HIGHWAY WORK PROPOSAL

Proposal Number: Ø 1

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Rock and Dane	1001-01-62		Janesville - Madison Milwaukee St - STH 106	IH 39

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required, $ 100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: April 8, 2014 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time October 10, 2014	
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 Removals, concrete pavement repair and replacement, asphaltic surface, erosion control, traffic control, pavement marking and structure overlay.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

(3) The department will provide bidding information through the department's web site at http://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 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/engrserv/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

Wisconsin Department of Transportation

DT1303 1/2006

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)

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

(Signature of Attorney-in-Fact)

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

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

Wisconsin Department of Transportation

DT1305 8/2003

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.

Name of Subcontractor	Class of Work	Estimated Value

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 1001-01-62, Janesville – Madison, Milwaukee St. - STH 106, IH 39, Rock and Dane Counties, 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 removals, concrete pavement repair and replacement, asphaltic surface, erosion control, traffic control, pavement marking, structure overlays for B-53-73, B-53-75 and B-53-77, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Provide the Erosion Control Implementation Plan (ECIP) 14 days prior to the Preconstruction Conference.

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment. Included in this "Prosecution and Progress" article and "Traffic" article are restrictions to working hours and lane closures. Work efforts will possibly require multiple or concurrent controlling operations to occur at the same time, as well as multiple mobilizations related to staging. No additional payment will be made by the department for said mobilizations. This information is included to assist the contractor and its subcontractors and shall not be interpreted as a demonstration of specified means and methods.

Provide a sawcut or equivalent joint at the beginning of each night's milling/paving operation.

Work Restrictions

Do not begin or continue any work that closes traffic lanes, shoulders, or ramps outside the allowed time periods specified in the "Traffic" article in these special provisions.

In areas of guardrail adjustment, ensure that all guardrail in a location is adjusted within 6 hours of starting the work. All guardrail must be reinstalled by 5:00 AM each Friday or by noon of a holiday restriction. A shoulder closure is required at all times during guardrail adjustment until the work is complete, as shown in the plan. No shoulder closures will be allowed over the weekend or during holidays.

Uneven pavement lanes or shoulder drops-offs will not be allowed over the weekend or during holidays. Construct HMA pavement layers or aggregate shoulders to eliminate all uneven lanes or drop-offs before 5:00 AM each Friday or before 5:00 AM of the first day of a holiday restriction.

Mill and replace the 4-inch asphalt shoulder repairs as found in Stages 1 and 2 below in one night or provide a shoulder closure until the work is complete. No more than a 2-inch shoulder drop-off is allowed.

Lane Rentals

No lanes shall be closed prior to or after the specified times provided in the "Traffic" article. If the contractor closes lanes of traffic prior to the start of the allowable lane closure hours or fails to open lanes of traffic by the end of the allowable lane closure hours, then a lane rental cost based upon 15 minute increments will be assessed to the contractor. The total lane rental cost assessed to the contractor will be cumulative based on an escalating scale of 15 minute increments and will be the summation of separate costs for each traffic lane and each direction of traffic in violation.

Time Period in excess of specified time	Lane rental cost per lane of traffic and per direction of traffic	Cumulative lane rental cost per direction of traffic
1st 15 minutes	$1,500	$1,500
2nd 15 minutes	$3,000	$4,500
3rd 15 minutes	$4,500	$9,000
4th 15 minutes	$6,000	$15,000

If the contractor fails to open lanes of traffic after 60 minutes from the specified times, a lane rental cost of $6,000 for each additional 15 minute increment, for each lane and each direction of traffic, will be assessed until lanes are open to traffic.

The total reduction from monies due to the contractor shall be the summation of the separate lane rental costs for each work restriction violation. The department will administer lane rental costs for the road not being open to traffic under the Failing to Open Road to Traffic administrative item.

Traffic Staging
Perform staging to pave from the high side of the roadway to the low side to provide proper roadway drainage. See plans for segment limits and staging details.

Stage 1
Perform work on the outside shoulder and travel lane.

- Adjusting outside shoulder guardrail.
- Performing outside shoulder concrete repairs.
- Milling the existing concrete rumble strips and replacing with 1.75-inch asphalt pavement.
- Milling the existing asphalt rumble strips and replacing with 2-inch asphalt pavement.
- Milling and replacing a 6-foot wide strip of 3.5-inch asphalt along the outside longitudinal shoulder joint (1-foot wide in the outside travel lane and 5-foot in the shoulder).
- Removing and replacing the existing outside 4-inch asphalt shoulder.

Stage 2A
Perform work on the inside shoulder and travel lane.

- Performing concrete repairs for the shoulder and travel lane.
- Removing and replacing the existing inside 4-inch asphalt shoulder.
- Adjusting all inside shoulder guardrail. This work is required in areas where no existing overlay is present.

Stage 2B
Perform work on the inside shoulder and travel lane.

- Milling the existing 3.5-inch overlay.
- Placing the first 1.75-inch lift of asphalt overlay on the inside shoulder and travel lane.
- Milling and replacing a 3-foot wide strip of 3.5-inch asphalt along the centerline of the travel lanes (1.5-foot wide in each lane).
- Removing and replacing the 4-inch asphalt pavement inside shoulder.

Stage 3A
Perform work on the outside shoulder and travel lane.

- Performing concrete repairs for the shoulder and travel lane.
- Adjusting outside shoulder guardrail.

Stage 3B
Perform work on the outside shoulder and travel lane.

- Milling the existing 3.5-inch overlay and/or placing the first 1.75-inch lift of asphalt overlay on the outside shoulder and travel lane.

Stage 3C
Perform work on the outside shoulder and travel lane, along with structural and joint repair work.

- Placing the top 1.75-inch surface lift of asphalt overlay on the outside shoulder and travel lane.

Stage 4
Perform work on the inside shoulder and travel lane, along with structural and joint repair work.

- Placing the top 1.75-inch surface lift of asphalt overlay on the inside shoulder and travel lane.
- Placing rumble strips.

Stage 5
Perform work on the outside shoulder.

- Placing rumble strips.

4. Traffic.

General
Keep IH 39 open to through traffic at all times throughout the project. Maintain all existing 12-foot wide lanes of traffic in each direction at all times, except as allowed below during nighttime single lane closures. Keep all ramps and other roadways intersecting IH 39 open to traffic at all times except as allowed below.

All proposed work within the driving lanes is planned for nighttime operations. Traffic will be reduced to 1 lane during nighttime work hours, to allow for adequate work zone limits. Any pavement removal or milling, base patching, and overlay work shall require the contractor to reopen that lane to traffic the following morning, and the contractor shall either completely backfill the excavated work zone or shall provide a "safety edge" (navigable slope from the edge of pavement to the work zone) at the conclusion of each night's work. Daytime shoulder closures for guardrail work are allowed.

At the conclusion of each night's work, restore all pavement marking prior to opening roadway to traffic.

Do not park or store equipment, vehicles, or construction materials within the clear zone of any roadway carrying traffic during non-working hours except at locations and periods of time approved by the engineer. At such locations, the material and equipment involved shall not constitute a hazard to the traveling public

During working hours, keep construction vehicles within the work zone to an absolute minimum.

No contractor equipment, including trucks, shall be allowed to use maintenance/emergency crossovers for changing direction of travel.

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

Closures

Provide arrow boards for use during all lane closures in accordance to the MUTCD. Arrow boards for lane closures will be paid for under the item Traffic Control Arrow Boards for each night with a lane closure where an arrow board is in use.

Perform traffic control for lane closures as shown on the Construction Staging plan.

The length of lane closures will be limited to work to be done that night.

All lane, ramp, and shoulder closures shall be removed when work is not in progress. Failure to reopen closed lanes, ramps, and shoulders shall be subject to penalties specified under the article "Prosecution and Progress".

In cases where the work zone requires the contractor to pave through a ramp, that ramp will require closure for the night of construction. All hours of ramp closures fall within the hours allowed for single lane closures as specified below. Provide a three-day warning (via changeable message board) prior to closing any ramp. Closure of ramps shall be kept to a minimum. Do not close any one ramp more than five total nights unless approved by the engineer.

Same night concurrent ramp closure restrictions are outlined in the table below:

Ramp Closed	Ramps not allowed to be closed concurrently
NB IH 39/90 offramp to EB USH 14	NB IH 39/90 offramp to STH 26
NB IH 39/90 offramp to WB USH 14	NB IH 39/90 offramp to STH 26
NB IH 39/90 onramp from USH 14	NB STH 26 to NB IH 39/90 and SB STH 26 to NB IH 39/90 onramps
SB IH 39/90 offramp to WB USH 14	SB IH 39/90 offramp to STH 26
SB IH 39/90 offramp to EB USH 14	SB IH 39/90 offramp to STH 26
SB IH 39/90 onramp from USH 14	NB STH 26 to SB IH 39/90 and SB STH 26 to SB IH 39/90 onramps
NB IH 39/90 offramp to STH 26	NB IH 39/90 to WB USH 14 and NB IH 39/90 offramps
NB IH 39/90 onramp from NB STH 26	USH 14 to NB IH 39/90ramp
NB IH 39/90 onramp from SB STH 26	USH 14 to NB IH 39/90ramp
SB IH 39/90 offramp to STH 26	SB IH 39/90 to WB and EB USH 14 offramps
SB IH 39/90 onramp from SB STH 26	SB IH 39/90 offramp from USH 14
SB IH 39/90 onramp from NB STH 26	SB IH 39/90 offramp from USH 14
NB IH 39/90 offramp to STH 59	NB IH 39/90 offramp to STH 51
NB IH 39/90 onramp from STH 59	NB IH 39/90 onramp from STH 51
SB IH 39/90 offramp to STH 59	SB IH 39/90 offramp to STH 51
SB IH 39/90 onramp from STH 59	SB IH 39/90 onramp from STH 51
NB IH 39/90 offramp to STH 51	NB IH 39/90 offramp to STH 56
NB IH 39/90 onramp from STH 51	NB IH 39/90 onramp from STH 56
SB IH 39/90 offramp to STH 51	SB IH 39/90 offramp to STH 56
SB IH 39/90 onramp from STH 51	SB IH 39/90 onramp from STH 56

All ramp closures are subject to the approval of the region traffic engineer. Times listed for lane and ramp closure restrictions include setup and breakdown of any equipment and traffic control devices. Notify all local emergency services at least 24 hours prior to closing and re-opening ramps on IH 39. Provide the State Highway Patrol, the Rock and Dane County Sheriff's Department, and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Shoulders may be closed if required by work operations, but the right and left shoulder may not be closed in the same area at the same time. Install traffic control for shoulder closures for guardrail work as shown on the plan. Notify Wisconsin State Patrol, Rock County Sherriff's Department, State Traffic Operations Center (STOC), and local emergency units at least 24 hours prior to shoulder closures.

Allowable Lane Closure Hours
From the southerly project limits to Kennedy Road overpass, nighttime single lane closures will be allowed nightly:

- 8:00 PM Monday to 5:00 AM Tuesday
- 8:00 PM Tuesday to 5:00 AM Wednesday
- 8:00 PM Wednesday to 5:00 AM Thursday
- 8:00 PM Thursday to 5:00 AM Friday
- 9:00 PM Friday to 7:00 AM Saturday
- 8:00 PM Saturday to 7:00 AM Sunday
- 10:00 PM Sunday to 5:00 AM Monday

From the Kennedy Road overpass to the northern project limits, nighttime single lane closures will be allowed nightly:

- 7:00 PM Monday to 5:00 AM Tuesday
- 7:00 PM Tuesday to 5:00 AM Wednesday
- 7:00 PM Wednesday to 5:00 AM Thursday
- 7:00 PM Thursday to 5:00 AM Friday
- 9:00 PM Friday to 7:00 AM Saturday
- 7:00 PM Saturday to 7:00 AM Sunday
- 10:00 PM Sunday to 5:00 AM Monday

If the specified lane closure times noted above are exceeded, the project will be utilizing an escalation scale for lane rental costs to the contractor as noted in "Prosecution and Progress".

Wisconsin Lane Closure System Advanced Notification
Provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System:

Lane closures (without width, height or weight restriction)	14 calendar days
Extended closure hours	3 business days
Service ramp closures	3 business days
System ramp closures	7 calendar days
Lane closures (with width, height or weight restriction)	14 calendar days
Project start	14 calendar days
Construction stage changes	14 calendar days

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

Lane Width Requirements
During nighttime lane closures, maintain a minimum 12-foot lane in each direction for all stages of traffic with the exception of 11-foot minimum lane width for Stage 3C.

During nighttime lane closures, maintain a minimum roadway width (lanes and shoulders) of 13-feet for Stage 3C and 14-feet for Stages 3A and 3B.

During daytime operations, provide 2 full travel lanes and shoulder(s), with 30-foot minimum during shoulder closures for guardrail adjustments and 40-foot typical, in each direction.

Speed Limit Reduction
Reduce regulatory speed limit to 55 mph during nighttime construction. Cover existing 65 mph sign during lane closures. Cover 55 mph sign during non-lane closure periods.

Portable Changeable Message Signs
Place Traffic Control Signs Portable Changeable Message at the beginning of the project in each direction of IH 39 at least 14 calendar days prior to the beginning of construction. Place Traffic Control Signs Portable Changeable Message for all lane and ramp closures as shown on plan at least seven days prior to the lane or ramp closure. Obtain approval from the department for all messages for the Traffic Control Signs Portable Changeable Message. The engineer shall contact Jeff Gustafson at the Southwest Region Madison Office, (608) 516-6400. All lane closures outside of allowable closures and all ramp closures are subject to the approval of the region traffic engineer.

Detours
Ramp closures are anticipated to be overnight only, with ramps open during daytime operations. Advanced warning shall be provided to drivers 3 days in advance of overnight ramp closures via Portable Changeable Message Signs.

Oversized Over Weight (OSOW) Trucking Operations
Place OSOW signage in accordance to traffic control details prior to the first traffic stage reducing the travelled way plus shoulder width to less than 16 feet. Notify the engineer for approval at least one week in advance of the lane width reduction requiring OSOW notification. Place advanced signs prior to the STH 11 interchange on the south end of the project and prior to the STH 51 interchange on the north end of the project. Permitted traffic will be required to use the alternate route during nighttime paving operations for the remaining duration of the project.

Traffic Control Devices
Place drums for lane or shoulder closures 1-foot minimum from edge of live traffic lane except as shown on the plan. Drums placed on the centerline during Stage 3 may be moved out towards traveled way during paving operations, but pulled back on centerline immediately after paving operations are complete. Drums placed adjacent to the work areas shall be pulled back from the traveled lane when work is not in progress.

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to properly route traffic or work operations.

Do not disturb, remove or obliterate any permanent traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways not shown on the plans without approval of the engineer.

Vehicle Strobe Lights
Supplement standard spec 107.8 as follows:

Equip all contractors' vehicles and equipment operating in or near live traffic lanes with at least one hazard identification beacon (flashing amber light). The flashing amber light shall be activated when vehicles or equipment are operated on the roadway, parked in close proximity to the roadway, and when entering or exiting live lanes of traffic. The flashing amber light shall be mounted approximately midway between the transverse extremities of the vehicles or machinery and at the highest practicable point that provides visibility from all directions. The light shall be of the flashing strobe or revolving type meeting the following requirements:

Flashing Strobe Type Light	**Revolving Type Light**
360-degree lens	360-degree lens
60 to 90 flashes per minute	45 to 90 flashes per minute
5-inch minimum height	4 5/8-inch minimum height
3 ¾-inch minimum diameter	3 ¾-inch minimum diameter

The light shall be equipped with bulbs of 50 candlepower minimum. Mounting shall be either magnetic or permanent. No compensation for furnishing and installing the flashing amber light to contractor owned construction equipment or vehicles will be provided for in the contract.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 39 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 2, 2014 to noon Monday, May 5, 2014 for Fishing Season Opener;
- From noon Friday, May 23, 2014 to noon Tuesday, May 27, 2014 for Memorial Day;
- From noon Thursday, July 3, 2014 to noon Monday, July 7, 2014 for Independence Day;
- From noon Friday, August 29, 2014 to noon Tuesday, September 2, 2014 for Labor Day;
- From noon Friday, October 10, 2014 to noon Tuesday, October 14, 2014 for Columbus Day;
- From noon Friday, November 21, 2014 to noon Monday, November 24, 2104 for Gun Deer Season Opener;

- From noon Wednesday, November 26, 2014 to noon Monday, December 1, 2104 for Thanksgiving.

107-005 (20050502)

6. Utilities.

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

There are utility facilities within the construction limits of this project. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities for the underground facilities in the area, as required per statutes prior to any work starting. Use caution to maintain the integrity of underground utilities and maintain OSHA code clearances from overhead facilities at all times.

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

Alliant Energy – Electricity/Gas/Petroleum
ANR Pipeline Company
ATC Management, Inc.
AT&T Wisconsin
Century Link Communications
Charter Communications
Consolidated Koshkonong Sanitary District
City of Edgerton Water and Sewer
Frontier Communications
City of Janesville Water and Sewer
Kentucky Data Link/Paetec – Communications
City of Milton Wastewater
Northern Natural Gas Company
Rock County Electric Cooperative
TDS Telecom Communications
We Energies – Electricity/Gas/Petroleum
Wisconsin Department of Transportation – Communications
WisDOT RWIS Program Communication Tower

If utility conflicts occur, they will be adjusted during construction in coordination with the contractor.

7. Other Contracts.

Other contracts in the project area include:

Project 1007-10-71 IH 39 at Siggelkow Road. WisDOT PM is James Buschkopf, (608) 246-3851.

8. Coordination with WisDOT Maintenance.

Notify Jamie Grainger at (608) 246-7915 at least 24 hours prior to identifying concrete repair locations. Notify Steve Katzner at (608) 246-7994 at least 24 hours prior to milling the bridge decks.

9. Railroad Insurance and Coordination.

A Description
Comply with standard spec 107.17 for all work affecting Wisconsin and Southern 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.

Provide the second policy in the name of Wisconsin and Southern Railroad Company. Provide evidence of the required coverage, and duration to Ben Meighan, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co., 1890 East Johnson Street, Madison, WI 53704; TELEPHONE (414) 438-8820; Ext. 4201; FAX (608) 243-9225; email: bmeighan@watcocompanies.com. Include the following information on the insurance document:

Project 1001-01-62
Route Name IH 39, Rock County
Crossing ID 391642R
Railroad Subdivision Madison
Railroad Milepost 108.55
WisDOT Structure B-53-77

Project 1001-01-62
Route Name IH 39, Rock County
Crossing ID 392370J
Railroad Subdivision Madison
Railroad Milepost 102.80
WisDOT Structure B-53-83

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 Ben Meighan, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co., 1890 East Johnson Street, Madison, WI 53704; TELEPHONE (414) 438-8820; Ext. 4201; FAX (608) 243-9225; email: bmeighan@watcocompanies.com for consultation on railroad requirements at Crossing ID's 391642R and 392370J (overpass Structures B-53-77 and B-53-83) 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 4 through freight trains operate daily through the Crossing ID 391642R (overpass Structure B-53-77). Through freight trains operate at up to 25 mph. No switching movements occur at this location.

Approximately 4 through freight trains operate daily through the Crossing ID 392370J (overpass Structure B-53-83). Through freight trains operate at up to 25 mph. No switching movements occur at this location.

10. Environmentally Sensitive Locations.

The department has not obtained a U.S. Army Corps of Engineers Section 404 permit as proposed work is not encroaching into any adjacent wetlands on the project. Avoid placing any equipment, stockpiling any material or performing any grading that impacts wetland locations.

11. Archaeologically Significant Sites.

Riverview Resort is an uncatalogued burial site located approximately between Stations 1151NBR+00 to 1163NBR+00 on the east side of I-39 and 1151SBR+00 to 11165SBR+00 on the west side of I-39 within the limits shown on the plans.

Whitford Map Mound is an uncatalogued burial site located approximately between Stations 1010NBR+00 to 1040NBR+00 on the east side of I-39 and 1010SBR+00 to 1052SBR+00 on the west side of I-39 within the limits shown on the plans.

Provide notice to the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at least two weeks before commencement of any ground disturbing activities along the east side of I-39 between Stations 1010NBR+00 to 1040NBR+00 and 1151NBR+00 to 1163NBR+00 and the west side of I-39 between Stations 1010SBR+00 to 1052SBR+00 and 11151SBR+00 to 11165SBR+00. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.

BTS-EPDS can be contacted through the following representatives:

Jim Becker: (608) 261-0137
Lynn Cloud: (608) 266-0099

If human bone is discovered during construction, work activities in the area shall immediately cease and the qualified archeologist will contact the Wisconsin Historical Society at (800) 342-7834 or (608) 264-6507 for compliance with Wisconsin Statute 157.70 regarding the protection of human burial sites.

The area within the limits of the Riverview Resort and the Whitford Map Mound shall not be used for borrow or waste disposal, and the site area not currently capped by asphalt/concrete shall not be used for the staging of personnel, equipment and/or supplies.

12. Construction Noise – Night Time Work Hours.

Standard spec 107.8(6) does not apply. Contractor shall be allowed to work 24 hours. The department is coordinating to inform the City of Janesville of the night time working requirements.

13. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

James Gondek, License Number AII-108099, and Angela Voit, License Number 112673 inspected Structure B-53-73, B-53-75, and B-53-77 for asbestos on December 5-7, 2005. No regulated Asbestos Containing Material (RACM) was found on these structures. A copy of the inspection report is available from: James Buschkopf (608) 246-3851.

In accordance to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to James Buschkopf, (608) 246-3851, and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

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

- Site Name: Structure B-53-73, IH 90 westbound over Newville Rd
- Site Address: 6.2M W JCT STH 26 TO
- Ownership Information: WisDOT Transportation SW Region, 2101 Wright Street, Madison, WI 53704
- Contact: James Buschkopf
- Phone: (608) 246-3851
- Age: 53 years old. This structure was constructed in 1961.
- Area: 6,741 SF of deck

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

- Site Name: Structure B-53-75, IH 90 westbound over CTH M
- Site Address: 4.7M W JCT STH 26 TO
- Ownership Information: WisDOT Transportation SW Region, 2101 Wright Street, Madison, WI 53704
- Contact: James Buschkopf
- Phone: (608) 246-3851
- Age: 53 years old. This structure was constructed in 1961.
- Area: 4,728 SF of deck

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

- Site Name: Structure B-53-77, IH 90 westbound over WSOR Railroad
- Site Address: 4.6M W JCT STH 26 TO
- Ownership Information: WisDOT Transportation SW Region, 2101 Wright Street, Madison, WI 53704
- Contact: James Buschkopf
- Phone: (608) 246-3851
- Age: 53 years old. This structure was constructed in 1961.
- Area: 5,945 SF of deck

Insert the following paragraph in Section 6.g.:

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

107-125 (20120615)

14. Debris Containment B-53-77, Item 203.0225.S.01; Debris Containment B-53-83, Item 203.0225.S.02.

A Description

This special provision describes providing a containment system to prevent debris from structure removal, reconstruction, or other construction operations from falling onto

facilities located under the structure. Using this containment system does not relieve the contractor of requirements under standard spec 107.17 and standard spec 107.19 or requirements under a US Army Corps of Engineers Section 404 Permit.

B (Vacant)

C Construction

Prior to starting work, submit a debris containment plan to the engineer for review. Incorporate engineer-requested modifications. Do not start work over Wisconsin and Southern Railroad Company until the engineer approves the debris containment plan.

Maintain adequate protection throughout construction for people and property within the potential fall zone. Ensure that a containment system capable of protecting underlying facilities from falling construction debris is in place before beginning deck repair, parapet removal, or other operations that may generate debris.

At least 15 working days before conducting potential debris generating operations, contact the following owners or lessees:

1. Wisconsin Southern Railroad Company
   1890 East Johnson Street
   Madison, WI 53704
   Attention: Ben Meighan, Superintendent of Maintenance of Way
   Phone: (414) 438-8820 Ext. 4201

2. Wisconsin Department of Transportation
   DTSD SW Region
   2101 Wright Street
   Madison, WI 53704
   Attention: James Buschkopf
   Phone: (608) 246-3851

D Measurement

The department will measure Debris Containment B-53-77 and Debris Containment B-53-83 as a single lump sum unit of work for each structure, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
203.0225.S.01	Debris Containment B-53-77	LS
203.0225.S.02	Debris Containment B-53-83	LS

Payment is full compensation for furnishing, installing, maintaining, and removing a debris containment system.

203-010 (20080902)

15. Removing Asphaltic Surface Milling.

This work shall be in accordance to the pertinent requirements of standard spec 204, except that milling of concrete pavement repairs or replacements is incidental to this bid item. An estimated quantity of 450 SY of concrete milling is anticipated.

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:

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

[1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

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

[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Department verification testing is optional for quantities of 6000 tons or less.

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

B Materials

B.1 Quality Control Plan

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

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.

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

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://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. Base Aggregate Dense ¾-Inch, Item 305.0110.

Revise standard spec 301.2.4.3 as follows:

Furnish aggregate classified as crushed stone for ¾-Inch base when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

18. Dust Control.

When engaged in roadway cleaning operations, use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere. Payment for cleaning operations and equipment employed in cleaning operations is incidental to the contract.

19. QMP HMA Pavement Nuclear Density.

A Description

Replace standard spec 460.3.3.2 (1) and 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^3. 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^3 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^3 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^3 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.

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

Table 1

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

(1) A lot represents a combination of the total daily tonnage for each layer and target density.

(2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one sublot 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 sublot and perform the number of random tests as specified in Table 2.

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

Table 2

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

(1) Calculate the average sublot densities using the individual test results in each sublot.

(2) If all sublot 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 sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot 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 sublot 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 sublot 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 sublot. Testing in a previously accepted sublot 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 sublot 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 sublot and lot densities.

(6) If 2 consecutive sublot 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 sublot 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 sublot using the same testing requirements and frequencies as the QC tester.

(3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.

(4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 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 sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.

(4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

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

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

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

E.2 Disincentive for HMA Pavement Density

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

E.3 Incentive for HMA Pavement Density

(1) Delete standard spec 460.5.2.3.

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

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

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

(4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.

(5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.

460-020 (20100709)

20. Removing Asphaltic Concrete Deck Overlay B-53-73, Item 509.9010.S.01; B-53-75, Item 509.9010.S.02; B-53-77, Item 509.9010.S.03.

A Description

Remove the asphaltic concrete overlay with or without an underlayment of waterproof membrane by milling the entire bridge deck in accordance to standard spec 204, the plans, and as hereinafter provided.

B (Vacant)

C Construction

C.1 Milling

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

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

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

- Is free of sharp protrusions;
- Has uniform transverse grooves that measure up to ¼-inch vertically and transversely; and
- If applicable, is acceptable to the manufacturer of the sheet waterproof membrane.

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

C.2 Cleaning

Blast-clean the entire surface of the deck, the vertical faces of curbs, sidewalks, and parapets to the depth of the adjoining overlay.

Clean the surface on which the new overlay will be placed to remove all loose particles and dust by either brooming and water pressure using a high-pressure nozzle, or by water and air pressure. Use water for cleaning that conforms to specifications for water under standard spec 501.2.4.

The removed asphaltic concrete shall become the property of the contractor; properly dispose of it in accordance to standard spec 204.

D Measurement

The department will measure Removing Asphaltic Concrete Deck Overlay (Structure) in area by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.9010.S.01	Removing Asphaltic Concrete Deck Overlay B-53-73	SY
509.9010.S.02	Removing Asphaltic Concrete Deck Overlay B-53-75	SY
509.9010.S.03	Removing Asphaltic Concrete Deck Overlay B-53-77	SY

Payment is full compensation for removing the asphaltic concrete with or without an underlayment of waterproof membrane; cleaning the concrete surfaces; and for properly disposing of all materials.

509-010 (20110615)

21. Nighttime Work Lighting-Stationary.

A Description

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

B (Vacant)

C Construction

C.1 General

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

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

1. Layout, including location of portable lighting – lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.

2. Specifications, brochures, and technical data of all lighting equipment to be used.

3. The details on how the luminaires will be attached.

4. Electrical power source information.

5. Details on the louvers, shields, or methods to be employed to reduce glare.

6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.

7. Detail information on any other auxiliary equipment.

C.2 Portable Lighting

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

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

C.3 Light Level and Uniformity

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

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

C.4 Glare Control

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

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

1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.

2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

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

C.5 Continuous Operation

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

D (Vacant)

E Payment

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

643-010 (20100709)

22. Polyester Polymer Concrete Masonry, SPV.0025.01.

A Description

This special provision describes furnishing and applying a polyester polymer concrete with a high molecular weight methacrylate (HMWM) resin prime coat, to the limits shown on the plans as a structural concrete masonry material

B Materials

B.1 Primer

The high molecular weight methacrylate (HMWM) resin shall be low viscosity and have low odor, and shall meet the following requirements:

Property	Requirements[A]	Test Method
Viscosity	≤ 25 cps	ASTM D 2196 – Brookfield RVT
Specific Gravity	0.90 – 1.10	ASTM D 1475
Flash Point	≥ 180°F	ASTM D 3278
Tack-free Time	≤ 400 minutes	California Test Method 551
Vapor Pressure	≤ 1 mm Hg	ASTM D 323
Gel Time	10 – 150 min	ASTM C 881, para.11.2, mod.
Tensile Strength	≥ 2,000 psi (7 days)	ASTM D 638
Adhesive Strength	≥ 250 psi (24hrs)	ACI 503R, Append. A
Compressive Strength	≥ 3,000 psi (24hrs)	ASTM D 695

[A] Values are based on specimens or samples cured or aged and tested at 77°F.

B.2 Resin

The material shall be a polyester polymer system composed of a two-component, 100 percent solids, thermosetting compound with the following properties:

Property	Requirements[B]	Test Method
Gel Time	10 – 25 min	ASTM C 881
Viscosity	1 – 5 poises	ASTM D 2196 – Brookfield RVT
Absorption	≤ 1 percent (24 hr)	ASTM D 570
Tensile Elongation	30 – 80 percent (7 days)	ASTM D 638
Tensile Strength	≥ 2,000 psi (7 days)	ASTM D 638
Permeability to Chloride ion	≤ 100 coulombs (28 days)	AASHTO T 277

[B] Values are based on specimens or samples cured or aged and tested at 75°F.

B.3 Aggregates

The finishing sand aggregate shall be commercial quality dry blast sand. Furnish material conforming to the following: 95% passing the No. 8 sieve and at least 95% retained on the No. 20 sieve.

For mixing with the polyester polymer, furnish natural or synthetic aggregates that have a proven record of performance in applications of this type. Furnish aggregates that are non-polishing, clean, free of surface moisture, fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and meet the following properties and gradation requirements:

Aggregate Properties:

Property	Requirements	Test Method
Moisture Content	£ 0.2%	ASTM C566
Hardness	³ 6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face and 80% with at least 2 fractured faces of material retained on No.16	ASTM 5821

Gradation:

Sieve Size	% Passing by Weight
3/8”	100
No. 4	70
No. 8	50
No. 16	44
No. 30	30
No. 50	5-20
No. 100	1
No. 200	0

B.4 Required Properties of Polyester Polymer Concrete Masonry System

The required properties of the polyester polymer concrete system are listed in the table below:

Property	Requirements[C]	Test Method
Minimum Compressive Strength	1,000 psi (8 hrs) 5,000 psi (24 hrs)	ASTM C 579 Method B, Modified [D]
Thermal Compatibility	No delaminations	ASTM C 884
Minimum Pull-off Strength	250 psi (24 hrs)	ACI 503R, Appendix A

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

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

Polyester polymer concrete shall a have minimum cure time according to subsection C.4 of this special provision.

B.5 Approval of Polyester Polymer System

A minimum of 20 working days prior to application, submit product data sheets and specifications from the manufacturer, and a certified test report to the engineer for

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

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

The product history/reference projects consist of a minimum of 5 bridge/roadway locations where the proposed polyester polymer system has been applied in Wisconsin or in locations with similar climate – include contact names for the facility owner, current phone number or e-mail address, and a brief project description.

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

C Construction

C.1 General

Perform work in accordance to standard spec 502 except as modified herein.

Preserve and reuse existing reinforcing steel in accordance to standard specs 509.3.1 and 509.3.5(2)2.

Conduct a pre-installation conference with the manufacturer's representative prior to construction to establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and install the polyester polymer system according to the manufacturer’s instructions. The manufacturer's representative familiar with the polyester polymer system installation procedures shall be present at all times during surface preparation and material placement to provide quality assurance that the work is being performed properly.

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

C.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 according to the International Concrete Repair Institute Technical Guideline No. 03732. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ACI 503R, Appendix A of the ACI *Manual of Concrete Practice*. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of ¼ inches or more is greater than 50% of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare areas and surfaces where new polyester polymer system is to be placed by shotblasting as described above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours prior to the application of the primer. Do not allow traffic on the repair/replacement area surfaces between shotblasting and application of the primer. Do not perform more removal and preparation than can be replaced within the lane closure period available, accounting for cure time.

Just prior to masonry placement, clean all dust, debris, and concrete fines from the repair area surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely.

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

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

Lightly sandblasting (breeze blast) the prepared repair surface if any of the following occurs:
If after shot blasting, the repair surface is exposed to rain or dew

C.3 Application of the Primer
Do not apply the primer if any of the restrictions listed in C.4 are present. Apply primer to the repair area surface within 5 minutes of mixing at approximately 1 gallon per 100 square feet. Use a squeegee, roller, broom, low pressure sprayer, etc. to distribute the material uniformly. Remove excess buildup. Wait a minimum of 15 minutes before placement of polyester polymer.

C.4 Application of the Polyester Polymer
Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions. Do not apply the polyester polymer system if any of the following exists:

- Ambient air temperature is below 50^{o}F.
- Concrete surface temperature is below 50^{o}F or above 100 ^{o}F.
- Moisture content in the existing concrete surface exceeds 4.5% when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured in accordance to ASTM D4263.
- Rain is forecasted within 12 hours of completion.
- Materials component temperatures below 50^{o}F or above 99 ^{o}F.
- Concrete age is less than 28 days unless approved by the engineer.
- If gel time is 10 minutes or less at predicted high air temperature for the day.

The polyester concrete shall be placed within 120 minutes after the primer has been applied.

The polyester concrete shall contain approximately 12 percent polyester resin by weight of dry aggregate; the exact percentage will be determined by the engineer during placement to enable proper finishing and texturing of the material surface.

The amount of initiator used in polyester concrete shall be sufficient to produce an initial set time between 30 – 120 minutes during placement.

Termination edges of material placement may require application and finishing by hand trowel. Finishing and texturing equipment shall be fitted with vibrators and tines or other means of consolidating and texturing the polyester concrete to the required compaction.

The finish sand shall be applied by either mechanical or hand dispersion immediately after strike-off, before gelling occurs. Apply at approximately 15 to 20 lbs per 100 square feet or until saturation as determined by the engineer.

Allow material to fully cure before allowing traffic on the bridge. Cure times will vary depending on product and ambient temperature; refer to manufacturer's recommendation. At a minimum wait 4 hours before allowing traffic on the treated area.

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

D Measurement

The department will measure Polyester Polymer Concrete Masonry by the cubic foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0025.01	Polyester Polymer Concrete Masonry	CF

Payment is full compensation for preparing the surface; for formwork; for tensile bond testing; for providing and placing the polyester polymer concrete masonry; for cleanup; and for sweeping/vacuuming and disposing of excess materials.

23. PCMS Remote Communications, SPV.0045.01.

A Description

This special provision describes remote communications requirements for use with portable changeable message signs (PCMS) provided under the contract.

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

Provide management IP address, serial port setting, and password(s). for the cellular modem to the department. The department will notify contractor of message changes.

Furnish antenna cable without splices mounted at the highest practical location on the PCMS.

C Construction
Install a cellular modem in a lockable, weatherproof compartment in the PCMS trailer.

A minimum of 14 days before deployment, demonstrate to the department that the installed system is capable of communicating with Trans Suite software.

If remote communications are interrupted or temporarily unavailable, the department will direct the contractor to manually change the message.

D Measurement
The department will measure PCMS Remote Communications by the day acceptably completed, measured as the number of calendar days that remote communications are available and functioning properly. The department will measure separately for each PCMS requiring remote communications that is available for exclusive use under the contract. The department will deduct one day for each calendar day remote communications are required but out of service for more than 2 hours.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	PCMS Remote Communications	DAY

Payment is full compensation for providing remote communications capability, and for making message changes if remote communications are interrupted or temporarily unavailable.

24. Securing Structure Covers, SPV.0060.01.

A Description
Provide a fastening device on any existing drainage structure that is within the wheelpath during staged construction.

B Materials
Perform the work in accordance with the applicable provisions of standard spec 611 and as herein provided.

C Construction
Prior to any traffic shift where inlets or manholes are within the shifted traffic wheelpath, secure the drainage cover to the frame by weld, bolt, or other engineer approved method. Prior to fastening any cover, place any required inlet protection.

Upon completion of adjacent work, remove fastening device to restore the drainage structure to its preconstruction condition.

D Measurement
Department will measure Securing Structure Covers as each individual location, acceptably completed. Locations that require reinstallation of the fastening device is incidental to the contract.

E Payment
Department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Securing Structure Covers	Each

Payment is full compensation for securing drainage covers to structure frames with an engineer approved fastening device or method, maintenance of the fastening device, and removal of fastening device upon completion of the work. This work also includes any cleaning, sandblasting, and disposal of removed material. The department will pay for covers, including frames, grates and lids separately if damaged due to traffic loading only.

24. Rout and Seal Joint, Item SPV.0090.01.

A Description
This special provision describes routing, cleaning, drying, and sealing the transverse joint between the approach slab and concrete pavement or approach slab and bridge abutment. The work shall conform to the plan details and as hereinafter provided.

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

Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the safe heating temperature. Present the manufacturer's certification stating that the compound meets the requirements of this specification. Prior to applying the sealant,

furnish to the engineer a certificate of compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

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

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

C.2 Methods

Conduct the operation so that the routing, cleaning, and sealing are continuous operations. Traffic shall not be allowed to knead together or damage the routed joints. Rerout, if necessary, routed joints not sealed before traffic is allowed on the pavement when routing and sealing operations resume at no additional cost to the department.

Rout the transverse joint to a minimum width of 2-inches and a minimum depth of 2-inches. Use a power vacuum or equivalent to immediately remove any routing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity, or both. Prior to sealing, dry the cleaned joints either by air-drying or by using a high capacity torch. Immediately prior to sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor shall be required to clean the joint again.

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

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

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

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

D Measurement
The department will measure Rout and Seal Joint in length by the linear foot, completed according to the contract and accepted.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Rout and Seal Joint	LF

Payment is full compensation for rout cutting; cleaning the joint; furnishing and installing all materials, including sealant.

25. Sawing Concrete Partial Depth, Item SPV.0090.02.

A Description
This special provision describes partial depth sawing of existing concrete pavement in accordance to standard spec 690, the plans, and as hereinafter provided.

B (Vacant)

C Construction
Conform to standard spec 690.3 for the item Sawing Concrete except for the following:

Saw to the depth shown on the plan or as the engineer directs.

D Measurement
Conform to standard spec 690.4.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Sawing Concrete Partial Depth	LF

Payment is full compensation for furnishing all sawing and sludge removal.

26. Fill Existing Rumble Strips, SPV.0090.03.

A Description

This special provision describes filling the existing rumble strips prior to shifting traffic and resurfacing. The intent is to fill the rumble strip indentations so that the traffic can safely navigate through the work zone. Perform this work in accordance to the plan details and herein after provided.

B Materials

Furnish asphaltic mixture meeting the requirements specified for Type E-10 under standard spec 460.2; except the engineer will not require the contractor to conform to the quality management program specified under standard spec 460.2.8.

C Construction

Clean, fill, and compact the rumble strip indentations using methods that will provide a sound smooth surface which will handle traffic and not leave a detrimental residue on the surface. Special care to limit the splatter of asphaltic material onto existing concrete is required.

D Measurement

The department will measure Fill Existing Rumble Strip by the linear foot, acceptably completed, measured as the length along the side of the traveled way, from the center of the first rumble strip groove filled in a segment to the center of the last rumble strip groove filled in the segment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Fill Existing Rumble Strips	LF

Payment is full compensation for providing all materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

27. Restore Existing Rumble Strips, SPV.0090.04.

A Description

This special provision describes restoring the previously filled existing rumble strips due to traffic control needs. The intent is to restore the rumble strip indentations to requirements outlined in the standard specifications and standard detail drawings. Perform this work in accordance to the plan details and herein after provided.

B (Vacant)

C Construction
Remove the material from the existing rumble strip while not damaging the integrity, dimensions, and performance in accordance to the standard detail drawings, and standard specs 416 and 465. Remove any excess asphaltic residue remaining on the existing concrete pavement outside of the rumble strips. If damaged, repairs to the existing rumble strips are incidental to the contract.

D Measurement
The department will measure Restore Existing Rumble Strips by the linear foot, acceptably completed, measured as the length along the side of the traveled way, from the center of the first rumble strip groove filled in a segment to the center of the last rumble strip groove filled in the segment.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Restore Existing Rumble Strips	LF

Payment is full compensation for providing all materials; removal asphaltic rumble strip fillings, containment of the asphalt during removal operations; and for properly disposing of all materials.

28. Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling, Item SPV.0090.05.

A Description
This special provision describes removing Tapered and Notched Longitudinal Joints called for in the plans prior to paving the adjacent lane in order to create a vertical longitudinal joint.

B (Vacant)

C Construction
Remove the notched wedge longitudinal joint constructed according to standard spec 450.3.2.8 immediately prior to paving the adjacent lane. Provide a uniform milled surface that is reasonably plane, free of excessively large scarification marks, and has the grade and transverse slope the plans show or the engineer directs. Do not damage the remaining pavement.

Use a self-propelled milling machine with depth, grade, and slope controls. Shroud the drum to prevent discharging loosened material onto adjacent work areas or live traffic lanes. Provide an engineer-approved dust control system.

Do not windrow or store material on the roadway.

D Measurement
The department will measure Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling by the linear foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling	LF

Payment is full compensation for removing the pavement; and for properly disposing of all materials. As part of this bid item, an estimated quantity of 5000 LF of concrete milling is anticipated.

29. Continuously Reinforced Concrete Pavement SHES Repair, Item SPV.0180.01.

A Description
This special provision describes repairing continuously reinforced concrete pavement, in accordance to standard spec 416, the plans, and as hereinafter provided.

B Materials
Furnish SHES concrete conforming to standard specs 416.2.5.1 and 416.2.5.2, but using a non-chloride accelerator. Furnish tie bars and steel reinforcement conforming to standard specs 505.2.4 and 505.2.6.

C Construction
Construct as specified in standard spec 416.3.8. Use extreme care when removing concrete at the ends of the repair between the full depth and partial depth saw cuts. Repair any damage to the existing reinforcing steel or concrete that is to remain in place.

Reinforce the concrete as the plans specify. Keep reinforcement clean and free from rust scale, straight, and free from distortion. Store all reinforcement steel, received on the job, in engineer-approved storage and distribute only as needed for immediate placement.

Place the bar steel reinforcement after properly preparing the subgrade. Place the longitudinal bars on top of the transverse bars and firmly tie or fasten together at each intersection. Support the assembled bars on bar chairs at a depth the plans show. Bar chairs are subject to the engineer's approval. Use bar chairs sufficient in strength and number to hold the steel reinforcement in position during construction.

Splice longitudinal bars by lapping, as the plans show, and firmly tie or fasten together. Arrange splices as the plans show.

Protect all bar steel reinforcement left protruding from the slab for any extended period from deterioration caused by exposure.

Do not bend bar steel reinforcement or subject to loading or forces that distort the steel or weaken the bond to the concrete.

Tie coated bars using a procedure, equipment, and materials that do not damage or cut the coating. Use one or more of the following materials to tie coated bars:

- Engineer-approved plastic or nonmetallic material.
- Stainless steel wire.
- Nylon, epoxy, or plastic-coated wire.

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Continuously Reinforced Concrete Pavement SHES Repair	SY

Payment is full compensation for removing the existing concrete and properly disposing of removed materials; for preparing the foundation; and for furnishing, hauling, preparing, placing, curing, protecting concrete, and repairing damages. Payment includes providing tie bars in unhardened concrete and all reinforcing steel within the repair as shown in SDD, Continuously Reinforced Concrete Pavement Repair and Replacement, except for tie bars provided in concrete not placed under the contract, the department will pay separately under Drilled Tie Bars bid item as specified in standard spec 416.5. The department will pay separately for sawing existing concrete for removal, under the bid items Sawing Concrete as specified in standard spec 690.5 and Sawing Concrete Pavement Partial Depth, SPV.0090.02.

30. Continuously Reinforced Concrete Pavement Approach Slab SHES Repair, Item SPV.0180.02.

A Description

This special provision describes repairing continuously reinforced concrete pavement, in accordance to standard spec 416, the plans, and as hereinafter provided.

B Materials

Furnish SHES concrete conforming to standard specs 416.2.5.1 and 416.2.5.2, but using a non-chloride accelerator. Furnish tie bars, dowel bars, and steel reinforcement conforming to standard specs 505.2.4 and 505.2.6.

C Construction

Construct as specified in standard spec 416.3.8. Use extreme care when removing concrete at the ends of the repair between the partial depth saw cuts and above the sleeper slab. Do not damage the sleeper slab. Repair any damage to the existing reinforcing steel or concrete that is to remain in place. Cut-off the I-beam between the sleeper slab and approach slab as shown in the construction detail.

Reinforce the concrete as the plans specify. Keep reinforcement clean and free from rust scale, straight, and free from distortion. Store all reinforcement steel, received on the job, in engineer-approved storage and distribute only as needed for immediate placement.

Place the bar steel reinforcement after properly preparing the sleeper slab. Place the longitudinal bars on top of the transverse bars and firmly tie or fasten together at each intersection. Support the assembled bars on bar chairs at a depth the plans show. Bar chairs are subject to the engineer's approval. Use bar chairs sufficient in strength and number to hold the steel reinforcement in position during construction.

Splice longitudinal bars by lapping, as the plans show, and firmly tie or fasten together. Arrange splices as the plans show.

Protect all bar steel reinforcement left protruding from the slab for any extended period from deterioration caused by exposure.

Do not bend bar steel reinforcement or subject to loading or forces that distort the steel or weaken the bond to the concrete.

Tie coated bars using a procedure, equipment, and materials that do not damage or cut the coating. Use one or more of the following materials to tie coated bars:

- Engineer-approved plastic or nonmetallic material.
- Stainless steel wire.
- Nylon, epoxy, or plastic-coated wire.

Place dowel bars with expansion cap and expansion joint filler at the joint.

D Measurement

The department will measure Continuously Reinforced Concrete Pavement Approach Slab SHES Repair by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.02	Continuously Reinforced Concrete Pavement Approach Slab SHES Repair	SY

Payment is full compensation for removing the existing concrete and properly disposing of removed materials; for preparing the foundation; and for furnishing, hauling, preparing, placing, curing, protecting concrete, and repairing damages. Payment includes providing tie bars in unhardened concrete, all reinforcing steel within the repair, dowel bars and expansion cap, and expansion joint filler as shown in construction detail, *Continuously Reinforced Concrete Pavement Approach Slab SHES Repair,* except for tie bars provided in concrete not placed under the contract, the department will pay separately under Drilled Tie Bars bid item as specified in standard spec 416.5. The department will pay separately for sawing existing concrete for removal, under the bid items Sawing Concrete as specified in standard spec 690.5 and Sawing Concrete Pavement Partial Depth, SPV.0090.02.

31. Removing Rumble Strips, Item SPV.0180.03.

A Description

Remove existing rumble strips located in existing concrete shoulder along IH 39, as shown on the plans, and in accordance to the pertinent provisions of standard spec 204, and as hereinafter provided. The diamond ground area shall be filled with HMA pavement type E-10.

B Materials

Furnish HMA pavement type E-10 that is in accordance to the pertinent provisions of this contract and standard spec 465.

C Construction

The existing rumble strips shall be diamond ground to a 1.0-inch minimum depth below the lowest corrugation. Clean the diamond ground area prior to placement of tack coat. Fill the ground area with HMA pavement type E-10 to provide a smooth driving surface as directed by the engineer.

D Measurement

The department will measure Removing Rumble Strips by the square yard of existing rumble strip, prior to removal by diamond grinding, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.03	Removing Rumble Strips	SY

Payment is full compensation for diamond grinding existing rumble strips; cleaning and tacking; furnishing, placing and compacting HMA pavement type E-10; and for disposal of all materials.

32. Polymer Modified Asphalt Overlay, Item SPV.0195.01.

A Description

This special provision describes furnishing, placing and compacting a minimum 2-inch asphalt paving mix modified with a thermoplastic polymeric material, including surface preparation, application of tack coat and edge sealant.

B Materials

B.1 Composition of Mixture

The mixture shall be composed of coarse and fine aggregates, mineral filler, asphalt cement, and virgin polymeric concentrate. The final job mix design will be according to the polymer modifier manufacturer's requirements and approved by the engineer.

B.2 Fine and Course Aggregate

The fine and coarse aggregate shall conform to the requirements of standard spec 460.2. Mineral aggregates, which are inherently porous, such as blast furnace slag, expanded shale, porous limestone, and lightweight aggregates, shall not be utilized in this mixture. The final blend will be in accordance to polymer modifier manufacturer's requirements and approved by the engineer.

B.3 Mineral Filler

Mineral filler, if utilized, shall meet the requirements of standard spec 460.2.

B.4 Asphalt Cement

The asphalt cement shall conform to the requirements of standard spec 455.2. The final blend will be in accordance to the polymer modifier manufacturer's requirements and approved by the engineer.

B.5 Polymer Modifier Additive

The polymer modifier additive shall be a polymer modifier packaged in 22.5 pound (10.1 kg) units in meltable polyethylene bags, with a minimum of 45 pounds of polymer modifier. The meltable bags can be tossed into the pug mill without opening, and will melt to disperse the additive through the normal mixing action of the pug mill. The final blend will be in accordance to the polymer modifier manufacturer requirements and approved by the engineer. The modifier shall be a concentrated thermoplastic virgin polymeric material that is waterproof, has a melting point of 250 degrees Fahrenheit and an embrittlement point of -34 degrees Fahrenheit.

B.6 Deck Preparation Materials

B.6.1 Tack Coat

The tack coat shall be in accordance to the polymer modifier manufacturer's requirements and approved by the engineer.

B.6.2 Edge Sealer
The edge sealer shall be in accordance to the polymer modifier manufacturer's requirements and approved by the engineer.

B.6.3 Construction Joint Sealer
Asphalt joint sealer for saw cut construction joints shall be rubberized asphalt joint sealer certified to be in accordance to ASTM D3405 or AASHTO M301-85 specifications. Substitution of a 20-inch (500-mm) wide strip of geotextile paving fabric installed in accordance to the manufacturer's recommendations, such as Pave Prep, Dow Corning, Royston or approved equal, may be used at no additional cost if approved by the engineer.

C Construction
C.1 Wearing Surface Proportioning and Mix Design
Seven days prior to the pre-construction meeting, submit the name and location of the intended sources of supply for all bituminous pavement products. Asphalt concrete will be accepted only from an approved automated plant equipped with interlocks and printouts meeting the requirements of ASTM D995 and SS405.

Through the polymer modifier manufacturer, formulate and submit to the engineer a Job Mix Formula (JMF) that satisfies the general limits under this specification. The JMF shall be the actual gradation to be supplied. The submittal shall state the mineral aggregate sources and types, the grade and source of bituminous material used in the mixture, and the type and source of all asphalt modifiers. Furnish samples of aggregates to be used for the asphaltic concrete pavement.

Submit a complete five-point Marshall Method Mix Design for the proposed mixture to the engineer. The contractor shall be responsible for procuring the samples, materials, and performing the required Marshall tests in accordance to ASTM D1559. In the case of inadequate facilities, an independent testing firm that has sufficient experience and expertise to accomplish the desired test shall be used. Submit the name of the intended firm to the engineer for approval prior to any tests being performed. In either case, the department or its representative may monitor the entire testing procedure. If for any reason a change in production plant, aggregate, asphalt or asphalt modifier occurs or is contemplated, submit a separate JMF for the review of the engineer.

C.2 Verification of the JMF
Should the asphalt content for the proposed JMF, as determined using the range methods, not coincide with the asphalt content used in the trial specimens, prepare additional sets of specimens of the proposed JMF asphalt content to verify that the actual Marshall test results duplicate those anticipated from the curves.

Generic Formulation of the Modified Asphalt Concrete Mixture
(NOT THE FINAL JOB MIX FORMULA)

Screen Size	General Limits
	% Passing
	Total Aggregate
5/8 in.	100
½ in.	95-100
3/8 in.	80-100
No. 4	50-76
No. 8	37-54
No. 16	26-40
No. 30	17-29
No. 50	10-21
No. 100	5-16
No. 200	2-7
AC 20 (% Total Mix)	5.75-6.75
Thermoplastic Polymer	2.25% of mix

Minimum/Maximum Desired Physical Properties of the Design Mixture
(GENERIC, NOT FINAL JOB MIX FORMULA)

Stability, N, range	11000 - 16000 [2000-3000 lbs.]
Flow, mm, range	3.75 - 7.50 [15-30 flow units]
Air Voids, Percent, range	0.5 - 2.0
75 Blow verification, Air Voids percent,	max 0.5
No evidence of flushing or instability	------

Desired Physical Properties of the In-Place Mixture
(GENERIC, NOT FINAL JOB MIX FORMULA)

Air Voids, percent, max.	2.0	
Average Percent of Marshall Density, min.	97.0	
Minimum Percent of Marshall Density		94.0
No evidence of flushing or instability		-----

Production tolerances are estimated maximum variation in typical production facilities producing the specified mixture. Tolerances may exceed the design general limits. Mineral filler or metered dust collector fines may be needed based on extraction test. The Polymer Modifier additive, if added as a bagged powder, shall be introduced during the dry mix cycle. After the aggregates and thermoplastic polymer additive have mixed for approximately 10 seconds then the asphalt cement is introduced. This begins the wet mix cycle, which will last 90 seconds to ensure proper mixing of the AC, modifier and aggregates.

Using the previously determined mix design, the proper quantities of aggregate are preheated to a temperature of at least 450° F (232° C) and dropped into the pug mill. The proper amount of polymer modifier is added (45 pounds per ton of mix or 2.25% of total weight per batch). Then the AC-binder is introduced which will have a temperature of 300° - 325° F (149° C - 162° C). After the 90 second wet mix time, the mix is dropped into a truck or silo fed. The drop temperature must be above 410° F (210° C) but not hotter than 450° F (232° C). If the mix drop temperature is outside this range, the material will be rejected. To assure adequate delivery temperatures, completely cover all delivery trucks at all times with a non-porous tarp.

After the review of the Job Mix Formula (JMF) and Marshall Mix Design data, the engineer will authorize initial mix placement. Once production begins, provide the engineer with daily certification that all in place asphalt concrete materials are in substantial conformation with the submitted JMF, the project specifications in the contract and contain the materials as stated in the JMF. The polymer modifier manufacturer will have a full-time inspector in the plant for the normal time it takes to produce and place the modified asphalt material, at no additional cost to the department. For any day lost due to contractor problems such as equipment breakdowns, labor disputes, etc. the contractor will reimburse the polymer modifier manufacturer for established costs per day, per person. Polymer modifier manufacturer personnel will certify the material production, take samples and these personnel shall be fully authorized to reject any material not meeting the specifications. The polymer modifier manufacturer will retain samples for an extended period of time to be looked at or tested by the region at any time. The engineer reserves the right to verify by sampling material or all certifications and to take actions as deemed necessary, under the contract, should quality certifications be found to be in error or disingenuous.

The engineer shall be afforded access to the plant and equipment to review and verify certifications of material conformance and quality. If finding that the contractor failed to perform Quality Control or submitted an incorrect certification, it shall constitute grounds for total rejection of the involved paving and/or other action as may be indicated by the finding. Intentional misrepresentation shall constitute due cause for termination under this contract. The engineer may at any time, notwithstanding previous sampling and certification, notify and stop the contractor, reject and require the contractor to dispose of any batch of bituminous mix, which is rendered unfit for use due to temperature, oxidation, contamination, segregation or incomplete coating of aggregate. Such rejection may be based on visual inspection alone.

Place asphaltic concrete pavement on surfaces that have been tack coated and have been allowed to cure for a period of 40 minutes. Place the material at a temperature between 375° F to 390° F.

C.3 Compaction

Full compaction is required; achieve by utilizing steel double drum drive rollers used in the static mode. A minimum of two rollers will be utilized to do the compaction, one for break down with a static weight of approximately 8 tons and one finish roller with a static weight of 2 to 5 tons. The PLI (pounds per linear inch) will be at the 240 pound

specification. A third roller will be on the job to cover any breakdowns. The roller's water system shall be in perfect working order, and apply even water coverage to the asphalt mat. The Polymer Modified Asphalt is much hotter than conventional mixes and requires more water to keep the material from sticking to the steel rolls. No pneumatic tired rollers will be used on the Polymer Modified Asphalt mat. A representative of the polymer modifier manufacturer shall be present at all times during the placement of the modified asphalt material and compaction operations, at no additional cost to the department. The contractor may use other compaction means in areas where the specified roller cannot access. The use of an asphalt vibrator wacker is acceptable as long as it is in good working order, including the water system. The breakdown rolling will be done closely behind the spreading operation. The finish roller will follow break down and be used to remove imperfections in the mat. The rolling pattern will be straight with the paving direction, with no turning except what is necessary to move from pass to pass. The polymer modifier manufacturer's representative will indicate the rolling pattern and the frequency of passes. Any changes to the paving and rolling procedures must be approved by the polymer modifier manufacturer's representative.

C.4 Special Deck Preparation

Following any required deck patching and prior to placement of the Polymer Modified Asphalt, prepare the concrete deck as follows:

The work under this item shall include cleaning the surface of the concrete deck to remove any milled material or debris which would reduce or prevent bonding; furnishing and applying edge sealer, tack coat; furnishing and placing on the cleaned and tack coated bridge deck an impermeable hot-mix waterproofing asphalt course to the lines, grades, width, and depth as indicated on the plans; and saw cutting and filling any construction joints with rubberized joint sealer, all in accordance to the specifications and as directed by the engineer.

The entire deck area of the structures being overlaid including curbs and parapets shall be free of asphaltic and fast setting concrete patches and all spalled, unsound or disintegrated areas of concrete.

Prepare the surface of the entire deck surface areas of the structures by shot blast cleaning. The shot blast cleaning shall include the vertical face of the curbs or parapets to the height of the specified finish pavement surface and elevation. The shot blasting machine used for this procedure shall be capable of propelling steel shot against the deck surface in a uniform method to remove all foreign material and loose concrete. The shot blasting operation shall include collection and disposal of used steel shot and dust. As per manufacturer's recommendations, all pavement-marking lines within the cleaning area shall be sufficiently removed to prevent bleeding through the tack coat. After shot blasting operations, remove by sweeping, compressed air blasting, pressure washing with water or by other satisfactory means any foreign material remaining on the concrete deck.

If necessary due to working time restrictions, submit to the engineer for approval an alternate surface preparation method using water and/or air blast cleaning or other acceptable process.

The deck shall be clean, dry and free from mud, dirt, sand, oil or grease and any other contaminants prior to application of the tack coat. Use a 4-6 inch (100-150 mm) application of polymer modifier manufacturer edge sealer, at a rate specified by the manufacturer, to seal all edges of the planned day's placement of the waterproofing asphalt course. Give particular attention to vertical edges of headers, drains, scuppers, expansion joints or wherever compaction may be difficult to achieve. Where vertical edges exist, apply Edge Sealer 4-6 inch (100-150 mm) out from curb scuppers, joints, etc., on the horizontal and up to the top of the proposed finished surface grade. When practical, do this the day before or as early as possible in the day to maximize drying time.

Apply polymer modifier manufacturer tack coat to the existing horizontal concrete bridge deck surfaces in a uniform coating at the rate specified by the polymer modifier manufacturer. The polymer modifier manufacturer will oversee the tack coat application. Cover and protect all deck drains and joints prior to paving.

Butt joints made during paving operations that have cooled below 150° F must have edge sealer applied to the butt surface before the joining asphalt lift. The polymer modifier manufacturer will oversee the applications of edge sealer, wherever it is used. Construction joints shall be saw cut to a ½-inch (12.7-mm) width and filled to within 1/8-inch (3-mm) of the surface with the rubberized asphalt joint sealer previously specified. Take extreme care so as not to overfill these sawed joints since excess joint sealer material will cause ripples in the surface course necessitating corrective work by the contractor.

Apply edge sealer to all terminations of the paved asphalt, including curb lines and deck joints, as soon as possible after the pavement has cooled.

D Measurement

The department will measure Polymer Modified Asphalt Overlay by the ton, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Polymer Modified Asphalt Overlay	TON

Payment is full compensation for furnishing all materials, including asphaltic materials and polymeric additive materials; and for performing work.

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:

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.

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[1]
1. Commercial general liability insurance endorsed to include blanket contractual liability coverage.[2]	$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.[2]	$1 million-combined single limits per occurrence.

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

[2] 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[1]	15.0[2]	16.0	17.0

[1] 14.5 for E-3 mixes.

[2] 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 10^6 (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_{ini}	6	7	7	8	8	9	8
Gyrations for N_{des}	40	60	75	100	100	125	65
Gyrations for N_{max}	60	75	115	160	160	205	160
Air Voids, $\%V_a$ ($\%G_{mm}$ N_{des})	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_{mm} N_{ini}	<= 91.5[1]	<= 90.5[1]	<= 89.0[1]	<= 89.0	<= 89.0	<= 89.0	___
% G_{mm} N_{max}	<= 98.0	<= 98.0	<= 98.0	<= 98.0	<= 98.0	<= 98.0	___
Dust to Binder Ratio[2] (% passing 0.075/P_{be})	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[4] [5]	65 - 78[4]	65 - 75[3] [4]	65 - 75[3] [4]	65 - 75[3] [4]	65 - 75[3] [4]	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

[1] The percent maximum density at initial compaction is only a guideline.

[2] 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.

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

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

[5] 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[1]	- 0.5	- 0.2

[1] 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 460-1for 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.

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.

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.

Errata

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

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 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.

B. Costs for conforming to this special provision are incidental to the contract.

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

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

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

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

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

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

II. PAYROLL REQUIREMENTS

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

III. POSTINGS AT THE SITE OF THE WORK

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

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

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

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

V. ADDITIONAL CLASSIFICATIONS

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

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

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

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

ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
ROCK COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on September 1, 2013

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding 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.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	35.58	19.20	54.78
Carpenter	30.16	15.31	45.47
Cement Finisher	32.09	16.13	48.22
Future Increase(s): Add $1.87 on 6/1/13; 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	37.25	17.59	54.84
Fence Erector	28.00	4.50	32.50
Ironworker	35.00	28.90	63.90
Line Constructor (Electrical)	31.29	15.34	46.63
Painter	26.65	13.10	39.75
Pavement Marking Operator	29.22	16.82	46.04
Piledriver	30.66	15.31	45.97
Roofer or Waterproofer	29.40	18.81	48.21
Teledata Technician or Installer	21.26	11.75	33.01
Tuckpointer, Caulker or Cleaner	32.01	16.85	48.86
Underwater Diver (Except on Great Lakes)	37.45	19.45	56.90
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.64	17.22	46.86
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	15.09	50.59
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.94	13.57	39.51
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.08	12.96	37.04
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.90	33.65

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
TRUCK DRIVERS			
Single Axle or Two Axle	33.22	18.90	52.12
Three or More Axle	23.31	17.13	40.44
Future Increase(s): Add $1.85/hr on 6/1/2013. 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	27.77	19.90	47.67
Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/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 $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.			
Pavement Marking Vehicle	23.84	14.70	38.54
Shadow or Pilot Vehicle	33.22	18.90	52.12
Truck Mechanic	22.50	16.19	38.69
LABORERS			
General Laborer	28.07	13.90	41.97
Future Increase(s): Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014. Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	18.00	0.00	18.00
Landscaper	28.07	13.90	41.97
Future Increase(s): Add $1.70/hr on 6/1/13; 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	24.70	13.90	38.60
Future Increase(s): Add $1.70/hr on 6/1/2013; 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)	17.81	12.22	30.03
Railroad Track Laborer	15.00	7.65	22.65

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/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 $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.	35.22	19.90	55.12
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/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 $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.	34.72	19.90	54.62
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 Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu 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 & A- Frames. Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14.	34.22	19.90	54.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.			
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 Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine.	33.96	19.90	53.86
Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/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 $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.			
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.	33.67	19.90	53.57
Future Increase(s): Add $2/hr on 6/1/13; Add $1.75/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 $1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.			
Fiber Optic Cable Equipment.	25.74	15.85	41.59

SCHEDULE OF ITEMS REVISED:

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 CONTRACT ITEMS					
0010	108.4400 CPM PROGRESS SCHEDULE	1.000 EACH		.		.
0020	203.0200 REMOVING OLD STRUCTURE (STATION) 03. STA. 974NBR+25	LUMP	LUMP			.
0030	203.0225.S DEBRIS CONTAINMENT (STRUCTURE) 01. (B-53-77)	LUMP	LUMP			.
0040	203.0225.S DEBRIS CONTAINMENT (STRUCTURE) 02. (B-53-83)	LUMP	LUMP			.
0050	204.0105 REMOVING PAVEMENT BUTT JOINTS	6,550.000 SY		.		.
0060	204.0110 REMOVING ASPHALTIC SURFACE	36,518.000 SY		.		.
0070	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS	1,557.000 SY		.		.
0080	204.0120 REMOVING ASPHALTIC SURFACE MILLING	224,288.000 SY		.		.
0090	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	547.000 STA		.		.
0100	213.0100 FINISHING ROADWAY (PROJECT) 01. 1001-01-62	1.000 EACH		.		.

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	305.0110 BASE AGGREGATE DENSE 3/4-INCH	9,727.000 TON		.		.
0120	305.0500 SHAPING SHOULDERS	2,091.000 STA		.		.
0130	416.0610 DRILLED TIE BARS	5,013.000 EACH		.		.
0140	416.0620 DRILLED DOWEL BARS	21,312.000 EACH		.		.
0150	416.1110 CONCRETE RUMBLE STRIPS SHOULDER	365.000 LF		.		.
0160	416.1715 CONCRETE PAVEMENT REPAIR SHES	11,285.000 SY		.		.
0170	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES	9,598.000 SY		.		.
0180	455.0105 ASPHALTIC MATERIAL PG58-28	3,937.000 TON		.		.
0190	455.0605 TACK COAT	16,521.000 GAL		.		.
0200	460.1110 HMA PAVEMENT TYPE E-10	71,455.000 TON		.		.
0210	460.2000 INCENTIVE DENSITY HMA PAVEMENT	45,740.000 DOL		.		.

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0220	465.0110 ASPHALTIC SURFACE PATCHING	22.000 TON		.		.
0230	465.0400 ASPHALTIC SHOULDER RUMBLE STRIP	181,688.000 LF		.		.
0240	509.9010.S REMOVING ASPHALTIC CONCRETE DECK OVERLAY (STRUCTURE) 01. B-53-73	697.000 SY		.		.
0250	509.9010.S REMOVING ASPHALTIC CONCRETE DECK OVERLAY (STRUCTURE) 02. B-53-75	480.000 SY		.		.
0260	509.9010.S REMOVING ASPHALTIC CONCRETE DECK OVERLAY (STRUCTURE) 03. B-53-0077	600.000 SY		.		.
0270	614.0400 ADJUSTING STEEL PLATE BEAM GUARD	653.000 LF		.		.
0280	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS	10.000 EACH		.		.
0290	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE	65.000 LF		.		.
0300	619.1000 MOBILIZATION	1.000 EACH		.		.
0310	628.7015 INLET PROTECTION TYPE C	14.000 EACH		.		.

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0320	634.0616 POSTS WOOD 4X6-INCH X 16-FT	4.000 EACH		.		.
0330	642.5401 FIELD OFFICE TYPE D	1.000 EACH		.		.
0340	643.0100 TRAFFIC CONTROL (PROJECT) 01. 1001-01-62	1.000 EACH		.		.
0350	643.0300 TRAFFIC CONTROL DRUMS	142,848.000 DAY		.		.
0360	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	2,327.000 DAY		.		.
0370	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	4,654.000 DAY		.		.
0380	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	6,636.000 DAY		.		.
0390	643.0800 TRAFFIC CONTROL ARROW BOARDS	498.000 DAY		.		.
0400	643.0900 TRAFFIC CONTROL SIGNS	8,346.000 DAY		.		.
0410	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	914.000 EACH		.		.
0420	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE	81.000 SF		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0430	643.1050 TRAFFIC CONTROL SIGNS PCMS	1,596.000 DAY		.		.
0440	646.0106 PAVEMENT MARKING EPOXY 4-INCH	210,017.000 LF		.		.
0450	646.0126 PAVEMENT MARKING EPOXY 8-INCH	3,702.000 LF		.		.
0460	646.0600 REMOVING PAVEMENT MARKINGS	300.000 LF		.		.
0470	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	962.000 LF		.		.
0480	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	246,536.000 LF		.		.
0490	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH	4,159.000 LF		.		.
0500	649.1500 TEMPORARY PAVEMENT MARKING DIAGONAL 12-INCH	1,415.000 LF		.		.
0510	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE	66,878.000 LF		.		.
0520	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1001-01-62	LUMP	LUMP			.

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0530	690.0150 SAWING ASPHALT	310.000 LF		.		.
0540	690.0250 SAWING CONCRETE	36,155.000 LF		.		.
0550	SPV.0025 SPECIAL 01. POLYESTER POLYMER CONCRETE MASONRY	68.000 CF		.		.
0560	SPV.0045 SPECIAL 01. PCMS REMOTE COMMUNICATIONS	319.000 DAY		.		.
0570	SPV.0060 SPECIAL 01. SECURING STRUCTURE COVERS	12.000 EACH		.		.
0580	SPV.0090 SPECIAL 01. ROUT AND SEAL JOINT	1,850.000 LF		.		.
0590	SPV.0090 SPECIAL 02. SAWING CONCRETE PARTIAL DEPTH	1,128.000 LF		.		.
0600	SPV.0090 SPECIAL 03. FILL EXISTING RUMBLE STRIPS	2,065.000 LF		.		.
0610	SPV.0090 SPECIAL 04. RESTORE EXISTING RUMBLE STRIPS	365.000 LF		.		.
0620	SPV.0090 SPECIAL 05. REMOVING HMA PAVEMENT TAPERED AND NOTCHED LONGITUDINAL JOINTS MILLING	28,303.000 LF		.		.

CONTRACT: 20140408001 PROJECT(S): 1001-01-62 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0630	SPV.0180 SPECIAL 01. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT SHES REPAIR	448.000 SY		.		.
0640	SPV.0180 SPECIAL 02. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT APPROACH SLAB SHES REPAIR	37.000 SY		.		.
0650	SPV.0180 SPECIAL 03. REMOVING RUMBLE STRIPS	1,436.000 SY		.		.
0660	SPV.0195 SPECIAL 01. POLYMER MODIFIED ASPHALT OVERLAY	196.000 TON		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE