructed under traffic. One lane of USH 53 may be closed for construction for up to five miles at one time to facilitate construction. Traffic shall not be allowed to run on a milled surface.

##### Stage 1

USH 53 remains open to traffic. Pave over the existing rumble strips on the outside lanes of USH 53. Shift traffic to the outside lanes of USH 53. The inside (median) lanes are closed to traffic utilizing single lane closures, and are repaired and resurfaced. Shift the traffic drums back across the centerline when not needed for the paving or repairing operations.

##### Stage 2

Shift traffic to the inside (median) lanes of USH 53. The outside lanes are closed to traffic utilizing single lane closures, and are repaired and resurfaced. Construct temporary wedge joint to maintain lane closure requirements. Shift the traffic drums back across the centerline when not needed for the paving or repairing operations.

### Stage 3

Shift traffic to the outside lanes of USH 53. The inside (median) lanes are closed to traffic utilizing single lane closures, and temporary wedge joints are removed and upper pavement layer is constructed.

The regulatory speed limit of USH 53 within the project limits will be reduced to 55 miles per hour during lane closures only. Signs are included in the contract for the speed limit reduction. Reestablish a 65 mph speed limit zone when all lanes are open. The on ramp and exit ramp from USH 53 to STH 40 and STH 64 will remain open during construction; flagging may be required and is incidental to the reconstruction.

Three maintenance crossovers may be used by the contractor while the inside lanes are closed, as well as the interchanges at CTH B, STH 40, and STH 64. The crossover north of Highline Avenue (Station 554+25), the crossover north of 147<sup>th</sup> Avenue (Station 674+56), and the crossover north of STH 64 (Station 1006+73) may be used.

Pave over the existing rumble strips on the outside shoulders (driving lane shoulder) and shift traffic onto the existing shoulder during construction. Maintenance of the shoulder is to be incidental to the item Asphaltic Surface Temporary.

### **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 $\leq 16'$ )	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
Full roadway closures	14 calendar days
System and service ramp closures	14 calendar days
Full system and service ramp closures	14 calendar days
Detours	14 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction $> 16'$ )	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
System and service 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.

108-057 (20150630)

## **5. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 53, STH 40 and STH 64 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 Friday, May 27, 2016 to 6:00 AM Tuesday, May 31, 2016 for Memorial Day;
- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 6:00 AM Tuesday, September 6, 2016 for Labor Day.

107-005 (20050502)

## **6. Utilities.**

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

107-065 (20080501)

### **Bloomer Telephone Company**

Bloomer Telephone Company has underground fiber optic and telephone facilities in the project area between 147<sup>th</sup> Avenue and STH 64, approximately Stations 585+00 and 979+62. Some of these facilities have been discontinued and are noted on the plans. No conflicts are anticipated.

### **CenturyLink**

CenturyLink has an underground fiber optic cable crossing USH 53 on the north side of Duncan Creek at approximately Station 479+00. No conflicts are anticipated.

### **Charter Communications**

Charter Communications has an underground fiber optic cable crossing USH 53 in the City of Bloomer at approximately Station 807+00. Contact Charter five working days prior to any excavation within 10 feet of their facility. The Charter contact for this project is Tom Haase, his office phone number is 715-719-0564.

In addition to contacting Charter, prior to any excavation within 10 feet of their facility, schedule a fiber watch by first obtaining a valid Diggers Hotline ticket (and valid locate) and then by calling USIC Dispatch at (800) 778-9140 to request the fiber watch. No conflicts are anticipated.

**Chippewa Valley Electric Co-Op.**

Chippewa Valley Electric has facilities in the project area, including: a single phase overhead crossing at approximately Station 532+00; a single phase overhead crossing at approximately Station 880+54; and a 3-phase underground crossing at approximately Station 955+00. No conflicts are anticipated.

**CINC**

CINC has FO facilities in the project area, including: an underground crossing of USH 53 north of STH 40 / 17<sup>th</sup> Avenue; and an underground crossing of USH 53 south of 190<sup>th</sup> Avenue. No conflicts anticipated.

**City of Bloomer – Electric**

The City of Bloomer has an underground electric crossing USH 53 south of STH 40 at approximately Station 805+85. No conflicts are anticipated.

**City of Bloomer – Sewer**

The City of Bloomer has an underground sanitary crossing USH 53 south of STH 40 at approximately Station 807+25. No conflicts are anticipated.

**City of Bloomer – Water**

The City of Bloomer has facilities in the project area, including; an underground water main crossing USH 53 south of STH 40 at approximately Station 807+25 and an underground water main crossing north of STH 40 at approximately Station 840+95. No conflicts are anticipated.

**Northern Natural Gas**

Northern Natural Gas has a gas line crossing at approximately Station 945+64. Contact Northern Natural Gas 24 hours before any excavation will occur within 25 feet of their facility to provide a field representative. The Northern Natural Gas contact for this project is Mark Peterson, his office phone number is (651) 674-4488. No conflicts are anticipated.

**Packerland Broadband (CCI Systems)**

Packerland has a fiber optic cable that runs along the west side of USH 53 for the length of the project. Concrete channel slope paving will be replaced near the fiber optic cable at approximately Station 803+00 and Station 907+50, at a depth of approximately 3 feet. Provide Packerland notice at least 7 calendar days in advance of when the work will be completed at these sites near their facilities to arrange for verification of the lines. The Packerland contact for this project is Wayne Cretton, his office phone number is (906) 774-6621. No conflicts are anticipated.

Packerland has an underground fiber optic line crosses south of STH 40 at approximately Station 150+25; and an underground fiber optic line crosses north of STH 64 at approximately Station 41+72. No conflicts are anticipated.

### **We Energies**

We Energies has underground gas lines under USH 53 and the STH 40 ramps at approximately Station 823+80. Contact We Energies before removing any gas facilities, to verify that they have been discontinued and carry no natural gas. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch line at (800) 261-5325 to arrange for this verification. No conflicts are anticipated.

### **Xcel Energy - Distribution**

Xcel Energy has overhead electric facilities in the project area, including: a crossing between CTH B and CTH Q at approximately Station 444+70; a crossing north of 147<sup>th</sup> Avenue at approximately Station 633+00; a crossing north of CTH Q at approximately Station 689+75; and a crossing on the south side of 190<sup>th</sup> Avenue at approximately Station 914+25. No conflicts are anticipated.

### **Xcel Energy – Transmission**

Xcel Energy has a 115 kV crossing USH 53 at Highline Avenue at approximately Station 527+10. Xcel Energy's required working clearance to lines for cranes and booms is 20 feet. The required approach boundary clearance for unqualified works is 10 feet 8 inches. No conflicts are anticipated.

## **7. Notice to Contractor, Asbestos Containing Materials on Structure.**

John Roelke, License Number All-119523, inspected Structures B-09-0061, B-09-0062, B-09-0076 and B-09-0077 for asbestos on June 25, 2013. Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities:

- On Structure B-09-0061 6 sq. feet of caulk located in the parapet expansion joints contained 5% non-friable asbestos.
- On Structure B-09-0062 6 sq. feet of caulk located in the parapet expansion joints contained 5% non-friable asbestos. 5 sq. feet of caulk located in the abutment joint also contained 5% non-friable asbestos.
- On Structure B-09-0076 3 sq. feet of caulk located in the parapet expansion joints contained 5% non-friable asbestos. 3 sq. feet of caulk located in the abutment joint also contained 5% non-friable asbestos.
- On Structure B-09-0077 3 sq. feet of caulk located in the parapet expansion joints contained 5% non-friable asbestos. 3 sq feet of caulk located in the abutment joint also contained 5% non-friable asbestos.

A copy of the inspection report is available from: Tara Weiss, (715) 836-2283. Locations of asbestos containing material are noted on the plan set. Do not disturb any asbestos containing material. Should asbestos containing material be disturbed, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response according to standard spec 107.24. Keep material wet until it is abated.

107-120 (20120615)

## **8. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.**

John Roelke, License Number All-119523, inspected Structures B-09-64, B-09-65, B-09-72, B-09-73, B-09-74, B-09-75, B-09-79, B-09-80 for asbestos on June 25, 2013. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Tara Weiss, (715) 836-2283.

According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Tara Weiss, (715) 836-2283 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI, 53707-7965. In addition, comply with all local or municipal asbestos requirements.

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

- Site Name: Structure B-09-64, USH 53 southbound over F
- Site Address: 1.0M S JCT STH 40 to N
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 6101 SF of deck
  
- Site Name: Structure B-09-65, USH 53 northbound over F
- Site Address: 7.3M N JCT CTH B to E
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 6101 SF of deck
  
- Site Name: Structure B-09-72, USH 53 southbound over Duncan Creek
- Site Address: 6.8M S JCT STH 40 to N
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 6442 SF of deck

- Site Name: Structure B-09-73, USH 53 northbound over Duncan Creek
- Site Address: 1.4M N JCT CTH B to E
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 6442 SF of deck
  
- Site Name: Structure B-09-74, USH 53 southbound over Duncan Creek
- Site Address: 4.2M S JCT STH 40 to N
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 5641 SF of deck
  
- Site Name: Structure B-09-75, USH 53 northbound over Duncan Creek
- Site Address: 4.0 M N JCT CTH B to E
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 5571 SF of deck
  
- Site Name: Structure B-09-79, USH 53 southbound over Como Creek
- Site Address: 2.0M S JCT STH 64 to E
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 3797 SF of deck
  
- Site Name: Structure B-09-80, USH 53 northbound over Como Creek
- Site Address: 1.1M N JCT STH 40 to N
- Ownership Information: WisDOT Transportation NW Region Eau Claire Office, 718 W. Clairemont Ave, Eau Claire, WI 54701
- Contact: Tara Weiss
- Phone: (715) 836-2283
- Age: 45 years old. This structure was constructed in 1971.
- Area: 3447 SF of deck

Insert the following paragraph in Section 6.g.:

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

107-125 (20120615)

## **9. Environmental Protection, Removal of Crack Filling Materials.**

Debris that is removed from the cracks in the existing pavement is expected to be of base aggregate size or smaller. Place this material on the shoulder of the road and incorporate into the shoulder base aggregate. In the event that there is debris of larger size, remove and deposit at a pre-approved location. Existing sealant in the cracks is expected to largely remain in place and is to be covered and incorporated into the existing crack. In the event that sealant comes free of the existing crack, pick up and deposit at a pre-approved location. Ensure that the debris/aggregate does not encroach into vegetated, wetland, or open water areas during its removal or placement.

## **10. Environmental Protection, Aquatic Exotic Species Control.**

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels 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](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.

107-055 (20130615)

## **11. Removing Concrete Slope Paving, Item 204.0175.**

*Supplement standard spec 204 as follows:*

Removing Concrete Slope Paving includes removing existing concrete slope paving in ditches and waterways at locations as noted in the plans. Restore slope under the existing slope paving prior to placing new slope paving.

## **12. 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 under the Aggregate Detours, Salvaged Asphaltic Pavement Base, 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://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>

## A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan 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:
  1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
  2. Divide the aggregate into uniformly sized sublots for testing as follows:

Plan Quantity	Minimum Required Testing
$\leq 1500$ tons	One test from production, load-out, or placement at the contractor's option <sup>[1]</sup>
$> 1500$ tons and $\leq 6000$ tons	Two tests of the same type, either from production, load-out, or placement at the contractor's option <sup>[1]</sup>
$> 6000$ tons and $\leq 9000$ tons	Three placement tests <sup>[2] [3]</sup>

- <sup>[1]</sup> If using production tests for acceptance, submit 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.
- <sup>[2]</sup> For 3-inch material, obtain samples at load-out.
- <sup>[3]</sup> If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
3. No control charts are required. 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. Department verification testing is optional for quantities of 6000 tons or less.
- (3) 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.

## **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:

<b>Required Certification Level:</b>	<b>Sampling or Testing Roles:</b>
Aggregate Technician IPP Aggregate Sampling Technician Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling <sup>[1]</sup>
Aggregate Technician IPP Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

<sup>[1]</sup> 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://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

### **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 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. 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 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. 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 tests, include only QC 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) Test gradation once per 3000 tons of material placed. 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 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.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (5) 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.
- (6) 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 4 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 4 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 2 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. One non-random test on the first day of 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, the department will collect samples from the stockpile 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 by 10 percent of the contract price 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.

301-010 (20100709)

**13. 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 Correlation of Nuclear Gauges**

##### **B.3.2.1 Correlation 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 correlation process. The section does not have to be the same mix design.
- (2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation 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/ft<sup>3</sup>. 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/ft<sup>3</sup> and repeat correlation process from B.3.2.1 (2).
- (5) Furnish one of the QC gauges passing the allowable correlation tolerances to perform density testing on the project.

### **B.3.2.2 Correlation Monitoring**

- (1) After performing the gauge correlation 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 correlation 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/ft<sup>3</sup> 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/ft<sup>3</sup> 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.

<b>Lane Width</b>	<b>No. of Tests</b>	<b>Transverse Location</b>
5 feet or less	1	Random
Greater than 5 feet 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.

<b>Side Roads, Turn Lanes, Crossovers, Ramps, Roundabouts: Sublot/Layer tonnage</b>	<b>Minimum Number of Tests Required</b>
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/ft<sup>3</sup> 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/ft<sup>3</sup> 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/ft<sup>3</sup>, use the original QC tests for acceptance.
- (6) If the QV and QC subplot averages differ by more than 1.0 lb/ft<sup>3</sup> 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 correlation according to B.3.2.1.
- (2) The testers may use correlation 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-correlated 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) Delete standard spec 460.5.2.3.
- (2) If the lot density is greater than the minimum specified in standard spec table 460-3 and all individual air voids test results for that mixture are within +1.0 percent or -0.5 percent of the design target in standard spec table 460-2, the department will adjust pay for that lot as follows:

Percent Lot Density Above Minimum	Pay Adjustment Per Ton
From -0.4 to 1.0 inclusive	\$0
From 1.1 to 1.8 inclusive	\$0.40
More than 1.8	\$0.80

- (3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.
  - (4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.
  - (5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.
- 460-020 (20100709)

## 14. 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 1/4".

### 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

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

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

<sup>A</sup> Uncured, mixed polymer binder

<sup>B</sup> Cured, mixed polymer binder



### B.3 Aggregates

Furnish natural or synthetic aggregates that have a proven record of performance in applications of this type. Furnish 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	<sup>3</sup> 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 5821
Absorption	≤1%	ASTM C128

\* Sampled and tested at the time of placement.

Gradation:

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

### B.4 Required Properties of Overlay System

The required properties of the overlay system are listed in the table below:

Property	Requirement <sup>A</sup>	Test Method
Minimum Compressive Strength at 8 Hrs. (psi)	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C 579 Method B, Modified <sup>B</sup>
Thermal Compatibility	No Delaminations	ASTM C 884
Minimum Pull-off Strength	250 psi @ 24 hrs	ACI 503R, Appendix A

<sup>A</sup> Based on samples cured or aged and tested at 75°F

<sup>B</sup> Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

## **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 test report to the engineer for approval. The engineer may request samples of the polymer and/or aggregate, prior to application, for the purpose of acceptance testing by the department.

For materials not pre-qualified, in addition to the above submittals, submit product history/reference projects and a certified test report from an independent testing laboratory showing compliance with the requirements of the specification.

The product history/reference projects consist of a minimum of five bridge/roadway locations where the proposed overlay system has been applied in Wisconsin or in locations with a similar climate - include contact names for the facility owner, current phone number or e-mail address, and a brief description of the project.

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.

## **C Construction**

### **C.1 General**

Conduct a pre-installation conference with the manufacturer's representative prior to construction to 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. The 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.

Store resin materials in their original containers in a dry area. Store and handle materials according to the manufacturer's recommendations. 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 according to the International Concrete Repair Institute Technical Guideline No. 03732. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ACI 503R, Appendix A of the *ACI Manual of Concrete Practice*. 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.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 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 (breeze blast) the exposed surfaces.

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.

Create a transitional area approaching transverse expansion joints and ends of the deck using the shotblasting machine or other approved method. Remove 5/16" to 3/8" of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

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.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.
- 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 50°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. 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 standard chip spreader or equivalent machine that can provide a uniform, consistent coverage of aggregate. 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 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. If required by the engineer, a minimum of three 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 <sup>A</sup> (GAL/100 SF)	Aggregate <sup>B</sup> (LBS/SY)
1	2.5	10+
2	5.0	14+

<sup>A</sup> The minimum total applications rate is 7.5 GAL/100 SF.

<sup>B</sup> 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.

#### 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 providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials. Concrete Deck Repair will be paid for separately.

509-030 (20150630)

## **15. Removing Signs Type II, Item 638.2602.**

This work shall be according to the pertinent requirements of standard spec 638 and as provided here.

Type II signs are the department's property. All DOT signs removed, and not identified for reuse, shall be separated, plywood from aluminum signs, and the aluminum signs shall be palletized for shipment and handling with a forklift. Contact DTSD Sign Shop Coordinator Steve Allard at (715) 855-7671 at least 3 business days prior to delivery to coordinate shipment to be delivered to the DTSD Sign Shop Distribution Center at one of the following locations:

- Dunn County Highway Shop, 3303 USH 12 East, Menomonie, WI 54751
- LaCrosse County Highway Shop, 301 Carlson Rd, West Salem, WI 54669
- Price County Highway Shop, 704 N. Lake Ave, Phillips, WI 54555
- Washburn County Highway Shop, 1600 CTH H, Spooner, WI 54801
- Wood County Highway Shop, 555 17<sup>th</sup> Ave North, Wisconsin Rapids, WI 54495

## **16. Pavement Marking Grooved Wet Reflective Epoxy 4-Inch, Item 646.2304.S; 8-Inch, Item 646.2308.S.**

### **A Description**

This special provision describes furnishing, grooving, and installing wet reflective epoxy pavement marking as shown on the plans, according to standard spec 646, and as hereinafter provided.

### **B Materials**

Furnish a 20 mils application of modified epoxy binder pavement marking, Epoplex LS65, Ennis-Flint HPS-4 or Dow Poly-Carb Mark 55.4, or approved equal, in a grooved slot. Provide a double drop system of 5.3 pounds per gallon of 3M elements Series 70E wet reflective beads for white marking and 71E for yellow markings and Utah Performance beads mixture at a drop rate of 12-22 pounds per gallon.

*Replace standard spec 646.2.3 (1) with the following:*

Furnish Utah Performance beads with the following gradation:

Utah Bead Gradation

US Mesh	Percent Passing (ASTM D1214)
18	65-80
20	
25	
30	30-50
40	
50	0-5

Beads shall achieve a minimum of 250 mcd, initial, and 80 mcd, for white after one year from placement, per ASTM E 2177, 45 seconds after the pavement marking is wetted.

## **C Construction**

### **C.1 General**

For quality assurance, provide the engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of the wet reflective epoxy/bead marking.

Plane the grooved lines according to details in the plan. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove. Remove lane line and center line pavement markings during the grooving process.

### **C.2 Groove Depth for Asphalt**

Cut the groove to a depth of 80 mils  $\pm$ 10 mils from the pavement surface. Measure depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

### **C.3 Groove Depth for Concrete**

Cut the groove to a depth of 60 mils  $\pm$ 10 mils from the pavement surface or, if tined from the high point of the tined surface. Measure depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

### **C.4 Groove Width – Longitudinal Markings**

Cut the groove 1 inch wider than the width of the pavement marking.

### **C.5 Groove Position**

Position the groove edge according to Standard Detail Drawing Pavement Marking (Mainline). If necessary, groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the pavement marking segment. Achieve straight alignment with the grooving equipment.

## **C.6 Groove Cleaning**

### **C.6.1 Concrete**

Cooling the cutting head with water may be necessary for some applications and equipment. If cooling water is necessary, flush the groove immediately with high-pressure water after cutting to remove any build-up of cement dust and water slurry. If this is not done, the slurry may harden in the groove.

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the marking. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

### **C. 6.2 New Asphalt**

Groove pavement 2 or more days after paving.

If opening to traffic an asphalt lane that is not grooved, place temporary pavement marking. For asphalt lanes not open to traffic, temporary pavement marking is not required.

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove.

### **C. 6.3 Existing Asphalt**

Check for structural integrity in supporting grooving operations. If the structural integrity of the asphalt pavement is inadequate to support grooving operations, immediately notify the engineer.

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove.

## **D Measurement**

The department will measure Pavement Marking Grooved Wet Reflective Epoxy (Width) by the linear foot of line, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF
646.2308.S	Pavement Marking Grooved Wet Reflective Epoxy 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the epoxy, 3M elements and beads; and for removing existing or temporary marking, if necessary.

646-024 (20141107)



**17. Continuously Reinforced Concrete Pavement Repair Special, Item SPV.0035.01.**

**A Description**

This special provision describes base patching continuously reinforced concrete according to standard spec 390 and standard spec 415 and as shown on the plans or as directed by the engineer, and as hereinafter provided.

**B Materials**

The longitudinal and transverse reinforcement shall conform to the requirements of standard spec 415.2.

**C (Vacant)**

**D Measurement**

The department will measure Continuously Reinforced Concrete Pavement Repair Special by the cubic yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Continuously Reinforced Concrete Pavement Repair Special	CY

Payment is full compensation for removing the existing concrete and disposing of removed materials; for preparing the base; for providing the concrete, curing and protecting concrete; for supplying and installing all transverse and longitudinal reinforcement; and for supplying and placing all concrete.

The department will pay separately for the following bid item: Sawing Concrete.

**18. Portable Changeable Message Sign (PCMS) Cellular Communications, Item SPV.0045.01.**

**A Description**

This special provision describes cellular communications requirements for use with PCMS. Cellular communication allows the department to control PCMS during incidents or other emergencies through Trans Suite software. The department will notify contractor of message changes.

**B Materials**

Provide a cellular modem and antenna that enables the department to communicate and control PCMS conforming to standard spec 643.2.7.

### **B.1 Cellular Modem and Antenna**

Furnish an EV-DO Cellular modem registered to a 3G or 4G Cellular carrier. The cellular modem must include 1 or more external antennas, 1 or more 10/100 Ethernet ports, and 1 or more db9 Serial RS-232 interfaces. The device must be able to handle -30° C to +75° C and powered by a 12VDC power supply. The cellular modem must have a built-in secure router with NAT, port forwarding and IP pass-through capabilities.

Provide management IP and passwords for the cellular modem to the department.

Access includes IP address, serial port setting, and password(s). Antenna cable shall be continuous without splices. Mount the antenna at the highest practical location on the PCMS.

### **C Construction**

Conform to standard spec 643.3.7. Install cellular modem in a lockable, weatherproof compartment in the PCMS trailer.

A minimum of 14 days prior to deployment, demonstrate to the department that the cellular modem is capable of communications with Trans Suite software.

If remote communications are interrupted or temporarily unavailable, contractor will be notified by the department to change the message.

### **D Measurement**

The department will measure Portable Changeable Message Sign (PCMS) Cellular Communications by the day acceptably completed, measured as the number of calendar days each cellular modem for PCMS is available for exclusive use under the contract. The department will deduct one day for each calendar day the sign communications are required but out of service for more than 2 hours.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	Portable Changeable Message Sign (PCMS) Cellular Communications	DAY

Payment is full compensation for providing, operating and maintaining a cellular modem and antenna, and for making message changes if cellular communications are interrupted or temporarily unavailable.

## **19. Regrade Ditch, Item SPV.0090.01.**

### **A Description**

This special provision describes regrading existing ditches, cleaning apron endwalls, and disposing of the resulting materials.

**B (Vacant)**

**C Construction**

Excavate and remove material in ditches around median inlets and around apron endwalls in a manner to ensure that the existing drainage patterns are maintained.

**D Measurement**

The department will measure Regrade Ditch as length in linear feet of ditch, regraded acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Regrade Ditch	LF

Payment is full compensation for excavating material from existing ditch, cleaning median inlets and cleaning apron endwalls to a depth up to 3 feet, and for disposing all material.

**20. Concrete Curb and Gutter Cure and Seal Treatment, Item SPV.0090.02.**

**A Description**

This work includes treating all newly constructed concrete curb and gutter with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

**B Materials**

Materials shall conform to a clear treating material listed on the current approved WISDOT product list for “Cure and Seal Compounds for Non-Trafficked Surfaces on Structural Masonry”.

**C Construction**

Application rates for the treating material shall be according to the manufacturer’s specifications.

**D Measurement**

The department will measure the Concrete Curb and Gutter Cure and Seal Treatment 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 and Gutter Cure and Seal Treatment	LF

Payment is full compensation for providing Concrete Curb and Gutter Cure and Seal Treatment.

## **21. Cleaning Concrete Channels, Item SPV.0090.03.**

### **A Description**

This special provision describes cleaning existing concrete channels of debris and disposing of the resulting materials.

### **B (Vacant)**

### **C Construction**

Dispose of all surplus and unsuitable materials according to standard spec 205.3.12.

### **D Measurement**

The department will measure Cleaning Concrete Channels 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.0090.03	Cleaning Concrete Channels	LF

Payment is full compensation for excavating material from existing concrete channel; for removal of brush and trees; for cleaning channel to the existing concrete; for clearing vegetation to a distance of 2 feet on both sides of channel in-slopes and back slopes; and for disposing of all material.

## **22. Preparation of Foundation for Asphaltic Paving Special, Project 1190-05-75, Item SPV.0105.01.**

### **A Description**

Prepare the existing pavement foundation according to standard spec 211, as per the special plan detail, and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

*Delete standard spec 211.3.5.4 and replace with the following:*

Remove all surplus crack and joint sealing material from the surface of the pavement and all joint material, including fillers, sealers, and asphalt patching from joints and cracks to a minimum depth of 4 inches or full depth where conditions dictate below the surface of the concrete pavement.

Completely remove unstable patches of asphaltic materials used to fill localized pits, depressions, badly spalled, or disintegrated areas of the old pavement. Remove any loose concrete or concrete with incipient spalling within or contiguous to such areas.

Mill centerline repair areas to sound concrete per the Concrete Pavement Centerline Repair detail.

Prior to placement of the HMA pavement and or leveling layer, refill this areas of removal, as described above, to the surface of the concrete pavement. Payment for refilling these areas is paid for under bid item 465.0110 Asphaltic Surface Patching. Patching material that extends more than ½ inch above the milled ground surface shall be corrected before the leveling layer is placed.

#### **D Measurement**

The department will measure Preparation of Foundation for Asphaltic Paving Special (Project) according to standard spec 211.4.

#### **E Payment**

Payment will be according to standard spec 211.5 except delete standard spec 211.5.1 paragraph (1) and replace with the following:

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Preparation of Foundation for Asphaltic Paving Special Project 1190-05-75	LS

Payment is full compensation for preparing the foundation for asphaltic paving, removing and disposing of previously placed asphalt material; for removing and disposing of unsound concrete repair areas, including milling centerline repair areas; for removal of any remaining rubber crack filler to a depth of at least 1-inch below the surface mill, for cleaning; for supplying and placing water for compaction and dust control; as directed by the engineer.

### **23. Material Transfer Vehicle, Project 1190-05-75, Item SPV.0105.02.**

#### **A Description**

This special provision describes furnishing Material Transfer Vehicle (MTV) and an operator for use on this project during HMA upper layer paving operations, as shown in the plans or as directed by the engineer, and as hereinafter provided.

#### **B Materials**

The MTV shall be self-propelled, remix and maintain constant temperature, and continually feed the paver hopper. The storage capacity shall be adequate to provide continuous forward movement of the paver. The paver speed shall be coordinated to match the delivery of material and capacity of the MTV to limit stopping of the paver.

#### **C Construction**

An operator shall remain with the vehicle at all times during moving operations and the paver's hopper shall remain full at all times to avoid segregation of coarse aggregates. No placement of HMA upper layer pavement shall be allowed without the use of the MTV.

**D Measurement**

The department will measure Material Transfer Vehicle (Project) by the lump sum unit of work for each material transfer vehicle, 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.0105.02	Material Transfer Vehicle, Project 1190-05-75	LS

Payment is full compensation for deploying the equipment and its operator.

**24. Milling and Removing Temporary Joint, Item SPV.0105.03.****A Description**

This special provision describes This special provision describes the milling and removing of the upper layer HMA wedge joint and any other temporary longitudinal or transverse joints, including sweeping and cleaning of the affected area prior to the abutting pavement placement.

**B (Vacant)****C Construction**

Immediately prior to the placement of the adjoining lane, mill any temporary wedge joint to a true line with a face perpendicular to the surface of the existing asphaltic surface pavement.

Immediately prior to continuation of paving operations, mill any temporary transverse joint to a true line with a face perpendicular to the surface of the existing asphaltic surface pavement.

The contractor becomes the owner of the removed asphaltic pavement and is responsible for the disposal as specified for disposing of materials under standard spec 204.3.1.3.

**D Measurement**

The department will measure Milling and Removing Temporary Joint as a single lump sum unit of work for all wedge joints, acceptably removed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Milling and Removing Temporary Joint	LS

Payment is full compensation for milling, removing, sweeping, cleaning, and disposing of materials.

## **25. Reheating HMA Pavement Longitudinal Joints Special, Item SPV.0170.01.**

### **A Description**

This special provision describes reheating the abutting centerline edge of the previously compacted **upper** centerline 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 surface 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. Joint temperature is to be measured immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, plant mix temperatures, warm asphalt type mixtures, 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 Special by the full 100-foot (40 m) survey station, acceptably completed as measured along the joint. The department will measure partial stations as full stations.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.01	Reheating HMA Pavement Longitudinal Joints Special	STA

Payment is full compensation for all the work required under this bid item.

## **26. Asphaltic Surface Special, Item SPV.0195.01.**

### **A Description**

This section describes constructing asphaltic surface according to standard spec 465, as directed by the engineer, and as hereinafter provided.

### **B Materials**

The materials shall conform to standard spec 465.2 for the asphaltic mixture except that the mixture shall meet the requirements specified for E-3 or greater under 460.2 and the contractor shall furnish aggregates mixed with AC PG 64-34 or AC PG 58-34 asphaltic material.

### **C Construction**

Construct asphaltic surface according to standard spec 465.3.1.

### **D Measurement**

The department will measure Asphaltic Surface Special by the ton acceptably completed using the methods specified in standard spec 450.4. The department will not measure asphaltic materials separately.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Asphaltic Surface Special	TON

Payment is full compensation for submitting an asphaltic mixture design; for preparing the foundation; for providing the asphaltic mixture, including asphaltic material and reclaimed asphaltic materials; and for compacting the mixture.

## **27. HMA Pavement Type SMA Special, Item SPV.0195.02.**

### **A Description**

This special provision describes HMA Pavement Type SMA Special. Perform work according to standard spec 460, as shown in the plans or as directed by the engineer, and as hereinafter provided.

### **B Materials**

*Add the following to standard spec 460.2.1:*

(2) Mineral filler, whether fly ash or lime dust, shall be stored moisture free. Prior to and during paving, the plant shall demonstrate to the QV team and engineer that the mineral filler will be metered out correctly into the asphalt mixture. If irregularities in mineral filler metering and/or clumping are observed, then the plant must stop production and corrective action taken.



Replace Table 460-2 Mixture Requirements with the following:

Mixture Type	SMA
ESALS x 10 <sup>8</sup> (20 yr design life)	-
LA Wear (AASHTO T 96)	
100 revolutions (max % loss)	13
500 revolutions (max % loss)	35
Soundness (AASHTO T 104) (sodium sulphate, max % loss)	12
Freeze/Thaw (AASHTO T 103) (Specified counties, max % loss)	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	100/90
Flat and elongated (ASTM D4791) (max %, by weight)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	45
Sand Equivalency (AASHTO T 176, min)	50
Gyratory Compaction	
Gyrations for N <sub>ini</sub>	8
Gyrations for N <sub>des</sub>	65
Gyrations for N <sub>max</sub>	160
Air Voids, % V <sub>a</sub> (% Gmm @ N <sub>des</sub> )	4.5 (95.5)
% Gmm @ N <sub>ini</sub>	-
% Gmm @ N <sub>max</sub>	-
Dust to binder ratio <sup>[2]</sup> (% passing 0.075/P <sub>be</sub> )	1.2-2.0
Voids filled with binder (VFB or FRA, %)	70-80
Tensile strength ratio (TSR) (ASTM 4867)	
No antistripping additive	0.70
With antistripping additive	0.75
Draindown at Production Temperature (%)	0.30
Effective Asphalt Content, P <sub>be</sub> min	5.5 %

Replace standard spec 460.2.5(2) with the following:

Control recycled materials used in HMA by evaluating the percent binder replacement, the ratio of recovered binder to the total binder. The maximum allowable percent binder replacement shall not exceed 9.0 percent. Prior to incorporation into the HMA mixture, one hundred (100) percent of the RAS material must be processed to pass the 4.75mm sieve size.

*Delete standard spec 460.2.6(2).*

*Replace standard spec 460.2.8.2.1.5(1).*

Conform to the following control limits for the JMF and warning limits based on a running average of the last 4 data points:

ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
75-µm	+/- 2.0	+/- 1.5
Asphaltic content in percent	- 0.3	- 0.2
Air voids in percent	+ 1.5 / - 1.3	+ 1.2 / -1.0
VMA in percent[1]	- 0.5	- 0.2

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

*Add the following to standard spec 460.2.8.2.1.7:*

(10) The four point running average for air voids must contain two or more successive QC tests within the JMF limits and must not contain two or more successive QC tests outside the JMF limits to be considered a conforming material.

(11) For material that does not meet the definition of article (10) above for conforming material, the department will pay 80% of the contract price for the material from the point where the first QC test is outside the JMF limits until another QC test is within the JMF limits.

*Replace standard spec 460.2.8.3.1.6 with the following:*

The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:

- Va is within a range of 3.2 to 6.0 percent.
- VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

*Replace standard spec 8-66.2.3.5 of the CMM with the following.*

For SMA mixture design, determine specimen bulk specific gravity (Gmb), using (Corelok System) AASHTO T-331. Report Gmb value to three decimal places (0.001).

*Add the following to standard spec 8-36.4 of the CMM*

For the QC testing, SMA volumetric testing for bulk specific gravity (Gmb) and maximum specific gravity (Gmm) will be doubled to help reduce testing variability. Sample sizes shall be large enough to allow for four Gmb and two Gmm specimens for both the QC and the QV testing.

If the contractor requests to run a CA test, a 3-way split of the QC sample will be required. The 3 samples will consist of a QC, QC-retained, and a CA sample. Procedures for the 3-way split must be approved by the engineer prior to producing SMA material.

*Replace subsection 8-36.6.7 of the CMM with the following.*

Determine bulk specific gravity, Gmb, using (Corelok System) AASHTO T-331.

Additional information on using the Corelok for Gmb is provided in the following link:

<http://www.youtube.com/watch?v=HFT9xIR2lnI#t=74>

For the QC testing, determine the average bulk specific gravity, Gmb, for SMA material by averaging 4 specimens instead of the usual 2 specimens. If one of the individual specimens deviates by more than +/- 0.015 from the average, results are considered suspect and the result furthest from the average should be removed from the calculation. Calculate the average using the remaining 3 specimens.

For the QV testing, determine the average bulk specific gravity, Gmb, for SMA material by averaging 2 specimens. If the difference between the two specimens is more than 0.015 from each other, 2 more specimens will be prepared. Determine the average bulk specific gravity for SMA material by averaging the 4 specimens. If one of the individual specimens deviates by more than +/- 0.015 from the average, results are considered suspect and the result

furthest from the average should be removed from the calculation. Calculate the average using the remaining 3 specimens.

*Add the following to CMM 8-36.6.8*

Determine the maximum specific gravity, Gmm, for SMA by averaging 2 samples instead of using the usual 1 sample. If one of the individual samples deviates by more than 0.015 from each other, results are considered suspect and a new set of samples is to be prepared.

*Add the following to standard spec 460.2.8.3.1.8:*

Remove and replace HMA Pavement Type SMA Special where excessive bleeding problems (fat spots) occur, as these are unacceptable and shall be corrected or removed, per engineer review, at no additional expense to the department.

Furnish AC PG 70 -28 or AC PG 64-34P for the HMA Pavement Type SMA Special.

#### **C (Vacant)**

#### **D Measurement**

The department will measure HMA Pavement Type SMA Special by the ton, acceptably completed.

#### **E Payment**

The department will pay for measured quantities according to standard spec 460.5 of the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.02	HMA Pavement Type SMA Special	TON

Payment for HMA Pavement Type SMA Special, is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting the mixture; for QMP testing and aggregate source testing; and for all materials including asphaltic materials and warm mix asphalt additives and processes; for stabilizer, hydrated lime, and liquid antistripping agent if required.

### **28. SMA Pavement Compaction Acceptance, Item SPV.0195.03.**

#### **A Description**

This special provision describes the density testing requirements for acceptance of stone matrix asphalt (SMA) pavements. Provide mixture designs, quality management program requirements, and materials as specified in standard spec 460, except as required below.

#### **B Materials**

Furnish materials conforming to HMA Pavement Type SMA Special.

## **C Construction**

Conform to standard spec 460.3, except as follows:

### **C.1 Rubber Tired Roller**

Rubber tired roller will not be used for compaction of SMA Pavement layer.

### **C.2 Minimum Required Density and Pavement Density Determination**

*Replace standard spec 460.3.3.2 with the following:*

The initial placement of the first 1,500 feet of SMA Pavement will be accepted by standard compaction methods. After placement of the initial 1,500 feet of SMA Pavement, density will be determined by the control strip methods described below.

After the initial placement of 1,500 feet of SMA pavement construct a control strip at the beginning of work for each layer of SMA to be compacted. Ensure that the control strip, when acceptably compacted and meeting finish and smoothness requirements, remains in place and becomes part of the completed pavement. Ensure that the SMA mixture is composed of the same material with the same mixture design as the rest of the layer.

The control strip shall consist of 1,000 feet of the SMA mixture that contains a minimum of one QC test and 12 sites for nuclear density testing. Within the control strip, the department, using random numbers for stationing, will determine 12 locations for density testing. Relocate any locations determined by random numbers that fall within the wheel paths laterally away from the wheel paths. Upon completion of the desired compaction for the control strip, perform nuclear density tests at the 12 locations. Take nuclear density readings as direct readings without additional materials to aid in seating the gage. Take two cores from the control strip for evaluation of the integrity of the aggregate structure.

Determine the control strip target density by calculating the median value of the random 12 nuclear density locations. Within 24 hours, provide the department with test results for the QC sample and control strip target density. The department will use the control strip target density as the target density for remaining layer acceptance if the air voids from the QC sample falls between 4.0% and 5.5%. If the test results do not meet these minimum requirements, an investigation will result and a new control test strip may be required. The department will base acceptance of the remaining SMA layer on normal department QMP HMA Pavement Nuclear Density procedures using the control strip median density in percentage as the target.

Stop mixture production and initiate an investigation if any of the following conditions occur:

1. There is a change in binder source;
2. The previous day's maximum specific gravity average from QC testing varies by 0.020 from the value from the initial QC test;

3. The overall blend changes have deviated from the original mix design by 10%;
4. There is a change in the average lot density in two sequential lots either below or above control strip target density by 2.0% inclusive; or
5. Any other condition occurs which in the judgment of the engineer would warrant the establishment of a new control strip density. The engineer may request additional core densities of two per day to verify compaction or to indicate the need for another control test strip.

#### **D Measurement**

The department will measure SMA Pavement Compaction Acceptance by the ton, acceptably completed.

#### **E Payment**

The department will pay for measured quantities according to standard specification 460.5 at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.03	SMA Pavement Compaction Acceptance	TON

Payment is full compensation for performing all work under this item.

#### **E.1 Disincentive for SMA Pavements**

For SMA pavement replace standard spec 460.5.2.2 with the following:

If the lot density is less than the specified control strip target density, the department will reduce pay under the Disincentive Density HMA Pavement and Disincentive Density Asphaltic Material administrative items, as follows:

<b>Percent Lot Density</b>	<b>Payment Factor</b>
<b>Below Control Strip Target Density</b>	<b>(percent of contract price)</b>
From 1.1 to 1.5 inclusive	98%
From 1.6 to 2.0 inclusive	95%
From 2.1 to 2.5 inclusive	85%
From 2.6 to 3.0 inclusive	70%
More than 3.0	See footnote [*]

[\*] Remove and replace the lot with a mixture at the specified density. After acceptable replacement, the engineer will pay for the lot at the contract unit price per ton, or the engineer may permit the unacceptable material to remain in place with a 50% payment factor.

The engineer will apply no disincentive to any test strip constructed in an acceptable manner as described above.

#### **E.2 Incentive Pay Adjustment for SMA Pavements**

For SMA pavement, delete standard spec 460.5.2.3(1).

## **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:

#### 550.5.2 Piling

Add the following as paragraph three effective with the December 2015 letting:

- (3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:
- | Percent of Contract Length Driven | Pay Adjustment   |
|-----------------------------------|--|
| < 85                              | ( 85% contract length - driven length ) x 20% unit price |
| > 115                             | (driven length - 115% contract length) x 5% unit price   |

#### 643.2.1 General

Replace paragraph two with the following effective with the December 2015 letting:

- (2) Use reflective sheeting from the department's approved products list on barricades, drums, and flexible tubular marker posts.

## Errata

Make the following corrections to the standard specifications:

#### 641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

- (1) Provide commercially fabricated overhead sign supports conforming to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years with a wind importance factor of 1.00. Design to withstand a 3 second gust wind speed of 90 mph. Do not use the methods of appendix C of those AASHTO standards.
- (2) Design structures, listed as applicable structure types in the AASHTO standards, to the fatigue category criteria as follows:
  1. Structures carrying variable message signs:
    - Category I criteria for structures over all roadway types.
  2. Structures carrying type II or III signs:
    - Category I criteria for structures used over highways and free flow ramps.
    - Category II criteria for structures with arms greater than 30 feet used over local roads and city streets.
    - Category III criteria for structures with arms 30 feet or less used over local roads and city streets.
- (3) Use the posted speed limit of the roadway beneath the structure for truck-induced gusts.
- (4) Submit shop drawings identified by structure number, design computations, and material specifications, to the engineer before erecting sign supports. Provide tightening procedures for mast arm or luminaire arm to pole shaft connections on the shop drawings. Have a professional engineer registered in the state of Wisconsin sign, seal, and date the shop drawings and certify that the design conforms to AASHTO standards and the contract.
- (5) Provide steel pole shafts and mast arms zinc coated according to ASTM A123. Provide tapered pole and arm shafts with a minimum taper of 0.14 inch per foot for single-member vertical and single-member horizontal structure components. Provide bolts and other hardware conforming to 641.2.2.



**ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> 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.



## **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 Tess Mulrooney at 608-267-4489 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 send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

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

**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/rdwy/worksheets/ws4567.doc>

**Effective with September 2004 Letting**

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

**I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES**

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various 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 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contracts.

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 103.50 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 rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) 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, eculid 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.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

## **II. PAYROLL REQUIREMENTS**

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 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 place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

## **IV. WAGE RATE REDISTRIBUTION**

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

## **V. ADDITIONAL CLASSIFICATIONS**

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
4. The unlisted classification must be commonly employed in the area where the project is located.
5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
6. The request should be made prior to the actual performance of the work by the unlisted classification.
7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).



**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
CHIPPEWA COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development  
for the Department of Transportation  
Pursuant to s. 103.50, Stats.  
Issued on May 1, 2015

**CLASSIFICATION:** Contractors are required to call the Department of Workforce Development if there are any questions regarding the proper trade or classification to be used for any worker on a public works project.

**OVERTIME:** Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

**FUTURE INCREASE:** If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

**PREMIUM PAY:** If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

**SUBJOURNEY:** Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	30.42	18.04	48.46
Carpenter	32.72	16.00	48.72
Future Increase(s): Add \$1.42/hr on 6/1/2015; Add \$1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	33.95	18.01	51.96
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	30.59	18.37	48.96
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	34.65	22.85	57.50
Future Increase(s): Add \$1.50/hr on 5/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.			
Line Constructor (Electrical)	39.50	16.81	56.31
Painter	26.65	16.09	42.74
Pavement Marking Operator	28.97	17.70	46.67
Piledriver	33.24	16.00	49.24
Future Increase(s): Add \$1.44/hr on 6/1/2015; Add \$1.44/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Roofer or Waterproofer	23.70	10.87	34.57
Teledata Technician or Installer	22.00	0.86	22.86
Tuckpointer, Caulker or Cleaner	34.49	13.96	48.45
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.98	46.58
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38

**TRUCK DRIVERS**

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	25.28	18.31	43.59
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Pavement Marking Vehicle	23.16	17.90	41.06
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	17.77	42.29

**LABORERS**

General Laborer	30.13	15.14	45.27
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	15.59	0.00	15.59
Landscaper	30.13	15.14	45.27
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination			

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	26.76	15.14	41.90
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.00	0.00	17.00
Railroad Track Laborer	15.00	4.95	19.95

### HEAVY EQUIPMENT OPERATORS

Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).	52.90	20.19	73.09
Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.	37.22	21.15	58.37
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig;	36.72	21.15	57.87

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20160209022PROJECT(S):  
1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

## SECTION 0001 Contract Items

0010	203.0200 Removing Old Structure (station) 01. 733+83	LUMP		LUMP		.
0020	204.0105 Removing Pavement Butt Joints	14,924.000 SY		.		.
0030	204.0110 Removing Asphaltic Surface	178,575.000 SY		.		.
0040	204.0115 Removing Asphaltic Surface Butt Joints	8,708.000 SY		.		.
0050	204.0120 Removing Asphaltic Surface Milling	337,798.000 SY		.		.
0060	204.0150 Removing Curb & Gutter	8.000 LF		.		.
0070	204.0175 Removing Concrete Slope Paving	1,432.000 SY		.		.
0080	204.0180 Removing Delineators and Markers	519.000 EACH		.		.
0090	206.2000 Excavation for Structures Culverts (structure) 01. C-9-14	LUMP		LUMP		.
0100	210.0100 Backfill Structure	45.000 CY		.		.

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20160209022PROJECT(S):  
1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	213.0100 Finishing Roadway (project) 01. 1190-05-75	1.000 EACH	.		.	
0120	305.0110 Base Aggregate Dense 3/4-Inch	1,250.000 TON	.		.	
0130	305.0500 Shaping Shoulders	2,282.000 STA	.		.	
0140	416.0610 Drilled Tie Bars	3.000 EACH	.		.	
0150	440.4410 Incentive IRI Ride	86,500.000 DOL	1.00000		86500.00	
0160	455.0110 Asphaltic Material PG58-34	1,500.000 TON	.		.	
0170	455.0145 Asphaltic Material PG64-34P	2,186.000 TON	.		.	
0180	455.0605 Tack Coat	64,535.000 GAL	.		.	
0190	460.1100 HMA Pavement Type E-0.3	25,000.000 TON	.		.	
0200	460.1103 HMA Pavement Type E-3	36,430.000 TON	.		.	
0210	460.2000 Incentive Density HMA Pavement	39,320.000 DOL	1.00000		39320.00	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
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1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	465.0110 Asphaltic Surface Patching	720.000 TON	.		.	
0230	465.0125 Asphaltic Surface Temporary	4,220.000 TON	.		.	
0240	465.0400 Asphaltic Shoulder Rumble Strips	226,265.000 LF	.		.	
0250	502.5005 Masonry Anchors Type L No. 5 Bars	33.000 EACH	.		.	
0260	504.0100 Concrete Masonry Culverts	16.000 CY	.		.	
0270	505.0400 Bar Steel Reinforcement HS Structures	1,900.000 LB	.		.	
0280	509.5100.S Polymer Overlay	6,471.000 SY	.		.	
0290	511.1100 Temporary Shoring	300.000 SF	.		.	
0300	516.0500 Rubberized Membrane Waterproofing	4.000 SY	.		.	
0310	520.1018 Apron Endwalls for Culvert Pipe 18-Inch	3.000 EACH	.		.	
0320	520.1030 Apron Endwalls for Culvert Pipe 30-Inch	1.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20160209022PROJECT(S):  
1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0330	520.8700 Cleaning Culvert Pipes	52.000 EACH	.		.	
0340	522.0118 Culvert Pipe Reinforced Concrete Class III 18-Inch	8.000 LF	.		.	
0350	524.0124 Culvert Pipe Salvaged 24-Inch	32.000 LF	.		.	
0360	524.0130 Culvert Pipe Salvaged 30-Inch	20.000 LF	.		.	
0370	524.0148 Culvert Pipe Salvaged 48-Inch	32.000 LF	.		.	
0380	524.0618 Apron Endwalls for Culvert Pipe Salvaged 18-Inch	15.000 EACH	.		.	
0390	524.0624 Apron Endwalls for Culvert Pipe Salvaged 24-Inch	4.000 EACH	.		.	
0400	524.0630 Apron Endwalls for Culvert Pipe Salvaged 30-Inch	3.000 EACH	.		.	
0410	524.0636 Apron Endwalls for Culvert Pipe Salvaged 36-Inch	1.000 EACH	.		.	
0420	524.0648 Apron Endwalls for Culvert Pipe Salvaged 48-Inch	5.000 EACH	.		.	
0430	601.0409 Concrete Curb & Gutter 30-Inch Type A	8.000 LF	.		.	



## SCHEDULE OF ITEMS

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N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0440	604.0400 Slope Paving Concrete	1,432.000 SY	.		.	
0450	606.0100 Riprap Light	7.000 CY	.		.	
0460	606.0200 Riprap Medium	6.000 CY	.		.	
0470	611.8115 Adjusting Inlet Covers	6.000 EACH	.		.	
0480	612.0206 Pipe Underdrain Unperforated 6-Inch	2.000 LF	.		.	
0490	612.0406 Pipe Underdrain Wrapped 6-Inch	31.000 LF	.		.	
0500	618.0100 Maintenance And Repair of Haul Roads (project) 01. 1190-05-75	1.000 EACH	.		.	
0510	619.1000 Mobilization	1.000 EACH	.		.	
0520	624.0100 Water	19.000 MGAL	.		.	
0530	628.1504 Silt Fence	500.000 LF	.		.	
0540	628.1520 Silt Fence Maintenance	500.000 LF	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20160209022PROJECT(S):  
1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0550	628.1905 Mobilizations Erosion Control	2.000 EACH	.		.	
0560	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH	.		.	
0570	628.2004 Erosion Mat Class I Type B	50.000 SY	.		.	
0580	628.7005 Inlet Protection Type A	5.000 EACH	.		.	
0590	628.7504 Temporary Ditch Checks	100.000 LF	.		.	
0600	633.0100 Delineator Posts Steel	519.000 EACH	.		.	
0610	633.0500 Delineator Reflectors	692.000 EACH	.		.	
0620	633.5200 Markers Culvert End	22.000 EACH	.		.	
0630	634.0614 Posts Wood 4x6-Inch X 14-FT	33.000 EACH	.		.	
0640	634.0616 Posts Wood 4x6-Inch X 16-FT	156.000 EACH	.		.	
0650	634.0618 Posts Wood 4x6-Inch X 18-FT	27.000 EACH	.		.	

## SCHEDULE OF ITEMS

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1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0660	637.1220 Signs Type I Reflective SH	200.000 SF	.		.	
0670	637.2210 Signs Type II Reflective H	1,655.740 SF	.		.	
0680	637.2230 Signs Type II Reflective F	323.750 SF	.		.	
0690	638.2601 Removing Signs Type I	2.000 EACH	.		.	
0700	638.2602 Removing Signs Type II	252.000 EACH	.		.	
0710	638.3000 Removing Small Sign Supports	218.000 EACH	.		.	
0720	642.5001 Field Office Type B	1.000 EACH	.		.	
0730	643.0100 Traffic Control (project) 01. 1190-05-75	1.000 EACH	.		.	
0740	643.0300 Traffic Control Drums	153,139.000 DAY	.		.	
0750	643.0420 Traffic Control Barricades Type III	10,062.000 DAY	.		.	
0760	643.0705 Traffic Control Warning Lights Type A	16,856.000 DAY	.		.	

## SCHEDULE OF ITEMS

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1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0770	643.0715 Traffic Control Warning Lights Type C	8,980.000 DAY	.		.	
0780	643.0800 Traffic Control Arrow Boards	468.000 DAY	.		.	
0790	643.0900 Traffic Control Signs	7,640.000 DAY	.		.	
0800	643.0920 Traffic Control Covering Signs Type II	4.000 EACH	.		.	
0810	643.1050 Traffic Control Signs PCMS	234.000 DAY	.		.	
0820	645.0130 Geotextile Fabric Type R	39.000 SY	.		.	
0830	646.0600 Removing Pavement Markings	390.000 LF	.		.	
0840	646.2304.S Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	290,420.000 LF	.		.	
0850	646.2308.S Pavement Marking Grooved Wet Reflective Epoxy 8-Inch	8,687.000 LF	.		.	
0860	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	182.000 LF	.		.	

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1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0870	647.0803 Pavement Marking Aerial Enforcement Bars Epoxy 24-Inch	120.000 LF	.		.	
0880	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	7,670.000 LF	.		.	
0890	649.0402 Temporary Pavement Marking Paint 4-Inch	261,415.000 LF	.		.	
0900	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	2,400.000 LF	.		.	
0910	650.8000 Construction Staking Resurfacing Reference	136,475.000 LF	.		.	
0920	650.9910 Construction Staking Supplemental Control (project) 01. 1190-05-75	LUMP	LUMP		.	
0930	690.0150 Sawing Asphalt	240.000 LF	.		.	
0940	690.0250 Sawing Concrete	2,409.000 LF	.		.	
0950	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000		500.00	
0960	SPV.0035 Special 01. Continuously Reinforced Concrete Pavement Repair Special	54.000 CY	.		.	

## SCHEDULE OF ITEMS

REVISED:

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1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0970	SPV.0045 Special 01. Portable Changeable Message Sign (PCMS) Cellular Communications	234.000 DAY	.		.	
0980	SPV.0090 Special 01. Regrade Ditch	215.000 LF	.		.	
0990	SPV.0090 Special 02. Concrete Curb & Gutter Cure and Seal Treatment	8.000 LF	.		.	
1000	SPV.0090 Special 03. Cleaning Concrete Channels	485.000 LF	.		.	
1010	SPV.0105 Special 01. Preparation Of Foundation For Asphalt Paving Special, Project 1190-05-75	LUMP	LUMP		.	
1020	SPV.0105 Special 02. Material Transfer Vehicle, Project 1190-05-75	LUMP	LUMP		.	
1030	SPV.0105 Special 03. Milling and Removing Temporary Joint	LUMP	LUMP		.	
1040	SPV.0170 Special 01. Reheating HMA Pavement Longitudinal Joints Special	1,148.000 STA	.		.	
1050	SPV.0195 Special 01. Asphaltic Surface Special	8,240.000 TON	.		.	

## SCHEDULE OF ITEMS

REVISED:

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20160209022PROJECT(S):  
1190-05-75FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1060	SPV.0195 Special 02. HMA Pavement Type SMA Special	42,860.000 TON	.		.	
1070	SPV.0195 Special 03. SMA Pavement Compaction Acceptance	40,000.000 TON	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	





**PLEASE ATTACH SCHEDULE OF ITEMS HERE**