

# HIGHWAY WORK PROPOSAL

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

Proposal Number:

18

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Kenosha	3220-03-61		52 <sup>nd</sup> Street - City of Kenosha IH-94 to STH 31	STH 158

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, \$ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: July 8, 2014 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time October 30, 2014	<b>SAMPLE</b> <b>NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

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

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

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

\_\_\_\_\_  
(Date Commission Expires)

Notary Seal

\_\_\_\_\_  
(Bidder Signature)

\_\_\_\_\_  
(Print or Type Bidder Name)

\_\_\_\_\_  
(Bidder Title)

## For Department Use Only

Type of Work Asphalt milling, asphalt pavement, beam guard, signing, pavement marking.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

## BID PREPARATION

### Preparing the Proposal Schedule of Items

#### A General

- (1) Obtain bidding proposals as specified in **section 102** of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  1. Electronic bid on the internet.
  2. Electronic bid on a printout with accompanying diskette or CD ROM.
  3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm>. The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.
- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the [www.bidx.com](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm> 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.

#### 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™ software to enter a unit price for every item in the schedule of items.
  3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
  4. Submit the bid before the hour and date the Notice to Contractors designates.
  5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

**Bidder Name**

**BN00**

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

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.
- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
  2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

3. The diskette or CD ROM is not submitted at the time and place the department designates.

### **C Waiver of Electronic Submittal**

- (1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.
- (2) Submit a schedule of items on paper conforming to [section 102](#) of the standard specifications. The department charges the bidder a \$75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."
- (3) In addition to the reasons specified in [section 102](#) of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
  2. The bidder fails to pay the \$75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the \$75.
  3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.
- (4) In addition to the reasons specified in [section 102](#) of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.





# PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

## PRINCIPAL

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

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

## NOTARY FOR PRINCIPAL

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

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

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

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

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

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

\_\_\_\_\_  
(Signature of Attorney-in-Fact)

## NOTARY FOR SURETY

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

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

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

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

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

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



# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

\_\_\_\_\_  
(Signature of Authorized Contractor Representative)

\_\_\_\_\_  
(Date)



## March 2010

## LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

[illegible]

**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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

## Special Provisions

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 3220-03-61, 52<sup>nd</sup> Street, City of Kenosha, STH 158, from IH-94 to STH 31, located in Kenosha 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, 2014 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 (20130615)

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

The work under this contract shall consist of removing asphaltic surface milling, HMA pavement, base patching asphaltic, beam guard, adjusting beam guard, inlet adjustments, signal work, signing, pavement marking and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

### **3. Prosecution and Progress.**

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

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

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

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

The completion of asphalt milling, asphaltic pavement, shoulders, pavement marking, steel plate beam guard, adjusting beam guard, energy absorbing terminals, and centerline rumble strip is based on the expedited work schedule and may require extraordinary forces and equipment.

**Schedule of Operations – Roadway Construction**

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

Complete Base Patching Asphaltic in a given stage or location prior to performing Asphaltic Surface Milling in the same given stage or location.

Place HMA pavement within the limits of the intersection of STH 158 and 104<sup>th</sup> Avenue within five calendar days of performing Asphaltic Surface Milling.

Place and finish base aggregate shoulders or complete shaping shoulders within two nights of placing HMA Pavement from Station 64+00 to Station 183+85. Post “Low Shoulder” signs (W8-9) after placing HMA Pavement until finished base aggregate shoulders are placed or shaping shoulders is completed.

Complete Pavement Marking Same Day Epoxy 4-Inch, Removable Tape 4-Inch and Removable Tape 8-Inch prior to opening STH 158 to traffic following night time closures from Station 64+00 to Station 183+85.

For beam guard locations that require removal of existing guardrail and installation of new guardrail, limit guardrail removal lengths to that which can be replaced with new beam guard items prior to opening roadway to traffic. Splice new beam guard into existing guard rail prior to opening roadway to traffic.

Construct new beam guard at Station 157+50 to Station 160+74 LT and Station 157+50 to Station 160+24 RT in such a manner to prevent a blunt end of beam guard rail from being exposed while the roadway is open to traffic.

**STH 158 Night Work**

Construct STH 158 from Station 64+00 to Station 183+85 at night. Night closures are only allowed from 8:00 PM to 5:00 AM. Items of work to be completed during night closures include: sawing, Base Patching Asphaltic, signal loop removal and replacement, Removing Asphaltic Surface Milling, HMA pavement, Pavement markings same day, centerline rumble strips, aggregate shoulders, shaping shoulders, and all beam guard items. Complete STH 158 night work from Station 64+00 to Station 183+85 in 15 night closures.

*Supplement standard spec 108.11 as follows:*

If the contractor fails to open STH 158 in each direction by the specified times, then a reduction of \$2,000 per hour for each hour of lane closure violations will be made from monies due him. This reduction shall be a quarterly fraction of the \$2000 hourly reduction rate for each 15-minute increment during which the lane closure violation occurs. The total reductions from monies due the contractor shall be the summation of the separate reductions for each lane closure violation. The department will assess hourly damage for

the roadway lanes not being open to through traffic under the Failing to Open Road to Traffic administrative item.

*Supplement standard spec 108.11 as follows:*

If the contractor fails to complete all necessary work to complete STH 158 Night Work within fifteen (15) night closures, the department will assess the contractor \$2000 interim liquidated damages for each night closure beyond 15 night closures. An entire night closure will be charged for any period of time within the night closure allowable time period that STH 158 is closed to traffic.

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

Complete all construction activities outside of the pavement area not mentioned in “STH 158 Night Work” article above from Station 64+00 to Station 183+85 using shoulder closures.

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

##### **General**

Construct the project using the construction staging and traffic control shown in the plans and standard detail drawings.

Conduct construction operations in such a manner as to provide access to emergency vehicles at all times.

Do not park or store equipment, vehicles, or construction materials within 18 feet of the edge of the STH 158 traffic lanes during non-working hours.

Employ flaggers, signs, barricades, and drums as may be necessary to safeguard and direct traffic at all locations where construction operations may interfere with or restrict the smooth flow of traffic and to protect and delineate hazards such as open excavations and abrupt drop-offs.

##### **Traffic Control**

Do not proceed with any operation until all traffic control devices for such work are in the proper location. Place traffic control devices as the plans and standard detail drawings show or as directed by the engineer.

Provide 24-hour-a-day availability of equipment and forces to expeditiously restore barricades, lights, signs, markers, or other traffic control devices that are damaged or disturbed. The cost to maintain and restore the above items shall be incidental to the bid item Traffic Control Surveillance and Maintenance and no additional payment will be made.

Place and operate Traffic Control Signs Portable Changeable Message near the beginning and end of the project ten calendar days prior to starting Stage 1 construction with the message “STH 158, ROAD WORK” “BEGINS, XX-XX”

Shoulder closures in opposing directions shall not overlap. Provide a minimum of 1,000 feet between shoulder closures on opposite sides of STH 158.

Flagging operations shall be permitted for milling and paving operations at side road intersections.

Pavement marking operations from Station 64+00 to Station 183+85 shall use single lane closures for intersection markings and SDD Moving Pavement Marking Operation for all other markings.

Contact the Kenosha County Sheriff’s Department 5 working days prior to Removing Overhead Sign Support S-30-4 in Stage 1. Temporarily close both westbound lanes of STH 158 at 104<sup>th</sup> Avenue to facilitate removal of horizontal sign support. Do not conduct removal of horizontal sign support during peak hours

### **Staging**

Stage the work as shown on the plans or as directed by the engineer. Notify the engineer at least 7 days prior to any staging switch. Do not conduct traffic control stage changes during peak hours.

Peak hours are defined as 6:00 AM – 9:00 AM Monday, Tuesday, Wednesday, Thursday, Friday and 2:00 PM to 7:00 PM Monday, Tuesday, Wednesday, Thursday, and Friday.

Utilize Detail A and B of Standard Detail Drawing “Traffic Control, Intersection within Single Lane Closure” at all intersections within single lane closures.

### **Night Time Closure**

Close STH 158 from east of 104<sup>th</sup> Avenue to Station 120+00 and from west of 68<sup>th</sup> Avenue to STH 31 to through traffic during night time closures. Close STH 158 from Station 120+00 to west of 68<sup>th</sup> Avenue to all traffic during night time closures. Access to emergency vehicles shall be provided at all times.

### **Detour**

Place portable changeable message signs seven days in advance of any detour at the beginning and end of the detoured construction zone with the following message: “STH 158, CLOSED” “DATES, 8:00 PM – 5:00 AM”.

Post the detour routes provided in the plan prior to closing STH 158 for night time closures. Place portable changeable message signs as shown in the detour plan along IH-94 prior to closing STH 158 for night time closures with the following message: “STH 158, CLOSED” “104th – HWY 31”.

Detour signs shall be covered or removed each morning following a STH 158 night time closure.

The contractor shall notify the following agencies five working days prior to any night time closure with detour:

Wisconsin State Patrol	Capt. Wendy Younglove	(262) 785-4700
Kenosha County	Gary Sipsma	(262) 857-1870
Kenosha County Sheriff		(262) 605-5100
Kenosha Police Department		(262) 605-5200
Kenosha Fire Department		(262) 653-4100
City of Kenosha	Shelly Billingsley	(262) 653-4150
Town of Somers	William Morris	(262) 859-2822
Mahone Middle School	Office	(262) 359-8100
Indian Trail High School Academy	Office	(262) 359-8700
Kenosha Regional Airport	Wayde Buck	(262) 653-4160

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

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 158 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, August 29, 2014 to 6:00 AM Tuesday, September 2, 2014 for Labor Day.

107-005 (20050502)

## **6. Utilities.**

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

There are underground and overhead utility facilities located within the project limits. There are known utility adjustments required for this construction project. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to ensure the integrity of the underground and overhead facilities.

Bidders are advised to contact each utility company listed in the plans, prior to preparing their bids, to obtain current information on the status of existing and new utility work.

If utility relocations are required during construction operations coordination with utilities will be required to minimize impacts during construction.

**AT&T Legacy (Corp.)** has underground facilities within the construction project limits. The existing fiber facilities are located on the east side of the Union Pacific Railroad Right of Way where it crosses under STH 158.

No conflicts or relocations are anticipated. The field contact for construction will be Kenneth Nine and can be reached at (952) 904-6336.

**AT&T Local (TCG)** has underground facilities within the construction project limits. The existing fiber facilities are located along the Union Pacific Railroad where it crosses STH 158.

No conflicts are anticipated. The field contact for construction will be Donald Dietsch and can be reached at (262) 646-5602 or (414) 651-2862.

**AT&T Wisconsin** has underground and aerial facilities within the construction project limits. The existing underground facilities are located along both sides of STH 158. The existing aerial facilities are located on We Energies Poles on the north side of STH 158 from Station 178+00 to the east end of the project.

No conflicts are anticipated. The field contact for construction will be Alper Kolcu and can be reached at (262) 970-8494 or [ak308x@att.com](mailto:ak308x@att.com).

**ATC Management, Inc.** has one 345kV overhead transmission line within the construction project limits. It crosses STH 158 at Station 136+00.

Maintain OSHA Safe Working Clearance to the overhead 345kV transmission lines based on the latest OSHA criteria.

No conflicts are anticipated. The field contact for construction will be Michael Olsen and can be reached at (920) 338-6582 or (920) 660-2390.

**City of Kenosha** has underground storm sewer facilities along 68<sup>th</sup> Avenue and 64<sup>th</sup> Avenue south of the construction project limits.

No conflicts are anticipated. The field contact for construction will be Bob Potts and can be reached at (262) 653-4494 or (262) 945-8603 or [bpotts@kenosha.org](mailto:bpotts@kenosha.org).

**Frontier** has underground facilities in the area to the west of the construction project limits.

No conflicts are anticipated. The field contact for construction will be Robert Church and can be reached at (608) 837-1881 or [Robert.church@ftr.com](mailto:Robert.church@ftr.com)

**Kenosha Water Utility** has underground facilities within the construction project limits. The existing facilities are located along STH 158 from Station 48+00 to Station 183+85.

Adjustments of water valves and sanitary sewer manholes will be done as a non-participating contract item. No relocations are proposed. The field contact for construction will be Ian Bagley and can be reached at (262) 653-4304 or [ibagley@kenosha.org](mailto:ibagley@kenosha.org).

**Level 3 Communications** has underground facilities within the construction project limits. The existing underground fiber facilities are located along the west side of the Canadian Pacific Railway right-of-way.

No conflicts are anticipated. The field contact for construction will be Mark Dechant and can be reached at (414) 426-1857 or [mark.dechant@level3.com](mailto:mark.dechant@level3.com).

**McLeod USA (Paetec)** has underground facilities located to the east of the construction project limits. The existing underground facilities are located along the west side of STH 31.

No conflicts are anticipated. The field contact for construction will be John Louis and can be reached at (608) 819-5009 or (414) 305-0332.

**Midwest Fiber Networks** has underground facilities within the construction project limits. The existing underground fiber facilities are located along the west side of CTH H.

No conflicts are anticipated. The field contact for construction will be Richard Trgovec and can be reached at (414) 459-3554 or [rtrgovec@midwestfiberetworks.com](mailto:rtrgovec@midwestfiberetworks.com).

**Sprint Communications** has underground facilities located within the construction project limits. The existing underground facilities are located in the Union Pacific Railroad Right of Way where it crosses STH 158, Station 148+75 to Station 151+15.

No conflicts are anticipated. The field contact for construction will be James Burton and can be reached at (708) 955-6659 or [james.burton@ericsson.com](mailto:james.burton@ericsson.com).

**Time Warner Cable** has overhead and underground facilities located within the construction project limits. The existing facilities are located at the following locations:

- Underground facilities crossing STH 158 at approximately Station 65+00
- Overhead and underground facilities along the north side of STH 158 from approximately Station 156+00 to the east end of the project

No conflicts are anticipated. The field contact for construction will be Lukas LaCrosse and can be reached at (414) 908-4766 or [Lukas.lacrosse@twcable.com](mailto:Lukas.lacrosse@twcable.com).

**Verizon Business** has underground facilities located within the construction project limits. The existing underground facilities are located along the Canadian Pacific Railway Right of Way where it crosses STH 158.

No conflicts are anticipated. The field contact for construction will be Stephen Bonczkowski and can be reached at (630) 395-6701 or [Stephen.bonczkowski@verizon.com](mailto:Stephen.bonczkowski@verizon.com).

**We Energies – Electric** has underground and overhead facilities located within the construction project limits. The existing facilities are located throughout the project along both sides of STH 158 and along side roads.

No conflicts are anticipated. The field contact for construction will be Bryan Stoeher and can be reached at 414-944-5516 or [bryan.stoeher@we-energies.com](mailto:bryan.stoeher@we-energies.com).

The contractor shall contact We Energies 24-hour Dispatch Line to verify that any unmarked facilities are abandoned. We Energies Electrical Dispatch: (800) 662-4797

**We Energies – Gas** has underground facilities within the construction project limits. The existing facilities are located at the following locations:

- 4-Inch plastic main along the west side of 104<sup>th</sup> Avenue
- 2-inch, 4-inch plastic, 4-inch metal main along STH 158 and crossing STH 158 from Station 68+00 to Station 103+00
- 16-inch main crossing STH 158 along the east side of the Canadian Pacific Railway
- 4-inch metal main along and crossing STH 158 from Station 170+00 to Station 183+85

We Energies – Gas valve boxes may potentially needed to be adjusted.

Valve boxes are to be adjusted during construction. Provide a three working day notice prior to the date of needed adjustment of We Energies – Gas Facilities. The field contact for construction will be Chris DeGrave and can be reached at (262) 886-7018 or [chris.degrave@we-energies.com](mailto:chris.degrave@we-energies.com).

The contractor shall call the We Energies 24-hour Dispatch line to arrange verification that unmarked facilities are abandoned. We Energies Gas Dispatch: (800) 261-5325

## **7. Municipality Acceptance of Sanitary Sewer and Water Main Construction.**

Both the department and the City of Kenosha Water Utility personnel will inspect construction of sanitary sewer and water main under this contract. However, final acceptance of the sanitary sewer and water main construction will be by the City of Kenosha Water Utility.



## **8. Railroad Insurance and Coordination – Canadian Pacific Railway Company.**

### **A Description**

Comply with standard spec 107.17 for all work affecting Soo Line Railroad Company, d/b/a Canadian Pacific Railway Company property and any existing tracks.

### **A.1 Railroad Insurance Requirements**

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Soo Line Railroad Company, d/b/a Canadian Pacific Railway Company.

Notify evidence of the required coverage, and duration to Canadian Pacific Railway Company at 11306 Franklin Avenue, Franklin Park, IL 60131, Attention Edward Oom. Include the following information on the insurance document:

Project: 3220-03-61

Route Name: STH 158, Kenosha County

RR Crossing 388 007W, Milepost 54.05

C&M Subdivision

### **A.2 Work by Railroad**

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

### **A.3 Names and addresses of Railroad Representatives for Consultation and Coordination**

Contact Edward Oom, Manager of Public Works- US East Engineering, 11306 Franklin Avenue, Franklin Park, IL 60131, telephone (630) 860-4975, Fax (630) 860-4170, [Edward\\_Oom@cpr.ca](mailto:Edward_Oom@cpr.ca), for consultation on railroad requirements during construction.

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

### **A.4 Temporary Grade Crossing**

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

### **A.5 Train Operation**

Approximately 16 passenger trains and 24 through freight trains operate daily through the construction site. Passenger trains operate at up to 79 mph. Through freight trains operate at up to 60 mph. In addition to through movements there are switching movements at slower speeds.

## **9. Railroad Insurance and Coordination - Union Pacific Railroad Company.**

### **A Description**

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

### **A.1 Railroad Insurance Requirements**

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

Notify evidence of the required coverage, and duration to John Venice, Manager Special Projects – Industry & Public Projects Engineering Department, 101 North Wacker Drive, Suite 1920, Chicago, IL 60606, telephone (312) 777-2043, FAX (402) 233-2769, email [jnvenice@up.com](mailto:jnvenice@up.com).

Include the following information on the insurance document:

Project: 3220-03-61  
Route Name: STH 158, Kenosha County  
RR Crossing No. 176 894C, Milepost 52.83  
Milwaukee Subdivision

### **A.2 Work by Railroad**

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

### **A.3 Names and addresses of Railroad Representatives for Consultation and Coordination**

Contact John Venice, Manager Special Projects – Industry & Public Projects Engineering Department, 101 North Wacker Drive, Suite 1920, Chicago, IL 60606, telephone (312) 777-2043, FAX (402) 233-2769, email [jnvenice@up.com](mailto:jnvenice@up.com), for consultation on railroad requirements during construction.

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

### **A.4 Temporary Grade Crossing**

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

### **A.5 Train Operation**

Approximately 16 through freight trains operate daily through the construction site. Through freight trains operate at up to 50 mph.

## **10. Union Pacific Railroad Company Requirements.**

### **A General**

In addition to requirements of the standard specifications and other articles within these special provisions, comply with the following requirements of Union Pacific Railroad Company (UPRR).

### **B Request for Information / Clarification**

All requests for information (RFI) involving work within UPRR right-of-way shall be in accordance to the procedures listed elsewhere in the special provisions. Submit all RFIs to the engineer for submittal to UPRR. Allow four weeks for UPRR's review after receipt from the engineer.

### **C Plans / Specifications**

Changes to the plans or specifications are subject to the approval of UPRR. Submit all change requests to the engineer. Allow four weeks for UPRR review time after receipt of a change request from the engineer.

### **D Construction Submittals**

Submit six sets of the following to the engineer. All design submittals shall be stamped and signed by a professional engineer registered in the State of Wisconsin. The engineer will submit four sets of each submittal, along with any review comments to UPRR. A satisfactory submittal review does not relieve the contractor of responsibility and liability.

The engineer and UPRR may review the submittals. If the engineer or UPRR finds a submittal unsatisfactory, make all required changes and resubmit it. A satisfactory submittal review does not relieve the contractor of responsibility and liability of complying with the plans, specifications and the special provisions and for the structural integrity and proper functioning of the item that is the subject of the submittal. Allow four weeks for UPRR's review time after receipt of a submittal from the engineer.

<b>Item</b>	<b>Description of Submittal Item</b>	<b>Notes</b>
1	Shoring Design and Details	
2	False work Design and Details	
3	Drainage Design Provisions	
4	Erection Diagrams and Sequence	
5	Demolition Diagram and Sequence	
6	Shop Drawings	Steel and concrete members.

Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to UPRR's designated representative for review. Review by UPRR shall not relieve the contractor from liability.

**E Infringement on Minimum Clearances**

Submit to the engineer requests for infringement upon the minimum horizontal or vertical clearance requirements of standard spec 107.17.1(2)4. The engineer will submit the requests to UPRR's designated representative. Allow four weeks for UPRR's review time after receipt of a submittal from the engineer. Do not infringe upon the minimum clearances unless they are first approved in writing by UPRR.

**F Approval of Details**

Submit details of construction affecting UPRR tracks, structure, and right-of-way not included in the plans to the engineer for UPRR review before undertaking such work. Allow four weeks for UPRR's review after receipt from the engineer.

**G Site Inspections by UPRR**

UPRR may make site inspections at any time. Provide the engineer a schedule of anticipated dates for the following activities; the engineer will furnish the schedule to UPRR:

1. Shoring
2. Demolition
3. False work
4. Erection of superstructure
5. Completion of the bridge structure.

Update the schedule monthly, or more frequently if necessary, so that site visits may be scheduled.

**I Construction Excavations and Demolition**

Construction excavations shall meet OSHA and American Railway Engineering and Maintenance-of-Way Association (AREMA) requirements and the UPRR "Guidelines for Temporary Shoring" (GTS).

Demolition shall be done in accordance to Union Pacific's Guidelines for Preparation of a Bridge Demolition and Removal Plan for Structures over Railroad (GPBDRP)

The GTS and the GPBDRP are available for review from the Southwest Region's Railroad Coordinator at the department's Southeast Regional Office located at 141 N W Barstow Street, Waukesha, WI 53187

**11. Notice to Contractor, Verification of Asbestos Inspection, No Asbestos Found.**

John Roelke, License Number All-119523, inspected Structure B-30-0002 and B-30-0003 for asbestos on October 5, 2011. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Jeff Guenette, (262) 548-8663.  
107-127 (20120615)

## **12. Erosion Control.**

The contractor shall prepare and submit an erosion control implementation plan (ECIP) for the project including borrow sites, material disposal sites, dust control, and dewatering in accordance to Chapter TRANS 401 requirements. The erosion control implementation plan shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan will identify how the contractor intends to implement the project's erosion control plan.

Provide the ECIP 14 calendar days prior to the pre-construction conference. Provide 1 copy of the ECIP to WisDOT and 1 copy of the ECIP to the WDNR Liaison Craig Webster. Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

Re-topsoil of 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 calendar days after placement of topsoil. If graded areas are left exposed for more than 14 calendar days, seed those areas with temporary seed.

When performing roadway cleaning operations, the contractor shall use equipment having vacuum or water spray mechanism to eliminate the dispersion of dust. If vacuum equipment is employed, it shall have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

Stockpile excess material or spoils on upland areas away from wetlands, floodplains and waterways. Stockpiled soil shall be protected against erosion. If stockpiled material is left for more than 14 calendar days, seed the stockpile with temporary seed.

## **13. Public Convenience and Safety.**

*Revise standard spec 107.8(6) as follows:*

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 10:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer and except as noted in the "Prosecution and Progress" article of these special provisions.

## **14. Permanent Signing.**

Do not remove any permanent signs until the new permanent signs are installed. If any signs need to be removed due to construction activities, place a temporary sign at the location or as directed by the engineer until a permanent sign is installed. These signs shall be incidental to the item "Traffic Control Surveillance and Maintenance".

## **15. General Requirements for Electrical Work.**

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

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.

## **16. QMP Base Aggregate.**

### **A Description**

#### **A.1 General**

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

<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>

#### **A.2 Contractor Testing for Small Quantities**

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

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

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

- <sup>[1]</sup> If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.
- <sup>[2]</sup> For 3-inch material, obtain samples at load-out.
- <sup>[3]</sup> If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
  4. Department verification testing is optional for quantities of 6000 tons or less.
- (3) Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

## **B Materials**

### **B.1 Quality Control Plan**

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:
  1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
  2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
  3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.

4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

## **B.2 Personnel**

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

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

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

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

## **B.3 Laboratory**

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

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

<http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

## **B.4 Quality Control Documentation**

### **B.4.1 General**

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



#### **B.4.2 Records**

- (1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

#### **B.4.3 Control Charts**

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
  1. Contractor individual QC tests.
  2. Department QV tests.
  3. Department IA tests.
  4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

#### **B.5 Contractor Testing**

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

- (5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

## **B.6 Test Methods**

### **B.6.1 Gradation**

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

### **B.6.2 Fracture**

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

### **B.6.3 Liquid Limit and Plasticity**

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

## **B.7 Corrective Action**

### **B.7.1 General**

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

### **B.7.2 Placement Corrective Action**

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
  1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
  2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
  1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
  2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
  3. The fracture control limit is exceeded by more than 10.0 percent.

## **B.8 Department Testing**

### **B.8.1 General**

- (1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

### **B.8.2 Verification Testing**

#### **B.8.2.1 General**

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

#### **B.8.3 Independent Assurance**

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
  2. Proficiency sample testing.
  3. Witnessing sampling and testing.
  4. Test equipment calibration checks.
  5. Reviewing required worksheets and control charts.
  6. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

### **B.9 Dispute Resolution**

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

### **C (Vacant)**

### **D (Vacant)**

### **E Payment**

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.

- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20100709)

## **17. QMP Ride; Incentive IRI Ride, Item 440.4410.S.**

### **A Description**

- (1) This special provision describes profiling pavements with a non-contact profiler, locating areas of localized roughness, and determining the International Roughness Index (IRI) for each wheel path segment.
- (2) Profile the final riding surface of all mainline pavements. Include auxiliary lanes in Category I and II segments; crossroads with county, state or U.S. highway designations greater than 1500 feet in continuous length; bridges, bridge approaches; and railroad crossings. Exclude roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections.
- (3) The engineer may direct straightedging under standard spec 415.3.10 for pavement excluded from localized roughness under C.5.2 (1); for bridges; and for roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections. Other surfaces being tested under this provision are exempt from straightedging requirements.

### **B (Vacant)**

### **C Construction**

#### **C.1 Quality Control Plan**

- (1) Submit a written quality control plan to the engineer at or before the pre-pave meeting. 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 all quality control personnel.
  2. The process by which quality control information and corrective action efforts will be disseminated to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
  3. The methods and timing used for monitoring and/or testing ride quality throughout the paving process. Also indicate the approximate timing of acceptance testing in relation to the paving operations.
  4. The segment locations of each profile run used for acceptance testing.
  5. Traffic Control Plan

## **C.2 Personnel**

- (1) Have a profiler operator, certified under the department's highway technician certification program (HTCP), operate the equipment, collect the required data, and analyze the results using the methods taught in the HTCP profiling course. Ensure that an HTCP-certified profiler operator supervises data entry into the material records system (MRS).

## **C.3 Equipment**

- (1) Furnish a profile-measuring device capable of measuring IRI from the list of department-approved devices published on the department's web site:  
<http://roadwaystandards.dot.wi.gov/standards/qmp/index.htm>
- (2) Unless the engineer and contractor mutually agree otherwise, arrange to have a calibrated profiler available when paving the final riding surface.
- (3) Perform daily calibration verification of the profiler using test methods according to the manufacturer's recommendations. Notify the engineer before performing the calibration verification. If the engineer requests, arrange to have the engineer observe the calibration verification and operation. Maintain records of the calibration verification activities, and provide the records to the engineer upon request.

## **C.4 Testing**

### **C.4.1 Run and Reduction Parameters**

- (1) Enter the equipment-specific department-approved filter settings and parameters given in the approved profilers list on the department's QMP ride web site.  
<http://roadwaystandards.dot.wi.gov/standards/qmp/profilers.pdf>

### **C.4.2 Contractor Testing**

- (1) Operate profilers within the manufacturer's recommended speed tolerances. Perform all profile runs in the direction of travel. Measure the longitudinal profile of each wheel track of each lane. The wheel tracks are 6.0 feet apart and centered in the traveled way of the lane.
- (2) Coordinate with the engineer to schedule profile runs for acceptance. The department may require testing to accommodate staged construction or if corrective action may be required.
- (3) Measure the profiles of each standard or partial segment. Define primary segments starting at a project terminus and running contiguously along the mainline to the other project terminus. Field-locate the beginning and ending points for each profile run. When applicable, align segment limits with the subplot limits used for testing under the QMP Concrete Pavement specification. Define segments one wheel path wide and distinguished by length as follows:
  1. Standard segments are 500 feet long.
  2. Partial segments are less than 500 feet long.

- (4) Treat partial segments as independent segments.

The department will categorize each standard or partial segment as follows:

<b>Segments with a Posted Speed Limit of 55 MPH or Greater</b>	
<b>Category</b>	<b>Description</b>
HMA I	Asphalt pavement with multiple opportunities to achieve a smooth ride. The following operations performed under this contract are considered as opportunities: a layer of HMA, a leveling or wedging layer of HMA, and diamond grinding or partial depth milling of the underlying pavement surface.
HMA II	Asphalt pavement with a single opportunity to achieve a smooth ride.
HMA III	Asphalt pavement segments containing any portion of a bridge, bridge approach, railroad crossing, or intersection. An intersection is defined as the area within the points of curvature of the intersection radii.
PCC II	Concrete pavement.
PCC III	Concrete pavement segments containing any portion of a bridge, bridge approach, railroad crossing, intersection or gap. An intersection is defined as the area within the points of curvature of the intersection radii.

<b>Segments with Any Portion Having a Posted Speed Limit Less Than 55 MPH</b>	
<b>Category</b>	<b>Description</b>
HMA IV	Asphalt pavement including intersections, bridges, approaches, and railroad crossings.
PCC IV	Concrete pavement including gaps, intersections, bridges, approaches, and railroad crossings.

#### **C.4.3 Verification Testing**

- (1) The department may conduct verification testing (QV) to validate the quality of the product. A HTCP certified profiler operator will perform the QV testing. The department will provide the contractor with a listing of the names and telephone numbers of all verification personnel for the project.
- (2) The department will notify the contractor before testing so the contractor can observe the QV testing. Verification testing will be performed independent of the contractor's QC work using separate equipment from the contractor's QC tests. The department will provide test results to the contractor within 1 business day after the department completes the testing.
- (3) The engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's testing procedures and equipment. Both parties will document all investigative work.



- (4) If the contractor does not respond to an engineer request to resolve a testing discrepancy, the engineer may suspend production until action is taken. Resolve disputes as specified in C.6.

#### **C.4.4 Documenting Profile Runs**

- (1) Compute the IRI for each segment and analyze areas of localized roughness using the ProVAL software. Also, the contractor shall prepare the ProVAL Ride Quality Module Reports, showing the IRI for each segment and the areas of localized roughness exceeding an IRI of 200 in/mile. Use ride quality module report as follows:

	<u>Fixed Interval</u>	<u>Continuous (Localized Roughness)</u>
Base-length	500'	25'
Threshold	140"/Mile	200"/Mile

The ProVAL software is available for download at:

<http://www.roadprofile.com>.

- (2) As part of the profiler software outputs and ProVAL reports, document the areas of localized roughness. Field-locate the areas of localized roughness prior to the engineer's assessment for corrective actions. Document the reasons for areas excluded and submit to the engineer.
- (3) Within 5 business days after completing profiling of the pavement covered under this special provision, unless the engineer and contractor mutually agree to a different timeline, submit the electronic ProVAL project file containing the .ppf files for each profiler acceptance run data and Ride Quality Module Reports, in .pdf format using the department's Materials Reporting System (MRS) software available on the department's web site:

<http://www.atwoodsystems.com/mrs>

Notify the engineer when the Profiler Acceptance Run data and the Ride Quality Report have been submitted to the MRS system.

#### **C.5 Corrective Actions**

##### **C.5.1 General**

- (1) Analyze the data from the PROVAL reports and make corrective action recommendations to the department. The department will independently assess whether a repair will help or hurt the long-term pavement performance before deciding on corrective action. Correct the ride as the engineer directs in writing.

### C.5.2 Corrective Actions for Localized Roughness

- (1) Apply localized roughness requirements to all pavements, including HMA III, PCC III, HMA IV, and PCC IV; except localized roughness requirements will not be applied to pavements within 25 feet of the following surfaces if they are not constructed under this contract: bridges, bridge approaches, or railroad crossings. The department may direct the contractor to make corrections to the pavement within the 25-foot exclusionary zones.
- (2) The engineer will review each individual wheel track for areas of localized roughness. The engineer will assess areas of localized roughness within 5 business days of receiving notification that the reports were uploaded. The engineer will analyze the report documenting areas that exceed an IRI of 200 in/mile and do one of the following for each location:
  1. Direct the contractor to correct the area to minimize the effect on the ride.
  2. Leave the area of localized roughness in place with no pay reduction.
  3. Except for HMA IV and PCC IV segments, assess a pay reduction as follows for each location in each wheel path:

Localized Roughness IRI (in/mile)	Pay Reduction <sup>[1]</sup> (dollars)
> 200	(Length in Feet) x (IRI – 200)

<sup>[1]</sup> A maximum \$250 pay reduction may be assessed for locations of localized roughness that are less than or equal to 25 feet long. Locations longer than 25 feet may be assessed a maximum pay reduction of \$10 per foot.

- (3) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without independent identification of that area as determined by physically riding the pavement. For corrections, use only techniques the engineer approves.
- (4) Re-profile corrected areas to verify that the IRI is less than 140 in/mile after correction. Submit a revised ProVAL ride quality module report to the reference documents section of the MRS for the corrected areas to validate the results.

### C.5.3 Corrective Actions for Excessive IRI

- (1) If an individual segment IRI exceeds 140 in/mile for HMA I, HMA II, and PCC II pavements after correction for localized roughness, the engineer may require the contractor to correct that segment. Correct the segment final surface as follows:

- HMA I: Correct to an IRI of 60 in/mile using whichever of the following methods as approved by the engineer:  
Mill and replace the full lane width of the riding surface excluding the paved shoulder.  
Continuous diamond grinding or fine-tooth milling the full lane width, if required, of the riding surface including adjustment of the paved shoulders.
- HMA II: Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer:  
Mill and replace the full lane width of the riding surface excluding the paved shoulder.  
Continuous diamond grinding or fine-tooth milling of the full lane width, if required, of the riding surface including adjustment of the paved shoulders
- PCC II: Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer:  
Continuous diamond grinding of the full lane width, if required, of the riding surface including adjustment of the paved shoulders. Conform to sections C.1 through C.4 of Concrete Pavement Continuous Diamond Grinding Special provision contained elsewhere in the contract.  
Remove and replace the full lane width of the riding surface.

- (2) Re-profile corrected segments to verify that the final IRI meets the above correction limits and there are no areas of localized roughness. Enter a revised ProVAL ride quality module report for the corrected areas to the reference documents section of the MRS. Segments failing these criteria after correction are subject to the engineer's right to adjust pay for non-conforming work under standard spec 105.3.

### **C.6 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 testing procedures, and perform additional testing.
- (2) If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming pavement, the department will use third party testing to resolve the dispute. The department's Quality Assurance Unit, or a mutually agreed on independent testing company, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in

error will pay service charges incurred for testing by an independent tester. The department may use third party tests to evaluate the quality of questionable pavement and determine the appropriate payment.

#### **D Measurement**

- (1) The department will measure Incentive IRI Ride by the dollar, adjusted as specified in E.2.

#### **E Payment**

##### **E.1 Payment for Profiling**

- (1) Costs for furnishing and operating the profiler, documenting profile results, and correcting the final pavement surface are incidental to the contract. The department will pay separately for engineer-directed corrective action performed within the 25-foot exclusionary zones under C.5.2 as extra work.

##### **E.2 Pay Adjustment**

- (1) The department will pay incentive for ride under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
440.4410.S	Incentive IRI Ride	DOL

- (2) Incentive payment is not limited, either up or down, to the amount the schedule of items shows.
- (3) The department will administer disincentives for ride under the Disincentive IRI Ride administrative item.
- (4) The department will not assess disincentive on HMA III or PCC III segments. Incentive pay for HMA III and PCC III segments will be according to the requirements for the category of the adjoining segments.
- (5) The department will adjust pay for each segment based on the initial IRI for that segment. If corrective action is required, the department will base disincentives on the IRI after correction for pavement meeting the following conditions:
  - All Pavement: The corrective work is performed in a contiguous, full lane width section 500 feet long, or a length as agreed with the engineer.
  - HMA Pavements: The corrective work is a mill and inlay or full depth replacement and the inlay or replacement layer thickness conforms to standard spec 460.3.2.
  - Concrete Pavements: The corrective work is a full depth replacement and conforms to standard spec 415.

- (6) The department will adjust pay for 500-foot long standard segments nominally one wheel path wide using equation “QMP 1.04” as follows:

<b>HMA I</b>	
<b>Initial IRI (inches/mile)</b>	<b>Pay Adjustment<sup>[1]</sup> (dollars per standard segment)</b>
< 30	250
≥ 30 to <35	$1750 - (50 \times \text{IRI})$
≥ 35 to < 60	0
≥ 60 to < 75	$1000 - (50/3 \times \text{IRI})$
≥ 75	-250

<b>HMA II and PCC II</b>	
<b>Initial IRI (inches/mile)</b>	<b>Pay Adjustment<sup>[1][2]</sup> (dollars per standard segment)</b>
< 50	250
≥ 50 to < 55	$2750 - (50 \times \text{IRI})$
≥ 55 to < 85	0
≥ 85 to < 100	$(4250/3) - (50/3 \times \text{IRI})$
≥ 100	-250

<b>HMA IV and PCC IV</b>	
<b>Initial IRI (inches/mile)</b>	<b>Pay Adjustment<sup>[1][2]</sup> (dollars per standard segment)</b>
< 35	250
≥ 35 to < 45	$1125 - (25 \times \text{IRI})$
≥ 45	0

<sup>[1]</sup> If the engineer directs placing upper layer asphaltic mixtures between October 15 and May 1 for department convenience as specified in standard spec 450.3.2.1(5), the department will not adjust pay for ride on pavement the department orders the contractor to place when the temperature, as defined in standard spec 450.3.2.1(2), is less than 36 F.

<sup>[2]</sup> If the engineer directs placing concrete pavement for department convenience, the department will not adjust pay for ride on pavement the department orders the contractor to place when the air temperature falls below 35 F.

- (7) The department will prorate the pay adjustment for partial segments based on their length.

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## **18. QMP HMA Pavement Nuclear Density.**

### **A Description**

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

- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
  1. Selection of test sites.
  2. Testing.
  3. Necessary adjustments in the process.
  4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:  
<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>
- (4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

<http://www.atwoodsystems.com/mrs>

### **B Materials**

#### **B.1 Personnel**

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

#### **B.2 Testing**

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

## **B.3 Equipment**

### **B.3.1 General**

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

### **B.3.2 Correlation of Nuclear Gauges**

#### **B.3.2.1 Correlation of QC and QV Nuclear Gauges**

- (1) Select a representative section of the compacted pavement prior to or on the first day of paving for the correlation process. The section does not have to be the same mix design.
- (2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.
- (3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft<sup>3</sup>. Measure and record the density on the 5 additional test sites for each gauge.
- (4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft<sup>3</sup> and repeat correlation process from B.3.2.1 (2).
- (5) Furnish one of the QC gauges passing the allowable correlation tolerances to perform density testing on the project.

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

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.

- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft<sup>3</sup> of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft<sup>3</sup> of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

#### **B.4 Quality Control Testing and Documentation**

##### **B.4.1 Lot and Sublot Requirements**

###### **B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances**

- (1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.
- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.
- (5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.
- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.



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

**Table 1**

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

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

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

**Table 2**

#### **B.4.2 Pavement Density Determination**

##### **B.4.2.1 Mainline Traffic Lanes and Appurtenances**

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

##### **B.4.2.2 Mainline Shoulders**

###### **B.4.2.2.1 Width Greater Than 5 Feet**

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

#### **B.4.2.2.2 Width of 5 Feet or Less**

- (1) If all subplot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- (2) If a subplot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

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

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

#### **B.4.2.4 Documentation**

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

#### **B.4.3 Corrective Action**

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

## **B.5 Department Testing**

### **B.5.1 Verification Testing**

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

### **B.5.2 Independent Assurance Testing**

- (1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

## **B.6 Dispute Resolution**

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.

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

## **B.7 Acceptance**

- (1) The department will not accept QMP HMA Pavement Nuclear Density if a non-correlated gauge is used for contractor QC tests.

## **C (Vacant)**

## **D (Vacant)**

## **E Payment**

### **E.1 QMP Testing**

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

### **E.2 Disincentive for HMA Pavement Density**

- (1) The department will administer density disincentives according to standard spec 460.5.2.2.

### **E.3 Incentive for HMA Pavement Density**

- (1) Delete standard spec 460.5.2.3.
- (2) If the lot density is greater than the minimum specified in standard spec table 460-3 and all individual air voids test results for that mixture are within +1.0 percent or -0.5 percent of the design target in standard spec table 460-2, the department will adjust pay for that lot as follows:

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

- (3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.

- (4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.
  - (5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.
- 460-020 (20100709)

## 19. Cover Plates Temporary, Item 611.8120.S.

### A Description

This special provision describes furnishing, installing and removing a steel plate to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

### B Materials

Provide a 0.25-inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

### C (Vacant)

### D Measurement

The department will measure Cover Plates Temporary as units, acceptably completed in place.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	Each

Payment is full compensation for furnishing, installing, and removing the cover plates.

The steel plates shall become the property of the contractor when no longer needed in the contract work.

611-006 (20030820)

## 20. Barrier System Grading Shaping Finishing.

*Supplement standard spec 614.3.2.5 (1) with the following:*

Erosion Mat..... standard spec 628

*Supplement standard spec 614.5 (14) with the following:*

Payment for Barrier System Grading Shaping Finishing also includes compensation for providing erosion mat when the barrier system is outside the contract grading limits. If the

work specified in standard spec 614.3.2.5 falls within the contract grading limits, the department will pay separately for that work under erosion mat bid items.

**21. Pavement Marking Grooved Wet Reflective Tape 4-Inch, Item 646.0881.S; 8-Inch, Item 646.0883.S.**

**A Description**

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

**B Materials**

Furnish grooved wet reflective pavement marking tape and adhesive material per manufacturer's recommendations, if required, from the department's approved products list.

Furnish a copy of the manufacturer's recommendations to the engineer before preparing the pavement marking grooves.

**C Construction**

**C.1 General**

For quality assurance, provide the engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of pavement marking tape.

Plane the grooved lines according to details in the plan and per manufacturer's recommendations. Use grooving equipment with a free-floating, independent cutting head. Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

**C.2 Groove Depth**

Cut the groove to a depth of 120 mils  $\pm$  10 mils from the pavement surface or, if tined, from the high point of the tined surface. To measure the depth, the contractor may use a depth plate placed in the groove and a straightedge placed across the plate and groove, or the contractor may use a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

**C.3 Groove Width – Longitudinal Markings**

Cut the groove one-inch wider than the width of the tape.

**C.4 Groove Position**

Position the groove edge according to plan details. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the tape segment. Achieve straight alignment with the grooving equipment.

## **C.5 Groove Cleaning**

### **C.5.1 Concrete**

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

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

### **C.5.2 New Asphalt**

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove.

### **C.5.3 Existing Asphalt**

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

Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 120 psi air pressure to clean the groove.

## **C.6 Tape Application**

Apply the wet reflective pavement marking tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive

- 1) For the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee:
  - Apply SPA-60 during May 1 to September 30, both dates inclusive due to Volatile Organic Compound Limitations.
  - Apply P-50 during October 1 to April 30, both dates inclusive.
- 2) For the remainder counties:
  - Apply either adhesive.

Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

Tamp the wet reflective pavement marking tape with a tamper cart roller, with a minimum of a 200-lb load, cut to fit the groove. Tamp a minimum of three complete cycles (6 passes) with grooved modified tamper roller cart.

#### **D Measurement**

The department will measure Pavement Marking Grooved Wet Reflective Tape (Width) for grooved applications in length by the linear foot of tape placed according to the contract and accepted.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch	LF
646.0883.S	Pavement Marking Grooved Wet Reflective Tape 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary.

646-018 (20120615)

### **22. Locating No-Passing Zones, Item 648.0100.**

For this project, the spotting sight distance in areas with a 55 mph posted speed limit is 0.21 miles (1108 feet).

648-005 (20060512)

### **23. Adjusting Sanitary Manhole Covers, Item SPV.0060.01.**

#### **A Description**

Perform this work in accordance to standard spec 611 and as hereinafter provided. Adjust existing sanitary manhole covers to grade by adding or removing concrete adjusting rings.

#### **B Materials**

Furnish and install materials that conform to the requirements of standard spec 519. Salvage and reinstall existing covers on the manholes. Mastic Gaskets shall be E-Z-STIK or approved equal.

Furnish non-shrink grout that is a premixed, non-metallic, cementitious, controlled expansion, high strength, versatile grout; PenngROUT by IPA Systems, Inc. or equal.

#### **C Construction**

This work shall be in accordance to the pertinent provision of standard spec 611, as shown on the plans, and as hereinafter provided.



Adjust manhole covers located in pavement areas in two separate operations. Initially, remove designated manhole covers along with sufficient pavement to permit installation of temporary cover plate over the opening. Fill the excavated area with Base Aggregate Dense 1 ¼-Inch, which shall remain in place until contract milling and paving operations permit setting the manhole frames to grade. During the second phase, remove the base aggregate surrounding the manhole plus the temporary cover plate, and set the manhole cover to final grade. Set the adjusting rings and manhole frames with mastic gaskets and non shrink grout as follows. Apply mastic gaskets to the outside of the horizontal surface of all adjusting rings. Apply a non- shrink grout to the remaining horizontal surface of all adjusting rings.

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

If the manhole frame is higher than the adjacent pavement, the two measurements shall be made at each end of the straightedge. These two measurements shall be averaged. The same criteria for acceptance and payment as above, shall apply.

#### **D Measurement**

The department will measure Adjusting Sanitary Manhole Covers by each individual unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Adjusting Sanitary Manhole Covers	Each

Payment is full compensation for furnishing all required materials, exclusive of frames, grates, or lids available and designated for adjusting; for removing, reinstalling and adjusting the covers. Covers to be adjusted and which are rendered unfit for use by the contractor through the contractor's operations will be replaced by the contractor in kind at the contractor's own cost and expense. The department will pay for the items of Base Aggregate Dense 1 ¼-Inch, temporary cover plate, sawing, milling, and paving separately.

## **24. Adjusting Water Valves, Item SPV.0060.02.**

### **A Description**

Perform this work in accordance to the plans, Standard Specifications for Sewer and Water Construction in Wisconsin, and as hereinafter provided. Adjust existing water valves to an elevation as determined by the engineer.

### **B (Vacant)**

### **C Construction**

The approximate location of water valves is indicated on the plans. Adjust these items as necessary to proper placement according to the plans and standard detail drawings. Obtain approval from the engineer prior to beginning work for any method of adjustment of water valves other than that indicated on the plans or standard detail drawings.

### **D Measurement**

The department will measure Adjusting Water Valves as each individual adjustment, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Adjusting Water Valves	Each

Payment is full compensation for furnishing all required materials, exclusive of frames or lids designated for adjustment, for adjusting covers. Frames or lids to be adjusted and which are rendered unfit for use by the contractor through the contractor's operations will be replaced by the contractor in kind at the contractor's own cost and expense. The department will pay for the items of Base Aggregate Dense 1 1/4-Inch, sawing, milling, and paving separately.

## **25. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2, Item SPV.0060.03; Arrows Type 3, Item SPV.0060.04; Arrows Type 5, Item SPV.0060.05; Words, Item SPV.0060.06; Stop Line 18-Inch, Item SPV.0090.01.**

### **A Description**

This special provision describes grooving the pavement surface, and furnishing and installing preformed thermoplastic pavement marking as shown on the plans, in accordance to standard spec 647, and as hereinafter provided.

### **B Materials**

Furnish 125 mils preformed thermoplastic pavement marking from the department's approved products list. If required, furnish sealant material recommended by the manufacturer.

## **C Construction**

### **C.1 General**

For quality assurance, provide the engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of preformed thermoplastic pavement marking.

Plane the grooved lines in accordance to the plan details. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove.

### **C.2 Groove Depth**

Cut the groove to a depth of 120 mils  $\pm$ 10 mils deep from the pavement surface or, if tined, from the high point of the tined surface. Measure depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

### **C.3 Groove Width – Linear Markings**

Cut the groove 1-inch wider than the width of the thermoplastic.

### **C.4 Groove Position**

Position the groove edge in accordance to the plan details.

#### **C.4.1 Linear Marking**

Groove at a minimum of 4-inches, but not greater than, 12-inches from both ends of the line segment. Achieve straight alignment with the grooving equipment.

#### **C.4.2 Special Marking**

Groove at a minimum of 4-inches from the perimeter of the special marking. Groove separate areas for Word Items.

### **C.5 Groove Cleaning**

#### **C.5.1 Concrete**

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the sealant, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/min air flow and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

### **C.5.2 Asphalt**

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

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

### **C.6 Preformed Thermoplastic Application**

Preheat the surface if necessary based on manufacturer's recommendation.

Apply preformed thermoplastic in the groove as per manufacturer's recommendations. If manufacturer's recommendations require a sealant, apply a sealant lower than 91g/l VOC during the following period of time due to Volatile Organic Compound Limitations:

May 1 to September 30, both dates inclusive – the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee.

Use any sealant in the remainder counties and for the remainder of the year. The sealant must be wet.

### **D Measurement**

The department will measure Pavement Marking Grooved Preformed Thermoplastic (Type) by each individual unit, acceptably completed.

The department will measure Pavement Marking Grooved Preformed Thermoplastic (Type) in length by the linear foot of tape placed, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2	Each
SPV.0060.04	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 3	Each
SPV.0060.05	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 5	Each
SPV.0060.06	Pavement Marking Grooved Preformed Thermoplastic Words	Each
SPV.0090.01	Pavement Marking Grooved Preformed Thermoplastic Stop Line 18-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface, and for furnishing and installing the material.

**26. Remove Loop Detector Wire and Lead-in Cable, STH 158 and 68<sup>th</sup> Avenue, Item SPV.0105.01; STH 158 and 104<sup>th</sup> Avenue, Item SPV.0105.02.**

**A Description**

This special provision describes removing loop detector wire and lead-in cable at the STH 158 intersections with 68<sup>th</sup> Avenue and 104<sup>th</sup> Avenue. Removal will be in accordance to standard spec 204, as shown in the plans, and as hereinafter provided.

**B (Vacant)**

**C Construction**

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

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

**D Measurement**

The department will measure Remove Loop Detector Wire and Lead-in Cable 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.0105.01	Remove Loop Detector Wire and Lead-in Cable, STH 158 and 68 <sup>th</sup> Avenue	LS
SPV.0105.02	Remove Loop Detector Wire and Lead-in Cable, STH 158 and 104 <sup>th</sup> Avenue	LS

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

**27. Removing Overhead Sign Support S-30-4, Item SPV.0105.03.**

**A Description**

Work under this item shall consist of removing the overhead sign structure and footing. The sign on the structure is paid for under a separate pay item, i.e. Removing Signs Type II. See signing plans for location.

**B (Vacant)**

**C Construction**

Remove the digital message sign and overhead sign supports and concrete footings, backfill the resulting holes, and dispose of all materials outside of the right-of-way in

accordance to standard specs 204.3 and 638.3. Concrete footing shall be removed to 2' below the existing ground. The reinforcement shall be cut off flush with the top of the concrete. The footing shall be then covered with topsoil and seeded. This is all incidental to Remove Overhead Sign Structure.

Removal of the overhead sign support will require multiple mobilizations. In Stage 1, remove the digital message sign, horizontal overhead sign support, and the pole with concrete footing on the north side of STH 158. In Stage 2, remove the pole with concrete footing in the median of STH 158.

#### **D Measurement**

The department will measure Removing Overhead Sign Support, as a single lump sum unit of work in place, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Removing Overhead Sign Support S-30-4	LS

Payment in full compensation for disassembling, removing, including concrete footings, backfilling, and disposal of all materials.

638-SER1 (20040405)

### **28. EVP Detector Head Installation, STH 158 and 104<sup>th</sup> Avenue, Item SPV.0105.04; STH 158 and 88<sup>th</sup> Avenue, Item SPV.0105.05; STH 158 and 68<sup>th</sup> Avenue, Item SPV.0105.06.**

#### **A Description**

This special provision describes the transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets at the STH 158 intersections with 104<sup>th</sup> Avenue, 88<sup>th</sup> Avenue, and 68<sup>th</sup> Avenue.

#### **B Materials**

Use materials furnished by the department including: Emergency Vehicle Preemption (EVP) Detector Heads and EVP Detector Head Mounting Brackets. Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60<sup>th</sup> Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials three working days prior to picking the materials up.

#### **C Construction**

Install the EVP detector heads and mounting brackets as shown on the plans. The department will determine the exact location to ensure that the installation does not create a sight obstruction. The department will terminate the EVP cable ends and install the discriminators and card rack in the cabinet.

Notify the department's Electrical shop at (414) 266-1170 upon completion of the installation of the Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets.

**D Measurement**

The department will measure EVP Detector Head Installation (Location) as a single lump sum unit of work, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	EVP Detector Head Installation, STH 158 and 104 <sup>th</sup> Avenue	LS
SPV.0105.05	EVP Detector Head Installation, STH 158 and 88 <sup>th</sup> Avenue	LS
SPV.0105.06	EVP Detector Head Installation, STH 158 and 68 <sup>th</sup> Avenue	LS

Payment is full compensation for transporting and installing of department furnished Emergency Vehicle Preemption (EVP) Detector Heads and mounting brackets.

## **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 2014 edition of the standard specifications:*

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**101.3 Definitions**

*Replace the definition of semi-final estimate with the following effective with the December 2013 letting:*

**Semi-final estimate** An estimate indicating the engineer has measured and reported all contract quantities and materials requirements.

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**105.11.1 Partial Acceptance**

*Replace paragraph two with the following effective with the December 2013 letting:*

- (2) Partial acceptance will relieve the contractor of maintenance responsibility for the designated portion of the work. By relieving the contractor of maintenance, the department does not relieve the contractor of responsibility for defective work or damages caused by the contractor's operations. Do not construe partial acceptance to be conditional final acceptance or final acceptance of any part of the project, or a waiver of any legal rights specified under 107.16.
- 

**105.11.2 Final Acceptance**

*Retitle and replace the entire text with the following effective with the December 2013 letting:*

**105.11.2 Project Acceptance****105.11.2.1 Inspection****105.11.2.1.1 General**

- (1) Notify the engineer when the project is substantially complete as defined in 105.11.2.1.3. As soon as it is practical, the engineer will inspect the work and categorize it as one of the following:
  1. Unacceptable or not complete.
  2. Substantially complete.
  3. Complete.

**105.11.2.1.2 Unacceptable or Not Complete**

- (1) The engineer will identify, in writing, work that is unacceptable or not complete. Immediately correct or complete that work. The engineer will assess contract time until the work is corrected or completed.
- (2) Proceed as specified in 105.11.2.1.1 until the engineer determines that the work is complete.

**105.11.2.1.3 Substantially Complete**

- (1) The project is substantially complete and the engineer will no longer assess contract time if the contractor has completed all contract bid items and change order work, except for the punch-list. As applicable, the following must have occurred:
  1. All lanes of traffic are open on a finished surface.
  2. All signage and traffic control devices are in place and operating.
  3. All drainage, erosion control, excavation, and embankments are completed.
  4. All safety appurtenances are completed.
- (2) The engineer will provide a written punch-list enumerating work the contractor must perform and documents the contractor must submit before the the engineer will categorize the work as complete.
  1. Punch-list work includes uncompleted cleanup work required under 104.9 and minor corrective work. Immediately correct or complete the punch-list work. The engineer may restart contract time if the contractor does not complete the punch-list work within 5 business days after receiving the written punch-list. The engineer and contractor may mutually agree to extend this 5-day requirement.
  2. Punch-list documents include whatever contract required documentation is missing. The engineer may restart contract time if the contractor does not submit the punch-list documents within 15 business days after receiving the written punch-list. The engineer and contractor may mutually agree to extend this 15-day requirement.
- (3) Proceed as specified in 105.11.2.1.1 until the work is complete.

**105.11.2.1.4 Complete**

- (1) The project is complete when the contractor has completed all contract bid items, change order work, and punch-list work including the submission of all missing documentation.

**105.11.2.2 Conditional Final Acceptance**

- (1) When the engineer determines that the project is complete, the engineer will give the contractor written notice of conditional final acceptance relieving the contractor of maintenance responsibility for the completed work.

**105.11.2.3 Final Acceptance**

- (1) The engineer will grant final acceptance of the project after determining that all contract is work complete; all contract, materials, and payroll records are reviewed and approved; and the semi-final estimate quantities are final under 109.7.
- (2) Failure to discover defective work or materials before final acceptance does not prevent the department from rejecting that work or those materials later. The department may revoke final acceptance if the department discovers defective work or materials after it has accepted the work.

**105.13.3 Submission of Claim**

*Replace paragraph one with the following effective with the December 2013 letting:*

- (1) Submit the claim to the project engineer as promptly as possible following the submission of the Notice of Claim, but not later than final acceptance of the project as specified in 105.11.2.3. If the contractor does not submit the claim before final acceptance of the project, the department will deny the claim.

**107.17.3 Railroad Insurance Requirements**

*Replace paragraph one with the following effective with the December 2013 letting:*

- (1) If required by the special provisions, provide or arrange for a subcontractor to provide railroad protective liability insurance in addition to the types and limits of insurance required in 107.26. Keep railroad protective liability insurance coverage in force until completing all work, under or incidental to the contract, on the railroad right of way or premises of the railroad and until the engineer determines that the work is complete as specified in 105.11.2.1.4.

**107.26 Standard Insurance Requirements**

*Replace paragraph one with the following effective with the December 2013 letting:*

- (1) Maintain the following types and limits of commercial insurance in force until the engineer determines that the work is complete as specified in 105.11.2.1.4.

**TABLE 107-1 REQUIRED INSURANCE AND MINIMUM COVERAGES**

TYPE OF INSURANCE	MINIMUM LIMITS REQUIRED <sup>[1]</sup>
1. Commercial general liability insurance endorsed to include blanket contractual liability coverage. <sup>[2]</sup>	\$2 million combined single limits per occurrence with an annual aggregate limit of not less than \$4 million.
2. Workers' compensation.	Statutory limits
3. Employers' liability insurance.	Bodily injury by accident: \$100,000 each accident Bodily injury by disease: \$500,000 each accident \$100,000 each employee
4. Commercial automobile liability insurance covering all contractor-owned, non-owned, and hired vehicles used in carrying out the contract. <sup>[2]</sup>	\$1 million-combined single limits per occurrence.

<sup>[1]</sup> The contractor may satisfy these requirements with primary insurance coverage or with excess/umbrella policies.

<sup>[2]</sup> The Wisconsin Department of Transportation, its officers, agents, and employees shall be named as an additional insured under the general liability and automobile liability insurance.

**108.14 Terminating the Contractor's Responsibility**

Replace paragraph one with the following effective with the December 2013 letting:

- (1) The contractor's responsibilities are terminated, except as set forth in the contract bond and specified in 107.16, when the department grants final acceptance as specified in 105.11.2.3.
- 

**109.2 Scope of Payment**

Replace paragraph two with the following effective with the December 2013 letting:

- (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 applicable bid items 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.
- 

**109.6.1 General**

Replace paragraphs three and four with the following effective with the December 2013 letting:

- (3) The department's payment of an estimate before conditional final acceptance of the work does not constitute the department's acceptance of the work, and does not relieve the contractor of responsibility for:
    1. Protecting, repairing, correcting, or renewing the work.
    2. Replacing all defects in the construction or in the materials used in the construction of the work under the contract, or responsibility for damage attributable to these defects.
  - (4) The contractor is responsible for all defects or damage that the engineer may discover on or before the engineer's conditional final acceptance of the work. The engineer is the sole judge of these defects or damage, and the contractor is liable to the department for not correcting all defects or damage.
- 

**109.7 Acceptance and Final Payment**

Replace paragraphs one and two with the following effective with the December 2013 letting:

- (1) After the engineer grants conditional final acceptance of the work as specified in 105.11.2.2 and reviews required document submittals and materials test reports, the engineer will issue the semi-final estimate.
- (2) Within 30 calendar days after receiving the semi-final estimate, submit to the engineer a written statement of agreement or disagreement with the semi-final estimate. For an acceptable statement of disagreement, submit an item-by-item list with reasons for each disagreement. If the contractor does not submit this written statement within those 30 days, the engineer will process the final estimate for payment. The engineer and the contractor can mutually agree to extend this 30-day submission requirement.

**450.3.3 Maintaining the Work**

*Replace paragraph one with the following effective with the December 2013 letting:*

- (1) Protect and repair the prepared foundation, tack coat, base, paved traffic lanes, shoulders, and seal coat. Correct all rich or bleeding areas, breaks, raveled spots, or other nonconforming areas in the paved surface.

**455.3.2.5 Maintaining Tack Coat**

*Replace paragraph one with the following effective with the December 2013 letting:*

- (1) Protect and repair the existing surface and the tack coat. Correct areas with excess or deficient tack material and any breaks, raveled spots, or other areas where bond might be affected.

**460.2.2.3 Aggregate Gradation Master Range**

*Replace paragraph one with the following effective with the January 2014 letting:*

- (1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

**TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS**

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm	25.0 mm	19.0 mm	12.5 mm	9.5 mm	SMA 12.5 mm	SMA 9.5 mm
50.0-mm	100						
37.5-mm	90 – 100	100					
25.0-mm	90 max	90 - 100	100				
19.0-mm	—	90 max	90 - 100	100		100	
12.5-mm	—	—	90 max	90 - 100	100	90 - 97	100
9.5-mm	—	—	—	90 max	90 - 100	58 - 72	90 - 100
4.75-mm	—	—	—	—	90 max	25 - 35	35 - 45
2.36-mm	15 – 41	19 - 45	23 - 49	28 - 58	20 - 65	15 - 25	18 - 28
75-µm	0 – 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	8.0 - 12.0	10.0 - 14.0
% MINIMUM VMA	11.0	12.0	13.0	14.0 <sup>[1]</sup>	15.0 <sup>[2]</sup>	16.0	17.0

<sup>[1]</sup> 14.5 for E-3 mixes.

<sup>[2]</sup> 15.5 for E-3 mixes.

**460.2.7 HMA Mixture Design**

*Replace paragraph one with the following effective with the January 2014 letting:*

- (1) For each HMA mixture type used under the contract, develop and submit an asphaltic mixture design according to the department's test method number 1559 as described in CMM 8-66 and conforming to the requirements of table 460-1 and table 460-2. The values listed are design limits; production values may exceed those limits. The department will review mixture designs and report the results of that review to the designer according to the department's test method number 1559.

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	E - 0.3	E - 1	E - 3	E - 10	E - 30	E - 30x	SMA
ESALs x 10 <sup>6</sup> (20 yr design life)	< 0.3	0.3 - < 1	1 - < 3	3 - < 10	10 - < 30	>= 30	—
LA Wear (AASHTO T96)							
100 revolutions(max % loss)	13	13	13	13	13	13	13
500 revolutions(max % loss)	50	50	45	45	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18	18	18	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	60 / —	65 / —	75 / 60	85 / 80	98 / 90	100/100	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40	40	43	45	45	45	45
Sand Equivalency (AASHTO T176, min)	40	40	40	45	45	50	50
Gyratory Compaction							
Gyrations for N <sub>ini</sub>	6	7	7	8	8	9	8
Gyrations for N <sub>des</sub>	40	60	75	100	100	125	65
Gyrations for N <sub>max</sub>	60	75	115	160	160	205	160
Air Voids, %V <sub>a</sub> (%G <sub>mm</sub> N <sub>des</sub> )	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)
% G <sub>mm</sub> N <sub>ini</sub>	<= 91.5 <sup>[1]</sup>	<= 90.5 <sup>[1]</sup>	<= 89.0 <sup>[1]</sup>	<= 89.0	<= 89.0	<= 89.0	—
% G <sub>mm</sub> N <sub>max</sub>	<= 98.0	<= 98.0	<= 98.0	<= 98.0	<= 98.0	<= 98.0	—
Dust to Binder Ratio <sup>[2]</sup> (% passing 0.075/P <sub>be</sub> )	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 <sup>[4] [5]</sup>	65 - 78 <sup>[4]</sup>	65 - 75 <sup>[3] [4]</sup>	65 - 75 <sup>[3] [4]</sup>	65 - 75 <sup>[3] [4]</sup>	65 - 75 <sup>[3] [4]</sup>	70 - 80
Tensile Strength Ratio (TSR) (ASTM 4867)							
no antistripping additive	0.70	0.70	0.70	0.70	0.70	0.70	0.70
with antistripping additive	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Draindown at Production Temperature (%)	—	—	—	—	—	—	0.30

<sup>[1]</sup> The percent maximum density at initial compaction is only a guideline.

<sup>[2]</sup> For a gradation that passes below the boundaries of the caution zone(ref. AASHTO MP3), the dust to binder ratio limits are 0.6 - 1.6.

<sup>[3]</sup> For 9.5mm and 12.5 mm nominal maximum size mixtures, the specified VFB range is 70 - 76%.

<sup>[4]</sup> For 37.5mm nominal maximum size mixes, the specified VFB lower limit is 67%.

<sup>[5]</sup> For 25.0mm nominal maximum size mixes, the specified VFB lower limit is 67%.

**460.2.8.2.1.5 Control Limits**

*Replace paragraph one with the following effective with the January 2014 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	+/- 1.3	+/- 1.0
VMA in percent <sup>[1]</sup>	- 0.5	- 0.2

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

- (2) Warning bands are defined as the area between the JMF limits and the warning limits.

**460.2.8.2.1.6 Job Mix Formula Adjustment**

*Replace the entire text with the following effective with the January 2014 letting:*

- (1) The contractor may request adjustment of the JMF according to the department's test method number 1559. Have an HTCP 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 an HMA technician certified at level III review the proposed adjustment and, if acceptable, issue a revised JMF.
- (2) The department will not allow adjustments that do the following:
- Exceed specified JMF tolerance limits.
  - Reduce the JMF asphalt content unless the production VMA running average meets or exceeds the minimum VMA design requirement defined in table 460-1 for the mixture produced.
- (3) Have an HMA technician certified at level II make related process adjustments. If mixture redesign is necessary, submit a new JMF, subject to the same specification requirements as the original JMF.

**520.3.8 Protection After Laying**

*Delete the entire subsection.*

**614.2.1 General**

*Replace paragraphs five and six with the following effective with the December 2013 letting:*

- (5) Furnish zinc coated wire rope and fitting conforming to the plans and galvanized according to ASTM A741.
- (6) Before installation store galvanized components above ground level and away from surface run off. The department may reject material if the zinc coating is physically damaged or oxidized.
- (7) Provide manufacturer's drawings, and installation and maintenance instructions when providing proprietary systems.

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**614.2.3 Steel Rail and Fittings**

Replace paragraph one with the following effective with the December 2013 letting:

- (1) Furnish galvanized steel rail conforming to AASHTO M180 class A, type II beam using the single-spot test coating requirements. Furnish plates, anchor plates, post mounting brackets, and other structural steel components conforming to 506.2.2.1 and hot-dip galvanized according to ASTM A123.
- 

**614.2.7 Crash Cushions**

Replace paragraph one with the following effective with the December 2013 letting:

- (1) Furnish permanent and temporary crash cushions from the department's approved products list. Use cushions as wide or wider than the plan back-width. Furnish transitions conforming to the crash cushion manufacturer's design and specifications. Submit manufacturer crash cushion and transition design details to engineer before installing.
- 

**616.3.1 General**

Replace paragraph six with the following effective with the December 2013 letting:

- (6) Remove and dispose of all excess excavation and surplus materials from the fence site.
- 

**618.3.3 Restoration**

Replace paragraph one with the following effective with the December 2013 letting:

- (1) Upon termination of hauling operations and before conditional final acceptance, restore all haul roads, including drainage facilities and other components, to the equivalent of pre-hauling conditions.
- 

**627.3.1 General**

Replace paragraph four with the following effective with the December 2013 letting:

- (4) Maintain the mulched areas and repair all areas damaged by wind, erosion, traffic, fire or other causes.
- 

**637.3.2.1 General**

Delete paragraph three effective with the December 2013 letting.

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**670.3.4.2 Post-Construction Work**

Replace paragraph one with the following effective with the December 2013 letting:

- (1) Submit 5 copies of ITS documentation including but not limited to the following:
  - Operator's manual: for contractor furnished equipment, submit a manual containing detailed operating instructions for each different type or model of equipment and or operation performed.
  - Maintenance procedures manuals: for contractor furnished equipment, submit a manual containing detailed preventive and corrective maintenance procedures for each type or model of equipment furnished.
  - Cabinet fiber optic wiring diagram: submit a cabinet wiring diagram, identified by location for each cabinet. Include both electrical wiring and fiber optic conductor and cable connections. Place one copy of the fiber optic wiring diagram in a weatherproof holder in the cabinet. Deliver the other copies to the engineer.
  - As-built drawings: submit final as-built drawings that detail the final placement of all conduit, cabling, equipment, and geometric modifications within the contract. Provide all documentation in an electronic format adhering to the region's ITS computer aided drafting standards and according to the department's as-built requirements. The department will review the as-built drawings for content and electronic format. Modify both the content and format of as-built drawings until meeting all requirements.
  - Equipment inventory list: submit an inventory list including serial number, make, model, date installed, and location installed of all equipment installed under the contract.

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**Errata**

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*Make the following corrections to the 2014 edition of the standard specifications:*

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**415.3.14 Protecting Concrete**

Correct errata by referencing the opening to service specification.

- (1) Erect and maintain suitable barricades and, if necessary, provide personnel to keep traffic off the newly constructed pavement until it is opened for service as specified in 415.3.15. Conform to 104.6 for methods of handling and facilitating traffic.
- 

**501.2.9 Concrete Curing Materials**

Correct errata by changing AASHTO M171 to ASTM C171.

- (2) Furnish sheeting conforming to ASTM C171 for white opaque polyethylene film, except that the contractor may use clear or black polyethylene for cold weather protection.
- 

**607.2 Materials**

Correct errata by changing AASHTO M198 to ASTM C990.

- (1) Use materials conforming to the requirements for the class of material named and specified below.
- |  |            |
|--|------------|
| Composite pipe, couplings, fittings and joint materials .....            | ASTM D2680 |
| Annular rubber and plastic gaskets for flexible, watertight joints ..... | ASTM C990  |
| External rubber gaskets, mastic, and protective film.....                | ASTM C877  |
| Mortar .....   | 519.2.3    |
- 

**637.2.1.3 Sheet Aluminum**

Correct errata by changing ASTM B449 to B921 and eliminating the specification for coating thickness.

- (4) Degrease, etch, and coat the sign blank on both sides with a chromate treatment conforming to ASTM B921, class 2.
- 

**637.3.3.4 Performance**

Correct errata to reference to 105.11.2.3 as revised to implement changes to the finals process.

- (1) Under 105.11.2.3 the department may revoke acceptance and direct the contractor to repair or replace previously accepted sign installations if the department subsequently discovers evidence of defective materials or improper installation. Deficiencies that warrant department action include but are not limited to the following:
- Sign posts more than five degrees out of plumb.
  - Signs twisted by more than 5 degrees from plan orientation.
  - Signs with delaminated or warped plywood.
  - Signs with bubbling, fading, delaminating, or buckling sheeting.
- 

**646.3.3.4 Proving Period**

Correct errata to reference to 105.11.2.3 as revised to implement changes to the finals process.

- (4) Replace all marking within sections with a percent failing more than 10% and repair or replace all markings that, in the engineer's assessment, show evidence of improper construction. If post-acceptance inspections uncover evidence of defective materials or improper construction, the department may revoke acceptance under 105.11.2.3.



**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://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm>

(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://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/crc-basic-info.pdf>



**DECEMBER 2013**

**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://roadwaystandards.dot.wi.gov/standards/cmm/cm-02-28.pdf#cm2-28.5>

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://roadwaystandards.dot.wi.gov/standards/forms/ws4567.doc>

**Effective with September 2004 Letting**

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

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

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

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

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

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

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

## **II. PAYROLL REQUIREMENTS**

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

## **III. POSTINGS AT THE SITE OF THE WORK**

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

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

## **IV. WAGE RATE REDISTRIBUTION**

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

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

## **V. ADDITIONAL CLASSIFICATIONS**

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

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

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



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

**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
KENOSHA 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, 2014

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

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.25	17.63	52.88
Carpenter	32.93	19.99	52.92
Cement Finisher	29.37	19.72	49.09
Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	32.20	21.80	54.00
Fence Erector	16.00	3.33	19.33
Ironworker	30.51	23.23	53.74
Line Constructor (Electrical)	40.00	14.69	54.69
Painter	21.87	11.37	33.24
Pavement Marking Operator	30.00	0.00	30.00
Piledriver	27.67	25.64	53.31
Roofer or Waterproofing	29.40	15.55	44.95
Teledata Technician or Installer	24.75	16.08	40.83
Tuckpointer, Caulker or Cleaner	34.57	16.42	50.99
Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.80	45.40
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.58	40.36
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.34	34.09

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
<b>TRUCK DRIVERS</b>			
Single Axle or Two Axle	34.22	19.90	54.12
Three or More Axle	24.52	17.77	42.29
Future Increase(s): Add \$1.30/hr on 6/1/2014. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	29.27	20.40	49.67
Future Increase(s): Add \$1.75/hr on 6/1/14); Add \$1.25/hr on 6/1/15); Add \$1.30/hr on 6/1/16); Add \$1.25/hr on 6/ 1/ 17. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm</a> .			
Pavement Marking Vehicle	23.31	17.13	40.44
Shadow or Pilot Vehicle	34.22	19.90	54.12
Truck Mechanic	23.31	17.13	40.44
<b>LABORERS</b>			
General Laborer	25.12	19.43	44.55
Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Pay: Add \$.10/hr for topman; Add \$.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.26/hr for bottomman; Add \$.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement), strike off man; Add \$.32/hr for and line and grade specialist; Add \$.65/hr for blaster and powderman; Add \$.75/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	22.11	18.28	40.39
Landscaper	25.12	19.43	44.55
Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	22.26	19.43	41.69
Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.69	15.50	33.19
Railroad Track Laborer	15.00	4.38	19.38

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
<b>HEAVY EQUIPMENT OPERATORS</b>			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.72	20.40	57.12
Backhoe (Track Type) Having a Mfrg.'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 \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .	36.22	20.40	56.62
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 Mfrg.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; 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	35.72	20.40	56.12

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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& A- Frames.			
Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/ 1/ 2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	35.46	20.40	55.86
Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/ 1/ 2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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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.	35.17	20.40	55.57
Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/ 1/ 2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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Fiber Optic Cable Equipment.	26.69	16.65	43.34
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
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Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97
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Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
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Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	34.50	20.04	54.54
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<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
-----	\$-----	\$-----	\$-----

## SCHEDULE OF ITEMS

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

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

## SECTION 0001 ROADWAY ITEMS

0010	204.0110 REMOVING ASPHALTIC SURFACE	211.000 SY	.		.	
0020	204.0120 REMOVING ASPHALTIC SURFACE MILLING	73,000.000 SY	.		.	
0030	204.0150 REMOVING CURB & GUTTER	239.000 LF	.		.	
0040	204.0165 REMOVING GUARDRAIL	5,960.000 LF	.		.	
0050	213.0100 FINISHING ROADWAY (PROJECT) 01. 3220-03-61	1.000 EACH	.		.	
0060	305.0110 BASE AGGREGATE DENSE 3/4-INCH	480.000 TON	.		.	
0070	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	130.000 TON	.		.	
0080	305.0500 SHAPING SHOULDERS	211.000 STA	.		.	
0090	390.0203 BASE PATCHING ASPHALTIC	3,070.000 SY	.		.	
0100	416.0610 DRILLED TIE BARS	28.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	440.4410.S INCENTIVE IRI RIDE	13,600.000 DOL	1.00000		13600.00	
0120	455.0115 ASPHALTIC MATERIAL PG64-22	600.000 TON	.		.	
0130	455.0605 TACK COAT	1,500.000 GAL	.		.	
0140	460.1103 HMA PAVEMENT TYPE E-3	10,860.000 TON	.		.	
0150	460.2000 INCENTIVE DENSITY HMA PAVEMENT	6,960.000 DOL	1.00000		6960.00	
0160	465.0125 ASPHALTIC SURFACE TEMPORARY	11.000 TON	.		.	
0170	465.0400 ASPHALTIC SHOULDER RUMBLE STRIP	4,900.000 LF	.		.	
0180	465.0475 ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	3,220.000 LF	.		.	
0190	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	400.000 LF	.		.	
0200	611.0430 RECONSTRUCTING INLETS	4.000 EACH	.		.	
0210	611.0624 INLET COVERS TYPE H	4.000 EACH	.		.	



## SCHEDULE OF ITEMS

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	611.8115 ADJUSTING INLET COVERS	9.000 EACH	.		.	
0230	611.8120.S COVER PLATES TEMPORARY	2.000 EACH	.		.	
0240	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING	3.000 EACH	.		.	
0250	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH	63.000 LF	.		.	
0260	614.0305 STEEL PLATE BEAM GUARD CLASS A	2,873.000 LF	.		.	
0270	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS	50.000 LF	.		.	
0280	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	1.000 EACH	.		.	
0290	614.0400 ADJUSTING STEEL PLATE BEAM GUARD	860.000 LF	.		.	
0300	614.0515 GUARDRAIL STIFENED LHW	360.000 LF	.		.	
0310	614.2300 MGS GUARDRAIL 3	2,650.000 LF	.		.	
0320	614.2500 MGS THRIE BEAM TRANSITION	120.000 LF	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0330	614.2610 MGS GUARDRAIL TERMINAL EAT	3.000 EACH	.		.	
0340	619.1000 MOBILIZATION	1.000 EACH	.		.	
0350	625.0100 TOPSOIL	875.000 SY	.		.	
0360	625.0500 SALVAGED TOPSOIL	230.000 SY	.		.	
0370	627.0200 MULCHING	1,105.000 SY	.		.	
0380	628.1504 SILT FENCE	600.000 LF	.		.	
0390	628.1520 SILT FENCE MAINTENANCE	600.000 LF	.		.	
0400	628.1905 MOBILIZATIONS EROSION CONTROL	3.000 EACH	.		.	
0410	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	1.000 EACH	.		.	
0420	628.7015 INLET PROTECTION TYPE C	24.000 EACH	.		.	
0430	628.7020 INLET PROTECTION TYPE D	6.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0440	628.7504 TEMPORARY DITCH CHECKS	40.000 LF	.		.	
0450	628.7570 ROCK BAGS	10.000 EACH	.		.	
0460	629.0210 FERTILIZER TYPE B	0.720 CWT	.		.	
0470	630.0130 SEEDING MIXTURE NO. 30	24.000 LB	.		.	
0480	630.0200 SEEDING TEMPORARY	15.000 LB	.		.	
0490	634.0618 POSTS WOOD 4X6-INCH X 18-FT	91.000 EACH	.		.	
0500	637.2210 SIGNS TYPE II REFLECTIVE H	639.090 SF	.		.	
0510	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING	74.600 SF	.		.	
0520	637.2230 SIGNS TYPE II REFLECTIVE F	262.500 SF	.		.	
0530	638.2102 MOVING SIGNS TYPE II	6.000 EACH	.		.	
0540	638.2602 REMOVING SIGNS TYPE II	86.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0550	638.3000 REMOVING SMALL SIGN SUPPORTS	71.000 EACH	.		.	
0560	642.5201 FIELD OFFICE TYPE C	1.000 EACH	.		.	
0570	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 3220-03-61	60.000 DAY	.		.	
0580	643.0300 TRAFFIC CONTROL DRUMS	10,896.000 DAY	.		.	
0590	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	1,493.000 DAY	.		.	
0600	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	2,551.000 DAY	.		.	
0610	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	1,881.000 DAY	.		.	
0620	643.0800 TRAFFIC CONTROL ARROW BOARDS	60.000 DAY	.		.	
0630	643.0900 TRAFFIC CONTROL SIGNS	2,547.000 DAY	.		.	
0640	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	105.000 EACH	.		.	
0650	643.1050 TRAFFIC CONTROL SIGNS PCMS	108.000 DAY	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20140708018PROJECT(S):  
3220-03-61FEDERAL ID(S):  
N/A

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0660	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 01. 3220-03-61	1.000 EACH	.		.	
0670	643.3000 TRAFFIC CONTROL DETOUR SIGNS	2,265.000 DAY	.		.	
0680	646.0106 PAVEMENT MARKING EPOXY 4-INCH	52,680.000 LF	.		.	
0690	646.0126 PAVEMENT MARKING EPOXY 8-INCH	1,300.000 LF	.		.	
0700	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH	16,200.000 LF	.		.	
0710	646.0600 REMOVING PAVEMENT MARKINGS	900.000 LF	.		.	
0720	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH	2,125.000 LF	.		.	
0730	646.0883.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH	5,960.000 LF	.		.	
0740	647.0456 PAVEMENT MARKING CURB EPOXY	90.000 LF	.		.	
0750	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	4.000 EACH	.		.	

## SCHEDULE OF ITEMS

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0760	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	1,050.000 LF	.		.	
0770	648.0100 LOCATING NO-PASSING ZONES	1.530 MI	.		.	
0780	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	2,880.000 LF	.		.	
0790	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH	680.000 LF	.		.	
0800	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	220.000 LF	.		.	
0810	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE	13,700.000 LF	.		.	
0820	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 3220-03-61	LUMP	LUMP		.	
0830	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	736.000 LF	.		.	
0840	652.0800 CONDUIT LOOP DETECTOR	1,745.000 LF	.		.	
0850	653.0135 PULL BOXES STEEL 24X36-INCH	8.000 EACH	.		.	
0860	653.0905 REMOVING PULL BOXES	10.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0870	655.0700 LOOP DETECTOR LEAD IN CABLE	6,578.000 LF	.		.	
0880	655.0800 LOOP DETECTOR WIRE	5,668.000 LF	.		.	
0890	690.0150 SAWING ASPHALT	10,210.000 LF	.		.	
0900	690.0250 SAWING CONCRETE	120.000 LF	.		.	
0910	SPV.0060 SPECIAL 01. ADJUSTING SANITARY MANHOLE COVERS	2.000 EACH	.		.	
0920	SPV.0060 SPECIAL 02. ADJUSTING WATER VALVES	3.000 EACH	.		.	
0930	SPV.0060 SPECIAL 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	37.000 EACH	.		.	
0940	SPV.0060 SPECIAL 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	2.000 EACH	.		.	
0950	SPV.0060 SPECIAL 05. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 5	2.000 EACH	.		.	
0960	SPV.0060 SPECIAL 06. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	26.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0970	SPV.0090 SPECIAL 01. PAVEMENT MARKING GROOVED PRE FORMED THERMOPLASTIC STOP LINE 18-INCH	650.000 LF	.		.	
0980	SPV.0105 SPECIAL 01. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE STH 158 & 68TH AVENUE	LUMP	LUMP		.	
0990	SPV.0105 SPECIAL 02. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE STH 158 & 104TH AVENUE	LUMP	LUMP		.	
1000	SPV.0105 SPECIAL 03. REMOVING OVERHEAD SIGN SUPPORT S-30-4	LUMP	LUMP		.	
1010	SPV.0105 SPECIAL 04. EVP DETECTOR HEAD INSTALLATION STH 158 & 104TH AVENUE	LUMP	LUMP		.	
1020	SPV.0105 SPECIAL 05. EVP DETECTOR HEAD INSTALLATION STH 158 & 88TH AVENUE	LUMP	LUMP		.	
1030	SPV.0105 SPECIAL 06. EVP DETECTOR HEAD INSTALLATION STH 158 & 68TH AVENUE	LUMP	LUMP		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	



**PLEASE ATTACH SCHEDULE OF ITEMS HERE**