# **HIGHWAY WORK PROPOSAL**

Proposal Number:

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

COUNTY STATE PROJECT ID FEDERAL PROJECT ID PROJECT DESCRIPTION HIGHWAY

Waukesha 1090-23-60 Rock Freeway, STH 164 Interchange,

STH 164

Interchange, Woodland Lane To CTH ES

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, \$ 40,000.00	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: December 13, 2016 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
June 20, 2017	NOT FOR BIDDING FOR GOLD
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.

Type of Work	Use Only	
Notary Seal		
(Date Commission Expires)	(Bidder Title)	-
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)	-
(Signature, Notary Public, State of Wisconsin)	(Bidder Signature)	-
Subscribed and sworn to before me this date		
Do not sign, notarize, or submit this Highway Work Proposal when s	ubmitting an electronic bid on the Internet.	
aken any action in restraint of free competitive bidding in connection with this prop	osal bid.	

Type of Work		
Base patching, removing asphaltic surface milling, HMA pavement, base aggregate dnese, pavement marking.		
Notice of Award Dated	Date Guaranty Returned	

# PLEASE ATTACH PROPOSAL GUARANTY HERE

### **Effective with November 2007 Letting**

# PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

# **Effective with August 2015 Letting**

# BID PREPARATION

### **Preparing the Proposal Schedule of Items**

### A General

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

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<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/after 5:00 P.M.">http://www.bidx.com/after 5:00 P.M.</a> 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<sup>TM</sup> on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

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

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

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.

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 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 TM 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 Meb 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.
  - 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 Corpor	ate Seal)		
(Signature and Title)			
(Company Name)			
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTARY FO	OR PRINCIPAL	NOTARY FO	R SURETY
(Date)		(Dat	te)
State of Wisconsin	)	State of Wisconsin	)
	) ss. County )		) ss. _County )
On the above date, this instrument named person(s).	was acknowledged before me by the	On the above date, this instrument was acknowledged before me by the named person(s).	
(Signature, Notary Pu	ublic, State of Wisconsin)	(Signature, Notary Publ	ic, State of Wisconsin)
(Print or Type Name, Nota	ry Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)	
(Date Comn	nission Expires)	(Date Commis	sion Expires)

Notary Seal Notary Seal

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

# **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

Time Period Valid (	From/To)
Name of Surety	
Name of Contracto	r
Certificate Holder	Wisconsin Department of Transportation
	y that an annual bid bond issued by the above-named Surety is currently on file with the partment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder mend, 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)

### 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.

Name of Subcontractor	Class of Work	<b>Estimated Value</b>

#### **DECEMBER 2000**

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

# **Instructions for Certification**

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

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

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

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

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

# **Special Provisions**

# **Table of Contents**

Article	Description Pa	ige#
1.	General	2
2.	Scope of Work.	2
3.	Prosecution and Progress.	
4.	Lane Rental Fee Assessment.	7
5.	Traffic	8
6.	Holiday Work Restrictions.	9
7.	Utilities	9
8.	Contractor Notification.	11
9.	Removing Asphaltic Surface Milling.	11
10.	Information to Bidders, Use of Recovered Material.	11
11.	Maintaining Drainage.	12
12.	Erosion Control.	
13.	QMP Base Aggregate.	13
14.	Nighttime Work Lighting-Stationary	21
15.	Traffic Control.	
16.	Traffic Control Detour Signs Not in Use.	
17.	Concrete Pavement Partial Depth Repair Joint Repair, Item 416.0750.S.	24
18.	Traffic Control Detour Signs Not in Use.	
19.	Traffic Control Signs Removal.	
20.	General Requirements for Electrical Work	
21.	Section 652 Electrical Conduit.	
22.	Incentive IRI Ride 440.4410.	
23.	Pavement Cleanup Project 1090-23-60, Item SPV.0075.01.	
24.	Remove Loop Detector Wire and Lead-in Cable IH 43 Ramps & STH 164,	
	Item SPV.0105.30; STH 164 & CTH ES, Item SPV.0105.31	
25.	Proof Rolling, Item SPV.0170.01.	34

1090-23-60 1 of 35

### SPECIAL PROVISIONS

### 1. General.

Perform the work under this construction contract for Project 1090-23-60, Rock Freeway, STH 164 Interchange, Woodland Lane to CTH ES, STH 164, Waukesha County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2017 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 (20160607)

# 2. Scope of Work.

The work under this contract shall consist of removing asphalt surface milling, base patching concrete SHES, HMA Pavement, base aggregate dense, removing curb and gutter, placing curb and gutter and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

# 3. Prosecution and Progress.

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

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

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

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

Be advised that there may be multiple mobilizations and/or remobilizations to complete construction operations, for example such items as: traffic control, base patching, milling and resurfacing, signing, pavement marking and other incidental items related to staging. No additional payment will be made, by the department, for additional mobilizations.

1090-23-60 2 of 35

# **Schedule of Operations**

The department anticipates that the schedule for each stage shall be as follows:

Do not move to the next stage until all work in the current stage is completed or as approved by the engineer.

### Stage 1

Stage 1 work consists of placing all temporary traffic control signs and detour signs for the project. During this stage activities include saw cutting, base patching, temporary pavement markings as required, removing detector wire and lead in cable and placement of new detector loop conduit at designated locations for STH 164 northbound from approximately Station 270+80 to Station 284+30 and STH 164 northbound and southbound outside lanes and shoulders from 284+30 to northern project limits.

### Stage 2

Stage 2 work consists of saw cutting, removal and replacement of curb and gutter, base patching, temporary pavement markings as required and removing detector wire and lead in cable and placement of new detector loop conduit at designated locations for STH 164 southbound from approximately Station 270+80 to Station 284+30 and STH 164 northbound and southbound inside lanes from 284+30 to northern project limits. Installation of traffic signal new detector loop wire can be completed in stage 2.

# Stage 3

Stage 3 work consists of 2" milling asphaltic surface, constructing HMA pavement and base aggregate dense, temporary or permanent pavement markings, permanent sign installations, and any remaining traffic signal new detector loop wire for STH 164 northbound from approximately Station 270+80 to Station 284+30 and STH 164 northbound and southbound outside lanes and shoulders from 284+30 to northern project limits.

### Stage 4

Stage 4 work consists of milling 2" asphaltic surface, HMA pavement, temporary or permanent pavement markings, and permanent sign installations for STH 164 southbound from approximately Station 270+80 to Station 284+30 and STH 164 northbound and southbound inside lanes from 284+30 to northern project limits.

### Stage 5

Stage 5 work consists of removing all temporary traffic control signs and detour signs for the project.

### **Advance Notification**

Notify the engineer and WisDOT Statewide Traffic Operations Center (STOC), (414) 227-2142, if there are any changes in the schedule, early completions, or cancellations of scheduled work. Coordinate the locations of Traffic Control Arrow Boards with the engineer and STOC.

1090-23-60 3 of 35

Provide the engineer with a schedule of lane and ramp closures for the following week by 9:00 AM on Wednesday of the previous week.

# **Wisconsin Lane Closure System Advance Notification**

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION	
Lane and shoulder closures	7 calendar days	
Full roadway closures	7 calendar days	
Ramp closures	7 calendar days	
Full ramp closures	7 calendar days	
Detours	7 calendar days	
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	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 (20160607)

# **Ramp Closures**

All entrance and exit ramps shall be posted three business days in advance of their closure with dates and time of closure.

# STH 164 and Ramp Work Restrictions

### **Definitions**

The following definitions apply to this contract:

### Weekday Off-Peak Hours

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

# Weekend Off-Peak Hours

9:00 AM – 3:00 PM Saturday and Sunday

1090-23-60 4 of 35

# Night Time Hours

- 7:00 PM Sunday, Monday, Tuesday, Wednesday, and Thursday to 6:00 AM the following morning
- 7:00 PM Friday and Saturday to 9:00 AM the following morning

### Weekday Peak Hours

- 6:00 AM 9:00 AM Monday, Tuesday, Wednesday, Thursday and Friday
- 3:00 PM 7:00 PM Monday, Tuesday, Wednesday, Thursday and Friday

# Weekend Peak Hours

• 3:00 PM – 7:00 PM Saturday and Sunday

All construction work shall be performed during night time hours as defined above except for the following:

• Placement of new detector loop wiring at designated locations and permanent sign installations may be completed during off-peak hours as approved by the engineer.

Follow plan details for closures. If plan details are not provided in the traffic control plan or within any traffic control change requests, then furnish plans for review to the engineer and Rebecca Klein, Regional Workzone Operations Engineer, (262) 548-8728 a minimum of one week prior to their implementation so that approval, or disapproval, is obtained at least three days prior to roadway, lane, or ramp closures.

No full freeway closures or mainline lane closures on IH 43 Rock Freeway are allowed at any time during this project. Restrict work on freeway to working in closed shoulders as allowed by the engineer. Access into the work zones from the freeway roads will be allowed during nighttime hours, subject to approval by the engineer, if operations can be safely accomplished and do not result in non-construction traffic entering the work zones. Exiting the work zones directly onto freeway roads will be allowed only when operations do not obstruct or slow traffic on the freeway.

All STH 164 lanes including turn lanes in all directions shall be open to traffic during peak hours. Do not, at any time, conduct construction operations in the median area and adjacent outside shoulder area of STH 164 at the same time without the permission of the engineer. Stage changes are allowed only during nighttime hours.

Where lane closure(s) are permitted by the engineer in conjunction with the contractor's work schedule, make a continuous effort to complete the work within said lane closure(s) in a timely manner.

Do not begin or continue any work that closes traffic lanes or ramps outside the allowed time periods specified in this contract. If the contractor fails to open lanes to traffic the department will assess the contractor lane rental according to the Lane Rental Fee Assessment article.

1090-23-60 5 of 35

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

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

### **Base Patching**

STH 164 lanes and shoulders shall be base patched prior to milling and HMA resurfacing operations. The plans identify base patching locations to be verified by the engineer in the field. There are two existing types of STH 164 pavements. From Station 290+30 southward existing pavements are predominantly reinforced concrete pavements requiring base patching concrete SHES. From 290+30 northward existing pavements are predominantly an asphaltic pavement section requiring base patching HMA. Base patching HMA will not be measured separately but will be paid for as HMA Pavement 4 MT 58-28.

# Milling and HMA Resurfacing

The milling and resurfacing operation shall be a simultaneous operation. Any pavement that is milled is required to be resurfaced prior to traffic at the end of the day. Traffic is not permitted on the milled surface. Temporary or permanent centerline pavement marking shall be applied prior to opening lanes to traffic.

# **Equipment Parking and Material Storage**

Park or store equipment and materials only at work sites approved by the engineer. The Park and Ride lot located off of STH 164 shall not be used for storage of contractor's equipment or materials. Parking equipment or storing materials on the shoulders or within 20' of the roadway during non-working hours is not permitted. Do not stockpile or store materials or equipment on wetlands.

### **Local Coordination**

Comply with all local ordinances that apply to work operations, including those pertaining to working during nighttime hours. Furnish any ordinance variance issued by the municipality or required permits to the engineer, in writing three working days before performing such work.

Contact Vernon Fire Department at least ten days prior to the start of construction to remove and relocate existing street name and signs. Contact information is below:

Address: W233 S7475 Woodland Ln, Big Bend, WI 53103

Phone: (262) 662-2079

The town of Vernon Fire Department is located just off of STH 164 on Woodland Lane. Maintain emergency vehicle access at all times for emergency services with the exception of Stage 4 milling and HMA paving operations required at Woodland Lane. These operations should be expedited to minimize impacts to emergency services and are

1090-23-60 6 of 35

anticipated to take no longer than one nighttime operation for Stage 4. Notify the engineer at least 7 days in advance of closing emergency vehicle access for coordination with the village of Big Bend and Town of Vernon. At all other times provide a minimum of 12 foot 6 inch vertical clearance and 14 foot horizontal clearance to pass emergency vehicles. Provide a drivable and passable surface for emergency vehicles with base aggregate surface at a minimum. Maintain emergency vehicle access free of ruts and potholes.

Maintain access to park and ride lot for local vehicles at all times with the exception of Stage 3 milling and HMA paving operations required at Woodland Lane (park and ride access). These operations should be expedited to minimize impacts to park and ride lot users and are anticipated to take no longer than one nighttime operation for Stage 3.

### 4. Lane Rental Fee Assessment.

# A General

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

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

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

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

### **B** Lane Rental Fee Assessment

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

\$XXX per lane, per direction of travel, per hour broken into 15 minute increments

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

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

1090-23-60 7 of 35

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

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

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

# 5. Traffic

### Stage 1

Close the outside lane on STH 164 in each direction from Station 284+30 to the northern limit of the project. Traffic on STH 164 from Station 270+80 to Station 284+30 will be flagged in both directions with one lane open.

All IH 43 ramps shall be closed, with traffic using detour routes.

# Stage 2

Close the inside lane in each direction from Station 284+30 to the northern limit of the project. Only right turn exit and entry movements to and from ramps at both ramp terminals shall be open. Others movements shall use the detour routes.

Traffic on STH 164 from Station 270+80 to Station 284+30 will be flagged in both directions with one lane open.

### Stage 3

Close the outside lane on STH 164 in each direction from Station 284+30 to the northern limit of the project Traffic on STH 164 from Station 270+80 to Station 284+30 will be flagged in both directions with one lane open. All IH 43 ramps shall be closed during construction with traffic using the detour routes.

Lanes shall be reopened to traffic when pavement marking is completed.

# Stage 4

Close the inside in each direction from Station 284+30 to the northern limit of the project. Only right turn exit and entry movements to and from ramps at both ramp terminals shall be open. Others movements shall use the detour routes. Traffic on STH 164 from Station 270+80 to Station 284+30 will be flagged in both directions with one lane open.

Lanes shall be reopened to traffic when pavement marking is completed.

1090-23-60 8 of 35

### **Wisconsin Lane Closure System Advance Notification**

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION	
Lane and shoulder closures	7 calendar days	
Full roadway closures	7 calendar days	
Ramp closures	7 calendar days	
Full ramp closures	7 calendar days	
Detours	7 calendar days	
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	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 (20160607)

# 6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind, along or across any portion of the highway carrying STH 164 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 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day.

107-005 (20050502)

### 7. Utilities.

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

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate

1090-23-60 9 of 35

construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes.

Utility manholes are located within the pavement area. The utility companies have been advised of the requirement to coordinate adjusting their manhole covers in conjunction with the contractor's operations. Provide a minimum of 10 days advance notice to each manhole owner before commencing milling operations over affected manholes. Provide a minimum of 10 days advance notice so that utilities may set their covers to match final pavement elevations.

Contact the local governing road authority to find out if there are any locally owned facilities within the project limits.

Contact each utility company listed in the plans, prior to preparing bids, to obtain current information on the status of existing and any new utility relocation work. 107-SER5 (20101021)

Following is the list of utilities and type of services with their areas and locations:

**AT&T Wisconsin -** AT&T Wisconsin has facilities on the IH 43 northbound Ramp terminals and south its south side. No conflicts are anticipated and no adjustments are required. The AT&T Wisconsin contact is Mr. Alper Kolcu, MGR OSP PLNG & ENGRG DESIGN at (414) 277-4045.

**McLeod USA Telecommunication Services Inc. -** No conflicts are anticipated and no adjustments are required. The McLeod USA Telecommunication Services Inc. contact is Nathan Becker at (414) 313-9032.

**Time Warner Cable -** Time Warner Cable has facilities around Woodland Lane. No conflicts are anticipated and no adjustments are required. The Time Warner Cable contact is Steve Storm at (414) 908-4789.

**We Energies – Electricity -** We Energies Electric has facilities around Woodland Lane. No conflicts are anticipated and no adjustments are required. The We Energies – Electric contact is Mr. LaTroy Brumfield, Project Manager at (414) 221-5617.

**We Energies – Gas -** We Energies Gas has facilities around Woodland Lane. No conflicts are anticipated and no adjustments are required. The We Energies – Gas contact is Mr. LaTroy Brumfield, Project Manager at (414) 221-5617.

**WisDOT STOC** - WisDOT STOC has facilities on east side of STH 164 near IH 43 northbound On Ramp terminal. No conflicts are anticipated and no adjustments are required. The WisDOT STOC contact is Mr. Jeff Madson at (262) 574-5422

**WisDOT Traffic lighting -** No conflicts are anticipated and no adjustments are required. The WisDOT, Traffic lighting contact is Mr. Eric Perea, SE Region Lighting Engineer at (414) 225-3723.

1090-23-60 10 of 35

**WisDOT Signals -** WisDOT Signal has facilities in the project area south of CTH ES, around the IH 43 northbound and IH 43 southbound Ramp terminals. All signal work is included as part of the project. The WisDOT Signals contact is Ms. Elizabeth Lloyd-Weis at (262) 521-4404.

# 8. Contractor Notification.

*Replace standard spec 104.2.2.2(2) with the following:* 

If the contractor discovers a differing condition, provide a written notice, as specified in standard spec 104.3.3, of the specific differing condition before further disturbing the site and before further performing the affected work.

# 104.3.2 (Vacant)

# 104.3.3 Contractor Initial Written Notice

Replace standard spec 104.3.2 and 104.3.3 with the following:

If required per standard spec 104.2; or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision; promptly provide a written notice to the engineer. At a minimum, provide the following:

- 1. A written description of the nature of the issue.
- 2. The time and date of discovering the problem or issue.
- 3. If appropriate, the location of the issue.

Provide the additional information specified in standard spec 104.3.5 as early as possible to assist the engineer in the timely resolution of an identified issue. The engineer will not require, in subsequent submissions, duplication of information already provided. SEF Rev. 12\_0823

# 9. Removing Asphaltic Surface Milling.

Amend standard spec 204.5.1 with the following:

Removing Asphaltic Surface Milling includes milling existing concrete pavement patches, proposed concrete base patches and concrete pavement to the depth shown on the plans.

# 10. Information to Bidders, Use of Recovered Material.

The department encourages the use of waste materials and recovered industrial byproducts as material substitutions (106.2.1), provided they meet standard specification gradation requirements, conform to NR 538 requirements, and follow standard engineering practice for their intended use.

SEF Rev. 14\_1211

1090-23-60 11 of 35

# 11. Maintaining Drainage.

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

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

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

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

**Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations** If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to article Erosion Control in these special provisions for additional requirements. SEF Rev. 15 0209

# 12. Erosion Control.

*Supplement standard spec 107.20 with the following:* 

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

Provide the ECIP 14 days prior to the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison, Craig Webster, (262) 574-2141, <a href="mailto:craig.webster@wisconsin.gov">craig.webster@wisconsin.gov</a>). Do not implement the ECIP until department approval, and perform all work according to the approved ECIP.

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

1090-23-60 12 of 35

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Immediately install perimeter silt fence protection around stockpiles. If stockpiled materials will be left for more than 14 days, install temporary seed or other temporary erosion control measures the engineer orders.

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

Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering(mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering is considered incidental to the project. SEF Rev. 15 0120

# 13. 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.

1090-23-60 13 of 35

- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
  - 1. Production and placement control and inspection.
  - 2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at: http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

# **A.2** 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>

- [1] 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.
- [2] For 3-inch material, obtain samples at load-out.
- [3] 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 sublot 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.

1090-23-60 14 of 35

### **B** Materials

# **B.1 Quality Control Plan**

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:
  - 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
  - 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
  - 3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
  - 4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
  - 5. Descriptions of stockpiling and hauling methods.
  - 6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
  - 7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

### **B.2** Personnel

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

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

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

1090-23-60 15 of 35

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

### **B.3** Laboratory

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

Materials Management Section

3502 Kinsman Blvd. Madison, WI 53704

Telephone: (608) 246-5388

http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-

rsrces/tools/appr-prod/qual-labs.aspx

# **B.4 Quality Control Documentation**

### **B.4.1** General

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

### **B.4.2 Records**

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 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.
- 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

1090-23-60 16 of 35

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	<b>AASHTO</b>	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.

1090-23-60 17 of 35

- (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.

1090-23-60 18 of 35

- (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 two business days after the department obtains the sample.

# **B.8.2** Verification Testing

# B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
  - 1. 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;

1090-23-60 19 of 35

- 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 OC 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

1090-23-60 20 of 35

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 (20151210)

# 14. Nighttime Work Lighting-Stationary.

### **A Description**

Provide portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

### **B** (Vacant)

### **C** Construction

### C.1 General

This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days prior to the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

- 1. Layout, including location of portable lighting lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.
- 2. Specifications, brochures, and technical data of all lighting equipment to be used.
- 3 The details on how the luminaires will be attached

1090-23-60 21 of 35

- 4. Electrical power source information.
- 5. Details on the louvers, shields, or methods to be employed to reduce glare.
- 6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
- 7. Detail information on any other auxiliary equipment.

### **C.2** Portable Lighting

Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lightning protection for the portable lighting. Portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

# C.3 Light Level and Uniformity

Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

### **C.4** Glare Control

Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

1090-23-60 22 of 35

- 1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.
- 2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

#### **C.5** Continuous Operation

Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

#### D (Vacant)

#### E Payment

Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract.

643-010 (20100709)

#### 15. Traffic Control.

*Supplement standard spec 643.3.1 with the following:* 

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to route traffic in order to perform the operations.

Place traffic control devices for work in the proper locations before operations proceed. Traffic Control is subject to change at the direction of the engineer in the event of an emergency.

Provide the Waukesha County Sheriff's Department, the Wisconsin State Patrol, Vernon Police Department, Village of Big Bend Police Department, Village of Mukwonago Police Department, the Statewide Traffic Operations Center and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Do not park or store equipment, contractor's and personal vehicles or construction materials within the clear zone as designated in the plans on any roadway carrying traffic during working and non-working hours except at locations and periods of time approved by the engineer.

Do not permit construction equipment or vehicles to directly cross the live traffic lanes of the freeway. Yield to all through traffic at all locations. Equip all vehicles or equipment operating in the live traffic lanes with a hazard identification beacon (flashing yellow signal

1090-23-60 23 of 35

light) that is visible from 360 degrees. Operate the flashing yellow beacon only when merging or exiting live traffic lanes or when parked or operating on shoulders. Do not park personal vehicles within the access control limits of the freeway. Do not cross live freeway traffic lanes with equipment or vehicles

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

Do not disturb, remove or obliterate any traffic control signs, advisory signs, sand barrel arrays, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

Do not use flag persons to direct, control, or stop freeway traffic. Obtain approval from the engineer to use a flag person to direct, control, or stop local street traffic. Adhere to the Manual of Uniform Traffic Control Devices chapter 6E standard requirements for flagger control.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

Replace standard spec 643.3.1(6) with the following:

Provide 24-hour a day availability of equipment, forces and materials to promptly restore barricades, lights, or other traffic control devices that are damaged or disturbed. 643-SER1 (20160321)

### 16. Traffic Control Detour Signs Not in Use.

*Replace standard spec 643.3.8.6(6) with the following:* 

Immediately remove or cover signing when the detour is no longer in effect. When removing signs, remove all signs, posts, supports, and other potential associated hazards to the traveling public from within the right-of-way.

SEF Rev. 14 1212

### 17. Concrete Pavement Partial Depth Repair Joint Repair, Item 416.0750.S.

#### A Description

This special provision describes removal of deteriorated concrete, furnishing, placing and curing concrete to the original slope and grade, and reestablishing cracks or joints at areas shown on the plans and as directed by the engineer, all according to the requirements of the plans, the standard specifications, and as hereinafter provided.

The item Concrete Pavement Partial Depth Repair Joint Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade, and reestablishing joints.

1090-23-60 24 of 35

The item Concrete Pavement Partial Depth Repair Crack Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade, and reestablishing cracks.

The item Concrete Pavement Partial Depth Repair Surface Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade.

The item Concrete Pavement Partial Depth Repair Edge Repair consists of removing deteriorated concrete at the areas designated in the plans, furnishing, placing, and curing concrete to the original slope and grade.

The item Concrete Pavement Partial Depth Repair Full Depth Adjustment consists of removing deteriorated concrete at the areas designated in the plans, furnishing and installing required pavement tie, furnishing, placing, and curing concrete to the original slope and grade, and reestablishing joints.

#### A.1 General

In advance of the beginning of the rehabilitation operation, establish traffic control for rehabilitation surveys and marking of locations.

Any removal and replacement of existing asphaltic concrete pavement in conjunction with the concrete pavement operations shall be incidental work for which no direct payment will be made unless otherwise shown in the plan.

Perform the removal operation in a manner that precludes damage to the remaining pavement. Any damage to the in-place concrete pavement by the contractor's operations, shall be repaired prior to acceptance as directed by the engineer and at no expense to the department.

Milling is generally completed with one pass of the milling machine. The nominal width of Joint Repair or Crack Repair shall not exceed 12 inches (305) mm). Any repair area required, beyond the nominal 12-inch (305 mm) width will be paid for as Surface Repair. The length of Full Depth Adjustment, along the transverse joint, from the nearest longitudinal joint, shall not be greater than 18 inches (458 mm).

If during removal operations it is determined that a full-lane width, full-depth repair its required, the contractor will receive partial payment for a measured quantity of the intended repair item, and the work shall be completed under the item of Concrete Pavement Repair, Item 416.0710. If after milling a transverse joint deteriorated concrete exists greater than 4 inches wide and 6 feet in length, the joint shall be converted to a full-depth Concrete Pavement Repair.

Do not place repair concrete when the ambient air temperature is below 50° F (10° C), except as permitted by the engineer. When the ambient air temperature is below 50° F (10° C) the engineer may require covering during the initial curing period.

1090-23-60 25 of 35

Partial depth repair areas should be inspected for possible debonding, by chain dragging or other suitable procedure, before opening to public traffic. Debonded repairs must be removed and replaced.

Opening of pavement repairs to traffic will be controlled by cylinder tests, as set forth in standard spec 415.3.15.

Replace any area of the asphaltic shoulder damaged during the pavement removal operations under this item with a commercially produced asphaltic patching material to the elevation of the adjacent shoulder.

At no expense to the department, remove and replace any areas of failure that appear within one month of the original repair, or any subsequent repair, including traffic control. Failures include but may not be limited to loss of bonding to the in-place concrete, spalling, or crack apparent in the repair other than the desired crack in the newly constructed joint or reestablished crack.

#### A.2 Equipment

Use only concrete milling machines that are equipped with a device for stopping at preset depths to prevent damage to dowel bars. Additionally, shroud the equipment to prevent discharge of any loosened material into adjacent work areas or live traffic lanes.

Use air chippers or breakers for chipping the old concrete surface that have a total weight not exceeding 30 lb. (13.6 kg) and are equipped with flat, chisel-type points that have cutting edges not less than .75 inch (19 mm) or greater than 3 inches (76.2 mm) wide.

Use concrete mixing equipment that provides material of uniform consistency. Do not prepare site-mixed concrete more than ½ hour prior to placement. Do not prepare ready-mixed concrete more than 1 hour prior to placement.

Use mechanical vibrators that are capable of operating at frequencies sufficient to achieve thorough and uniform consolidation, but not less than 7000 impulses per minute. Have available at least one spare vibrator, in working order and of sufficient frequency, on the work site before concrete placement is started.

#### **B** Materials

All materials used in the work shall conform to the requirements specified for the class of material named.

#### **B.1** Concrete

The replacement concrete shall comply with the standard specifications except as modified below. It shall be furnished, placed, and cured according to the provisions in the plans, specifications, and contract.

1090-23-60 26 of 35

Use the following proportions for 1 cubic yard (cubic meter) of concrete:

850 lb. (505 kg) Portland Concrete (Type 1 or Type III)

1338 lb. (794 kg) Fine Aggregate (Per standard specifications except max'm

P200=2.5%)

1338 lb. (794 kg) Coarse Aggregate (See table below for gradation)

<sup>\*</sup> These quantities assume a specific gravity of 2.65.

Coarse	Aggregate Gr	adation
Sieve	% Passing	
3/8	(9.5  mm)	100
#4	(4.75  mm)	55-95
#50	$(300 \mu m)$	0-5
#200	$(75 \mu m)$	0 - 1.0

Maximum slump shall be 1 inch (25 mm).

Air Content shall be  $6\% \pm 1.5\%$ 

ASTM C494 Type A admixture shall be used, unless Type E is used.

ASTM C494 Type E admixture may be used, according to the manufacturer's recommendations, to achieve the required opening strength in the desired time period. Dosage will vary with ambient temperature and desired opening time.

The use of more than 50% of the maximum manufacturer's recommended dosage of Type E admixture will require the concrete to be sprayed with curing compound and covered with wet burlene.

#### **B.2** Compression Relief Material

Provide compression relief material that is made of a rigid, compressible, non-absorbent material.

#### **B.3 Bonding Agent**

Use bonding grout that consists of equal portions of Portland cement and sand, mixed with sufficient water to form a slurry having the consistency of thick cream.

#### **B.4** Concrete Curing Agent

Provide a concrete curing agent that is a resin of 100 percent poly-alpha-methylstyrene type curing compound meeting ASTM C309, Type 2, Class B specifications and conforming to all requirements according to the following table:

1090-23-60 27 of 35

Properties	Minimum	Maximum
Total Solids, % by weight of compound	42	
Reflectance in 72 hours (ASTM E1347	65	
Loss of Water, kg/m2 in 24 hours (ASTM C156)		0.15
Loss of water, kg/m2 in 72 hours (ASTM C156)		0.40
Settling Test, ml/100 ml in 72 hours 1		2
V.O.C. Content, g/L		350
Infrared Spectrum, Vehicle2	100% alpha-1	methylstyrene

Test Method on file at the department's Materials Testing Lab.

Shelf life of the product shall be six months from date of manufacture. The product may be re-tested by the department's Materials Testing Lab and re-approved, if the physical and chemical properties have not changed, for an additional six months. However, the maximum shelf life shall not exceed one year from manufacture date.

#### **C** Construction

Remove the concrete by milling to the depths and dimensions as shown on the plan or as determined by the engineer, or both.

Milling may be accomplished either longitudinally or transversely to the joint, crack, or edge. The removal process must not damage dowel bars. In the event a dowel bar exhibits excessive corrosion, cut, or burn-off the bar.

The removal of the concrete surface in the designated repair areas shall have a minimum depth of 2 inches (50.8 mm) with all deteriorated concrete removed to a maximum depth of one-half the pavement thickness, or the top of the dowel bars. Using air chippers, remove all cracked or deteriorated concrete exposed after milling to sound concrete. Chipping at the milled surface of the crack or joint shall be a minimum 2 inches wide and shall be at a 1:1 slope.

When dowel bars are present, take precaution not to disturb unsound concrete below the tops of the dowels. If some of this unsound material is accidentally blown out during the cleaning process, fill in the voids with clean, dry sand.

Use air chippers only for final preparation of the repair area.

Storage of the removed material on the roadway will only be permitted in conjunction with a continuous removal and pick-up operation. During non-working hours, clear the roadway of all materials and equipment.

The removed pavement shall become the property of the contractor and disposed of according to standard spec 204.3.1.3.

1090-23-60 28 of 35

<sup>&</sup>lt;sup>2</sup> The infrared scan for the dried vehicle from the curing compound shall match the infrared scan on file at the department's Materials Testing Lab.

Install pavement ties according to standard spec 416.3.6.

Sandblast all exposed surfaces within 24 hours prior to concrete placement. If it rains prior to concrete placement, sandblast the repair areas again. Additionally, clean the repair areas of loose material by air blasting before applying the bonding grout.

Coat exposed surfaces of dowel bars to prevent bonding between the bar and the repair concrete. Take precaution to prevent contamination of existing concrete in the repair area.

Place compression relief material to maintain the continuity of the existing crack or to reestablish the joint in a full-depth adjustment. Install compression relief material such that it remains in position and is tight to all edges during placement of the repair concrete. During concrete placement and vibrating, keep the compression relief material in contact with the bottom of the repair area. To ensure that cracks are reestablished in their original locations, scribe their locations on the adjoining pavement outside the removal area, prior to removal operations.

Reestablish cracks and joints to a ¼-inch width, or to the existing crack or joint width, whichever is greater.

Immediately prior to placing the concrete, coat the repair surface with bonding grout. The surface shall be completely dry for at least one-half hour before coating with bonding grout. If the surface isn't completely dry, dry the surface using heat to remove all moisture from the repair surface. Mix the grout by mechanical means and thoroughly brush it over the prepared concrete surface to ensure that all parts receive an even coating. No excess grout shall be permitted to collect in pockets. Place grout within 1½ hours of mixing. If the grout whitens, sandblast, and re-grout.

Vibrate concrete as necessary to uniformly and thoroughly consolidate the entire mass of fresh concrete without causing segregation of the aggregates or the formation of localized areas of grout.

Concrete repairs shall not protrude beyond the original cross-section of the pavement by more than 3/8 inch (9.5 mm). The edges shall be formed or sawn full-depth.

Strike-off the surface of the repaired area flush with the adjacent concrete and finish the surface to a uniform texture, true to grade and cross section and free from porous areas. As a final finishing operation, float the concrete toward the edges of the repair.

While the concrete is still plastic, the repair shall be tested for trueness with a straightedge.

Reestablish cracks using compression relief material to or beyond the surface of the repair. Initially reestablish joints in plastic concrete by using a jointing tool. Establish tooled joints to a minimum depth of 2 inches. Tooled edges shall be provided, adjacent to all compression relief material, in fresh concrete. Complete the removal of excess compression relief

1090-23-60 29 of 35

material above the pavement surface without damage to the repair area. The method of removal will be reviewed and approved by the engineer prior to any removal.

Surface texturing, if required by the engineer, shall consist of a broomed finish in the long dimension direction of the repair.

Apply curing compound to the fresh concrete as soon as possible. Apply the compound uniformly, at a minimum rate of one gallon per 100 square feet (0.41 L/m<sup>2</sup>).

Restore joints by sawing. Saw the joints in a single cut, to the width and depth shown on the plans, and according to standard spec 415.3.9.

Thoroughly clean the joint or crack after sawing to remove loose compressible material.

#### **D** Measurement

The department will measure Concrete Pavement Partial Depth Repair Joint Repair; Concrete Pavement Partial Depth Repair Crack Repair; and Concrete Pavement Partial Depth Repair Edge Repair by the linear foot, acceptably completed.

The department will measure Concrete Pavement Partial Depth Repair Surface Repair and Concrete Pavement Partial Depth Repair Full Depth Adjustment in area by the square foot, acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 416.0750.S Concrete Pavement Partial Depth Repair Joint Repair LF

If a Partial Depth Repair item is changed, by the project engineer, to a full-depth repair, the contractor shall be paid at a measured quantity of 40 percent of the intended repair plus the full cost for Full Depth Repair.

Payment for Concrete Pavement Partial Depth Repair Joint Repair; Concrete Pavement Partial Depth Repair Crack Repair, and Concrete Pavement Partial Depth Repair Edge Repair, is full compensation for removing the concrete; disposing of materials; furnishing and placing sand where required; furnishing and placing compression relief material where required; furnishing and placing preformed joint filler where required; placement and curing of the concrete; and for reestablishing cracks or joints.

Payment for Concrete Pavement Partial Depth Repair Surface Repair and Concrete Pavement Partial Depth Repair Full Depth Adjustment, is full compensation for removing the concrete; for disposing of materials; furnishing and installing pavement ties where necessary; furnishing and placing preformed joint filler where required; furnishing and placing compression relief material where required; replacing the concrete; and reestablishing joints. The item Partial Depth Repair, Full Depth Adjustment will be paid for

1090-23-60 30 of 35

as a separate item at locations where it is necessary to extend the repair through the full remaining concrete pavement thickness. 416-015 (20160607)

### 18. Traffic Control Detour Signs Not in Use.

*Replace standard spec 643.3.8.6(6) with the following:* 

Immediately remove or cover signing when the detour is no longer in effect. When removing signs, remove all signs, posts, supports, and other potential associated hazards to the traveling public from within the right-of-way. SEF Rev. 14 1212

#### 19. Traffic Control Signs Removal.

*Supplement standard spec 643.3.8.3 with the following:* 

Remove all signs on temporary mounts and other potential associated hazards to the traveling public from the right-of-way when not in use. SEF Rev. 14 1212

### 20. General Requirements for Electrical Work.

*Replace standard spec 651.3.3 (3) with the following:* 

(3) Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region Electrical personnel will perform the inspection. In the event of deficiencies, request a re-inspection when the work is corrected. The engineer will not authorize turn-on until the contractor corrects all deficiencies

#### 21. Section 652 Electrical Conduit.

*Replace standard spec 652. 5 (2) with the following:* 

(2) Payment for Conduit Rigid Metallic, Conduit Rigid Nonmetallic, Conduit Reinforced Thermosetting Resin, and Conduit Special bid items is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for making necessary connections into existing pull boxes; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

1090-23-60 31 of 35

*Replace standard spec 652.5 (4) with the following:* 

(4) Payment for Conduit Loop Detector is full compensation for providing all materials, including conduit, compacted backfill, surface sealer if required, pull wire if required, condulets, conduit fittings, and for making necessary connections into existing pull boxes.

#### **22.** Incentive IRI Ride 440.4410.

Section 440 of WisDOT Specification Incentive IRI Ride does not apply to this project.

#### 23. Pavement Cleanup Project 1090-23-60, Item SPV.0075.01.

#### **A Description**

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site. Pavement Cleanup includes surveillance and reporting of all active haul routes.

#### **B** Materials

#### **B.1 Pavement Cleanup**

Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

Utilize vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified in this special provision or approved by the engineer.

#### C Construction

#### C.1 Surveillance

Provide daily surveillance of active haul routes to identify if material is being tracked from the jobsite. Document the condition of the roads and all sweeping recommendations in a daily report. Submit reports to the engineer daily, including hourly metered tickets for that day's sweeping activities.

#### **C.2 Pavement Cleanup**

Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract. Keep all pavements, sidewalks, driveways, curb lanes, and gutters adjacent to the project free of dust and debris that are caused by land disturbing, dust generating activities, as defined in the contractor's Dust Control Implementation Plan (DCIP). Provide routine sweeping of all pavements, sidewalks, driveways, curb lanes and gutters on local-street active haul routes as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

- · STH 164
- And any other roadways approved by the department

1090-23-60 32 of 35

In addition to routine sweeping, conduct sweepings as the engineer directs or approves, to eliminate dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Coordinate with engineer to determine deadlines for responding to emergency sweeping requests and cleaning up spillage and material tracked to/from the project.

Skid steers with mechanical power brooms may only be utilized on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer.

#### **D** Measurement

The department will measure Pavement Cleanup (Project 1090-23-60) by the hour, acceptably completed.

Tickets shall include:

- Date
- Company
- · Operator name
- Equipment make/model
- · Routes swept
- Total hours.

Total hours shall be to the nearest 0.25 hour that work under this item was performed.

#### **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV. 0075.01 Pavement Cleanup Project 1090-23-60 HR

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials.

SEF Rev. 16 0223

## 24. Remove Loop Detector Wire and Lead-in Cable IH 43 Ramps & STH 164, Item SPV.0105.30; STH 164 & CTH ES, Item SPV.0105.31.

#### **A Description**

This special provision describes removing loop detector wire and lead-in cable at IH 43 Ramps & STH 164 and STH 164 & CTH ES. Removal will be according to standard spec 204, as shown in the plans, and as hereinafter provided.

#### **B** (Vacant)

1090-23-60 33 of 35

#### **C** Construction

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

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

#### **D** Measurement

The department will measure Remove Loop Detector Wire and Lead-in Cable (Location) as a single lump sum unit of work for each intersection, 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.0105.30	Remove Loop Detector Wire and Lead in Cable,	LS
	IH 43 Ramps & STH 164	
SPV.0105.31	Remove Loop Detector Wire and Lead in Cable,	LS
	STH 164 & CTH ES	

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

#### 25. Proof Rolling, Item SPV.0170.01.

#### **A Description**

This special provision describes the testing of the stability of the compacted subgrade and base materials by rolling with a tri-axle dump truck.

#### **B** Equipment

Fully load a tri-axle dump truck to within 3 tons of the vehicle legal load limit and provide a minimum gross vehicle weight of 30 tons. Uniformly inflate all tires to the pressure recommended by the manufacturer for the applicable wheel load.

#### **C** Construction

Completely compact and shape the subgrade to approximate grade. Test roll at a normal walking speed under the direction of the engineer or his representative.

Roll the road subgrade and base across the width of the entire roadway. Make multiple passes throughout the length of the test area. Center each pass on a proposed lane or shoulder.

Excavation and backfill are paid for under other bid items.

1090-23-60 34 of 35

#### **D** Measurement

The department will measure Proof Rolling by the station along the ro0adway centerline or reference line, acceptably completed.

### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0170.01Proof RollingSTA

Payment is full compensation for performing the Proof Rolling and for retesting as determined by the engineer

1090-23-60 35 of 35

November 2013 ASP-4

#### 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:

#### 440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

#### 450.3.1.1.4 Recording Truck Loads

Replace the entire text with the following effective with the December 2016 letting:

- (1) If not using automatic batch recording, install a digital recorder as part of the platform truck or storage silo scales. Ensure that the recorder can produce a printed digital record of at least the gross or net weights of delivery trucks. Provide gross, tare, net weights, load count, and the cumulative tonnage; the date, time, ticket number, WisDOT project ID, and mix 250 number; and the mix type including the traffic, binder, and mix designation codes specified in 460.3.1. Ensure that scales cannot be manually manipulated during the printing process. Provide an interlock to prevent printing until the scales come to rest. Size the scales and recorder to accurately weigh the heaviest loaded trucks or tractor-trailers hauling asphaltic mixture. Ensure that recorded weights are accurate to within 0.1 percent of the nominal capacity of the scale.
- (2) Ensure that tickets identify additives not included in the mix design submittal. Indicate on the ticket if the mixture will be placed under a cold weather paving plan and identify the warm mix additive and dosage rate required under 450.3.2.1.2.2.

#### 455.3.2.1 General

Replace paragraph one with the following effective with the December 2016 letting:

(1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface and reasonably free of loose dirt, dust, or other foreign matter. Do not apply to surfaces with standing water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

#### 460.2.1 General

Replace the entire text with the following effective with the December 2016 letting:

- (1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material. Design mixtures conforming to table 460-1 and table 460-2 to 4.0% air voids to establish the aggregate structure.
- (2) Determine the target JMF asphalt binder content for production from the mix design data corresponding to 3.0% air voids (97% Gmm) target at the design the number of gyrations (Ndes). Add liquid asphalt to achieve the required air voids at Ndes.
- (3) For SMA, determine the target JMF asphalt binder content for production from the mix design data corresponding to 4.0% air voids (96% Gmm) target at Ndes.

#### 460.2.8.2.1.5 Control Limits

Replace paragraph one with the following effective with the December 2016 letting:

(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 <sup>[1]</sup>	+1.3/-1.0	+1.0/-0.7
VMA in percent <sup>[2]</sup>	- 0.5	- 0.2

<sup>[1]</sup> For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

#### 460.2.8.2.1.6 Job Mix Formula Adjustment

Replace paragraph one with the following effective with the December 2016 letting:

(1) The contractor may request adjustment of the JMF according to CMM 8-36.6.13.1. Have an HMA technician certified at a level appropriate for process control and troubleshooting or mix design submit a written JMF adjustment request. Ensure that the resulting JMF is within specified master gradation bands. The department will have a certified Hot Mix Asphalt, Mix Design, Report Submittals technician review the proposed adjustment and, if acceptable, issue a revised JMF.

#### 460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2016 letting:

- (1) 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 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
  - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

<sup>[2]</sup> VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

#### 460.3.3.1 Minimum Required Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) Compact all layers of HMA mixture to the density table 460-3 shows for the applicable mixture, location, and layer.

#### TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

		PERCENT	OF TARGET MAXIMUM DE	ENSITY
LOCATION	LAYER		MIXTURE TYPE	
		LT and MT	HT	SMA <sup>[5]</sup>
TRAFFIC LANES[2]	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	
TRAFFIC LAINES	UPPER	93.0	93.0	
SIDE ROADS,	LOWER	93.0 <sup>3]</sup>	93.0 <sup>[4]</sup>	
CROSSOVERS, TURN LANES, & RAMPS	UPPER	93.0	93.0	
SHOULDERS &	LOWER	91.0	91.0	
APPURTENANCES	UPPER	92.0	92.0	

<sup>&</sup>lt;sup>[1]</sup> The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

#### 460.5.2.1 General

Replace paragraph six with the following effective with the December 2016 letting:

(6) If during a QV dispute resolution investigation the department discovers mixture with 1.5 > Va > 5.0 or VMA more than 1.0 below the minimum allowed in table 460-1, and the engineer allows that mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

#### 460.5.2.3 Incentive for HMA Pavement Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) If the lot density is greater than the minimum specified in table 460-3 and all individual air voids test results for that mixture placed during the same day are within 2.5 - 4.0 percent, the department will adjust pay for that lot as follows:

#### INCENTIVE PAY ADJUSTMENT FOR HMA PAVEMENT DENSITY[1]

PERCENT LOT DENSITY ABOVE SPECIFIED MINIMUM
From -0.4 to 1.0 inclusive
From 1.1 to 1.8 inclusive
More than 1.8

\$0.40
\$0.80

<sup>[2]</sup> Includes parking lanes as determined by the engineer.

<sup>[3]</sup> Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

<sup>[4]</sup> Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

<sup>[5]</sup> The minimum required densities for SMA mixtures are determined according to CMM 8-15.

<sup>[1]</sup> SMA pavements are not eligible for density incentive.

<sup>[2]</sup> The department will prorate the pay adjustment for a partial lot.

#### 501.2.6 Fly Ash

Replace the entire subsection with the following effective with the December 2016 letting:

#### 501.2.6.1 General

- (1) Fly ash is defined as a finely divided residue resulting from the combustion of coal in a base loaded electric generating plant, transported from the boiler by flue gases, and later collected, generally by precipitators. Use fly ash in concrete manufactured by facilities and processes known to provide satisfactory material.
- (2) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.
- (3) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.
- (4) Prequalify any proposed fly ash source as follows: The contractor shall obtain a copy of the certified report of tests or analysis made by a qualified independent laboratory, recognized by the department under 501.2.2, showing full and complete compliance with the above specification from the fly ash manufacturer and furnish it to the engineer. Provide this report to the engineer at least 14 calendar days before using the fly ash.
- (5) The manufacturer shall retain test records for at least 5 years after completing the work, and provide these records upon request.

#### 501.2.6.2 Class C Ash

(1) Conform to ASTM C618 class C except limit the loss on ignition to a maximum of 2 percent.

#### 501.2.6.3 Class F Ash

(2) Furnish a class F fly ash from a source listed on the department's approved product list, and conform to ASTM C618 class F except limit the loss on ignition to a maximum of 2 percent.

#### 502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department's bureau of structures.

#### 503.3.2.1.1 Tolerances

<u>Increase the "length of beam" max tolerance for prestressed concrete I-type girders from 3/4" to 1 1/2"</u> effective with the December 2016 letting:

#### PRESTRESSED CONCRETE I-TYPE GIRDERS

#### **Errata**

Make the following corrections to the standard specifications:

#### Throughout the contract:

Update all references to the construction rental rate "Blue Book" to reference "EquipmentWatch" rates.

#### 105.13.4 Content of Claim

- (1) Include the following 5 items in the claim.
  - 1. A concise description of the claim.
  - 2. A clear contractual basis for the claim. This should include reference to 104.2 on revisions to the contract and as appropriate, specific reference to contract language regarding the bid items in question.
  - 3. Other facts the contractor relies on to support the claim.
  - 4. A concise statement of the circumstances surrounding the claim and reasons why the department should pay the claim. Explain how the claimed work is a change to the contract work.
  - 5. A complete breakdown of the costs used to compile the claim. Include copies of all EquipmentWatch equipment rental rate sheets used, with the applicable number highlighted.

#### 109.4.5.5.1 General

(2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in EquipmentWatch Cost Recovery (formerly Rental Rate Blue Book). Base all rates on revisions effective on January 1 for all equipment used in that calendar year.

http://equipmentwatch.com/estimator/

#### 109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

(1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

 $HEER = [RAF \times ARA \times (R/176)] + HOC$ 

#### Where:

**HEER** = Hourly equipment expense rate.

**RAF** = EquipmentWatch regional adjustment factor.

**ARA** = EquipmentWatch age rate adjustment factor.

**R** = Current EquipmentWatch monthly rate.

**HOC** = EquipmentWatch estimated hourly operating cost.

(2) The EquipmentWatch hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

#### 109.4.5.5.3 Hourly Equipment Stand-By Rate

(1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

 $HSBR = RAF \times ARA \times (R/176) \times (1/2)$ 

#### Where:

**HSBR** = Hourly stand-by rate.

**RAF** = EquipmentWatch regional adjustment factor.

**ARA** = EquipmentWatch age rate adjustment factor.

**R** = Current EquipmentWatch monthly rate.

(2) The department will limit payment for stand-by to 10 hours or less per day up to 40 hours per week. The department will not pay the contractor for equipment that is inoperable due to breakdown. The department will not pay for idle equipment if the contractor suspends work or if the contractor is maintaining or repairing the equipment.

#### 109.4.5.5.4 Hourly Outside-Rented Equipment Rate

(1) If the contractor rents or leases equipment from a third party for force account work, the contractor shall determine, and the department will confirm, the hourly outside-rented equipment rate as follows:

#### HORER = HRI + HOC

Where:

**HORER** = Hourly outside-rented equipment rate

**HRI** = Hourly rental invoice costs prorated for the actual number of hours

that rented equipment is operated solely on force account work

**HOC** = EquipmentWatch hourly operating cost.

#### 109.2 Scope of Payment

Correct errata to clarify that work under the contract is included in payment unless specifically excluded.

- (2) The department will pay for the quantity of work acceptably completed and measured for payment as the measurement subsection for each bid item specifies. Within the contract provide means to furnish and install the work complete and in-place. Payment is full compensation for everything required to perform the work under the contract including, but not limited to, the work elements listed in the payment subsection. Payment also includes all of the following not specifically excluded in that payment subsection:
  - 1. Furnishing and installing all materials as well as furnishing the labor, tools, supplies, equipment, and incidentals necessary to perform the work.
  - 2. All losses or damages, except as specified in 107.14, arising from one or more of the following:
    - The nature of the work.
    - The action of the elements.
    - Unforeseen difficulties encountered during prosecution of the work.
  - 3. All insurance costs, expenses, and risks connected with the prosecution of the work.
  - 4. All expenses incurred because of an engineer-ordered suspension, except as specified in 104.2.2.3.
  - 5. All infringements of patents, trademarks, or copyrights.
  - 6. All other expenses incurred to complete and protect the work under the contract.

#### 204.3.2.2.1 General

Correct errata by removing the reference to 490 which was deleted effective with the 2017 spec.

(1) Under the Removing Pavement bid item, remove concrete pavements, concrete alleys, concrete driveways, or rigid base including all surfaces or other pavements superimposed on them.

#### 657.2.2.1.1 General

Correct errata by eliminating the reference to department provided arms in the last sentence.

(1) Furnish shop drawings as specified in 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show. Show the width, depth, length, and thickness of all material, and list pertinent ASTM specification designations and metal alloy designations together with the tensile strength of metallic members. Provide tightening procedures for arm-to-pole connections on the shop drawings.

#### 657.2.2.1.4 Poles Designed Under Legacy Standards

Correct errata by deleting the entire subsection to eliminate redundant language.

#### 657.2.2.2 Trombone Arms

Correct errata by changing the reference from 657.2.2.1.3 to 657.2.2.1.2.

(1) Design aluminum trombone arms as specified in 657.2.2.1.2 based on the completed maximum loading configuration the plans show. Furnish shop drawings conforming to 657.2.2.1.1 that show the width, depth, length, and thickness of all members. Also list the ASTM alloy designation and strength of each aluminum member on the shop drawings.

#### **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

Page 1 of 1

#### **Non-discrimination Provisions**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.

**6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

#### **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

#### **Effective August 2015 letting**

#### **BUY AMERICA PROVISION**

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

#### http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

1 of 1

## 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 contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in 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 **WAUKESHA 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, 2016

**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.

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.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	31.55	18.52	50.07
Carpenter	34.13	20.79	54.92
Cement Finisher Future Increase(s): Add \$1.75 on 6/1/16.	33.95	19.88	53.83
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I Department of Transportation or responsible governing agency requir artificial illumination with traffic control and the work is completed after	Day. 2) Add \$1.40/les that work be pe	hr when the Wisc erformed at night	consin
Electrician Future Increase(s): Add \$1.60 on 6/1/16; Add \$1.70 on 6/1/17 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate o Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.13 n Sunday, New Ye	23.19 ar's Day, Memor	58.32
Fence Erector	35.62	0.00	35.62
Ironworker	30.77	23.72	54.49
Line Constructor (Electrical)	46.10	18.69	64.79
Painter	29.87	18.79	48.66
Pavement Marking Operator	31.24	17.83	49.07
Piledriver	30.11	21.09	51.20
Roofer or Waterproofer	30.40	2.23	32.63
Teledata Technician or Installer	25.63	17.25	42.88
Tuckpointer, Caulker or Cleaner	34.28	18.60	52.88
Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONI	LY 36.73	15.92	52.65
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	16.00	48.65

42.28

28.57

13.71

Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY

WAUKESHA COUNTY Page 2

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	Ψ 26.53	<b>Ψ</b> 13.09	39.62
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	22.45	12.24	34.69
dioditation Electrical Line Concentration Cher	<i>LL</i> .+0		
TRUCK DRIVERS			
Single Axle or Two Axle	36.72	21.15	57.87
Three or More Axle	29.18	14.41	43.59
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.82	21.85	52.67
Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/20		Voorlo Dov. Ma	اماسممس
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic random pay, Independence Day, Labor Day, Thanksgiving Day & Christmas See DOT'S website for details about the applicability of this night work http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/pressure.	Day. 2) Add \$1.50/l rk premium at: evailing- wage- com	nr night work pre	mium.
Pavement Marking Vehicle	23.82	17.72	41.54
Shadow or Pilot Vehicle		14.41	43.59
Truck Mechanic	29.18	14.41	43.59
LABORERS			
General Laborer	27.51	20.63	48.14
Premium Pay: Add \$.15/hr for air tool operator, joint sawer and filler (mechanical hand operated), chain saw operator and demolition burn bituminous worker (raker and luteman), formsetter (curb, sidewalk ar \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powe \$2.46/hr for bottomman; Add \$3.23/hr for pipelayer. / DOT PREMIUN on Sunday, New Year's Day, Memorial Day, Independence Day, Labo 2) Add \$1.25/hr for work on projects involving temporary traffic controwhen work under artificial illumination conditions is necessary as required prior to and/or cleanup after such time period).	ning torch laborer; And pavement) and s derman; Add \$2.01 (IS: 1) Pay two time or Day, Thanksgivin ol setup, for lane ar	Add \$.35/hr for strike off man; Add har for topman; A strike the hourly basing Day & Christmand shoulder closics.	dd dd ic rate nas Day. ures,
Asbestos Abatement Worker	19.00	0.00	19.00
Landscaper	27.51	20.63	48.14
Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff	ate on Sunday, Nev Day. 2) Add \$1.25/l res, when work und ng prep time prior t	nr for work on pr Ier artificial illum	ojects ination
Flagperson or Traffic Control Person	23.55	20.03	43.58
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.53	0.00	18.53
Railroad Track Laborer	17.00	3.88	20.88
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower Derrick, With or Without Attachments, With a Lifting Capacity of Over 10 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Leads of the Company of t	er or 00	21.85	60.12

WAUKESHA COUNTY Page 3

#### TRADE OR OCCUPATION

HOURLY **BASIC RATE** OF PAY

37.77

37.27

**HOURLY FRINGE BENEFITS** 

21.85

21.85

**TOTAL** 

59.62

59.12

Crane With Boom Dollies; Traveling Crane (Bridge Type).

Future Increase(s): 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:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

Backhoe (Track Type) Having a Mfgr.'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.

Future Increase(s): 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:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

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 Mfgr.'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 vds or More Capacity; Shoulder Widener; Sideboom; Skid Rig;

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 \$1.30/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:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

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

37.01

21.85

58.86

WAUKESHA COUNTY Page 4

# TRADE OR OCCUPATION TRADE OR OCCUPATION BASIC RATE FRINGE OF PAY BENEFITS TOTAL \$ \$

Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (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 \$1.30/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:

36.72

21.85

58.57

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

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 \$1.30/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:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx. .

Fiber Optic Cable Equipment. 22.00 5.66 27.66

# Wisconsin Department of Transportation PAGE: 1 DATE: 10/11/16 SCHEDULE OF ITEMS REVISED:

LINE	ı	!	PPROX.		UNIT PRICE		OUNT
NO	DESCRIPTION	201111111		DOLLARS		   DOLLARS	CTS
SECTI	ON 0001 ROADWAY ITEMS						
	204.0125 Removing  Asphaltic Surface  Milling	    TON	2,119.000			   	
	204.0150 Removing Curb &  Gutter 	    LF	200.000		•	   	
0030	205.0100 Excavation  Common 	    CY	202.000				
0040	213.0100 Finishing  Roadway (project) 01.  1090-23-60	    EACH	1.000			 	•
0050	305.0110 Base Aggregate  Dense 3/4-Inch 	    TON	722.000				
0060	311.0115 Breaker Run   	    CY	66.000				
	390.0201 Base Patching  Asphaltic 	    TON	420.000			   	
	390.0403 Base Patching  Concrete Shes 	    SY	1,350.000				
	416.0610 Drilled Tie  Bars 	    EACH	185.000		•	   	
	416.0620 Drilled Dowel  Bars 	      EACH	1,339.000	   		     	

# Wisconsin Department of Transportation PAGE: 2 DATE: 10/11/16 SCHEDULE OF ITEMS REVISED:

LINE	ı	!	ROX.	UNIT PR		BID AM	
NO	DESCRIPTION		TITY   UNITS	DOLLARS		DOLLARS	CTS
0110	416.0750.S Concrete  Pavement Partial Depth  Repair Joint Repair	      LF	300.000		.   		
0120	455.0605 Tack Coat   	   1  GAL	   ,438.000 		.		
	460.2000 Incentive  Density HMA Pavement 	   1  DOL	.,710.000   -	1	  00000 	17	10.00
	460.6224 HMA Pavement 4  MT 58-28 S 	   2   TON	2,119.000  				
	601.0411 Concrete Curb &  Gutter 30-Inch Type D 	    LF	200.000		.		•
0160	619.1000 Mobilization   	    EACH	1.000		  -		
	623.0200 Dust Control  Surface Treatment 	   24  SY	  ,570.000  		.		
0180	624.0100 Water   	    MGAL	80.000    		.		
	628.1905 Mobilizations  Erosion Control 	    EACH	2.000		.		
0200	628.1910 Mobilizations  Emergency Erosion  Control	    EACH	2.000		.   		
0210	628.7010 Inlet  Protection Type B 	       EACH	9.000		     		

# Wisconsin Department of Transportation PAGE: 3 DATE: 10/11/16 SCHEDULE OF ITEMS REVISED:

LINE	!	APPROX.		UNIT PRICE		BID AM	
NO	DESCRIPTION	QUANTITY   AND UNITS		DOLLARS		   DOLLARS	CTS
0220	634.0618 Posts Wood  4x6-Inch X 18-FT 	   98.00  EACH	    00			   	
0230	637.1220 Signs Type I  Reflective SH 	   180.00  SF	    00			   	
0240	637.2210 Signs Type II  Reflective H 	   1,003.84  SF	   40  			   	
	637.2215 Signs Type II  Reflective H Folding 	   156.60  SF	   60			   	
	637.2230 Signs Type II  Reflective F 	   131.79  SF	50  			   	
0270	638.2102 Moving Signs  Type II 	   2.00  EACH	00			   	
	638.2601 Removing Signs  Type I 	   2.00  EACH	    00			   	
0290	638.2602 Removing Signs  Type II 	   126.00  EACH	    00  			   	
0300	638.3000 Removing Small  Sign Supports 	   90.00  EACH	00			   	
0310	642.5201 Field Office  Type C 	   1.00  EACH	  00 		•	     	•
0320	643.0100 Traffic Control  (project) 01.  1090-23-60	   1.00  EACH	  00 				

## Wisconsin Department of Transportation PAGE: 4 DATE: 10/11/16

#### SCHEDULE OF ITEMS

REVISED:

CONTRA	ACTOR :				
LINE   NO	ITEM   DESCRIPTION 	APPROX.	UNIT PRICE	BID AMOUNT	
		AND UNITS	DOLLARS CTS	DOLLARS CTS	
	643.0300 Traffic Control  Drums 	   5,984.000  DAY			
	643.0420 Traffic Control  Barricades Type III 	   1,936.000  DAY		     	
	643.0705 Traffic Control  Warning Lights Type A 	3,872.000 DAY		     	
	643.0715 Traffic Control  Warning Lights Type C 	   528.000  DAY		     	
	643.0800 Traffic Control  Arrow Boards	   44.000  DAY		     	
	643.0900 Traffic Control  Signs 	   4,884.000  DAY		     	
	643.1000 Traffic Control  Signs Fixed Message 	   960.250  SF		     	
0400	643.2000 Traffic Control  Detour (project) 01.  1090-23-60	   1.000  EACH		     	
	643.3000 Traffic Control  Detour Signs 	   4,576.000  DAY		     	
	646.0126 Pavement  Marking Epoxy 8-Inch 	   1,170.000  LF	   	     	
	646.0406 Pavement  Marking Same Day Epoxy  4-Inch	   11,787.000  LF		   	

# Wisconsin Department of Transportation PAGE: 5 DATE: 10/11/16 SCHEDULE OF ITEMS REVISED:

LINE NO	ITEM   DESCRIPTION 	APPROX.     QUANTITY   AND UNITS	UNIT PRICE		BID AMOUNT		
			DOLLARS		DOLLARS	CTS	
	647.0166 Pavement  Marking Arrows Epoxy  Type 2	    EACH	4.000  			   	
0450	647.0356 Pavement  Marking Words Epoxy 	    EACH	4.000    4.000			   	
0460	647.0456 Pavement  Marking Curb Epoxy 	      LF	70.000    70.000		•	   	
	647.0566 Pavement  Marking Stop Line Epoxy  18-Inch	    LF	250.000  			   	
	647.0606 Pavement  Marking Island Nose  Epoxy	    EACH	7.000  			   	
0490	649.0400 Temporary  Pavement Marking  Removable Tape 4-Inch	   2  LF	2,310.000    			   	
0500	652.0800 Conduit Loop  Detector 	 	  1,308.000 			   	
0510	655.0700 Loop Detector  Lead In Cable 	    LF	  5,037.000 			   	
	655.0800 Loop Detector  Wire 	    LF	  5,284.000 			     	
0530	690.0150 Sawing Asphalt   	    LF	  1,910.000 			   	
0540	690.0250 Sawing Concrete   		  2,770.000 			     	

## Wisconsin Department of Transportation PAGE: 6 DATE: 10/11/16

REVISED: SCHEDULE OF ITEMS CONTRACT:

CONTR	ACTOR :			
LINE   NO	ITEM   DESCRIPTION 	APPROX. QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT
			DOLLARS C	TS   DOLLARS  CTS
0550	SPV.0075 Special 01.  Pavement Cleanup Project  1090-23-60	   10.000  HRS	     	.
0560	SPV.0105 Special 30.  Remove Loop Detector  Wire & Lead In CABLE IH  43 Ramps & STH 164	  LUMP 	    LUMP 	
0570	SPV.0105 Special 31.  Remove Loop Detector  Wire & Lead In CABLE STH  164 & CTH ES	  LUMP 	  LUMP 	
0580	SPV.0170 Special 01.  Proof Rolling 	   7.000  STA	   	     .
	   SECTION 0001 TOTAL		   	·
	   TOTAL BID		 	

### PLEASE ATTACH SCHEDULE OF ITEMS HERE