

HIGHWAY WORK PROPOSAL

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

Proposal Number:

Ø 4

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Dane	1206-04-62	WISC 2014 063	Madison South Madison Beltline Todd Drive - IH 39/90	USH 12

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, \$ 390,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: March 11, 2014 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time September 29, 2014	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 4%	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 Concrete pavement, concrete pavement repair, concrete pavement repair precast, structure rehabilitation of B-13-16/17/191/192/280, beamguard replacement, culvert pipe lining, traffic control, erosion control, ITS elements, lighting.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm> or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

B Submitting Electronic Bids

B.1 On the Internet

- (1) Do the following before submitting the bid:
 1. Have a properly executed annual bid bond on file with the department.
 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in **102.6** and **102.9** of the standard specifications, submit the proposal on the internet as follows:

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

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

[illegible]

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1206-04-62, City of Madison, South Madison Beltline, Todd Drive – IH 39/90, USH 12, Dane County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2014 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20130615)

2. Scope of Work.

The work under this contract shall consist of concrete pavement, concrete pavement repair, concrete pavement repair precast, structure rehabilitation, structure overlay, guardrail, culvert pipe lining, traffic control, erosion control, ITS elements, lighting, 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.

A Notice to Proceed

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. Do not begin work prior to April 14, 2014.

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.

B General

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment. The use of special high early concrete mixes containing chlorides or other additives to expedite cure times on US 12 mainline are prohibited and will not be an approved method to compress the construction schedule.

Indicate on the proposed schedule of operations that a large force and adequate equipment will be needed to assure that the work will be completed within the established contract time.

Corridorwide staging accounts for shoulder replacement, concrete pavement repair, guardrail and diamond grinding. Subsegment staging accounts for structure work and other items as shown in the plans. The schedule of operations shall conform to the construction staging as shown in the plans and hereafter described unless the engineer approves modifications to the schedule in writing.

Corridorwide Staging (Concrete Repair / Guardrail / Diamond Grinding):

- Stage 1 – Reconstruct outside shoulder with concrete pavement. Install new outside guardrail. Install test panels for Concrete Pavement Repair Precast 10-Inch. Upon approval of precast test panels, begin layout, survey and fabrication for precast panels.
- Stage 2 – Reconstruct inside shoulder with concrete pavement. Install inside shoulder guardrail. Perform concrete repairs on inside lane and concrete repair precast on center lane.
- Stage 3 – Perform concrete repairs on outside lane and concrete repair precast in the center lane not completed during Stage 2.

When patching in the outside lane adjacent to an auxiliary lane is required, close the temporary auxiliary lane (existing outside lane) to allow for cure in accordance with the traffic control plan detail Auxiliary Lane Conversion to Parallel Merge. Reopen the temporary auxiliary lane within 5 calendar days as specified under D. Work Restrictions. This staging is planned for the following locations:

- Fish Hatchery Road to Park Street
 - Rimrock Road to John Nolen Drive
 - Monona Drive to Stoughton Road
 - Stoughton Road to IH 39 (Eastbound Only)
- Conduct diamond grinding and temporary pavement marking or permanent pavement markings (where possible) for the center lane, outside lane, auxiliary lane, and feathering into the outside shoulder. Lane line remarking required the same night of grinding operations.
 - Stage 4*** – Conduct diamond grinding and final pavement markings for inside lane and feathering into the inside shoulder. Lane line remarking required the same night of grinding operations.

***Additional traffic control costs incurred due to deviating from the traffic control plan are incidental to the contract.

John Nolen Drive Subsegment (B-13-280):

- Staging prerequisites: Traffic cannot shift until outside concrete shoulders and guardrail necessary within the segment limits is complete per Corridorwide Staging Stage 1.
- Stage 1 – Construct inner shoulder and lanes of concrete deck repair and concrete overlay. Construct inner concrete shoulders for subsequent stages.
- Stage 2 – Construct center lane concrete deck repair and concrete overlay.
- Stage 3 – Construct outer shoulder and lanes of concrete deck repair and concrete overlay. Complete work on this stage prior to June 28, 2014, as specified in E. Interim Liquidated Damages.
- Complete all work for stages 1 through 3 within 45 calendar days as specified in the article Incentive/Disincentive for Interim Completion of Work John Nolen Drive Subsegment.
- Complete all work necessary to reopen the southbound John Nolen Drive to eastbound USH 12 Ramp (Stages 2 & 3) within 25 calendar days as specified in the article Incentive/Disincentive for Interim Completion of Work southbound John Nolen Drive to eastbound US 12 Ramp.

Where workzone availability provides, complete all concrete pavement repair / replacement within the subsegment during Stages 1 through 3. The department will not pay for the additional cost of concrete pavement precast for any concrete pavement repair / replacement not completed in conjunction with this subsegment.

Park Street Subsegment (B-13-016/B-13-191/B-13-017/B-13-192):

- Stage 1 – Remove existing median barrier wall, construct crossovers and construct shoulders for subsequent stages.
- Stage 2 – Construct the inner half of B-13-191/192. Work on this stage is not allowed to begin prior to June 29 at 7:00 PM.
- Stage 3 – Construct the outer half of B-13-191/192.
- Stage 4 – Construct the inner half of B-13-016/017.
- Stage 5 – Construct the outer half of B-13-016/017. Complete work on this stage prior to September 6, 2014, as specified in E. Interim Liquidated Damages.
- Stage 6 – Restore permanent median barrier.

- Complete all work necessary to reopen the southbound Park St to eastbound USH 12 Ramp (Stages 2 and 3) within 25 calendar days as specified in E. Interim Liquidated Damages.
- Complete all work necessary to reopen the northbound USH 14 to westbound USH 12 Ramp (Stages 4 and 5) within 25 calendar days as specified in E. Interim Liquidated Damages.
- Complete all work for Stages 2 through 5 within 60 calendar days as specified in the article Incentive/Disincentive for Interim Completion of Work Park Street Subsegment.

Where workzone availability provides, complete all concrete pavement repair / replacement within the subsegment during Stages 2 through 5. The department will not pay for the additional cost of concrete pavement precast for any concrete pavement repair / replacement not completed in conjunction with this subsegment.

Construct westbound inside lane concrete patches with Park Street Subsegment work from Station A537WB+50 to Park Street structures.

IH 39/Westbound USH 12 Subsegment:

- Staging prerequisites: Traffic cannot shift until outside concrete shoulders and guardrail within the subsegment limits is complete per Corridorwide Staging Stage 1.
- Stage 1 – Construct inside full depth shoulders and inside lane concrete repairs.
- Stage 2 – Construct center lane concrete repairs.
- Stage 3 – Construct outside lane concrete pavement replacement. Complete work requiring the nightly closure of the northbound IH39/90 to westbound USH 12 system ramp within 4 consecutive non-weekend nights as specified in D. Work Restrictions.
- Complete all work for Stages 1 through 3 within 28 calendar days as specified in the article Incentive/Disincentive for Interim Completion of Work IH39/westbound US 12 Subsegment.

Park Street/Badger Road Intersection:

- Stage 1 – Construct concrete barrier wall, median concrete sidewalk, and permanent crash cushions in median South of Park Street/Badger Road Intersection.
- Complete all work within 14 consecutive nights as specified in D. Work Restrictions.

Todd Drive Westbound Onramp:

- Stage 1 – Install guardrail to protect existing railing and pump station building.
- Todd Drive ramp work subject to the 10 night completion requirements outlined for service interchange ramp closures as specified in D. Work Restrictions.

Do not switch traffic over to the next construction stage until all signing, pavement marking, reflectors, temporary concrete barrier, and traffic control drums for the stage are in place, and conflicting pavement markings and signs are removed as shown in the traffic control plans and as directed by the engineer. Allowable exceptions to this specification are crossover and intersection areas where traffic control cannot be placed until the switch is made.

C Contractor Coordination

Hold prosecution and progress meetings once a week. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work expected to begin within the next two weeks shall attend and provide a written schedule of the next week(s)' operations.

The written schedule shall include begin and end dates of specific prime and subcontractor work operations. Invite City of Madison traffic engineering staff, City of Monona DPW, City of Fitchburg and Town of Madison. Agenda items at the meeting will include review of the contractor's schedule and subcontractors' schedule, evaluation of progress and pay items, and making revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems or conflicts between contractors.

Based on the progress meeting, if the engineer requests a revised schedule, submit it within seven calendar days. Failure to submit a new schedule within seven days shall result in the engineer holding pay requests until received.

Hold meetings with first responders and law enforcement representatives one week prior to each traffic stage change.

Contact Steve Katzner (608) 246-7994, WisDOT SW Region Maintenance, upon completion of sign structure work to schedule inspections.

D Work Restrictions

Special Events

See article Traffic for special event work restrictions.

Mainline Lane Closures

Do not close traffic lanes on USH 12 outside the allowed time periods specified in the Traffic article. If the contractor fails to open all lanes within the specified timeframe, the department will assess lane rental charges as shown below:

Time Period in excess of specified time	15 minute Lane Rental Charge (per lane)	Cumulative Lane Rental Charge (per lane)
1 st 15 minutes	\$750	\$750
2 nd 15 minutes	\$1,500	\$2,250
3 rd 15 minutes	\$2,250	\$4,500
4 th 15 minutes & beyond	\$3,000	\$7,500 & up

The department will administer lane rental charges under the Failing to Open Road to Traffic administrative item.

Auxiliary Lane Closures

Excluding night closures in conjunction with mainline lane closures, do not close any auxiliary lane for more than 5 consecutive days. The department will assess the contractor \$2,500 in liquidated damages for each calendar day that the auxiliary lane remains closed after 6:01 AM on the 6th calendar day after work starting. No time will be charged from 8:00 PM to 11:59 PM prior to the 1st calendar day. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 6:01 AM for the remainder of the contract. Damages will be assessed under the administrative item Failing to Open Road to Traffic.

Night Ramp Closures – Service Interchanges

Provide for a Portable Changeable Message Sign (PCMS) seven days in advance of the closures notifying the travelling public of the ramp closure.

Do not close service ramps outside the allowed time periods specified in the Traffic article. If the contractor fails to open the closed ramp within the specified timeframe, the department will assess lane rental charges as shown below:

Time Period in excess of specified time	15 minute Lane Rental Charge (per lane)	Cumulative Lane Rental Charge (per lane)
1 st 15 minutes	\$750	\$750
2 nd 15 minutes	\$750	\$1,500
3 rd 15 minutes	\$1,500	\$3,000
4 th 15 minutes & beyond	\$1,500	\$4,500 & up

The department will administer lane rental charges under the Failing to Open Road to Traffic administrative item.

Do not close any service interchange ramp for more than 10 nights. The department will assess the contractor \$1,500 in liquidated damages for each additional night that the ramp requires closure. Damages will be assessed under the administrative item Failing to Open Road to Traffic.

Night Ramp Closures – IH39/90

Provide for a PCMS seven days in advance of the closure to the northbound IH39/90 to westbound USH 12 system interchange movement notifying the travelling public of the ramp closure.

Do not close system ramps outside the allowed time periods specified in the Traffic article. If the contractor fails to open the closed ramp within the specified timeframe, the department will assess lane rental charges as shown below:

Time Period in excess of specified time	15 minute Lane Rental Charge (per lane)	Cumulative Lane Rental Charge (per lane)
1 st 15 minutes	\$750	\$750
2 nd 15 minutes	\$1,500	\$2,250
3 rd 15 minutes	\$2,250	\$4,500
4 th 15 minutes & beyond	\$3,000	\$7,500 & up

The department will administer lane rental charges under the Failing to Open Road to Traffic administrative item.

Do not close the northbound IH39/90 to westbound USH 12 system ramp for more than 4 consecutive non-weekend (M, T, W, Th) nights. The department will assess the contractor \$5,000 in liquidated damages for each additional night that the ramp requires closure. Damages will be assessed under the administrative item Failing to Open Road to Traffic.

Park Street/Badger Road Intersection Lane Closures

Provide for a PCMS seven days in advance of the closure to the median lanes at the Park Street/Badger Road intersection notifying the travelling public of the night lane closures.

Do not close any lanes on Park Street outside the allowed time periods specified in the Traffic article. If the contractor fails to open the closed lane within the specified timeframe, the department will assess lane rental charges as shown below:

Time Period in excess of specified time	15 minute Lane Rental Charge (per lane)	Cumulative Lane Rental Charge (per lane)
1 st 15 minutes	\$750	\$750
2 nd 15 minutes	\$750	\$1,500
3 rd 15 minutes	\$1,500	\$3,000
4 th 15 minutes & beyond	\$1,500	\$4,500 & up

The department will administer lane rental charges under the Failing to Open Road to Traffic administrative item.

Do not close lanes on Park St for more than 14 consecutive nights. The department will assess the contractor \$2,000 in liquidated damages for each additional night that lanes require closure. Damages will be assessed under the administrative item Failing to Open Road to Traffic.

Rimrock Road Interchange Access

Implement access modifications to the Rimrock Road interchange turning movements at the ramp terminals as shown on the plans prior to closing the southbound John Nolen Drive to eastbound US 12 ramp.

Provide for a PCMS 7 days in advance of the access modifications notifying the travelling public of the changes.

Restore full interchange access at Rimrock Road to US 12 within 24 hours of reopening the southbound John Nolen Drive to eastbound US 12 interchange ramp.

Provide the City of Madison 28 days of advance notification of access changes to the Rimrock Road interchange to coordinate necessary signal timing modifications.

Workzone Access and Work Hours

Material delivery and work hours are restricted as specified in the article Traffic. Placement of temporary barrier wall to enable additional working hours shall be considered for contractor convenience and incidental to the contract.

Clear Zone Working Restrictions

Do not leave any drop offs within 4 feet of the edge of the traveled way greater than 3 inches which are not protected by temporary precast barrier.

Protect all blunt ends of existing or proposed USH 12 barrier in accordance to standard detail drawings within 3 calendar days of initial occurrence and of Park Street median barrier within 5 calendar days of initial occurrence. Ensure adequate cure time of any new concrete barrier in accordance with the standard specifications prior to mounting any protective device. Blunt ends of temporary concrete barrier must be protected prior to reopening the adjacent lane to traffic.

Store materials or park equipment a minimum of 30-feet from the edge of the USH 12 traveled way unless protected by concrete barrier.

If the contractor is unsure whether an individual work operation will meet the safety requirements for working within the clear zone, review the proposed work operation with the engineer before proceeding with the work.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridge. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to

nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Joint Repair.

E Interim Liquidated Damages

Supplement standard spec 108.11 as follows:

If the contractor fails to complete all work and coordination measures necessary on US 12 to restore traffic for the southbound Park Street to eastbound US 12 ramp as part of the Park Street Subsegment within 25 calendar days of the closure date, the department will assess the contractor \$10,000 in interim liquidated damages for each calendar day that the ramp remains closed after 12:01 AM, on the 26th calendar day after the closure begins. An entire calendar day will be charged for any period of time within a calendar day that the ramp remains closed beyond 12:01 AM for the remainder of the contract.

If the contractor fails to complete all work and coordination measures necessary on US 12 to restore traffic for the northbound to westbound US 14 ramp as part of the Park Street Subsegment within 25 calendar days of the closure date, the department will assess the contractor \$10,000 in interim liquidated damages for each calendar day that the ramp remains closed after 12:01 AM, on the 26th calendar day after the closure begins. An entire calendar day will be charged for any period of time within a calendar day that the ramp remains closed beyond 12:01 AM for the remainder of the contract.

Complete Stages 1 through 3 of the John Nolen Drive Subsegment, including all structure work and concrete pavement approach slabs, prior to 12:01 AM June 28, 2014. If the contractor fails to complete the John Nolen Drive Subsegment prior to 12:01 AM June 28, 2014, the department will assess the contractor \$50,000 in interim liquidated damages for each calendar day that the roadway remains under construction after 12:01 AM, June 28, 2014. An entire calendar day will be charged for any period of time within a calendar day that the road remains under construction beyond 12:01 AM for the remainder of the contract.

Complete Stages 1 through 5 of the Park Street Subsegment, including all structure work and concrete pavement approach slabs, prior to 12:01 AM September 6, 2014. If the contractor fails to complete Stages 1 through 5 of the Park St Subsegment prior to 12:01 AM September 6, 2014, the department will assess the contractor \$50,000 in interim liquidated damages for each calendar day that the roadway remains under construction after 12:01 AM, September 6, 2014. An entire calendar day will be charged for any period of time within a calendar day that the road remains under construction beyond 12:01 AM for the remainder of the contract.

The department will not grant time extensions to the interim completion dates specified above for the following:

1. Severe weather as specified in standard spec 108.10.2.2.
2. Labor disputes that are not industry wide.
3. Delays in material deliveries.

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

4. **Traffic.**

A General

Accomplish the construction sequence, including the associated traffic control as detailed in the Construction Staging section of the plans, and as described in this article.

Unless detailed in the plans, do not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article.

Submit a detailed traffic control plan to the engineer for approval if different than the traffic control plan provided in the plan set. Submit this plan ten days prior to the preconstruction conference.

Submit all traffic control change requests to the engineer at least three working days prior to an actual traffic control change. A request does not constitute approval.

B Traffic Operations

All Stages:

- Maintain three lanes of traffic in each direction on USH 12 (plus auxiliary lanes where present) except as allowed under C Lane/Ramp Night Closures.
- Maintain a minimum lane width of 11-feet on USH 12 and USH 12 ramps.
- Maintain a minimum 1-foot shy distance to concrete barrier or guardrail.
- Maintain minimum 16 feet clear width for oversize / overweight (OSOW) vehicles when work restricts through traffic to single lane operations unless alternate OSOW accommodations are approved by the engineer.
- Coordinate the layout of Corridorwide Staging lane closures, merges, and shifts, with the Park Street, John Nolen, and IH 39 Subsegments so as to not violate MUTCD and FDM standards. Obtain approval from the engineer prior to any lane drop within 1 mile of any individual subsegment limits.

Corridorwide Staging (Concrete Patching/Guardrail upgrades):

Stage 1

Daytime: Traffic remains in their existing lanes. Drums are placed along the outside shoulder to protect curing concrete.

Nighttime: Traffic may be reduced to 2-lanes allowing a one-lane buffer for work being completed to reconstruct the outside shoulder. Auxiliary lanes will be shifted toward the median one lane and remain operational.

Stage 2

Daytime: Traffic is shifted away from the median. The outside travel lane (or auxiliary lane where present) will be shifted on the new concrete shoulder constructed in Stage 1. Drums will remain one-foot shy from the inside travel lane to protect curing concrete.

Nighttime: Travel lanes may be reduced to pave the inside shoulder and perform concrete repair to the inside and center lanes. Beltline traffic must be reduced to one lane before work can be started on the center travel lane.

Stage 3

Daytime: Traffic is shifted onto the inside shoulder. The outside travel lane will be shifted onto the existing center travel lane and the auxiliary lane (where present) will be shifted onto the existing outside travel lane. Drums will remain one-foot shy from the outside travel lane (or auxiliary lane if present) to protect curing concrete.

When patching in the outside lane adjacent to an auxiliary lane is required, close the temporary auxiliary lane (existing outside lane) to allow for cure in accordance with the traffic control plan detail Auxiliary Lane Conversion to Parallel Merge. Reopen the temporary auxiliary lane within 5 calendar days as specified in the Prosecution and Progress article. This staging is planned for the following locations:

- Fish Hatchery Road to Park Street
- Rimrock Road to John Nolen Drive
- Monona Drive to Stoughton Road
- Stoughton Road to IH 39 (Eastbound Only)

Nighttime: Travel lanes may be reduced to perform concrete repair and diamond grinding operations to the center and outside lanes. Where an auxiliary lane is present, close the upstream onramp and auxiliary lane to complete concrete repair and diamond grinding. Upon completion of diamond grinding for that night's work, restore temporary pavement markings to allow for reopening of traffic on the inside shoulder, inside lane, and center lane.

Stage 4

Daytime: Traffic is shifted onto its permanent location. All traveled lanes and auxiliary lanes shall be marked with permanent or temporary pavement markings depending upon level of completion of diamond grinding operations.

Nighttime: Travel lanes may be reduced to perform diamond grinding and pavement marking to the inside lane and shoulder.

John Nolen Drive Subsegment

Prior to shifting traffic for the John Nolen Drive structure work, complete outside concrete shoulders and guardrail within the subsegment limits per Corridorwide Staging Stage 1.

Stage 1

Westbound and eastbound traffic is shifted onto the outside shoulders while work is completed in the inside shoulder and inside lane. The westbound auxiliary lane between South Towne Drive and John Nolen Drive will be converted into parallel entrance ramp and tapered exit ramp.

Complete access modifications at the Rimrock Road interchange, as shown on the plans, prior to closing the southbound John Nolen Drive to eastbound US 12 entrance ramp during Stage 2 and Stage 3.

Stage 2

Eastbound traffic will be split, with 2 lanes to the outside of the workzone and 1 lane to the inside of the workzone. The eastbound auxiliary lane functions as an exit only lane to the John Nolen northbound exit ramp. Thru traffic will be allowed to exit at South Towne drive following the traffic split.

Westbound traffic will be split, with 2 lanes to the inside of the work zone and 1 lane to the outside of the workzone. Access for traffic entering US 12 from South Towne drive will change from an auxiliary lane to a parallel merge.

The southbound John Nolen to eastbound USH 12 entrance ramp will be closed during the duration of this stage.

Stage 3

Westbound and eastbound traffic is shifted onto the inside shoulder while overlay work is completed for the structure. The westbound auxiliary lane between South Towne Drive and John Nolen Drive will return to its normal condition.

The southbound John Nolen to eastbound USH 12 entrance ramp will be closed during the duration of this stage.

Park Street Subsegment*

Stage 1

The existing configuration for USH 12 traffic shall remain in place, with shoulder closures to allow for median barrier removal and concrete shoulder replacement as shown in the plan details.

Stage 2

Eastbound traffic is shifted onto the outside shoulder maintaining 3 lanes of traffic through the workzone.

Westbound traffic is split with two westbound lanes crossing the median and traveling on the existing eastbound inside shoulder and inside lane. The remaining westbound lanes remain north of the center barrier and ride on the outside shoulder and lane.

The southbound Park Street to eastbound USH 12 entrance ramp is closed during the duration of this stage. See Prosecution and Progress for allowable duration of ramp closure.

Stage 3

Eastbound traffic and the two westbound lanes diverted across the median barrier will remain as shown in stage 2.

The westbound lanes north of the center barrier will shift toward the median barrier to free up the remaining workzone on the westbound structures.

The southbound Park Street to eastbound USH 12 entrance ramp is closed during the duration of this stage. See Prosecution and Progress for allowable duration of ramp closure.

Stage 4

Westbound traffic is shifted onto the outside shoulder maintaining 3 lanes of traffic through the workzone.

Eastbound traffic is split with two eastbound lanes crossing the median and traveling on the existing westbound inside shoulder and inside lane. The remaining eastbound traffic lanes remain south of the center barrier and ride on the outside shoulder and lane.

The northbound Park Street to westbound USH 12 entrance ramp is closed during the duration of this stage. See Prosecution and Progress for allowable duration of ramp closure.

Workzone limits are extended west of structure to accommodate inside lane patching in the westbound direction.

Stage 5

Westbound traffic and the two eastbound lanes diverted across the median barrier will remain as shown in stage 4.

The eastbound lanes south of the center barrier will be shift toward the median barrier to free up the remaining workzone on the eastbound structures.

The northbound Park Street to westbound USH 12 entrance ramp is closed during the duration of this stage. See Prosecution and Progress for allowable duration of ramp closure.

Stage 6

USH 12 traffic to return to permanent locations with shoulder closures to allow for median barrier restoration.

IH 39/Westbound US 12 Subsegment

Prior to shifting traffic for the IH 39/Westbound US 12 Subsegment, complete the construction of the outside concrete shoulders and guardrail within the subsegment limits.

Stage 1

Daytime: All 3 through lanes and the auxiliary lane are active. Shift westbound USH 12 traffic onto the newly constructed outside concrete shoulder.

USH 12 westbound ramp traffic enters into the center lane as the inside lane is closed.

Nighttime: Single lane closure of the center lane allowing 2 through lanes and 1 auxiliary lane.

US 12 westbound ramp traffic enters into the outside lane as the center and inside lanes are closed. Drums and temporary removable tape, that will require nightly removal and reinstallation for each consecutive night of work to accommodate the lane shift.

Stage 2

Daytime: Traffic from Stage 1 to remain on the outside shoulder, auxiliary lane, and outside lane.

USH 12 westbound ramp traffic enters onto the Beltline using the newly constructed inside concrete shoulder. The inside lane and center lane do not carry traffic. Traffic will be split by the workzone.

Nighttime: Close the outside lane, with remaining 2 through lanes of traffic occupying the existing auxiliary lane and outside shoulder.

US 12 westbound ramp traffic remains in its daytime staged location.

Stage 3

Daytime: Traffic from IH 39/90 to westbound US 12 shall be split on the ramp. Southbound IH 39 traffic remains in their 2 designated lanes, and the northbound IH39 to westbound US 12 ramp traffic remains in the inside lane. Traffic weaving will be prevented through the use of drums.

Upon entering the Beltline, the northbound IH 39 to westbound US 12 ramp traffic will split from the other IH 39 ramp traffic to run parallel with the US 12 westbound traffic. Westbound US 12 traffic to remain in the Stage 2 location.

Traffic is split and running on both outside shoulder, the auxiliary lane, and the inside lane. The outside lane and center lane are not carrying traffic.

Nighttime: The northbound IH 39 to westbound US 12 system will be closed for 4 consecutive non-weekend nights. Traffic will be reduced on US 12 to 1 lane on the outside shoulder and 1 lane on the inside shoulder.

Park Street Median Work

Stage 1

Daytime: Traffic to operate in its current location. Protect workzone with drums.

Nighttime: Northbound inside lane, southbound inside lane, and northbound left turn bay to be closed. The northbound inside lane will be converted to a left/thru lane.

Todd Drive Westbound Entrance Ramp

Stage 1

Daytime: Full access to all lanes required along Todd Drive and the westbound entrance ramp to USH 12.

Nighttime: Northbound Todd Drive inside left turn lane to be closed. Westbound entrance ramp right lane to be closed (one lane of traffic to remain open).

Workzone Access Timeframes

Work on USH 12 not protected by concrete barrier is prohibited outside of allowable lane closure hours.

Access to mainline work zones protected by concrete barrier (Park Street and John Nolen Drive Subsegments) is restricted as follows:

- No access to the workzone from live traffic lanes is allowed at the following times:
AM Peak: 6:00 AM – 9:00 AM
PM Peak: 3:00 PM – 7:00 PM
- Access for contractor personnel entering / exiting the work zone from a live traffic lane is permitted from 9:00 AM – 3:00 PM with the support of a dedicated contractor safety vehicle as specified in the article Safety Vehicle.
- Access for material and equipment delivery or removal is prohibited outside of allowable lane closure hours.

Conduct operations in a manner that will cause the least interference to traffic movements.

C Lane/Ramp Night Closures

General

Request approval from the engineer for all lane closures at least three working days in advance of requested closure. A request does not constitute approval. Failure to obtain approval or reopen closed lanes at the required time shall be subject to lane rental charges specified in the Prosecution and Progress article.

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 day with a lane closure where an arrow board is in use.

No lane or shoulder closures will be permitted during events listed under article Holiday Work Restrictions

C.1 US 12 Mainline

Lane closures will be permitted during all stages as follows:

Nightly Lane Closures for Beltline Between Todd Drive and I-39/90 and US-12/14 Interchange						
Description			Direction	Lanes	Start	End
Monday - Thursday Night	To	Tuesday - Friday Morning	EB/WB	Single	7:00 PM	6:00 AM
			EB/WB	Dual	9:30 PM	5:00 AM
Friday Night	To	Saturday Morning	EB/WB	Single	8:00 PM	8:00 AM
			EB/WB	Dual	11:00 PM	6:00 AM
Saturday Night	To	Sunday Morning	EB/WB	Single	8:00 PM	10:00 AM
			EB/WB	Dual	11:00 PM	9:00 AM
Sunday Night	To	Monday Morning	EB/WB	Single	6:00 PM	6:00 AM
			EB/WB	Dual	10:00 PM	5:00 AM

C.2 IH39/90 to US 12 Westbound system ramp

Non-weekend (M, T, W, Th) night closure is permitted from 9:00 PM to 5:00 AM.

C.3 Service Interchange Ramps

System ramp closures are permitted during all stages as follows:

Nightly Ramp Closures for Interchange Ramps					
Description			Closure	Start	End
Monday - Thursday Night	To	Tuesday - Friday Morning	Full	8:00 PM	6:00 AM
			Full	8:00 PM	8:00 AM
Saturday Night	To	Sunday Morning	Full	8:00 PM	10:00 AM
Sunday Night	To	Monday Morning	Full	8:00 PM	6:00 AM

Exceptions to these allowable closures are listed below:

- During timeframes when Park Street or John Nolen Drive long term ramp closure detour routes require the use of a service ramp for that detour route. Ramps requiring a detour route are documented in article Prosecution and Progress and shown in the plans.
- During long term ramp closures at Park Street, no other ramp at Park Street can be closed.
- During the long term ramp closure at John Nolen Drive, no other ramp at John Nolen Drive can be closed.
- Closure of consecutive interchange ramps at the same time is prohibited.

C.4 Park Street/Badger Road Intersection

One inside lane closure, directly adjacent to median, is permitted in each direction from 9:00 PM to 5:00 AM nightly.

D Special Event Restrictions

Rhythm and Booms, June 28, 2014

- USH 12 Off Peak lane closures are restricted from Noon the day of the event to 5:00 AM the morning after the event.
- Maintain full access to the Rimrock Road, John Nolen Drive and Park Street interchanges from Noon the day of the event to 5:00 AM the morning after the event.

Dane County Fair, July 16-20, 2014

- USH 12 Off Peak lane closures shall not begin until 10:00 PM during the event.
- Maintain full access to the Rimrock Road and John Nolen Drive interchanges from 5:00 AM to 10:00 PM each day of the event.

Ironman Competition, September 7, 2014

- Maintain full access to the John Nolen Drive interchange from 5:00 AM the day of the event to 7:00 AM the day after the event.

The event will be closing the Rimrock Road interchange ramps.

World Dairy Expo, September 30 – October 4, 2014

- Maintain full access to the Rimrock Road and John Nolen Drive interchanges from 5:00 AM to 10:00 PM each day of the event.

University of Wisconsin home football games

- Off peak lane closures will not be permitted from five hours prior to game until five hours after the game.
- Maintain full access to the Park Street, John Nolen Drive, and Rimrock Road interchanges from five hours prior to game until five hours after the game.

The first home game is scheduled for September 6, 2014.

E Advance Notification

Notify the Dane County EMS; Police and Fire for the City of Madison, City of Monona, City of Fitchburg and Town of Madison; City of Madison Traffic Engineering; Dane County Sheriff's Department and Dane County Highway Commissioner 48 hours in advance of all switchovers of traffic lanes and closures of existing ramps. Notifications must be given by 4:00 PM on Thursday for any such work to be done on the following Monday.

5. Advance Notification for Lane Closure System.

Advance Notification

Provide the engineer with a schedule of lane and ramp closures for the following week by noon on Thursday of the previous week. In addition, provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System.

Ramp Closures	7 calendar days
System Ramp Closures	7 calendar days
Lane Closures	3 business days
Construction Stage Changes	14 calendar days
Detours	14 calendar days

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

Closures

All entrance and exit ramps shall be posted seven calendar days in advance of their closure with dates and time of closure with a Portable Changeable Message Sign.

6. Other Contracts.

The following projects will be under construction concurrently with the work under this contract:

Stoughton Road Pavement Loop Detectors

Existing in-pavement loop detectors will be disabled and abandoned by others prior to Stage 1 construction. Contact WisDOT SW Region ITS Engineer, Kyle Hemp, (608) 246-5367, to verify work has been completed prior to removing existing shoulders or otherwise disturbing existing loop detectors.

Madison Metropolitan Sewerage District (MMSD) Force Main

MMSD plans to place a new force main crossing under USH 12, approximately 3,500 feet East of South Towne Drive. The work under USH 12 is expected to be complete by April 1, 2014. The project contact is Bob Gundlach, AECOM, (608) 828-8137.

Broadway Drive will also be reduced to two lanes of traffic from April 1, 2014 to November 1, 2014.

Coordination with this project is required to minimize regional traffic delays due to potential diversion.

7. **Project Communication Enhancement Effort.**

Use the Project Communication Enhancement Effort (PCEE) tools on this contract. Coordinate with the department to modify the various published tools as necessary to meet the particular project needs and determine how to implement those tools under the contract. Ensure the full participation of the contractor and its principal subcontractors throughout the term of the contract.

Forms and associated guidance are published in the PCEE Manual available at the department's Highway Construction Contract Information (HCCI) web site at:

<http://roadwaystandards.dot.wi.gov/standards/admin/pcee-user-manual.doc>

105-005 (20090901)

8. **Intelligent Transportation Systems (ITS) – Control of Materials.**

Standard spec 106.2 – Supply Source and Quality

Supplement standard spec 106.2 with the following:

The department will furnish a portion of equipment to be installed by the contractor. This department-furnished equipment includes the following:

Department-Furnished Items
Microwave Detector Assembly
Loop Emulation Cards

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

9. **Public Convenience and Safety.**

Revise standard spec 107.8(6) as follows:

Operations are allowed for 24 hours a day.

10. **Holiday Work Restrictions.**

Do not perform any work during the following holiday periods:

Memorial Day Holiday

- All work operations are prohibited from 12:01AM to 11:59PM on Memorial Day;

Independence Day, July 4, 2014

- All work operations are prohibited from 12:01AM to 11:59PM on Independence Day;

Labor Day Holiday, September 1, 2014

- All work operations are prohibited from 12:01AM to 11:59PM on Labor Day.

107-005 (20050502)

11. **Railroad Insurance and Coordination.**

A Description

Comply with standard spec 107.17 for all work affecting Union Pacific Railroad Company Property, 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.

Insurance is filed in the name of Union Pacific Railroad Company and Wisconsin and Southern Railroad Company. Notify evidence of the required coverage, and duration to John Venice, Manager Special Projects – Industry and Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email jnvenice@up.com and 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 1206-04-62
Route Name USH 12, Dane County
Crossing ID 177871Y
Railroad Subdivision Evansville
Railroad Milepost 135.57

Provide the second policy in the name of Wisconsin and Southern Railroad Company. Notify 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 1206-04-62
Route Name USH 12, Dane County
Crossing ID 391711W
Railroad Subdivision Madison
Railroad Milepost 136.66

A.2 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor.

None.

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

Contact John Venice, Manager Special Projects – Industry and Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email jnvenice@up.com, for consultation on railroad requirements at Crossing ID 177871Y (overpass Structures B-13-17 / B-13-192) during construction.

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 391711W (overpass Structure B-13-280) 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 2-4 through freight trains will operate daily through Crossing ID 177871Y (overpass structures B-13-17 / B-13-192) beginning in spring of 2014. 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 391711W (overpass structure B-13-280). Through freight trains operate at up to 25 mph. No switching movements occur at this location.

12. **Erosion Control.**

Supplement standard spec 107.20 as follows:

Provide the Erosion Control Implementation Plan (ECIP) 14 days prior to the pre-construction conference. The contractor shall prepare and submit an ECIP for the project, including borrow sites and material disposal sites, in accordance to Wis. Adm. Code Chapter TRANS 401 requirements. The erosion control implementation plan shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan will identify how the contractor intends to implement the project's erosion control plan.

Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion.

Immediately re-topsoil graded areas, as designated by the engineer, after grading is completed within those areas. Seed, fertilize, and mulch or erosion mat all topsoiled areas within five working days after placement of topsoil.

Existing waterways and sensitive areas shall be protected. Do not disturb or store any equipment or materials in these areas without prior approval from the engineer. Store all materials upland and away from the waterway.

Do not wash out equipment in drainage ways or direct conduits to waters of the state.

13. **Environmental.**

Supplement standard spec 107.18 follows:

Wetlands

Do not disturb nor store materials or topsoil within the nearby wetlands. The department has not obtained a U.S. Army Corps of Engineers Section 404 permit as proposed slope intercepts are not encroaching into any adjacent wetlands on the project. Avoid placing any equipment, stockpiling any material, or performing any grading outside of the proposed slope intercepts that impact wetland locations. The work area shall be separated from the wetlands by silt fence, as shown on the plans, to avoid siltation and inadvertent fill into the wetland areas.

Dewatering

If dewatering is required, treat the water to remove suspended solids before allowing it to enter any waterway or wetland. Provide a sedimentation basin with sufficient capacity and size to provide an efficient means to filter the water from the dewatering operation before it is discharged back into the waterway or wetland as provided in the standard specifications and these special provisions. As part of the Erosion Control Implementation

Plan (ECIP) submittal, supply all pertinent information and calculations used to determine the best management practice for dewatering at each location it is required.

Refer to the dewatering guidelines of WisDNR Storm Water Management Technical Standards, Code #1061, "Dewatering". This document can be found at the WisDNR website: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>

The cost of all work and materials associated with water treatment and/or dewatering is incidental to the contract

Archeological Site Restrictions

See article "Archeological Site Protection" for restrictions when working adjacent to identified Archeological sites.

14. 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.

Work around any utility facilities to avoid a conflict as no adjustments are anticipated at this time.

The following utilities have facilities in the project limits:

ANR Pipeline has an existing underground **gas/petroleum** facility (10.75 inch pipe) within the construction limits at approximate Station K841WB+75 and F74EB+25. Notify ANR Pipeline at least 5 days prior to beamguard installation to locate gas facility. The contractor will ensure no beamguard posts be placed within 5-feet of the existing gas facility.

ATC Management has overhead **electrical** facilities paralleling the construction limits for the entire length of the contract workzone. ATC does not anticipate any conflicts with this project. OSHA Safe Working Clearances to energized high voltage transmission lines must be maintained.

Century Link/Lightcore has underground **communication** facilities within the construction limits. Lightcore communications lines are located on Applegate Court, the intersection of Ann Street and Fish Hatchery Road, and crossing USH 12/18 east of the Fish Hatchery Road interchange. Century Link/Lightcore does not anticipate any conflicts for this project.

The City of Madison/Oakridge Sanitary District has underground **sewer** facilities within the construction limits. An existing sewer line near beamguard location WB-01 is within close proximity of proposed beamguard. Contractor must not disturb this existing facility. An abandoned 8" sewer line crosses USH 12/18 near beamguard location WB-07. The City of Madison and the Oakridge Sanitary District does not anticipate any conflicts for this project.

Madison Gas and Electric (MG&E) has underground and overhead **electric and gas** facilities within the construction limits. If beamguard crosses an existing utility, the contractor will space the beamguard posts appropriately to avoid conflict with the utility. If post spacing cannot be achieved, contact Steve Beversdorf, 133 S Blair Street, Madison WI 53788, (608) 252-1552 or (608) 444-9620 at least 7 working days prior to construction near affected utility line. MG&E does not anticipate any conflicts with gas or electric lines for this project.

Madison Metropolitan Sewerage District (MMSD) has underground **sewer** facilities within the construction limits. Contact Ray Schneider to verify location of existing sewer line when working in the area of beamguard location EB-16 at least 7 days prior to construction, (608) 222-1201 Ext. 259 or (608) 347-3628. MMSD is proposing a new crossing underneath USH 12. See special provision Other Contracts for more information.

Madison Water Utility has underground **water** facilities within the construction limits. Madison Water Utility does not anticipate any conflicts for this project.

McLeod USA Telecom has underground **communications** facilities within the construction limits. Space beamguard posts to avoid conflict with the existing utility line at beamguard location EB-17. If post spacing cannot be achieved, contact Jim Kostuch, 13935 Bishops Dr, Brookfield WI 53005, (262) 792-7938 at least 7 working days prior to construction near affected utility line.

Monona Water Utility has underground **water and storm** facilities within the construction limits. Beamguard location WB-20 crosses three utility lines between Stations 139MNE+00 to 143MNE+00. The contractor is to space beamguard posts to avoid conflict with the existing utilities. If post spacing cannot be achieved, contact Dan Stephany, 5211 Schluter Rd, Monona WI 53716, (608) 222-2525 at least 7 days prior to construction.

Windstream KDL has underground **communications** facilities within the construction limits. Windstream does not anticipate any conflicts for this project.

WisDOT has an existing Road Weather Information System (RWIS) **communication tower** in the northwest quadrant of the Monona Drive interchange. Please contact Michael Adams, PO Box 7986, Madison, WI 53707, (608) 266-5004, 30 days prior to construction near the westbound USH 12/18 onramp from Monona Drive to locate underground cabling from the RWIS tower to the in-pavement sensors. Beamguard posts for location WB-16 will be spaced to avoid conflict with underground cables.

WisDOT has underground **communication** facilities within the construction limits. No conflicts are expected, but when working in close proximity to marked facilities, take care to avoid disruption of the conduit and adjust spacing of guardrail posts accordingly.

WisDOT has existing **street lighting** facilities throughout the project. Light poles in conflict are shown on the plan and are being relocated as part of this contract. “

US Signal has existing underground **communication** facilities within the construction limits crossing under USH 12/18 east of South Towne Drive. US Signal does not anticipate any conflicts with this utility line.

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

John Roelke, License Number All-119523, inspected Structures B-13-16, B-13-17, B-13-191, and B-13-192 for asbestos on August 21, 2013, and inspected Structure B-13-280 for asbestos and August 23, 2013, and inspected Structures B-13-0037 and B-13-318 for asbestos on January 17, 2014. No regulated Asbestos Containing Material (RACM) was found on these structures. Copies of the inspection reports are available from: Curt Neuhauser, (608) 245-2676.

In accordance with 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 Curt Neuhauser, (608) 245-2676 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-13-16, USH 12/18 Eastbound over USH 14 (Park St.)
- Site Address: 3.3 M E Jct USH 18 to W
- Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
- Contact: Curt Neuhauser
- Phone: (608) 245-2676
- Age: 63 years old. This structure was constructed in 1951.
- Area: 11,311 SF of deck

- Site Name: Structure B-13-17, USH 12/18 Eastbound over WSOR (formerly CNW RR)
 - Site Address: 0.2 M E Jct USH 151 to N
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 62 years old. This structure was constructed in 1952.
 - Area: 8,232 SF of deck
-
- Site Name: Structure B-13-191, USH 12/18 Westbound over USH 14 (Park St.)
 - Site Address: 3.7 M W Jct CTH BB
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 53 years old. This structure was constructed in 1961.
 - Area: 11,311 SF of deck
-
- Site Name: Structure B-13-192, USH 12/18 Westbound over WSOR (formerly CNW RR)
 - Site Address: 3.4 M W Jct CTH BB
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 53 years old. This structure was constructed in 1961.
 - Area: 6,735 SF of deck
-
- Site Name: Structure B-13-280, USH 12/18 over Capital City Trail/WSOR (formerly CMSTPP RR)
 - Site Address: 0.1 M E Jct CTH MC
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 39 years old. This structure was constructed in 1975.
 - Area: 31,731 SF of deck

- Site Name: Structure B-13-0037, Eastbound USH 12/18 over John Nolen Drive
 - Site Address: 1.3 M E Jct USH 151 T
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 62 years old. This structure was constructed in 1952.
-
- Site Name: Structure B-13-318, Westbound USH 12/18 over Monona Drive
 - Site Address: 0.9 M W Jct USH 51 TO
 - Ownership Information: WisDOT Transportation SW Region, 2101 Wright St., Madison, WI 53704-2583
 - Contact: Curt Neuhauser
 - Phone: (608) 245-2676
 - Age: 26 years old. This structure was constructed in 1988.

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)

16. **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:

- 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.
- Specifications, brochures, and technical data of all lighting equipment to be used.
- The details on how the luminaires will be attached.
- Electrical power source information.
- Details on the louvers, shields, or methods to be employed to reduce glare.
- Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
- 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:

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

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.

17. Incentive/Disincentive for Interim Completion of Work John Nolen Drive Subsegment, Item 108.3100.S.01.

A General

This item shall consist of either an incentive payment or a disincentive pay reduction as specified below.

The contractor shall complete all of the work and coordination measures necessary on US 12 within the John Nolen Drive Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits to restore traffic to its permanent location on this contract prior to 12:01 AM on the 45th consecutive day of construction.

The completion time allowed for this contract is based on an expedited work schedule, but shall not allow the use of special high early concrete mixes to shorten cure times.

Under this Incentive/Disincentive plan, no time extensions will be granted for adverse weather conditions; for delays in material deliveries; or for labor disputes unless it can be shown that such disputes are industry wide.

Each day shall be defined as a 24 hour period beginning at 12:01 AM.

The maximum incentive payment, as shown on the Schedule of Items, is for department accounting purposes. The actual incentive payment the contractor may receive shall be in accordance to section B of this provision.

Incentive payments will not be considered as part of the money value of the work completed for computing time extensions.

B Incentive Payment

The contractor shall be entitled to an incentive payment for completion of all of the work necessary to complete the John Nolen Drive Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits, on this contract prior to 12:01 AM, on the 45th consecutive day of construction or such extended time as may be allowed.

The incentive payment shall be paid at the rate of \$5,000 per calendar day for each day or portion thereof, of completion prior to the 45th calendar day 12:01 AM. The maximum amount of incentive payment shall not exceed \$50,000.

C Disincentive Pay Reduction

Should the contractor fail to complete all of the work and coordination measures necessary on US 12 within the John Nolen Drive Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits, to restore traffic to its permanent location under this contract prior to 12:01 AM, on the 45th consecutive day of construction or within such extended time as may be allowed, the contractor shall be liable to the department for a pay reduction in the amount of \$5,000 per calendar day or portion thereof, for each calendar day after 12:01 AM, on the 45th consecutive day of construction that work remains incomplete.

If contract time expires before completing all work specified in the contract, additional liquidated damages according to standard spec 108.11 will be affixed in addition to the disincentive pay reduction.

D Measurement and Payment

Incentive/Disincentive for interim Completion of Work will be measured by the calendar day and will be paid for at the contract unit price per calendar day.

The unit price per day based on the incentive pay adjustment shall be compensation in full for completing the work as hereinbefore specified.

The unit price per day based on the disincentive pay reduction shall be assessed for failing to complete all the work as hereinbefore specified.

108-056 (20080501)

18. **Incentive/Disincentive for Interim Completion of Work SB John Nolen Drive to EB US 12 Ramp, Item 108.3100.S.02.**

A General

This item shall consist of either an incentive payment or a disincentive pay reduction as specified below.

The contractor shall complete all of the work and coordination measures necessary on US 12 for southbound John Nolen Drive to eastbound US 12 Ramp, including all structure work and concrete pavement approach slabs within the subsegment limits, to restore traffic

to its permanent location on this contract prior to 12:01 AM on the 25th consecutive day of construction.

The completion time allowed for this contract is based on an expedited work schedule, but shall not allow the use of special high early concrete mixes to shorten cure times.

Under this Incentive/Disincentive plan, no time extensions will be granted for adverse weather conditions; for delays in material deliveries; or for labor disputes unless it can be shown that such disputes are industry wide.

Each day shall be defined as a 24 hour period beginning at 12:01 AM.

The maximum incentive payment, as shown on the Schedule of Items, is for department accounting purposes. The actual incentive payment the contractor may receive shall be in accordance to section B of this provision.

Incentive payments will not be considered as part of the money value of the work completed for computing time extensions.

B Incentive Payment

The contractor shall be entitled to an incentive payment for completion of all of the work necessary to reopen the southbound John Nolen Drive to eastbound US 12 Ramp, including all structure work and concrete pavement approach slabs within the subsegment limits, on this contract prior to 12:01 AM, on the 25th consecutive day of construction or such extended time as may be allowed.

The incentive payment shall be paid at the rate of \$5,000 per calendar day for each day or portion thereof, of completion prior to the 25th calendar day 12:01 AM. The maximum amount of incentive payment shall not exceed \$35,000.

C Disincentive Pay Reduction

Should the contractor fail to complete all of the work and coordination measures necessary to reopen southbound John Nolen Drive to eastbound US 12 Ramp, including all structure work and concrete pavement approach slabs within the subsegment limits, and restore traffic to its permanent location under this contract prior to 12:01 AM, on the 25th consecutive day of construction or within such extended time as may be allowed, the contractor shall be liable to the department for a pay reduction in the amount of \$5,000 per calendar day or portion thereof, for each calendar day after 12:01 AM, on the 25th consecutive day of construction that work remains incomplete.

If contract time expires before completing all work specified in the contract, additional liquidated damages according to standard spec 108.11 will be affixed in addition to the disincentive pay reduction.

D Measurement and Payment

Incentive/Disincentive for interim Completion of Work will be measured by the calendar day and will be paid for at the contract unit price per calendar day.

The unit price per day based on the incentive pay adjustment shall be compensation in full for completing the work as hereinbefore specified.

The unit price per day based on the disincentive pay reduction shall be assessed for failing to complete all the work as hereinbefore specified.

108-056 (20080501)

19. Incentive/Disincentive for Interim Completion of Work Park Street Subsegment, Item 108.3100.S.03.

A General

This item shall consist of either an incentive payment or a disincentive pay reduction as specified below.

The contractor shall complete all of the work and coordination measures necessary on US 12 within the Park Street Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits, to restore traffic to its permanent location on this contract prior to 12:01 AM on the 60th consecutive day of construction.

The completion time allowed for this contract is based on an expedited work schedule, but shall not allow the use of special high early concrete mixes to shorten concrete cure times.

Under this Incentive/Disincentive plan, no time extensions will be granted for adverse weather conditions; for delays in material deliveries; or for labor disputes unless it can be shown that such disputes are industry wide.

Each day shall be defined as a 24 hour period beginning at 12:01 AM.

The maximum incentive payment, as shown on the Schedule of Items, is for department accounting purposes. The actual incentive payment the contractor may receive shall be in accordance to section B of this provision.

Incentive payments will not be considered as part of the money value of the work completed for computing time extensions.

B Incentive Payment

The contractor shall be entitled to an incentive payment for completion of all of the work necessary to complete the Park Street Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits, on this contract prior to 12:01 AM, on the 60th consecutive day of construction or such extended time as may be allowed.

The incentive payment shall be paid at the rate of \$5,000 per calendar day for each day or portion thereof, of completion prior to the 60th calendar day 12:01 AM. The maximum amount of incentive payment shall not exceed \$50,000.

C Disincentive Pay Reduction

Should the contractor fail to complete all of the work and coordination measures necessary on US 12 within the Park Street Subsegment, including all structure work and concrete pavement approach slabs within the subsegment limits, to restore traffic to its permanent location under this contract prior to 12:01 AM, on the 60th consecutive day of construction or within such extended time as may be allowed, the contractor shall be liable to the department for a pay reduction in the amount of \$5,000 per calendar day or portion thereof, for each calendar day after 12:01 AM, on the 60th consecutive day of construction that work remains incomplete.

If contract time expires before completing all work specified in the contract, additional liquidated damages according to standard spec 108.11 will be affixed in addition to the disincentive pay reduction.

D Measurement and Payment

Incentive/Disincentive for interim Completion of Work will be measured by the calendar day and will be paid for at the contract unit price per calendar day.

The unit price per day based on the incentive pay adjustment shall be compensation in full for completing the work as hereinbefore specified.

The unit price per day based on the disincentive pay reduction shall be assessed for failing to complete all the work as hereinbefore specified.

108-056 (20080501)

20. Incentive/Disincentive for Interim Completion of Work IH39/WB US 12 Subsegment, Item 108.3100.S.04.

A General

The contractor shall complete all of the work and coordination measures necessary on US 12 within the IH 39/Westbound US 12 Subsegment to restore traffic to its permanent location on this contract prior to 12:01 AM on the 28th consecutive day of construction.

The completion time allowed for this contract is based on an expedited work schedule, but shall not allow the use of special high early concrete mixes to shorten cure times.

Under this Incentive/Disincentive plan, no time extensions will be granted for adverse weather conditions; for delays in material deliveries; or for labor disputes unless it can be shown that such disputes are industry wide.

Each day shall be defined as a 24 hour period beginning at 12:01 AM.

The maximum incentive payment, as shown on the Schedule of Items, is for department accounting purposes. The actual incentive payment the contractor may receive shall be in accordance to section B of this provision.

Incentive payments will not be considered as part of the money value of the work completed for computing time extensions.

B Incentive Payment

The contractor shall be entitled to an incentive payment for completion of all of the work necessary to complete the IH 39/Westbound US 12 Subsegment on this contract prior to 12:01 AM, on the 28th consecutive day of construction or such extended time as may be allowed.

The incentive payment shall be paid at the rate of \$5,000 per calendar day for each day or portion thereof, of completion prior to the 28th calendar day 12:01 AM. The maximum amount of incentive payment shall not exceed \$25,000.

C Disincentive Pay Reduction

Should the contractor fail to complete all of the work and coordination measures necessary on US 12 within the IH 39/Westbound US 12 Subsegment to restore traffic to its permanent location under this contract prior to 12:01 AM, on the 28th consecutive day of construction or within such extended time as may be allowed, the contractor shall be liable to the department for a pay reduction in the amount of \$5,000 per calendar day or portion thereof, for each calendar day after 12:01 AM, on the 28th consecutive day of construction that work remains incomplete.

If contract time expires before completing all work specified in the contract, additional liquidated damages according to standard spec 108.11 will be affixed in addition to the disincentive pay reduction.

D Measurement and Payment

Incentive/Disincentive for interim Completion of Work will be measured by the calendar day and will be paid for at the contract unit price per calendar day.

The unit price per day based on the incentive pay adjustment shall be compensation in full for completing the work as hereinbefore specified.

The unit price per day based on the disincentive pay reduction shall be assessed for failing to complete all the work as hereinbefore specified.

108-056 (20080501)

21. Debris Containment B-13-280, Item 203.0225.S.01.

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 Capital City Trail and WSOR 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. Ben Meighan, Maintenance of Way
Wisconsin and Southern Railroad Co.
1890 East Johnson Street
Madison, WI 53704
(414) 438-8820; Ext. 4201
bmeighan@watcocompanies.com

D Measurement

The department will measure Debris Containment B-13-280 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-13-280	LS

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

203-010 (20080902)

22. Temporary Shoring, Item 206.6000.S.

A Description

This special provision describes designing and providing temporary shoring at locations the plans show.

B Materials

B.1 Shoring Design

Provide a shoring design for each location where the plan requires temporary shoring. Have a professional engineer, registered in the State of Wisconsin and knowledgeable of the specific site conditions and requirements verify the adequacy of the design. Submit one copy of each shoring design, signed and sealed by the same professional engineer verifying the design, to the engineer for incorporation into the permanent project record.

C Construction

Provide temporary shoring at each required location conforming to the design developed for that location.

Remove the shoring when it is no longer needed unless the engineer allows it to remain in place. Backfill the space that is excavated but not occupied by the new permanent construction conforming to standard spec 206.3.13.

D Measurement

The department will measure Temporary Shoring by the square foot, acceptably completed at locations the plans show, measured as the area of exposed face in the plane of the shoring from the ground line in front of the shoring to a maximum of one foot above the retained grade. Shoring used for staged construction in multiple configurations without removal and reinstallation will be measured once based on the configuration with the largest area of exposed face.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
206.6000.S	Temporary Shoring	SF

Payment is full compensation for designing and providing shoring; for providing a signed and sealed copy of the design; and for backfilling and removing the shoring.

The department will not pay for temporary shoring, installed for contractor convenience that is not required in the plans.

206-005 (20110615)

23. 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.

24. **Base Aggregate Dense 1 1/4-Inch, Item 305.0120.**

Revise standard spec 305.2.2.1 as follows:

Use 1 1/4-Inch base aggregate that conforms to the following gradation requirements.

SIEVE	PERCENT PASSING BY WEIGHT
1 1/4 inch	95 - 100
1 inch	---
3/4 inch	70 - 90
3/8 inch	45 - 75
No. 4	30 - 60
No. 10	20 - 40
No. 40	7 - 25
No. 200	2 - 12 ^{[1], [2]}

^[1] Limited to a maximum of 8.0 percent for base placed between old and new pavement.

^[2] 3 - 10 percent passing when base is $\geq 50\%$ crushed gravel

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

B Materials

B.1 Quality Control Plan

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

B.2 Personnel

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

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)

26. Concrete Pavement HES 10-Inch.

Supplement standard spec 415.2 with the following:

415.2.6 Bond Breaker

Supply a bond breaker material for engineers approval that meets the necessary requirements to provide for a clean joint between newly established concrete pavement and existing concrete pavement.

Replace standard spec 415.3.5(1) with the following:

- (1) Reinforce the concrete as the plans specify. Limit the placement of tie bars to the longitudinal pavement edge where the proposed transverse joints align with the adjacent skewed transverse joints. The opposing longitudinal joint that does not include matched transverse joints should not be tied.

Supplement standard spec 415.3.7.1(1) with the following:

Take special care to align new perpendicular transverse joints with the skewed joint in the adjacent lane along one edge of the new concrete pavement. Place engineer approved Bond Breaker on the opposing side of the newly placed pavement, where transverse joints are unaligned between proposed and existing pavement.

Replace standard spec 415.3.7.1 (4) with the following:

(4) Saw joints in a single cut to the width and depth the plans show. Begin sawing as soon as the concrete hardens sufficiently to prevent excessive raveling along the saw cut and finish before conditions induce uncontrolled cracking. Limit overcut on all sawing to less than 0.75 feet into the adjacent panel or lane. Epoxy seal any overcut locations in accordance with standard spec 416.2.3.2 of the standard specifications.

Supplement standard spec 415.5.1 (2) with the following:

Payment includes providing and installing engineer approved bond breaker, and epoxy sealing of overcut locations.

27. Concrete Pavement Continuous Diamond Grinding, Item 420.1000.S.

A Description

(1) This special provision describes continuous diamond grinding of concrete pavement.

B (Vacant)

C Construction

C.1 General

- (1) Diamond grind the existing concrete pavement to provide a uniform surface that is reasonably plane, free of excessively large scarification marks, and has the grade and cross slope the plans show or the engineer specifies. Do not damage the remaining pavement. Do not grind deeper than 3/4 inch from the top of the original surface.
- (2) Complete full-depth and partial-depth concrete repairs, slab stabilization, dowel bar retrofit, and other pavement repair operations before grinding. Begin and end grinding at lines perpendicular to the pavement centerline at the project limits. Do not overlap adjacent grinding passes by more than 1-inch. Do not leave un-ground surface area between passes.
- (3) Grind joint or crack faults so there is no more than a 1/16-inch differential between the adjacent sides of the joints and cracks. Grind warped and curled slabs as required to provide an acceptable ride. Provide smooth transitions from the edge of the mainline to shoulders, adjacent lanes, and ramps leaving no more than a 3/16-inch ridge at transitions. Grind adjacent pavement and paved shoulders as necessary to feather in a smooth transition and maintain drainage. Do not grind approach slabs unless necessary to provide a smooth transition.

- (4) Provide lateral drainage by maintaining a constant cross slope between grinding extremities in each lane including feathered areas of the shoulder. Ensure that the finished cross slope conforms to the plans and has no depressions or slope misalignment greater than 1/4-inch in 12 feet when measured perpendicular to the centerline with a 12-foot straightedge
- (5) Do not diamond grind over valves, manholes, or other fixtures. Provide a smooth taper from the diamond ground surface to the top of the fixture.

C.2 Equipment

- (1) Use self-propelled grinding machines with electronic depth, grade, and slope controls designed for grinding and texturing pavement. Equip grinding machines with diamond blades and a vacuuming system capable of removing liquid and solid residue from the pavement surface. Shroud the machine to prevent discharging loosened material into adjacent work areas or live traffic lanes.
- (2) Ensure that the machine, including the grinding head, weighs 35,000 pounds or more, will grind a strip at least 4 feet wide, and has an effective wheel base of 25 feet or more. Do not use equipment that causes raveling, aggregate fractures, joint deflection, or other damage to material remaining in place.
- (3) Maintain equipment in proper working order. Ensure that the match and depth control wheels are round. Stop grinding and immediately replace out-of-round wheels.

C.3 Final Surface Finish

- (1) Produce a pavement surface that is true in grade and uniform in appearance. Provide a longitudinal line-type texture with corrugations parallel to the outside pavement edge.
- (2) Select the number of diamond blades per foot that will provide the proper surface finish for the aggregate type. Determine the proper sequence of operations and number of passes required to meet the specifications.
- (3) Ensure that ridges are 1/8-inch +/- 1/16-inch higher than the bottom of the grooves and uniformly spaced as follows:

	Limestone	Gravel
Width between grooves	0.090 to 0.110 inch	0.080 to 0.095 inch

- (4) Ensure that a minimum of 95 percent of any 4-foot by 100-foot section of pavement surface is textured. Remove unbroken fins as the engineer directs.

C.4 Residue Disposal

- (1) Remove solid and liquid grinding residues from the roadway by vacuuming. Leave the roadway in a clean, damp condition immediately behind the grinding machine. Remove residue immediately in areas of cross traffic. Do not allow residue and water to flow or blow across lanes used by public traffic or to enter any storm sewer, stream,

lake, reservoir, marsh, or wetland. Dispose of residue and water at an acceptable material disposal site located off the project limits and as shown in the Erosion Control Implementation Plan (ECIP).

C.5 Smoothness Requirements

- (1) Measure IRI for the pavement the contract designates for grinding both before and after grinding. Conform to the QMP Ride special provision as contained elsewhere in the contract except as follows:
 - Submit smoothness assurance reports to the engineer before and after grinding for IRI and before and after correcting areas of longitudinal surface deviation.
 - Straight edging is required to identify depressions or slope misalignment as specified in C.1(4).
 - No quality control plan is required. The contractor need only provide the name and certifications for the profiler operator and identify segment locations of each profile run.
 - The profiler and operator need only be on site when before-grinding and after-grinding profiles are run; and when conducting corrective grinding operations.
 - Do not apply localized roughness requirements to surfaces the contract designates for continuous diamond grinding or the transitions to existing pavement that is not ground under the contract. Instead ensure that the finished ground surface does not include longitudinal surface deviations exceeding 0.3-inch in 25 feet as determined using ProVal's straightedge simulation analysis.
 - Low areas due to subsidence or other localized causes are excluded from the smoothness requirements. The engineer will review each low area and may direct the contractor to perform corrective grinding as required to reduce the final IRI for that segment.
- (2) In addition to the categories defined in the contract QMP Ride special provision, the department will categorize each diamond ground standard or partial segment of concrete pavement as follows:

Segments with a Posted Speed Limit of 55 MPH or Greater	
Category	Description
RCDG V	Rural concrete pavement surfaces the contract designates for continuous diamond grinding.
Segments with Any Portion Having a Posted Speed Limit Less Than 55 MPH	
Category	Description
UCDG V	Urban concrete pavement surfaces the contract designates for continuous diamond grinding.

- (3) If an individual segment IRI exceeds the corrective grinding limits of 65 in/mile for RCDG V or 115 in/mile for UCDG V, perform corrective grinding on that segment. Re-profile corrected segments to verify the final IRI. Ensure that each segment has an IRI after corrective grinding as follows:
 - For segments with a before-grinding IRI less than or equal to 200 inches/mile, provide a final segment IRI that does not exceed 65 in/mile for RCDG V or 115 in/mile for UCDG V.
 - For segments with a before-grinding IRI greater than 200 inches/mile, provide a final segment IRI that does not exceed 65 in/mile for RCDG V, 115 in/mile for UCDG V, or 35 percent of the before-grinding IRI whichever is greater.
- (4) Submit a revised ProVAL smoothness assurance report after corrective grinding for corrected segments to validate the final segment IRI.
- (5) If after performing corrective grinding, a segment contains a bump exceeding 0.3-inch in 25 feet or has a final segment IRI greater than specified, that segment is subject to the engineer's right to adjust pay for non-conforming work under standard spec 105.3.

D Measurement

- (1) The department will measure Concrete Pavement Continuous Diamond Grinding by the square yard acceptably completed, measured as the final textured surface area regardless of the number of passes required to achieve acceptable results. The department will include minor areas of un-ground pavement within the ground area.
- (2) If conditions require a feather pass into the shoulder, adjacent lanes, or ramps, the department will also measure an area 2 feet wide times the length of the feather pass or an additional 20 square yards whichever is greater.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
420.1000.S	Concrete Pavement Continuous Diamond Grinding	SY

- (1) Payment for Concrete Pavement Continuous Diamond Grinding is full compensation for grinding to improve pavement ride including measuring IRI before and after grinding; for feathering in adjacent pavement; for removing unbroken fins; and for hauling and off-site disposal of grinding residue.
- (2) The department will adjust pay for smoothness of each 500-foot long segment nominally one wheel path wide using equation as follows:

Category RCDG V - Rural Diamond Ground Concrete Pavement	
IRI in/mile	Incentive \$ per 500-foot section
< 45	\$125
≥ 45 to < 55	\$687.5 - (12.5 x IRI)
≥ 55 to < 65	\$0
≥ 65	Corrective action
Category UCDG V - Urban Diamond Ground Concrete Pavement	
IRI in/mile	Incentive \$ per 500-foot section
< 50	\$125
≥ 50 to < 75	\$375 - (5 x IRI)
≥ 75 to < 115	\$0
≥ 115	Corrective action

420-010(20110930)

28. **QMP Ride.**

A Description

- (1) This special provision describes profiling pavements with a non-contact profiler, locating areas of localized roughness, and determining the International Roughness Index (IRI) for each wheel path segment.

B (Vacant)

C Construction

C.1 Personnel

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

C.2 Equipment

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

C.3 Testing

C.3.1 Run and Reduction Parameters

- (1) Enter the equipment-specific department-approved filter settings and parameters given in the approved profilers list on the department's QMP ride web site.

<http://roadwaystandards.dot.wi.gov/standards/qmp/profilers.pdf>

C.3.2 Contractor Testing

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

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

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

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

C.3.3 Verification Testing

- (1) The department may conduct verification testing (QV) to validate the quality of the product. A HTCP certified profiler operator will perform the QV testing. The department will provide the contractor with a listing of the names and telephone numbers of all verification personnel for the project.
- (2) The department will notify the contractor before testing so the contractor can observe the QV testing. Verification testing will be performed independent of the contractor's QC work using separate equipment from the contractor's QC tests. The department will provide test results to the contractor within 1 business day after the department completes the testing.
- (3) The engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's testing procedures and equipment. Both parties will document all investigative work.
- (4) If the contractor does not respond to an engineer request to resolve a testing discrepancy, the engineer may suspend production until action is taken. Resolve disputes as specified in C.6.

C.3.4 Documenting Profile Runs

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

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

The ProVAL software is available for download at:

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

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

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

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

C.4 Corrective Actions

C.4.1 General

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

C.4.2 Corrective Actions for Localized Roughness

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

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

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

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

C.4.3 Corrective Actions for Excessive IRI

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

HMA I: Correct to an IRI of 60 in/mile using whichever of the following methods as approved by the engineer:
Mill and replace the full lane width of the riding surface excluding the paved shoulder.
Continuous diamond grinding or fine-tooth milling the full lane width, if required, of the riding surface including adjustment of the paved shoulders.

HMA II: Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer:
Mill and replace the full lane width of the riding surface excluding the paved shoulder.
Continuous diamond grinding or fine-tooth milling of the full lane width, if required, of the riding surface including adjustment of the paved shoulders

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

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

C.5 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate testing procedures, and perform additional testing.
- (2) If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming pavement, the department will use third party testing to resolve the dispute. The department's Quality Assurance Unit, or a mutually agreed on independent testing company, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent tester. The department may use third party tests to evaluate the quality of questionable pavement and determine the appropriate payment.

29. Expansion Device, B-13-16, B-13-17, B-13-191, B-13-192, and B-13-280.

A Description

This special provision describes furnishing and installing an expansion device in accordance to standard spec 502, as shown on the plans, and as hereinafter provided.

B Materials

The minimum thickness of the polychloroprene strip seal shall be ¼-inch for non-reinforced elastomeric glands and 1/8-inch for reinforced glands. Furnish the strip seal gland in lengths suitable for a continuous one-piece installation at each individual expansion joint location. Provide preformed polychloroprene strip seals that conform to the requirements ASTM D3542, and have the following physical properties:

Property Requirements	Value	Test Method
Tensile Strength, min.	2000 psi	ASTM D412
Elongation @ Break, min	250%	ASTM D412
Hardness, Type A, Durometer	60 ± 5 pts.	ASTM D2240
Compression Set, 70 hours @212°F, max.	35%	D395 Method B Modified
Ozone Resistance, after 70 hrs. at 100°F under 20% Strain with 100 pphm ozone	No Cracks	ASTM D1149 Method A
Mass Change in Oil 3 after 70 hr. 212°F	45%	ASTM D471
Mass Change, max.		

Install the elastomeric strip seal gland with tools recommended by the manufacturer, and with a lubricant adhesive conforming to the requirements of ASTM D4070.

The manufacturer and model number shall be one of the following approved strip seal expansion device products:

Manufacturer	Model Number Strip Seal Gland Size*		
	4-Inch	5-Inch	6-Inch
D.S. Brown	SSA2-A2R-400	SSA2-A2R-XTRA	SSA2-A2R-XTRA
R.J. Watson	RJA-RJ400	RJA-RJ500	RJA-RJ600
Watson Bowman Acme	A-SE400	A-SE500	A-SE800
Commercial Fabricators	A-AS400	-----	-----

*Expansion device strip seal gland size requirement of 4", 5", and 6" shall be as shown on the plans.

Furnish manufacturer's certification for production of polychloroprene represented showing test results for the cured material supplied, and certifying that it meets all specified requirements.

The steel extrusion or retainer shall conform to ASTM designation A 709 grade 36 steel. After fabrication, steel shall be galvanized conforming to the requirements ASTM A123.

Manufacturer's certifications for adhesive and steel shall attest that the materials meet the specification requirements.
502-020 (20110615)

30. **Crack Sealing Epoxy, Item 502.0717.S.**

A Description

This special provision describes sealing all transverse and longitudinal cracks in the decks as shown on the plans and as hereinafter provided.

B Materials

Provide a penetrating sealant that is listed on the department's approved product listing, "Low Viscosity Crack Sealers".

C Construction

Clean the cracks to be sealed by the use of high pressure air after Cleaning Deck and Preparation Deck are completed.

Pour the epoxy sealant into the cracks to be sealed after the deck preparation has been completed and before the overlay is placed. Place the sealant in as narrow a band as possible so that the bond of the new concrete overlay to the existing concrete is not impaired.

At no expense to the department, clean all spills and clean all areas of too wide a band of sealant before the overlay is placed.

D Measurement

The department will measure Crack Sealing Epoxy in length by the linear foot of cracks sealed 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
502.0717.S	Crack Sealing Epoxy	LF

Payment is full compensation for furnishing and placing the epoxy sealant, including any required cleaning.

502-015 (20090901)

31. Protective Surface Treatment Reseal, Item 502.3215.S.**A Description**

This special provision describes resealing existing structures with protective surface treatment.

B Materials

Furnish a clear commercial protective surface treatment selected from the department's approved products list.

C Construction

Apply protective surface treatment to the entire top surface of the bridge deck; curb, including vertical face; median and sidewalk surfaces; and the inside faces and tops of concrete parapets.

Ensure that the concrete is surface-dry for a minimum of one day before application. Delay application if rain is expected, or protect from rain for up to 12 hours after application.

Ensure that the concrete is clean. Air blast immediately before applying the protective surface treatment to remove all dust or loose particles. Also ensure that application equipment is clean and functioning properly.

Use the manufacturer's recommended methods. Apply at the rate the manufacturer recommends unless that rate causes ponding.

Do not open the bridge to service until trafficked areas are dry enough to sustain traffic without causing damage to the treatment or creating a safety hazard.

D Measurement

The department will measure Protective Surface Treatment Reseal 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
502.3215.S	Protective Surface Treatment Reseal	SY

Payment is full compensation for resealing, including surface preparation and cleaning.
502-055 (20080902)

32. Removing Bearings B-13-280, Item 506.7050.S.01.

A Description

This special provision describes raising the girders and removing the existing bearings, as shown on the plans and as hereinafter provided.

B (Vacant)**C Construction**

Raise the structure's girders and remove the existing bearings as shown in the plans

Obtain prior approval from the engineer for the method of jacking the girders and of supporting them as required.

D Measurement

The department will measure Removing Bearings B-13-280 by the unit for each bearing removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
506.7050.S.01	Removing Bearings B-13-280	Each

Payment is full compensation for raising the bridge girders; and for removing the old bearings.

Cost of furnishing and installing the bearings will be paid for under separate bid items.
506-035 (20130615)

33. Removing Concrete Masonry Deck Overlay B-13-280, Item 509.9005.S.01.

A Description

Remove the concrete masonry deck overlay by milling the entire bridge deck, according 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 1/4-inch vertically and transversely; and
- If applicable, is acceptable to the manufacturer of the sheet waterproof membrane.

Windrowing and storing of the removed milled concrete masonry 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 concrete overlay. Blast-clean all exposed existing reinforcing steel.

Clean the surface on which the new concrete 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 concrete masonry shall become the property of the contractor; properly dispose of it according to standard spec 204.

D Measurement

The department will measure Removing Concrete Masonry Deck Overlay in area by the square yard acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.9005.S.01	Removing Concrete Masonry Deck Overlay B-13-280	SY

Payment is full compensation for removing the concrete masonry; cleaning the concrete surfaces; and for properly disposing of all materials.

509-005 (20100709)

34. **Culvert Pipe Liners, 18-Inch, Item 520.9700.S.01; Cleaning Culvert Pipes for Liner Verification, Item 520.9750.S.**

A Description

This special provision describes providing and pressure grouting culvert pipe liners for circular culverts.

B Materials

B.1 General

Provide flow calculations at the preconstruction conference. Use contractor-proposed liner properties, the Manning's coefficients listed on the department's approved products list, and base calculations on existing culvert sizes and liner sizes the plans show. Ensure that pipes when lined have a capacity within $\pm 5\%$ of the original full flow capacity of the pipe.

B.2 Flexible Pipe Liner

Use liners with a Manning's coefficient value published on the department's approved products list. Upon delivery provide manufacturer certificates of compliance certifying that the liners conform to the following:

Pipe Type	ASTM Designation	ASTM D3350 Resin
High Density Polyethylene (HDPE)		
Profile Wall Pipe	F894	345463C
Solid Wall Pipe	F714	345463C
Polyvinylchloride (PVC)	F949	---

B.3 Grout

Provide grout consisting of:

- One part of type I or II portland cement
- Three parts sand conforming to standard spec 501.2.5.
- Water to achieve required fluidity.

Alternatively the contractor may use an engineer-approved commercial cellular concrete grout conforming to the following:

Cement	ASTM C150	Type I or II
Density	ASTM C495 (no oven drying)	50 pcf min
Compressive Strength	ASTM C495	300 psi @ 28 day min 100 psi in 24 hours
Shrinkage	ASTM	1% by volume
Flow	ASTM C939	35 sec max

C Construction

C.1 General

As soon as possible after contract execution, survey existing culvert pipes to determine which culverts need cleaning in order to verify the required liner diameter and length. Notify the engineer before cleaning to confirm payment under the Cleaning Culvert Pipes for Liner Verification bid item.

Coordinate with the engineer to field verify culvert size, shape, material, and condition before ordering the liners.

Obtain easements if necessary for installing long sections of pipe.

C.2 Excavating and Cleaning

Before inserting the liner, clean and dry the pipe. Excavate and pump as required to remove debris and other materials that would interfere with the placement or support of the inserted liner. Dispose of and replace unserviceable endwalls as the engineer directs.

C.3 Placing Liners

Unload liners using slings and boom-type trucks or equivalents. Do not use chains or wire rope to handle liners and do not dump liners from the trucks when unloading.

Connect joints conforming to the manufacturer's recommendations.

C.4 Pressure Grouting

After the liner is in place, fill the area between the original pipe and the liner completely with grout to provide uniform space between the liner and the original pipe. Block, grout in lifts, or otherwise secure liners to prevent floatation associated while grouting.

Use a grout plant that is capable of accurately measuring, proportioning, mixing, and discharging by volume and at discharge pressures the liner manufacturer recommends. Do not exceed manufacturer-specified maximum pressures. The contractor may place grout in lifts to prevent exceeding maximum allowable pressures.

C.4 Site Restoration

Replace pipe sections damaged or collapsed during installation or grouting operations. Restore the grade to its original or improved cross section. Dispose of waste material.

D Measurement

The department will measure the Culvert Pipe Liners bid items by the linear foot acceptably completed, measured in place for each culvert location.

The department will measure Cleaning Culvert Pipes for Liner Verification as each culvert acceptably cleaned. The department will only measure culverts the engineer approves for payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
520.9700.S	Culvert Pipe Liners 18-Inch	LF
520.9750.S	Cleaning Culvert Pipes for Liner Verification	Each

Payment for the Culvert Pipe Liners bid items is full compensation for providing pipe liners; if deemed necessary, obtaining easements for equipment placement, storage, work operations, and all incidentals; for excavation and pumping; for cleaning the existing pipe before liner installation; for pressure grouting; for replacing contractor-damaged pipe and endwalls; and for restoring the grade and disposing of waste materials.

The department will pay the contractor \$150 per cubic yard for grout required in excess of 110 percent of the theoretical quantity required to fill the space between the inside diameter of the existing pipe and the outside diameter of the liner.

Payment for Cleaning Culvert Pipes for Liner Verification is full compensation for cleaning required to verify liner length and diameter; for excavation and pumping; and for disposing of waste material.

The department will pay separately for replacing unserviceable endwalls not rendered unserviceable by contractor operations under the appropriate contract endwall bid item, or absent the appropriate item as extra work.

520-015 (20130615)

35. Concrete Barrier Temporary Precast Installed.

Amend standard spec 603.3.1.1 by adding the following:

(5) Delineator brackets shall be two sided to allow reflectors to be placed on either side of the bracket. Rotating single sided brackets on previously installed barrier wall is incidental to the contract.

36. Adjusting or Reconstructing Existing Drainage Structures.

This work shall be according to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided for adjusting inlets, reconstructing manholes, and all other existing drainage structure modifications.

Amend standard spec 611.3.7 by adding the following to the last paragraph:

Set the drainage structure frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the frame to the correct plane and elevation. If this

average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

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

37. Archaeological Site Protection.

Archaeologically significant sites exist in the project area as follows:

Site	Location
47DA1283/BDA-0254 (Bryant Cemetery)	495WB+50 to 509WB+25
47DA141/BDA-0391 (Turville Bay Marsh Mounds)	C614EB+50 to D608EB+50 C614WB+50 to D618WB+75
47DA827 (Site C)	F675WB+00 to F702WB+00

Do not stage personnel, equipment and/or supplies on any area of the site not currently paved. Do not use these sites for borrow or waste disposal. If ground disturbance beyond the existing toe of slope becomes necessary, provide two weeks' notice to the Bureau of Technical Services, Environmental Services Section (ESS), before doing any work at these sites. ESS will provide a qualified archaeologist to be on site at all times when work occurs near these areas. ESS contacts are Jim Becker, (608) 261-0137 or Lynn Cloud, (608) 266-0099.

If a potentially significant archaeological feature or material is discovered during construction operations, the archeologist will promptly coordinate with the engineer, ESS and SHPO to determine an appropriate course of action.

38. Topsoil, Item 625.0100.

Replace standard spec 625.3.3(1) with the following:

- After preparing and finishing the areas designated for topsoil to the required lines, grades, slopes and cross section, place and spread the topsoil to the grades established on the cross sections. Depths of topsoil to vary based upon the cross section.

Supplement standard spec 625.3.3 with the following:

- (6) Prepare the slopes for topsoil placement by working the existing surface until a rough exposed surface remains to allow for adequate friction between existing ground and new topsoil placement.

39. **Removing Signs Type II, Item 638.2602.**

Replace standard spec 638.3.4(2) with the following:

Signs shall remain property of the department. Deliver signs to 3609 Pierstorff Street, Madison. Contact Iver Peterson at (608) 785-9060 or Eric Glindinning at (608) 785-9909 to coordinate the delivery. Separate the signs by plywood and aluminum and palletize them so they can be unloaded using a forklift. This work will be considered incidental to the bid item "Removing Signs Type II".

40. **Removing Raised Pavement Markers, Item 646.0790.S.**

A Description

This special provision describes removing raised pavement markers and filling holes with patching material.

B Materials

Furnish a commercial patching material selected from the department's approved products list for rapid setting concrete patch material that does not contain magnesium phosphate.

C Construction

Remove raised pavement markers as shown on the plans. Backfill the holes with patching material.

D Measurement

The department will measure Removing Raised Pavement Markers by each removed raised pavement marker, 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
646.0790.S	Removing Raised Pavement Markers	Each

Payment is full compensation for removing and properly disposing of raised pavement markers and for epoxy materials.

41. **Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch, Item 646.0841.S; 8-Inch, Item 646.0843.S.**

A Description

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

B Materials

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

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

C Construction

C.1 General

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

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

C.2 Groove Depth

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

C.3 Groove Width – Longitudinal Markings

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

C.4 Groove Position

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

C.5 Groove Cleaning

C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and the pavement marking tape. Use a high-pressure air blower with at least 185 ft³/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

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

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF
646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF

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

646-022 (20120615)

42. Temporary Pavement Marking 4-Inch.

Replace standard spec 649.3.1(4) with the following:

For pavements open to all traffic, apply edge line and lane lines as follows:

- For concrete pavement repair and replacement, on the same night the pavement is placed.
- For diamond ground surfaces, on the same night the pavement is ground unless the contractor applies permanent marking on the same night pavement is ground in the final location for each edge line and lane line.

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

A Description

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

B Materials

See Intelligent Transportation System Plans to determine type, size, and number of conduits, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

C Construction

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

D Measurement

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

E Payment

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

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

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

44. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

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

Unusual aspects of this project include:

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

A.2 Surge Protection

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

B Materials

B.1 General

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

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

B.2 Outdoor Equipment

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

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

B.3 Custom Equipment

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

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

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

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

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

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

B.3 Environmental Conditions

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

1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
2. **Duty Cycle:** Continuous
3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.
4. **Electrical Power:**
 - a. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
 - b. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
 - c. **Line voltage transients:** The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.
5. **Temperature and Humidity:**
 - a. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.

- b. **Equipment in Controlled Environments** shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

B.4 Patch Cables and Wiring

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

B.5 Surge Protection

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

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

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

C Construction

C.1 Thread Protection

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

C.2 Cable Installation

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the

department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

C.3 Wiring

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

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

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

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

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

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

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

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

C.4 System Operations

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

C.5 Surge Protection

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

D Measurement

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

E Payment

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

670-010 (20100709)

45. Polyester Polymer Concrete Masonry, Item 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 deck patching 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	$\geq 180^{\circ}\text{F}$	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	$\geq 2,000$ psi (7 days)	ASTM D 638
Adhesive Strength	≥ 250 psi (24hrs)	ACI 503R, Append. A
Compressive Strength	$\geq 3,000$ 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	$\geq 2,000$ 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	$\leq 0.2\%$	ASTM C566
Hardness	≥ 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 masonry 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 have a 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 concrete masonry 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 specs 502 and 509 except as modified herein.

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 repair areas chipped under items Deck Preparation Type 1 or 2 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 bridge deck repair area surfaces between shotblasting and application of the primer. All deck area requiring deck preparation shall be patched using the Polyester Polymer Concrete Masonry item before ending the nightly lane closure. Do not perform more deck preparation than can be patched 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°F
- Concrete surface temperature is below 50°F or above 100 °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°F or above 99 °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 polymer concrete shall be placed within 120 minutes after the primer has been applied.

The polyester polymer 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 polymer concrete shall be sufficient to produce an initial set time between 30 – 120 minutes during placement.

Apply and finish areas patched under the Polyester Polymer Concrete Masonry items to be flush with the adjacent existing deck surface.

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 as necessary. 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 tensile bond testing; for providing and placing the polyester polymer concrete masonry; for cleanup; and for sweeping/vacuuming and disposing of excess materials.

46. Concrete Masonry Deck Patching, Item SPV.0035.01.**A Description**

This special provision describes constructing a grade E concrete masonry deck patching course on the sawed deck preparation areas of the concrete bridge deck in accordance to standard specs 502 and 509, as shown on the plans, and as hereinafter provided.

B (Vacant)**C Construction**

Construct in accordance to the applicable methods specified in standard specs 502 and 509.

Immediately before placing the concrete deck patching, coat the prepared surfaces with a neat cement mixture. Mix the neat cement in a water-cement ratio approximately equal to five gallons of water per 94 pounds of cement. Ensure the prepared concrete surfaces are moist without any standing water before coating with the neat cement mixture. Brush the neat cement mixture over the prepared concrete surfaces to ensure that all parts receive an even coating, and do not allow excess neat cement to collect in pockets. Apply the neat cement at a rate that ensures the cement does not dry out before being covered with the new concrete.

Place concrete in accordance to standard spec 509 for concrete masonry overlay grade E concrete. The slump of the grade E concrete may be increased to three inches and ready-mixed concrete will be permitted. As determined by the engineer in the field, consolidate smaller areas by internal vibration, strike them off, and finish the areas with hand floats to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Give all deck patching areas a final hand float finish.

Cure the concrete masonry deck patching in accordance to the requirements of standard spec 502.2.6.1. Before cleaning the deck surface or applying the sheet membrane waterproofing (if applicable), cure the concrete deck patching surfaces for a period of three days and ensure that the deck patching concrete has a minimum compressive strength of 3500 psi.

D Measurement

The department will measure Concrete Masonry Deck Patching by the cubic yard, acceptably completed. The department will not measure wasted concrete. The computation of the measured quantity will be based on the normal cubic yard of concrete as defined in standard spec 501.3.2.2.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Concrete Masonry Deck Patching	CY

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

07/05

47. Backfill Controlled Low Strength Special, Item SPV.0035.02.

A Description

This special provision describes furnishing and placing a controlled low strength material to fill any voids underneath the existing abutment foundations as shown in the plans. This section covers the work necessary including furnishing, mixing and placing controlled low strength backfill; furnishing all labor, materials, equipment, and incidentals; and all other related work necessary for placing controlled low strength backfill, complete.

B Materials

Provide controlled low strength backfill that consists of a designed cementitious mixture of natural or processed materials. Allowable materials include natural sand, natural gravel, produced sand, foundry sand, produced gravel, fly ash, Portland cement, and other broken or fragmented mineral materials. The designed mixture shall be self-leveling and shall be free of shrinkage after hardening. Design the mixture to reach a state of hardening such that it can support foot traffic in no more than 24 hours. Provide a mixture that also meets the following requirements.

Test	Method	Value
Flow (inch)	ASTM D-6103	9 min
Compressive Strength (psi)	ASTM D-6024	20-40 @ 14 days 40-80 @ 28 days 80-120 @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days prior to placement, furnish the engineer with a design mix detailing all components and their proportions in the mix. Also, provide documentation from the supplier of the industrial byproducts that the foundry sand and fly ash used in the mixture meet the requirements for Industrial Byproducts Categories 1, 2, 3, or 4 in NR 538 of the Wisconsin Administrative Code for use as a confined geotechnical fill.

C Construction

C.1 General Requirements

Place controlled low strength backfill at the locations and to the lines and grades as shown on the plan. Proportion and mix materials to produce a product of consistent texture and flow characteristics. The engineer may reject any materials exhibiting a substantial change in properties, appearance, or composition.

If the official Weather Bureau forecast for the construction site predicts temperatures at or below freezing within the next 24 hours after placement of controlled low strength backfill, protect the placed materials from freezing during that time period. If the temperature is not forecast to rise above 40° F for 72 hours after placement, the engineer may require protection from freezing for up to 72 hours.

No controlled low strength backfill shall be allowed to enter any stream, lake, or sewer system. The contractor shall be responsible for any clean up or remediation costs resulting from such occurrences.

Minimize spilling and prevent the setting of any controlled low strength backfill that may escape upon finished structure surfaces. Remove any spilled controlled low strength backfill and restore the surface to its original condition. Properly dispose of all waste materials.

C.2 Placement under Existing Footing

Place a form at least 6 inches away from the face of the existing abutment footing that extends at least 9 inches above the base of the footing. Controlled low strength backfill shall be placed into the form to fill any voids below the footing/under the footing and to provide firm and uniform contact between the footings and the ground. Place formwork as necessary on the front face of the abutment to contain controlled low strength backfill where voids may pass completely under the footing.

The controlled low strength backfill must extend to the top of the form to provide nominal pressure so that voids will be filled. Purge any air pockets under the footing by rodding with a reinforcing bar at 1 foot intervals along the entire length of the formed area from front to back and/or by use of air vent pipes. The rod and/or pipes must extend to the back of the void throughout the formed area.

Once started, placement of controlled low strength backfill shall not be interrupted. Backfilling of a location shall not be considered complete until the controlled low strength backfill level is maintained within the formwork. After controlled low strength backfill placement has reached a constant level in the form, the backfill placement can stop so that the material can set.

WisDOT may periodically request that check holes be drilled to determine if unacceptable voids exist within the controlled low strength backfill. Additional backfilling shall be completed at no additional cost to the department where checking indicates the presence of unacceptable voids.

Controlled low strength backfill that cannot be placed prior to initial set shall be discarded.

Place controlled low strength backfill in continuous progression along the length of the footing. Exercise particular care to completely fill the voids on each side of any obstruction which interferes with the passage of backfill. Vent holes for the release of air and water during placement shall be provided as necessary. The controlled low strength backfill placement shall not be considered complete until all voids have been filled to the maximum extent practicable.

D Measurement

The department will measure Backfill Controlled Low Strength Special in volume by the cubic yard of material placed, acceptably completed. Such volume will be computed from supply truck tickets. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.02	Backfill Controlled Low Strength Special	CY

Payment is full compensation for designing the mix; providing formwork; supplying all materials; preparing the proportioned mix; hauling it to the construction site; placing the material; and for protecting it from freezing.

48. Portable Changeable Message Sign with Communication, Item SPV.0045.01.

A Description

This special provision describes providing portable changeable message signs (PCMS) with cellular communications. Cellular communication allows the department to control PCMS during incidents or other emergencies through Trans Suite software. The department will notify contractor of message changes.

B Materials

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

B.1 Cellular Modem and Antenna

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

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

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

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	Portable Changeable Message Sign (PCMS) with Communication	DAY

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

49. Safety Vehicle, Item SPV.0045.02.

A Description

This special provision describes providing a dedicated safety vehicle between 9:00 AM and 3:00 PM to assist the contractor and inspection staff entering and exiting the work zone.

B Materials

Furnish a vehicle equipped with an amber light bar, slow moving vehicle signage, and other appropriate safety lights or signs. Vehicle shall be minimum one ton capacity.

C Construction

Utilize safety vehicle to create a suitable gap in traffic in order to assist contractor staff and department inspection staff entering and exiting the bridge work zones except during prohibited hours defined in the Traffic article. The safety vehicle is not allowed to leave the traffic lane and enter the work zone.

D Measurement

The department will measure Safety Vehicle by the day, acceptably completed, measured as the number of calendar days the Safety Vehicle is in use on the project.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.02	Safety Vehicle	Day

Payment is full compensation for providing vehicle and driver.

50. Manholes Type E Special, Item SPV.0060.01.**A Description**

Furnish and install manholes in accordance to the pertinent provisions of standard spec 611, as shown on the plans and as hereinafter provided.

B Materials

Conform to standard spec 611.2.

C Construction

Cut and remove existing corrugated pullbox allowing placement of adjusting rings and a Manhole Covers Type J-Special to the proposed shoulder pavement elevation. Place the bedding material and construct the concrete foundation in accordance to standard spec 611.3.

Utilize the existing corrugated pullbox for forming the concrete foundation. Provide bracing to the corrugated pullbox if necessary pending contractor inspection of the integrity of the pullbox. Repair of pullbox or electrical damage for any portion of the operation is incidental to the item.

D Measurement

Department will measure Manholes Type E Special as each individual unit, acceptably completed.

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	Manholes Type E Special	Each

Payment is full compensation for providing all materials, including all masonry, corrugated pullbox cutting and removal, conduit and steel, steps and other fittings; for furnishing all excavating, backfilling, forming, disposing of surplus material, and for cleaning out and restoring the work site; except that the department will pay for covers, including frames, grates and lids separately.

51. **Securing Structure Covers, Item SPV.0060.02.**

A Description

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

B Materials

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. Minor cutting of inlet protection fabric is required to allow for an edge to weld between the grate and frame.

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

D Measurement

The 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

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	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, disposal of removed material. The department will pay for covers, including frames, grates and lids separately if damaged due to traffic loading only.

52. Traffic Control Close-Open Freeway Ramp, Item SPV.0060.03.

A Description

The work under this item consists of furnishing required labor, material and equipment for closing and subsequently opening or opening and subsequently closing on-ramp entrances in accordance to standard spec 643 of the standard specifications, the plans, and as directed by the engineer.

Post all ramp closures 7 working days in advance of their closure with dates and time of closure. Drums, barricades and signs may remain along the roadway when the entrance ramp is open to traffic. Ensure that all inappropriate signs, dates or times are not visible to traffic when the ramp is open. A deduction of one each will be made from the project total for this item for each day any inappropriate sign is visible to traffic when the ramp is open. Drums, barricades, arrow boards, and signs will be paid for separately under the various traffic control items.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Traffic Control Close-Open Freeway Entrance Ramp as a unit every time a freeway entrance ramp is setup and subsequently removed within a 24-hour period that has been authorized by the engineer. Closure to a ramp not deemed necessary for construction does not constitute payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Traffic Control Close-Open Freeway Entrance Ramp	Each

Payment is full compensation for providing and placing all materials, excluding the cost for the material themselves. Drums, Barricades, Arrow Boards, and Signs, will be paid for under separate bid items in the contract.

53. Temporary Thrie Beam Connection, SPV.0060.04.

A Description

This special provision describes providing Temporary Thrie Beam Connection and angle plate at the gaps in Concrete Barrier Temporary Precast in accordance to standard specs 506 and 614 with the connections as detailed in the plans.

B Materials

Furnish and install Temporary Thrie Beam Connection, angle plate, mechanical anchors, and thrie beam terminal connectors according to the pertinent requirements of standard specs 506 and 614.

C Construction

Construct Temporary Thrie Beam Connection as indicated on the plan or required by the engineer.

D Measurement

The department will measure Temporary Thrie Beam Connection as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Temporary Thrie Beam Connection	Each

Payment is full compensation for installing Temporary Thrie Beam Connections, including mechanical anchors, thrie beam terminal connectors, angle plate, and removal upon completion.

54. **Replace Missing Conduit Plug, Item SPV.0060.05.**

A Description

This special provision describes replacing missing conduit plugs as shown on the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to standard spec 652 and as shown in the plans.

C Construction

Use construction methods that are in accordance to standard spec 652 and as shown in the plans.

Lubricate the conduit plug threads with an approved anti-seize compound.

D Measurement

The department will measure Replace Missing Conduit Plug as each individual conduit plug acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Replace Missing Conduit Plug	Each

Payment is full compensation for furnishing and installing the new conduit plug, including anti-seize compound.

55. Tension Anchor Rod, Item SPV.0060.06.

A Description

This special provision describes tensioning loose anchor rod nuts as shown on the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent provisions of standard specs 641 and as shown in the plans.

C Construction

Field verify the size and number of anchor rods at structures indicated on the plans.

Use construction methods that are in accordance to the pertinent provisions of standard spec 641 and as shown in the plans. This work will consist of backing off one nut at a time on all loose anchor rod connections. Thoroughly clean and lubricate the anchor rod threads. Re-tension the anchor rod in accordance to the pertinent provisions of standard spec 641. Apply zinc-rich paint to the anchor rod, nuts, washers and leveling nuts in accordance to standard spec 635.3.5. Washers and nuts deteriorated to the extent that they cannot be properly tensioned will be replaced and considered incidental to this item.

D Measurement

The department will measure Tension Anchor Rod as each individual anchor rod, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Tension Anchor Rod	Each

Payment is full compensation for field verifying existing conditions where required; backing off nuts, cleaning anchor rod threads, lubricating rod and re-tensioning anchor rod; for removing and properly disposing of existing materials being replaced; for furnishing all materials and miscellaneous items to complete the repair; and for fabricating, handling, transporting, and erecting.

56. Clean and Protect Anchor Rod, Item SPV.0060.07.

A Description

This special provision describes cleaning and applying protective coating to the anchor rod assembly as shown on the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent provisions of standard specs 641 of the standard specifications and as shown in the plans.

C Construction

Field verify the size and number of anchor rods at structures indicated on the plans.

Thoroughly clean the anchor rod assembly. Apply zinc-rich paint to the anchor rod, nuts, washers and leveling nuts in accordance to standard spec 635.3.5.

D Measurement

The department will measure Clean and Protect Anchor Rod as each individual anchor rod, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Clean and Protect Anchor Rod	Each

Payment is full compensation for field verifying existing conditions where required; cleaning anchor rod assemblies; for applying protective coating; for furnishing all materials and miscellaneous items to complete the repair.

57. **Remove Sign Bridge Walkway, Item SPV.0060.08.**

A Description

This special provision describes removing the walkway from existing sign structures as shown on the plans, and as hereinafter provided.

B (Vacant)

C Construction

Remove and dispose of the walkway in accordance to standard spec 203.3. Remove the horizontal bracket components of the walkway and all items dependent on the support of the horizontal bracket including, but not limited to the railing and the galvanized steel catwalk. Vertical bracket components of the walkway that are outside of the sign panel limits are to be completely removed. Vertical bracket components that are within the sign panel limits are to be partially removed. Where the vertical bracket is integral with the sign panel attachment to the structure, terminate the vertical brackets at the bottom of the sign panel. Where the vertical walkway brackets are independent of the sign panel connection, terminate the vertical support bracket approximately 1'-0" below the bottom chord of the truss. Do not disturb sign panels for any walkway component removals.

Perform removal operations during timeframes when live traffic is shifted from beneath the sign structure. Additional traffic control items to address Sign Bridge Walkway removal outside of the normal traffic control sequencing outlined in the plans is incidental to the contract.

D Measurement

The department will measure Remove Sign Bridge Walkway by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Remove Sign Bridge Walkway	Each

Payment is full compensation for removing and disposing of the walkway; and for traffic control items.

58. Remove Grout Pad, Item SPV.0060.09.**A Description**

This special provision describes removing grout pads under base plates as shown on the plans, and as hereinafter provided.

B (Vacant)**C Construction**

Remove and dispose of the grout pad in accordance to standard spec 509.3.4.

D Measurement

The department will measure Remove Grout Pad by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Remove Grout Pad	Each

Payment is full compensation for removing and disposing of the grout pad.

59. Install Rodent Screen, Item SPV.0060.10.**A Description**

This special provision describes installing rodent screens under base plates as shown on the plans, and as hereinafter provided.

B Materials

Furnish zinc-rich paint in accordance to standard spec 635.3.5.

Furnish rodent screens that are stainless steel or galvanized steel when electrical is present.

Furnish wire to secure the rodent screens as shown on the plans when electrical is present.

C Construction

Thoroughly clean the existing anchor rods, nuts, washers and leveling nuts below and above the base plate; apply zinc-rich paint to the anchor rods, nuts, washers and leveling nuts in accordance to standard spec 635.3.5.

Install a rodent screen by wrapping perimeter of anchor bolt assembly twice and secure to anchor bolts with wire at each anchor bolt.

D Measurement

The department will measure Install Rodent Screen by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Install Rodent Screen	Each

Payment is full compensation for cleaning and applying zinc-rich paint; for providing and installing a rodent screen.

60. Install or Tighten Sign Panel Hardware, Item SPV.0060.11.**A Description**

This special provision describes tightening loose sign panel hardware, replacing damaged sign panel hardware or installing new sign panel hardware where missing as shown in the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent provisions of standard specs 637 and as shown in the plans.

C Construction

Use construction methods that are in accordance to the pertinent provisions of standard spec 637 and as shown in the plans.

Tighten or replace the bolts and nuts and tension to the manufacturer's recommended torque value.

D Measurement

The department will measure Install or Tighten Sign Panel Hardware as each individual sign panel connector, screw, or clip, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Install or Tighten Sign Panel Hardware	Each

Payment is full compensation for tightening (tensioning) loose sign panel hardware, replacing damaged sign panel hardware, installing new sign panel hardware.

61. Install or Tighten Handhole Cover Bolt, Item SPV.0060.12.

A Description

This special provision describes tightening or replacing handhole cover bolts where loose or missing as shown in the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent provisions of standard specs 641 of the standard specifications and as shown in the plans.

C Construction

Field verify the size and number of cover bolts at structures indicated on the plans.

Use construction methods that are in accordance to the pertinent provisions of standard spec 641 and as shown in the plans.

D Measurement

The department will measure Install or Tighten Handhole Cover Bolt as each bolt, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Install or Tighten Handhole Cover Bolt	Each

Payment is full compensation for field verifying existing conditions where required; and for tightening loose bolts, replacing missing bolts.

62. Install Sign Bridge ID Plaque, Item SPV.0060.13.

A Description

This special provision describes replacing or installing sign bridge ID plaques as shown on the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to SDD Structure Identification Plaques, Sign Bridges and Overhead Sign Support.

C Construction

Remove existing sign plaque if one exists. Install the sign bridge ID plaque in accordance to SDD Structure Identification Plaques, Sign Bridges and Overhead Sign Support.

D Measurement

The department will measure Install Sign Bridge ID Plaque as each individual sign bridge ID plaque, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.13	Install Sign Bridge ID Plaque	Each

Payment is full compensation for furnishing and installing sign bridge ID plaques; and for removing any existing plaques.

63. Tension Truss Connection Bolt, Item SPV.0060.14.**A Description**

This special provision describes tensioning post-to-truss connection bolts and splice plate bolts as shown on the plans, and as hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent provisions of standard spec 641 and as shown in the plans.

C Construction

Use construction methods that are in accordance to the pertinent provisions of standard spec 641 and as shown in the plans. Deteriorated bolts which cannot be properly tensioned will be replaced and considered incidental to this item.

Do not reuse or re-tension high-strength galvanized bolts. Any loose high-strength galvanized bolts will be replaced and considered incidental to this item.

D Measurement

The department will measure Tension Truss Connection Bolt as each individual connection bolt, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Tension Truss Connection Bolt	Each

Payment is full compensation for tensioning loose post-to-truss connection bolts or splice bolts; for removing and properly disposing of existing materials being replaced; for furnishing all materials and miscellaneous items to complete the repair; for fabricating, handling, transporting, and erecting.

64. Concrete Pavement Corner Repair Full Depth, Item SPV.0060.15.

A Description

Replaced damaged pavement corner cracks in accordance to standard specs 415 and 416, as shown on the plans or as directed by the engineer and as set forth in these special provisions.

Installing Concrete Pavement Corner Repair Full Depth includes all necessary saw cuts, removing existing pavement, preparing the foundation in accordance to standard spec 211, leveling base as needed, drilling and installing tie bars, placing new concrete pavement, tinning and grooving to match existing pavement, and reestablishing existing joints.

B Materials

B.1 Concrete and Concrete Curing

Conform to standard spec 415.

B.2 Drilled Tie Bars

Conform to standard spec 416.

B.3 Leveling Base

Furnish a fine grade crushed limestone or other base material free of unsuitable materials conforming to the following table for leveling of the pavement repair areas which will support the new concrete panel corner.

Sieve Size Designation	Percent Passing by Weight
½ inch	100
No. 4	80 – 100
No. 10	55 – 75
No. 40	10 – 40
No. 200	0 – 20

B.4 Mix Approval

Perform preliminary laboratory and/or field trial batching to establish the mix proportions necessary to meet the final concrete characteristics. Mix characteristics shall take special care to provide enhanced durability to limit future concrete degradation through the use of a synthetic fiber additive comprised of fibrillated polypropylene fibers. Fibrillated polypropylene fibers to be added to the mix at a rate of 3 lbs/CY of concrete mix or an engineer approved alternative.

Submit to the engineer the final mix design including specific sources and/or trade names as applicable for all materials.

B.5 Bonding Agent

Provide a bonding agent from the department list of approved products.

C Construction

C.1 General

In advance of the beginning of the rehabilitation operation, establish traffic control for rehabilitation survey and markings of locations.

C.2 Removing Existing Pavement

Complete all pavement removals in accordance to standard spec 416. Rubblization, breaking, or impact methods will not be allowed. Overcutting is not allowed into the adjacent panel or lane.

Perform the removal operation in a manner that limits damage to the remaining pavement, and provide a joint for the concrete pavement patch per the plan details. Repair any damage to the remaining concrete pavement associated with contractor operations prior to final acceptance. All repair work of this nature is incidental to the item.

Storage of the removed material on the roadway will not be permitted. During non-working hours, clear the roadway of all materials.

C.3 Patch Preparation

Prepare the patch in accordance with standard specs 415 and 416, and in accordance with the plans. Coat all non-longitudinal concrete joints from the base course to the driving surface with bonding agent. Adhere to the manufacturer specification for bonding agent set time prior to pouring concrete repair.

C.4 Placing and Finishing Concrete

Place concrete in accordance to standard spec 415.3.

Apply surface texturing based on standard spec 415. Apply grooving and/or tinning based on engineer's discretion and match existing pavement adjacent to the corner crack repair.

C.5 Re-establishing joints

Re-establish joints in accordance with standard specs 415, 416, and 690. Overcutting is prohibited.

D Measurement

The department will measure the Full Depth Corner Crack Repair based on each repair completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.15	Concrete Pavement Corner Repair Full Depth	Each

Payment is full compensation for all sawing; removing and disposing of existing pavement; providing base leveling materials; preparation and shaping of the leveling base; furnishing, drilling, grouting, and installing tie bars; for developing mix designs; for furnishing materials, hauling, preparing, placing, curing, and protecting the concrete; for measuring opening strength including fabricating and testing cylinders, obtaining and testing cores, and evaluating maturity; tinning and/or grooving final pavement.

65. Concrete Barrier Transition Section 32-Inch, Item SPV.0060.16.

A Description

This special provision describes removing an existing concrete barrier turndown end section and placing a new concrete barrier wall end section to connect to proposed guardrail. Sawcutting the existing barrier and removing the existing barrier end section are incidental to item Concrete Barrier Transition Section 32-inch, conform to standard specs 204 and 690, respectively.

B Materials

Conform to standard spec 603.

C Construction

Conform to standard spec 603.

D Measurement

The department will measure Concrete Barrier Transition Section 32-inch as each individual section, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.16	Concrete Barrier Transition Section 32-Inch	Each

Payment is full compensation for sawing and appropriate removal of existing concrete barrier, excavating and preparing the foundation; for providing all materials including concrete, expansion joints, bar steel and reinforcement; placing, finishing, protecting and curing concrete; backfilling, removing and disposing of excess materials and waste and restoring the grade.

66. Removing Lighting Assemblies, Item SPV.0060.17.

A Description

Perform this work in accordance to standard spec 204. Removed lighting equipment becomes property of the contractor.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Lighting Assemblies as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	Removing Lighting Assemblies	Each

67. Moving Lighting Assemblies, Item SPV.0060.18.

A Description

This work consists of removing, transporting, storing, and re-installing existing highway lighting assemblies including poles, cast bases, luminaire arms and luminaires.

B (Vacant)

C Construction

Coordinate the de-energizing of the highway lighting with the Southwest Region -Madison electrician after receiving approval from the engineer that the existing highway lighting can be removed.

Notify the department's Southwest Region –Madison operations engineer at (608) 246-5360 at least three working days prior to the removal of the highway lighting. Complete the removal work as soon as possible following shut down of this equipment.

Perform a field review of existing highway lighting equipment with the Southwest Region -Madison electrician for condition of equipment prior to removal. Notify the department of any damaged or non-operating equipment. Remove the highway lighting assemblies from their concrete foundations. Ensure that internal wires and hardware remain intact.

Store all removed materials designated in the plans at a safe and secure location. Protect from theft and damage. Contact the Southwest Region – Madison electrician to coordinate a post-storage inspection of all equipment prior to reinstalling. All equipment that is determined to have been damaged during storage shall be replaced in kind at contractor's expense.

D Measurement

The department will measure Moving Lighting Assemblies as each individual assembly unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.18	Moving Lighting Assembly	Each

Payment is full compensation for removing, disassembling highway lighting, disposing of scrap material, storing materials to be reused, delivering salvaged material, re-installing lighting equipment, and for protecting materials from theft and damage.

68. Temporary Concrete Barrier Gate, Item SPV.0060.19.**A Description**

This special provision describes furnishing and installing Temporary Concrete Barrier Gate, moving as required for project staging, and removing upon completion of the project.

B Materials

Furnish Temporary Concrete Barrier Gate and all necessary hardware and materials to install the gate.

Materials shall consist of ArmorGuard™ Gate System, 8 meter, or Vulcan Gate™, 30 feet, or approved equal.

The gate system shall be able to meet the recommended structural adequacy, occupant risk, and vehicle trajectory criteria set forth in the National Cooperative Highway Research Program Report (NCHRP) 350 for Test Level 3 for Longitudinal Barriers.

The gate shall be capable of preventing vehicle penetration, vaulting, and underriding during Test Level 3 Length Of Need with Transition (TL-3 LON/T) impacts and shall smoothly redirect the vehicle.

C Construction

Install the gate system in accordance to the contract details and manufacturer's recommendations at contract-identified locations or as the engineer directs. Move and reinstall the gate system as required for contract staging.

Ensure that the gap between the traffic face of temporary barrier and the traffic face of the gate transition is to be less than ¼ of an inch. If manufacturer allows, the contractor may bolt thrie beam and thrie beam terminal connector to temporary barrier and the gate transition to bridge this gap.

Maintain the gates throughout the duration of the project. Repair any damage to the gates within 48 hours.

Upon completion of the work, remove the gate system and properly dispose of all materials.

D Measurement

The department will measure Temporary Concrete Barrier Gate as each individual gate system, acceptably completed. Separate installations required for project staging will not be measured.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.19	Temporary Concrete Barrier Gate	Each

Payment is full compensation for providing, installing, moving, reinstalling, maintaining, and removing the gate system.

69. **Concrete Barrier Temporary Emergency Repair Mobilization, Item SPV.0060.20.**

A Description

This special provision describes mobilization required for emergency repair of concrete barrier temporary. Extra barrier sections shall be available on site and will be paid for under the Concrete Barrier Temporary Precast Furnished item. Barrier sections requiring replacement will be paid for under the Concrete Barrier Temporary Precast Installed item.

B (Vacant)**C Construction**

Concrete Barrier Temporary Emergency Repair Mobilization shall be as requested by the engineer. The contractor shall respond to the request for Concrete Barrier Emergency Repair Mobilization within 1 hour.

D Measurement

The department will measure Concrete Barrier Temporary Emergency Repair Mobilization as each individual mobilization, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Concrete Barrier Temporary Emergency Repair Mobilization	Each

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

70. Salvage and Reinstall Sign, Item SPV.0060.21.

A Description

This special provision describes salvaging and installing signs at the location shown on the plans.

B Materials

Furnish materials conforming to the details shown on the plan and in accordance to standard spec 643.

C Construction

Remove existing median signs and supports, store them for the duration of the project, and reinstall them at the existing locations when the travel lanes are no longer shifted towards the median. Any damaged signs or supports shall be replaced at the contractor's expense.

D Measurement

The department will measure Salvage and Reinstall Sign as each individual salvaged and reinstalled sign, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.21	Salvage and Reinstall Sign	Each

Payment is full compensation for removing, maintaining, and reinstalling sign.

71. Temporary Barrier Delineators Attached to Ex Median Barrier or Parapet, Item SPV.0060.22.

A Description

This special provision describes providing temporary barrier delineators for existing concrete barrier or concrete parapet.

B Materials

Furnish delineators conforming to standard spec 633. Contractor may use alternate shapes and housing.

Delineator brackets shall be two sided to allow reflectors to be placed on either side of the bracket depending upon traffic control needs.

C Construction

Install delineators according to manufactures instruction and at the locations shown on the Standard Detail Drawing for Concrete Barrier Temporary Precast. Install yellow reflectors when barrier is located to the left of traffic and white reflectors when barrier is located to the right of traffic. Space delineators a maximum of 25 feet apart. Provide top mounted

delineators in addition to the side mounted delineators on all barrier installations located on a curved alignment longer than 200 feet and on barriers used between opposing traffic.

Upon completion of the required traffic control configuration for construction, remove the delineators from the existing barrier or parapet wall in accordance to the standard specifications.

Rotating single sided brackets on previously installed barrier wall is incidental to the contract when adjusting for staging purposes.

D Measurement

The department will measure Temporary Barrier Delineators Attached to Existing Median Barrier or Parapet as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Temporary Barrier Delineators Attached to Ex Median Barrier or Parapet	Each

Payment is full compensation for providing all materials; for installation, maintenance, traffic control to perform maintenance, disposal of surplus materials.

72. Repositioning Traffic Control Devices for Mainline Closures, Item SPV.0060.23.

A Description

This special provision describes repositioning traffic control devices as required to close mainline lanes to traffic.

B Materials

Use traffic control devices conforming to standard spec 643 that have been delivered and placed within the project limits under other contract bid items.

C Construction

Reposition traffic control devices as required to close one or more lanes to public traffic along mainline USH 12. Monitor and maintain the traffic control device configuration for the duration of the closure. Upon conclusion of the allowable lane closure timeframes, return the devices to their previous configuration or an engineer-approved position within the project limits.

D Measurement

The department will measure Repositioning Traffic Control Devices for Mainline Closures as each individual reposition/return cycle acceptably completed, measured as the number of reposition/return cycles the engineer deems necessary to conform to the traffic control

plan, contract staging plan, and other contract requirements. The department will not measure additional moves or configuration changes as might be required solely to accommodate the contractor's operations.

The department will measure each change in configuration on a nightly basis regardless of the overall duration of the interruption to traffic at that location. Each direction of travel shall be measured separately.

Changes between single and double lane closures during the same night are incidental to the contract. Longitudinal gaps in lane closures shall not constitute measurement of multiple closures, and are incidental to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.23	Repositioning Traffic Control Devices for Mainline Closures	Each

Payment is full compensation for providing the required closure including placing and maintaining the required closure configuration as well as returning the traffic control devices to their previous or other engineer-approved location when the closure is no longer required. The department will pay separately for furnishing, and maintaining the condition of, required traffic control devices under other contract bid items.

73. Temporary Traffic Control Signal Covering, Item SPV.0060.24.

A Description

This special provision describes furnishing, installing a product for covering existing traffic control signal heads, maintaining the cover, and removal of the cover upon completion of the need for the cover.

B Materials

Furnish an engineer approved material to cover traffic control signal heads while the signals are not in use. The material shall be opaque to fully block any visibility of the signal head during all weather conditions.

C Construction

Furnish, deliver, and maintain traffic control signal coverings for the duration of the necessary intersection access modification. Upon completion of the necessary access and timing modification, immediately remove traffic signal coverings. Install coverings such that no damage occurs to the existing traffic signal systems. Install signal covers to clearly indicate that the traffic control signal is not in operation.

Install signal coverings in a manner that does not disrupt existing traffic patterns, while minimizing worker exposure to traffic. If this cannot be achieved, the contractor must conform to appropriate lane reduction methods referred to in WISDOT FDM Chapter 16,

Section 5, Subsection 15. Any traffic control devices required are incidental to the pay item “Temporary Traffic Control Signal Covering.”

Maintain the signal coverings during construction. Repair or replace any covering that is damaged during construction as directed by the engineer.

Remove covering prior to reestablishing operation to the traffic control signals.

D Measurement

The department will measure Temporary Traffic Control Signal Coverings by each signal head, acceptably covered and subsequently removed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.24	Temporary Traffic Control Signal Covering	Each

Payment is full compensation for providing, installing, maintaining, and removing the signal covering. Any traffic control devices required for installation are incidental to this item.

74. Concrete Pavement Corner Repair Partial Depth, SPV.0085.01.

A Description

This special provision describes providing and installing a product and adhering to the manufacturer’s specifications for partial depth concrete repair. Repair type determination is incidental to the item.

B Materials

Furnish material from the following:

- Deery Brand ThermaCrete, Level and Go, Part No. 80300
- Grey Hot Applied Flexible Repair Mastic
- Crafcro TechCrete
- Engineer approved alternative

Selection of the material shall consider manufacturer specifications for placement depth and area to complete partial depth corner break repairs.

C Construction

Prior to placing material, investigate pavement deformation to determine correct repair type. Obtain engineer approval on repair type prior to beginning repair work.

Follow all manufacturer specifications and requirements. These apply, but are not limited to, Melting and heating operation, pavement temperature, existing pavement removal, pavement preparation and cleaning, installation, storage, safety precautions, and other general requirements.

Do not open traffic to partial depth concrete repair locations until material has cooled to the surround existing pavement temperature.

D Measurement

The department will measure Concrete Pavement Corner Repair Partial Depth by the pound placed, and acceptably completed in accordance to the manufacturer specifications.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.01	Concrete Pavement Corner Repair Partial Depth	LB

Payment is full compensation for installing Concrete Pavement Corner Repair Partial Depth, including cleaning the existing pavement surface, removal of existing pavement.

75. Fill Existing Rumble Strips, Item SPV.0090.01.

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-0.3 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.0090.01	Fill Existing Rumble Strips	LF

Payment is full compensation for providing and installing all materials.

76. Restore Existing Rumble Strips, Item SPV.0090.02.

A Description

This special provision describes restoring the previously filled existing rumble. 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 spec 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.0090.02	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.

77. Sawing Concrete Precast Panel Installation, Item SPV.0090.03.

A Description

This special provision describes sawing transverse joints in conjunction with Concrete Pavement Repair Precast and Concrete Pavement Replacement Precast in accordance with standard spec 690.

B (Vacant)

C Construction

Append standard spec 690.3.1 with the following:

Under the Sawing Concrete Precast Panel Installation item, use diamond blades with a 3/8" thickness for sawing concrete full-depth at the limits of the repair. Take special care to ensure cuts are vertical to facilitate precast panel installation.

D Measurement

The department will measure Sawing Concrete Precast Panel Installation in accordance 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.0090.03	Sawing Concrete Precast Panel Installation	LF

Payment is full compensation for performing all sawcutting, and sludge removal.

78. Sawing Pavement Deck Preparation Areas, Item SPV.0090.04.

A Description

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

B (Vacant)

C Construction

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

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

D Measurement

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

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Sawing Pavement Deck Preparation Areas	LF

Payment is full compensation for making all saw cuts; and for removing and disposing of debris.

79. **Silicone Bridge Joint Sealant, Item SPV.0090.05.**

A Description

Furnish technical assistance and all materials necessary to install silicone joint sealant as shown on the plans and as specified herein. This work includes removing existing joint filler, cleaning joint openings, blast cleaning and priming existing surfaces, and furnishing and installing the silicone joint sealant.

B Materials

B.1 Silicone Joint Sealant

Provide rapid cure, self-leveling, cold applied, two-component silicone sealant. Provide a sealant that demonstrates resilience, flexibility, and resistance to moisture and puncture, upon curing. Provide sealant that demonstrates excellent adhesion to Portland cement concrete, polymer concrete and steel over a range of temperatures from –30 degrees F to 130 degrees F while maintaining a watertight seal. Provide sealant that does not contain any solvents or diluents that cause shrinkage or expansion during curing. Acid cure sealants are not acceptable. Provide the date of manufacture or “use-by date” with each lot. Materials twelve months old or older from the date of manufacture or past its “use-by date” will not be accepted. Provide manufacturer certification that the sealant meets or exceeds the following test requirements before installation begins. The department reserves the right to test representative samples from material proposed for use.

Physical Properties:

Each component supplied:

Specific gravity (ASTM D1475) 1.3 – 1.4
Extrusion rate (MIL-S-8802) 200 – 550 grams per minute
Flow Self-leveling
Durometer hardness, shore (ASTM D2240) 40 – 80
“00” (0 degrees and 77 ±3 degrees F)
Ozone and U.V. resistance no chalking, cracking or bond
(ASTM C793) loss after 5,000 hours

After mixing:

Tack-free time (ASTM C679) 60 minutes maximum
Joint cure rate (% of total cure)
50% within 4 - 6 hours
75% within 24 hours
100% within 48 - 160 hours

Upon complete cure (ASTM D5329):

Joint elongation (adhesion to concrete/ 600% minimum
steel/polymer concrete)

Joint modulus 3 – 12 psi at 100% elongation

B.2 Backer Rod

Provide closed cell backer rod as recommended by the sealant manufacturer, conforming to ASTM D5249, Type 3.

B.3 Joint Sealant Primer

For Portland cement concrete, provide primer in accordance to the manufacturer's recommendations.

C Construction

C.1 General

Remove existing joint filler materials from longitudinal joint between deck slabs. Clean existing deck surfaces to receive sealant and place sealant in accordance to manufacturer's installation procedures.

C.2 Silicone Joint Sealant

C.2.1 General

Provide manufacturer technical assistance during surface preparation and installation at no additional cost to the department. Provide the manufacturer's written product information, installation procedures, and instructional video – if available - at least two weeks prior to installation. Coordinate meeting with manufacturer and the engineer to review and clarify installation procedures and requirements prior to starting the work. A technical representative must be available at the start of surface preparations and sealant installation. Contact the manufacturer at least two weeks prior to installation. Place silicone against dry concrete and which has been allowed to dry for a minimum of 7 days following wet curing as identified in standard spec 502.3.8., or as recommended by manufacturer, and approved by the engineer. Cold, wet, inclement weather will require an extended drying time. Apply sealant in strict accordance with the manufacturer's instructions for joint opening 1 inch to 3 inches at the time of sealing.

C.2.2 Surface Preparation

C.2.2.1 Sandblasting

Sandblast both faces of the joint. Make a separate pass for each face for the full length of the joint and to the design depth of the center of the backer rod. Hold nozzle at an angle of 30 to 90 degrees to the joint face, at a distance of 1 to 2 inches. For Portland cement concrete and polymer concrete surfaces, sandblasting will be considered acceptable when both joint faces have a roughened surface with clean, exposed aggregate. Provide surface free of foreign matter or plastic residue. After sandblasting, clean joint of debris using compressed air, with a minimum pressure of 90 psi. Equip air compressor with traps to prevent the inclusion of water and/or oil in the air line. Provide joint opening that is clean, dry, and free from mud, dirt, sand, oil, or grease and any other contaminants prior to application of the primer or sealant.

C.2.2.2 Priming

Prime joint only after sandblasting and cleaning operations are completed and accepted and when the air and substrate temperatures are at least 41 degrees F and rising. Perform sandblasting, priming, and sealing on the same day. Prime the entire sandblasted surface using a brush-applied primer. Allow the primer to dry a minimum of one hour or more until it is thoroughly dry, whichever is longer, before proceeding. Extend minimum primer drying time to a minimum of 90 minutes when the substrate temperature is below 60 degrees F.

Supply primer in original containers. Use fresh primer that is within its "use by date." If transferring primer, poured from the original container into clean pails. Use primer immediately. Dispose of, and do not reuse, all primer left in the pail after priming.

C.2.3 Joint Installation

C.2.3.1 Backer Rod Placement

Install the backer rod to a uniform depth of at least 1¼-inch as specified on the plans and as recommended by the manufacturer. Tape all splices in the backer rod to prevent material loss during sealing. Install the backer rod to within 1/8 inch tolerance prior to sealing.

C.2.3.2 Sealant Placement

Place sealant ½-inch thick within 1/8-inch tolerance as measured in the center of the joint at the thinnest point. Measure the sealant thickness during installation every ±2 feet. Adjust to correct sealant thickness to within tolerance immediately before the sealant begins to set up. Place sealant when the air and substrate temperatures are above 41 degrees F and 5 degrees F above the dew point. Maintain the joint in clean and dry condition during sealing. Halt sealing operation until the joint has been restored to a clean and dry state if the joint becomes wet and/or dirty during sealing.

Perform sealing using a pneumatic gun approved by the sealant manufacturer. Inspect the gun prior to sealing to ensure that it is in proper working order and that it is being operated at the recommended air pressure.

The gun must demonstrate proper mixing action before sealant will be allowed into the joint. Do not place unmixed sealant in the joint. Remove and replace all unmixed sealant found in the joint at the contractor's expense.

After the engineer has determined that the pneumatic gun is functioning properly, seal the joint to the thickness and depth as shown on the plans and in accordance to sealant manufacturer's recommendations. Allow the sealant to achieve initial set before opening the joint to traffic.

End of seal treatment at vertical faces of abutments shall be as recommended by the manufacturer and as shown on the plans.

Sealant placed incorrectly shall be removed and replaced by the contractor at the contractor's expense.

C.2.4 Field Testing

The engineer will test a minimum of one joint per bridge per joint configuration by performing a "Pull Test." The sealant shall be allowed to cure for a minimum of 24 hours before testing. The locations for the tests will be determined by the engineer. The tests will be performed per the manufacturer's written instructions. As part of the test, the recess depth and sealant thickness will be verified. Remove all joint system installations failing to meet the specifications and replace, to the satisfaction of the engineer, at no cost to the department. In addition, since the "Pull Test" is a destructive test, repair the joint after completion of the test per the sealant manufacturer's written instructions at no additional cost to the department.

D Measurement

The department will measure Silicone Bridge Joint Sealant in length by the linear foot of sealant placed in accordance to the contract and accepted.

E Payment

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

Item Number	Description	Unit
SPV.0090.05	Silicone Bridge Joint Sealant	LF

Payment is full compensation for removing existing joint filler materials; cleaning and preparing the surface; and for furnishing and installing the material.

80. Removing Pavement Markings Water Blasting, Item SPV.0090.06.

A Description

Supplement standard spec 646.3.4 with the following:

Remove pavement marking using ultra-high pressure water.

B Materials

Provide a truck or vehicle mounted ultra high pressure pump and water tank capable of delivering a minimum of 30,000 psi and up to 40,000 psi to waterjet nozzles

C Construction

Supplement standard spec 646.3.4 with the following:

Remove pavement markings through means of water blasting. Do not damage the pavement during removal process. Use of water blasting for pavement marking removal shall be limited to locations with tapering pavement markings delineating traffic shifts across existing travelled lanes.

D Measurement

The department will measure Removing Pavement Markings Water Blasting 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.0090.06	Removing Pavement Markings Water Blasting	LF

Payment for Removing Pavement Markings Water Blasting is full compensation for removal, repairing associated damage, disposal of residue at an offsite location, and all incidentals and equipment necessary to complete the work.

81. **Traffic Control Gawk Screen Furnished, Item SPV.0090.07 and Traffic Control Gawk Screen Installed, Item SPV.0090.08.**

A Description

This special provision describes furnishing and installing a barrier screen on existing concrete barrier, existing concrete parapets, and Concrete Barrier Temporary Precast and removal upon completion of the project.

B Materials

Furnish polymer concrete colored Armorcast Guardian Gawk-Glare Screen and all necessary hardware and materials to install the glare screen.

C Construction

Furnish and deliver gawk screen to worksites within the project and remove it upon project completion.

Install the screen in accordance to the manufacturer's recommendations at contract-identified locations or as the engineer directs. Also make contract-identified or engineer-directed moves that do not require trucking and reinstall at those new locations.

Maintain the screen during construction. Repair or replace any portion of the screen that is damaged during construction as directed by the engineer. Fill all holes in the permanent concrete barrier and concrete parapet left by anchorage methods with an epoxy from the departments approved products list.

D Measurement

The department will measure Traffic Control Gawk Screen Delivered by the linear foot, acceptably delivered to the project site, acceptably completed. The department will measure Traffic Control Gawk Screen Installed by the linear foot, acceptably completed, measured along the base of the screen after each installation for each contract-identified or engineer-directed initial installation. The department will also measure subsequent

contract-identified or engineer-directed reinstallations. The department will not measure installations made solely to accommodate the contractor's means and methods.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.07	Traffic Control Gawk Screen Delivered	LF
SPV.0090.08	Traffic Control Gawk Screen Installed	LF

Payment is full compensation for providing gawk screen, initial delivery, trucking between worksites, each installation, and removing after contract completion; and for furnishing all hardware necessary to install the screen.

82. Traffic Channelizing Curb System Delivered, Item SPV.0090.09, Traffic Channelizing Curb System Installed, Item SPV.0090.10.

A Description

This special provision describes providing, maintaining and removing temporary traffic channelizing curb system at locations the plans show or the engineer directs.

B Materials

B.1 General

Furnish a temporary traffic channelizing curb system with a base component consisting of interlocking units and flexible vertical component. They system shall be constructed of high density injection-molded polyethylene (HDPE), resistant to ultraviolet light, ozone, and hydrocarbons. The units should interface with each other to form a temporary continuous longitudinal lane channelizing system separating traffic lanes. Provide a system that is fastened to or placed on the underlying pavement surface according to the manufacturer's recommendations. The system shall allow for cross drainage under or around the curb module with a maximum of 1 inch separation between individual curb units.

The channelizing system shall meet the requirement of National Cooperative Highway Research Program (NCHRP) Report 350 or the Manual for Assessing Safety Hardware (MASH). Submit a copy of the FHWA approval letter to the engineer.

B.2 Curb Unit

The curb sections shall be approximately 12" wide and shall not exceed 4" in height. Curb sides shall be sloped to allow crossover by emergency vehicles. Normal curb sections shall be a minimum of 40 inches and a maximum of 48 inches long. The transition sections shall be 18 inches long and shall not exceed 2 inches in height at the exposed nose. The units shall be yellow if used in a work zone installation or a permanent installation adjacent to yellow pavement markings, and white if used in a permanent installation adjacent to white pavement markings.

B.2 Vertical Component

Provide at least one vertical component for each modular curb unit uniformly spaced at no greater than 42 inches along the channelizing system. The vertical component shall be orange in color if used in a work zone installation, yellow if used in a permanent installation adjacent to yellow pavement markings, and white if used in a permanent location adjacent to white pavement markings.

The vertical component shall be a minimum of 36 inches and a maximum of 48 inches in height measured from the pavement surface. The width should be approximately 8 to 9 inches for elliptical designs and 4 to 6 inches for round designs.

The vertical component shall be equipped with retroreflective sheeting or with retroreflective stripes. Where stripes are used, the stripes shall consist of two 3-inch wide bands placed a maximum of 2-inches from the tope with a maximum of 6-inches between the bands. The base component shall be equipped with reflectors.

C Construction

C.1 Installation

Install the channelizing system according to the manufacturer's recommendations. Remove all conflicting pavement marking, raised pavement marker and delineator posts in the location where the channelizing system is to be installed. Follow manufacturer's installation procedures regarding anchoring systems into the various types of roadway surfaces. Only use anchors and hardware provided by the manufacturer.

C.2 Relocate

Relocate the channelizing system at locations the plans show or the engineer directs.

C.3 Maintenance

Replace damaged retroreflecting sheeting, misaligned curb units, damaged vertical components, and anchorbolts within 24 hours after the damage is reported to the contractor.

C.4 Removal

Repair all holes left in pavement when the temporary traffic channelizing curb system is removed. Holes shall be filled with an engineer-approved non-shrink grout.

Upon completion of the project, remove the channelizing system. The temporary channelizing system shall remain the property of the contractor for systems used in temporary traffic control applications.

D Measurement

The department will measure Traffic Channelizing Curb System Delivered by linear foot, acceptably completed for all quantity delivered to the job site. Excess material delivered without the approval of the engineer shall be incidental.

The department will measure Traffic Channelizing Curb System Installed by linear foot acceptably completed for installation of the item during each traffic stage. If the item does not require removal and resetting for the subsequent stage, leaving the curb system in place is incidental. Modification to the construction staging plans for contractor convenience as determined by the engineer, which requires additional Traffic Channelizing Curb System Delivered or Installed, is incidental to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.09	Traffic Channelizing Curb System Delivered	LF
SPV.0090.10	Traffic Channelizing Curb System Installed	LF

Payment is full compensation for delivering, installing, maintaining, and removing the channelizing systems.

83. Temporary Pavement Marking Wet Reflective Contrast Removable Tape 8-In, Item SPV.0090.11.

A Description

This special provision describes furnishing, and installing preformed wet reflective pavement marking contrast removable tape for applications as shown on the plans, according to standard spec 649, and as hereinafter provided.

B Materials

Furnish wet reflective pavement marking contrast removable tape and adhesive material, per manufacturer's recommendation if required, from the department's approved products list and in accordance to standard spec 649.

C Construction

C.1 General

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

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape per manufacturer's recommendations and in accordance to standard spec 649. Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.11	Temporary Pavement Marking Wet Reflective Contrast Removable Tape 8-In	LF

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

84. **Temporary Pavement Marking Wet Reflective Contrast Removable Tape 4-In, Item SPV.0090.12.**

A Description

This special provision describes furnishing, and installing preformed wet reflective pavement marking contrast removable tape for applications as shown on the plans, according to standard spec 649, and as hereinafter provided.

B Materials

Furnish wet reflective pavement marking contrast removable tape and adhesive material, per manufacturer's recommendation if required, from the department's approved products list and in accordance to standard spec 649.

C Construction**C.1 General**

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

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape per manufacturer's recommendations and in accordance to standard spec 649. Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.12	Temporary Pavement Marking Wet Reflective Contrast Removable Tape 4-In	LF

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

85. Profile Curb Cut, Item SPV.0090.13.**A Description**

This work includes providing a sawcut at the flow line of existing curb and gutter locations in order to remove the existing curb head as shown on plans, and hereinafter provided.

B Materials

Furnish materials that are in accordance to the pertinent requirements of standard spec 690.

C Construction

Perform work in accordance to the construction details and standard spec 690.

D Measurement

The department will measure Profile Curb Cut by the linear foot, acceptably completed, as measured along the existing face of curb.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.13	Profile Curb Cut	LF

Payment is full compensation for Profile Curb Cut, removal of the existing curb head, sludge removal and disposal.

86. Inspect Primary Bolted Connections, Item SPV.0105.01.**A Description**

This special provision describes inspecting all primary bolted connections at the following sign structures including anchor rods, chord to column bolts, truss splice bolts:

S-13-68
S-13-69
S-13-70
S-13-71
S-13-72
S-13-73
S-13-74
S-13-149
S-13-150
S-13-151
S-13-152
S-13-153
S-13-157

B (Vacant)

C Construction

Inspect all designated connections for missing bolts, deteriorated bolts, and bolts not torqued to the requirements of the pertinent provisions of standard spec 641.

Deficient connections identified by the inspection beyond those included in the plans, and additional connections as directed by the engineer, to be corrected and paid for under separate bid items identified in these special provisions. Field verify the dimensions and sizes of components required for these additional work items.

D Measurement

The department will measure Inspect Primary Bolted Connections as a single lump sum unit of work for inspecting the sign bridges included in this project, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Inspect Primary Bolted Connections	LS

Payment is full compensation for inspecting all anchor rods, chord to column bolts, and other truss splice bolts at each sign structure identified in the plans; and for field verifying existing conditions at any additional work locations.

The cost of furnishing, replacing, and/or tensioning any necessary connectors shall be paid for under separate bid items.

87. Traffic Control Surveillance and Maintenance Special Event, Item SPV.0105.02.

A Description

This special provision describes providing personnel and equipment to maintain traffic control items and assist in emergency situations requiring traffic control modifications during the Rhythm and Booms event.

B Materials

Furnish additional traffic control items, including Drums, Barricades, Warning Lights, Arrow Boards, and Portable Changeable Message Signs as necessary.

C Construction

Have onsite two traffic control personnel, called traffic control specialists, and two trucks with traffic control equipment beginning 12:00 PM Saturday June 28, 2014 until 2:00 AM Sunday June 29, 2014. If the event is cancelled due to rain, it will be moved to Sunday June 29, 2014 and the times shall be from 12:00 PM Sunday June 29, 2014 until 2:00 AM Monday June 30, 2014.

The traffic control specialists shall provide a mobile phone number to the event traffic management staff and Madison Police Department.

One of the traffic control specialists scheduled to be onsite for the event shall attend up to three planning meetings with the Madison Police Department and event traffic management staff.

During the above listed times, the traffic control specialists shall be responsible for continuous inspection and maintenance duties of traffic control items in accordance to the pertinent provisions of standard spec 643.3.2. The traffic control specialists shall also be on call to respond to traffic control maintenance requests from the Madison Police Department or event traffic management staff.

D Measurement

The department will measure Traffic Control Surveillance and Maintenance Special Event as a single lump sum unit of work, completed in accordance 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.0105.02	Traffic Control Surveillance and Maintenance Special Event	LS

Payment is full compensation for furnishing and placing additional traffic control devices; inspecting, maintaining, and relocating traffic control devices; and for attending planning meetings.

88. Survey Project 1206-04-62, Item SPV.0105.03.

A Description

Perform work according to standard spec 105.6 and 650.

Standard specs 105.6 and 650 are modified to define the requirements for construction staking for this contract.

Replace standard spec 105.6.2 with the following:

The department will not perform any construction staking for this contract. Perform all survey required to layout and construct the work under this contract, subject to engineer's approval.

The survey includes establishing horizontal and vertical position for all aspects of construction including but not limited to storm sewer, subgrade, base, curb, gutter, curb and gutter, pipe culverts, structure/expansion joint layout, pavement, barriers (temporary and permanent), electrical installations, supplemental control, slope stakes, ITS, FTMS, utilities, traffic control items, fencing, etc.

The department may choose to perform quality assurance survey during construction. This quality assurance survey does not relieve the contractor of the responsibility for furnishing all survey work required under this contract.

Delete standard spec 650.1.

B (Vacant)

C Construction

Survey required under this item shall be in accordance to all pertinent requirements of standard spec 650 and shall include all other miscellaneous survey required to layout and construct all work under this contract.

D Measurement

The department will measure Survey Project 1206-04-62 as a single lump sum unit of work, acceptably completed.

E Payment

Replace standard spec 650.5 with the following:

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Survey Project 1206-04-62	LS

Payment is full compensation for performing all survey work required to layout and construct all work under this contract. No additional payments will be made for restaking due to construction disturbance and knock-outs.

89. **Concrete Barrier Temporary Precast Emergency Repair Standby Time, Item SPV.0105.04.**

A Description

This special provision describes providing equipment and labor that will be available at the project site, necessary to install temporary precast concrete barrier in emergency situations to replace or supplement previously installed temporary barrier, and in accordance to the pertinent provisions of standard spec 603 and the plan standard detail drawings.

B (Vacant)

C Construction

Provide equipment at the project site that will be operational within one hour of notification by the engineer, the County Sheriff, or the State Patrol Region Headquarters, and that is capable to load, haul, unload, remove and place temporary precast concrete barrier that is in inventory on hand within the project limits. Provide a barrier wall lifting device that will be available for use by emergency services. Such equipment shall be stored within the project limits at all times when concrete barrier is in use within the project limits. Provide a qualified individual, designated as the Barrier Installation Specialist, who will be present at the project site within one hour of notification by the engineer, the County Sheriff, or the State Patrol Region Headquarters, and is capable of operating equipment and tools to load, haul, unload, remove and place temporary precast concrete barrier that is in inventory on hand within the project limits. The Barrier Installation Specialist shall be available, as outlined above, at all times when concrete barrier is in use within the project limits.

Provide additional individuals that will be present at the project site within three hours of notification by the Barrier Installation Specialist, who are capable of assisting the Barrier Installation Specialist to load, haul, unload, remove and place temporary precast concrete barrier.

D Measurement

The department will measure Concrete Barrier Temporary Precast Emergency Repair Standby Time as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Concrete Barrier Temporary Precast Emergency Repair Standby Time	LS

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

Concrete Barrier Temporary Installed and Concrete Barrier Temporary Emergency Repair Mobilization will be paid for separately.

90. Prepare Foundation for Concrete Pavement Special, Item SPV.0170.01.

A Description

Prepare item in accordance to the pertinent provisions of standard spec 211.1, as shown on the plans and as hereinafter provided.

B (Vacant)

C Construction

Construct in accordance to standard spec 211.3.

D Measurement

The department will measure Prepare Foundation for Concrete Pavement Special by the station, acceptably completed for each shoulder for each direction of travel.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.01	Prepare Foundation for Concrete Pavement Special	STA

Payment for Prepare Foundation for Concrete Pavement Special shall be in accordance to standard specs 211.5.1 (2), 211.5.1(2), 211.5.1(3), 211.5.1(4), and 211.5.2.

91. Street Sweeping, Item SPV.0170.02.

A Description

The special provision describes removing dust and debris from the roadway through the use of a street sweeper.

B Materials

Conduct street sweeping using a street sweeper equipped with a power broom, vacuum, and water sprayer.

Vacuum equipment shall have a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere. Particulate collector and water sprayer shall be in use at all times during sweeping operations.

C Construction

Sweep the USH 12 shoulders in advance of the initial lane shift at the beginning of the project, and prior to any major traffic shift to clean the surface prior to the next traffic stage.

Perform street sweeping during off-peak hours. Obtain approval from the engineer for the exact day of sweeping. Do not perform sweeping during inclement weather such as rain. If inclement weather is forecast for the scheduled sweeping day/time, coordinate with the engineer to adjust the schedule for that week.

Take reasonable measures to protect existing storm sewer inlets and manholes. Do not use the existing storm sewer system at any time to empty equipment. During the course of the sweeping, some dust and debris will enter the existing storm sewer system, but perform the work in such manner to minimize this.

Dispose of the accumulated material in compliance to all applicable laws, statutes and ordinances. Cover or secure material likely to become air-borne while being moved on public roads where necessary.

D Measurement

The department will measure Street Sweeping by the station, 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.0170.02	Street Sweeping	STA

Payment for Street Sweeping is full compensation for furnishing all work, materials, equipment, appurtenances, traffic control, and incidentals required by the contractor for street sweeping to remove all dust, dirt, and debris from USH 12 as specified in the plans and quantities.

92. Concrete Pavement Repair Precast 10-Inch, Item SPV.0180.01.

A Description

Furnish and install precast reinforced concrete pavement panels for pavement repairs as shown on the plans for longitudinal lengths 14 feet or less, or as directed by the engineer and as set forth in these special provisions.

Furnishing and installing precast reinforced doweled concrete pavement panels includes removing existing pavement; furnishing, installing, and fine grading of slab support material; furnishing and placement of precast concrete pavement slabs; dowel bar grouting; bedding grout; sawing of longitudinal joints, and all work necessary to complete the precast concrete pavement repair.

Sawing concrete in accordance to standard spec 690, and drilled dowel bars shall be paid separately.

B Materials

B.1 Precast Concrete Pavement Panels

The contractor is responsible for all aspects of the precast concrete pavement panel system including design, fabrication, and construction as defined in the plans and these special provisions.

Prior to fabrication and installation of any precast pavement panels on the project, develop complete fabrication and installation instructions specific to the proposed system for the department's review.

Fabricate the precast pavement panels in compliance with the department's plant certification program for fabrication of precast concrete members and the approved precast pavement system designer's fabrication instructions. Submit the plant certification information to the department for pre-approval as part of the precast pavement system design.

Fabricate and install 30 test panels within a travelled lane that does not require reopening to traffic the following morning. Complete installation of the 30 test panels or a portion thereof within a time period that matches the most restrictive center lane closure working periods. The working restrictions are defined in the article for Traffic. During the test panel installation, make modifications to the fabrication and installation instructions as directed by the department. If the installation process is rejected, provide an alternative method for precast panel installation and follow the test panel procedure outline in this article until department approval is granted. Do not proceed with fabrication of any additional precast pavement panels until the test panel installations are complete and the installation and performance process has been final approved by the department. A contract change order to cast-in-place patches for the center lane patches shall not be granted in lieu of precast panel installation. Contract time extension due to multiple test panel system iterations and corresponding process rejection shall not be granted.

Furnish concrete and fabricate precast concrete panels in accordance to standard spec 503 and to conform to length, width, and thickness as specified in the plans or to the dimensions as determined in the field with engineer. The top surface texturing of the precast panel shall match the existing texture of abutting pavement. Do not disturb or remove the precast panels from the fabrication forms until a minimum compressive strength of 3000 psi is achieved. Furnish a precast concrete panel design which provides for a 28-day strength of 5,000 psi or higher. The department retains the option to test concrete to ensure it meets requirements in accordance to the standard specifications at the precaster. Follow standard specs 701, 710, and 715 for QMP testing requirements. Any material found to be nonconforming shall be addressed with the process outlined in chapter 8 section 10 of the Construction and Materials Manual.

Furnish panel reinforcement conforming to standard spec 505 and the plans. Provide a mat of reinforcement with a size and spacing of steel (in both directions) that results in a minimum ratio of steel area to concrete area of at least 0.018 and a maximum center-to-center bar spacing in both directions of 18-inches. Use size No. 4 or larger epoxy coated steel bars.

Furnish shop drawings to the engineer for review prior to panel fabrication. Prior to shop drawing preparation determine widths of the new panels by field measuring the distance between existing longitudinal joints where they are to be placed. Determine whether or not the surface of single plane (flat) panels will suitably match the surrounding pavement surfaces. If the surface of the surrounding pavement is non-planar such that flat panels will not suitably match, perform a survey of the existing pavement to determine the elevations of each corner of the new non-planar warped panel. Include the following information in the submittal:

- Panel layout drawing if the patch includes more than one panel that shows the location of each panel.
- Reinforcement size and position.
- Detailed piece drawings showing the location and size of dowels, tie bars, lifting inserts, dowel bar slots, length and width of each panel and non-planar geometry information (if appropriate).
- Production note sheet showing source of materials, testing method, weight and area of each panel, tolerances and all details related to yard storage, shipping and handling.
- Texture of the top surface of the panels.

B.2 Leveling Base

Furnish a fine grade crushed limestone or other base material free of unsuitable materials conforming to the following table for leveling of the pavement repair areas which provides full support for the precast panels.

Sieve Size Designation	Percent Passing by Weight
½ inch	100
No. 4	80 – 100
No. 10	55 – 75
No. 40	10 – 40
No. 200	0 – 20

B.3 Drilled Dowel Bars

Furnish epoxy coated dowel bars that conform to standard spec 416.2.3. Dowel bars shall have tight fitting end caps made of non-metallic material that allow for 1/4-inch movement of the bar at each end. Prior to use, submit a sample end cap to the engineer for approval. Drilled dowel bars, between existing concrete pavement and the precast panel, to be paid separately and shall be between 14-inches and 18-inches in length.

B.4 Bedding Grout

Use a mixture of Type I or Type III Portland Cement, water, and approved viscosity-reducing admixture(s) to attain a flow rate of 15 to 20 seconds (maximum) in a standard ASTM C939 flow cone. Provide tests to show that the mix will meet the required flow rate and a compressive strength of 600 psi in 12 hours.

C Construction

C.1 Site Verification

Prior to precast concrete panel fabrication, verify site conditions in the areas proposed for the precast concrete pavement repair installations including verifications of lane widths, repair dimensions, and all other factors influencing fabrication and installation of the precast concrete pavement panels.

C.2 Prefabrication Meeting

Prior to fabrication of the 30 test panels, coordinate with the engineer to hold a prefabrication meeting at a mutually agreed location and timeframe. Ensure representatives from the department, the precast pavement system designer, and the contractor including the contractor's surveyor and any subcontractor associated with panel installation are present at the meeting. The precast pavement system designer shall present the system-specific fabrication and installation details as they relate to development of shop drawings. Ensure all details such as allowable joint widths, surface matching, dowel bar layout, panel dimensions, and bedding details are agreed upon before shop drawing preparation can proceed. Provide the department with documentation that the precast concrete panel fabricator and plant is certified by the department for precast products prior to or at this meeting.

Follow-up meetings prior to the fabrication of the remaining panels may be waived by the department upon successful fabrication of the test panel section.

C.3 Pre-Installation Meeting

At least one week prior to precast concrete pavement panel installation in the test panel section, hold a pre-installation meeting at a mutually agreed to time and location. Present the contents of the precast concrete pavement panel installation plan at the meeting. Provide a written copy of the precast concrete pavement panel installation plan to the engineer at least one week prior to the meeting to allow for department review prior to the meeting. Attendance at the pre-installation meeting is mandatory for the project superintendent, quality control manager, construction installation foreman, the project inspection and engineering staff, panel fabricator, all appropriate contractor personnel involved with setting the panels including subcontractors, and the engineer or designated representatives.

Follow-up meetings prior to the installation of the remaining panels may be waived by the department upon successful installation of the test panel section.

Provide a precast concrete pavement panel installation plan that addresses the following items:

- A detailed schedule breakdown of each task required to place the panels and complete the precast concrete pavement repairs which adhere to the traffic requirements and working restrictions as defined within these special provisions.
- Contractor personnel and equipment that will be used to perform the work. The installation plan shall demonstrate the contractor's ability to safely and efficiently lift, handle, transport, and install the precast pavement panels.
- Potential repair procedures for contractor-caused damaged to existing pavements to remain in place adjacent to the precast concrete pavement panels.
- A contingency plan to address lane openings which may be required in the event of an emergency situation such as equipment failure preventing the placement of precast panels during the allowable lane closure hours.

Panel installation will not occur until the precast concrete pavement panel installation plan is approved by the department.

C.4 Precast Concrete Pavement Repairs

C.4.1 Sawing Concrete for Repairs

Do not saw repair areas more than 72 hours prior to pavement removal and installation of the new precast concrete pavement panel. Limit overcut on all sawing to less than 0.75 feet into the adjacent panel or lane. Upon panel installation, epoxy seal any overcut locations in accordance to standard spec 416.2.3.2.

C.4.2 Removing Existing Pavement

Complete all pavement removals in accordance to standard spec 416. Rubblization, breaking, or impact methods will not be allowed.

C.4.3 Verification of Existing Base Material and Base Leveling Course

Upon pavement removal, prepare the foundation in accordance to standard spec 211 prior to placing the base leveling course material. Removal and replacement of poor existing base material is incidental to the contract.

Install, compact, and grade base leveling course material to a plane required to position the panels to match the surrounding concrete pavement to an accuracy of plus or minus 1/8-inch. Use grading equipment and methods demonstrated in test panel installation. Do not exceed a total thickness of 1-inch of base leveling course material. Prior to placing the panels check the base surface with a 10-foot straight edge and a depth gage to ensure the required surface accuracy. Correct the variation of the surface of the base leveling course to 1/8-inch or less. Correct all areas of the base surface not conforming to this smoothness requirement prior to precast concrete pavement panel installation.

C.5.4 Precast Concrete Panel Installation

Prior to shipment of the precast panels and prior to placement on site, the contractor and engineer will inspect all precast panels to assure they are free of defects, cracks and damage, slab dimensions meet tolerance requirements, dowel bars or slots meet tolerances,

and surface texture and finish matches existing pavement. The contractor is responsible for panel acceptability, but the engineer reserves the right to inspect, reject, or apply partial pay to panels not meeting this specification. No cracked or damaged installed panels will be allowed to remain in place prior to opening to USH 12 daily traffic.

Follow handling and transportation of precast panels as instructed by the precast pavement system fabricator. Lift panels at designated points using fabricator approved inserts and procedures.

For single panel repairs, center the new panel in the pre-measured sawcut void.

For multiple-panel repairs, mark out the leading edges of all panels to ensure proper placement and fit prior to placement of any panels. The marks shall account for proper joint widths as indicated on the panel layout drawing. Prior to placement of each panel, apply bond breaker to dowels, ends of the previously-placed panels, existing longitudinal joint, or existing pavement as indicated in the approved installation instructions.

Check the surface match between the new panel(s) to ensure it is within plus or minus 1/8-inch of each other vertically on all four sides. If the surface match exceeds this tolerance, remove the panel and regrade and recompact the base leveling course material such that the required surface tolerance is met. Grinding of the precast panels or adjacent existing pavement to achieve tolerances is prohibited.

Place panels such that the width of each transverse joint is 3/4-inch or less and each longitudinal joint is 3/4-inch in width or less.

C.5.5 Dowel Bars and Grouting

Install dowel bars as indicated in the approved fabrication and installation instructions, and in accordance to the standard specifications.

Complete patching and placement of curing agent for the doweled joint grouting within 48-hours of precast concrete pavement panel placement.

Place the bedding grout within 48 hours of panel placement. If allowed by manufacturer specification and approved by engineer, and panel is reopened to traffic prior to bedding grout being placed, reset panel to specified tolerances in this special provision.

C.5.6 Damage by Contractor

At no cost to the department, repair any damage to the precast concrete pavement due to the contractor's operations.

D Measurement

The department will measure Concrete Pavement Repair Precast 10-Inch by the square yard acceptably completed for repairs installed in the areas designated in the plans including the test panel section or in areas designated by the department.

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	Concrete Pavement Repair Precast 10-Inch	SY

Payment is full compensation for removing and disposing of existing pavement; supply of all materials for and fabrication of precast concrete pavement panels; preparation of existing foundation in accordance to standard spec 211 of the standard specifications; providing base leveling materials; preparation and shaping of the leveling base; delivery, handling, and placement of the precast concrete pavement panels; grouting dowel bars; furnishing and installing bedding grout; for survey, layout and design of the panel system, shop drawings and required reports, presentations and meetings, installations in test sections; and for sawing longitudinal joints.

Sawing concrete in accordance to standard spec 690 of the standard specifications, and drilled dowel bars shall be paid separately.

93. Concrete Pavement Replacement Precast 10-Inch, Item SPV.0180.02.

A Description

Furnish and install precast reinforced concrete pavement panels for pavement repairs as shown on the plans for longitudinal lengths between 14 feet and 300 feet, or as directed by the engineer and as set forth in these special provisions.

Furnishing and installing precast reinforced doweled concrete pavement panels includes removing existing pavement; furnishing, installing, and fine grading of slab support material; furnishing and placement of precast concrete pavement slabs; furnishing and installation of dowel bar cast into panels; dowel bar grouting; bedding grout; sawing of longitudinal joints, and all work necessary to complete the precast concrete pavement repair.

Sawing concrete, in accordance to standard spec 690 shall be paid separately. Do not tie precast panels to existing pavement.

B Materials

B.1 Precast Concrete Pavement Panels

The contractor is responsible for all aspects of the precast concrete pavement panel system including design, fabrication, and construction as defined in the plans and these special provisions.

Prior to fabrication and installation of any precast pavement panels on the project, develop complete fabrication and installation instructions specific to the proposed system for the department's review. The system selected shall match the installation system for bid item Precast Concrete Pavement Repair.

Fabricate the precast pavement panels in compliance with the department's plant certification program for fabrication of precast concrete members and the approved precast pavement system designer's fabrication instructions. Submit the plant certification information to the department for pre-approval as part of the precast pavement system design.

Fabricate and install 3 test panels runs of lengths greater than 14 feet, within a travelled lane that does not require reopening to traffic the following morning. Complete installation of the 3 test panel runs or a portion thereof within a time period that matches the most restrictive center lane closure working periods. The working restrictions are defined in the article for Traffic. During the test panel installation, make modifications to the fabrication and installation instructions as directed by the department. If the installation process is rejected, provide an alternative method for precast panel installation and follow the test panel procedure outline in this article until department approval is granted. Do not proceed with fabrication of any additional precast pavement panels until the test panel installations are complete and the installation and performance process has been final approved by the department. A contract change order to cast-in-place patches for the center lane patches shall not be granted in lieu of precast panel installation. Contract time extension due to multiple test panel system iterations and corresponding process rejection shall not be granted.

Furnish concrete and fabricate precast concrete panels in accordance to standard spec 503 and to conform to length, width, and thickness as specified in the plans or to the dimensions as determined in the field with engineer. The top surface texturing of the precast panel shall match the existing texture of abutting pavement. Do not disturb or remove the precast panels from the fabrication forms until a minimum compressive strength of 3000 psi is achieved. Furnish a precast concrete panel design which provides for a 28-day strength of 5,000 psi or higher. The department retains the option to test concrete to ensure it meets requirements in accordance to the standard specifications at the precaster. Follow standard spec 701, 710, and 715 for QMP testing requirements. Any material found to be nonconforming shall be addressed with the process outlined in chapter 8 standard spec 10 of the Construction and Materials Manual.

Furnish panel reinforcement conforming to standard spec 505 and the plans. Provide a mat of reinforcement with a size and spacing of steel (in both directions) that results in a minimum ratio of steel area to concrete area of at least 0.018 and a maximum center-to-center bar spacing in both directions of 18-inches. Use size No. 4 or larger epoxy coated steel bars.

Furnish shop drawings to the engineer for review prior to panel fabrication. Prior to shop drawing preparation determine widths of the new panels by field measuring the distance between existing longitudinal joints where they are to be placed. Determine whether or not the surface of single plane (flat) panels will suitably match the surrounding pavement surfaces. If the surface of the surrounding pavement is non-planar such that flat panels will not suitably match, perform a survey of the existing pavement to determine the elevations

of each corner of the new non-planar warped panel. Include the following information in the submittal:

- Panel layout drawing if the patch includes more than one panel that shows the location of each panel.
- Reinforcement size and position.
- Detailed piece drawings showing the location and size of dowels, tie bars, lifting inserts, dowel bar slots, length and width of each panel and non-planar geometry information (if appropriate).
- Production note sheet showing source of materials, testing method, weight and area of each panel, tolerances and all details related to yard storage, shipping and handling.
- Texture of the top surface of the panels

B.2 Leveling Base

Furnish a fine grade crushed limestone or other base material free of unsuitable materials conforming to the following table for leveling of the pavement repair areas which provides full support for the precast panels.

Sieve Size Designation	Percent Passing by Weight
½ inch	100
No. 4	80 – 100
No. 10	55 – 75
No. 40	10 – 40
No. 200	0 – 20

B.3 Drilled Dowel Bars

Furnish epoxy coated dowel bars that conform to standard spec 416.2.3. Dowel bars shall have tight fitting end caps made of non-metallic material that allow for 1/4-inch movement of the bar at each end. Prior to use, submit a sample end cap to the engineer for approval. Drilled dowel bars, between existing concrete pavement and the precast panel, to be paid separately. Dowel bars placed in the panel during precast operations are incidental. All dowel bars shall be between 14-inches and 18-inches in length.

B.4 Bedding Grout

Use a mixture of Type I or Type III Portland Cement, water, and approved viscosity-reducing admixture(s) to attain a flow rate of 15 to 20 seconds (maximum) in a standard ASTM C939 flow cone. Provide tests to show that the mix will meet the required flow rate and a compressive strength of 600 psi in 12 hours.

C Construction

C.1 Site Verification

Prior to precast concrete panel fabrication, verify site conditions in the areas proposed for the precast concrete pavement repair installations including verifications of lane widths, repair dimensions, and all other factors influencing fabrication and installation of the precast concrete pavement panels.

C.2 Prefabrication Meeting

Prior to fabrication of the 30 test panels, coordinate with the engineer to hold a prefabrication meeting at a mutually agreed location and timeframe. Ensure representatives from the department, the precast pavement system designer, and the contractor including the contractor's surveyor and any subcontractor associated with panel installation are present at the meeting. The precast pavement system designer shall present the system-specific fabrication and installation details as they relate to development of shop drawings. Ensure all details such as allowable joint widths, surface matching, dowel bar layout, panel dimensions, and bedding details are agreed upon before shop drawing preparation can proceed. Provide the department with documentation that the precast concrete panel fabricator and plant is certified by the department for precast products prior to or at this meeting.

Follow-up meetings prior to the fabrication of the remaining panels may be waived by the department upon successful fabrication of the test panel section.

C.3 Pre-Installation Meeting

At least one week prior to precast concrete pavement panel installation in the test panel section, hold a pre-installation meeting at a mutually agreed to time and location. Present the contents of the precast concrete pavement panel installation plan at the meeting. Provide a written copy of the precast concrete pavement panel installation plan to the engineer at least one week prior to the meeting to allow for department review prior to the meeting. Attendance at the pre-installation meeting is mandatory for the project superintendent, quality control manager, construction installation foreman, the project inspection and engineering staff, panel fabricator, all appropriate contractor personnel involved with setting the panels including subcontractors, and the engineer or designated representatives.

Follow-up meetings prior to the installation of the remaining panels may be waived by the department upon successful installation of the test panel section. Special attention shall be given to continuous lengths that exceed the available nightly production levels. When encountering this condition, provide a method to terminate the continuous precast panel section with existing pavement for reopening to traffic the following morning. Also provide how the first panel of the following night's work will be doweled to the last panel placed the previous night. Dowel bar retrofitting is prohibited.

Provide a precast concrete pavement panel installation plan that addresses the following items:

- A detailed schedule breakdown of each task required to place the panels and complete the precast concrete pavement repairs which adhere to the traffic requirements and working restrictions as defined within these special provisions.
- Contractor personnel and equipment that will be used to perform the work. The installation plan shall demonstrate the contractor's ability to safely and efficiently lift, handle, transport, and install the precast pavement panels.

- Potential repair procedures for contractor-caused damaged to existing pavements to remain in place adjacent to the precast concrete pavement panels.
- A contingency plan to address lane openings which may be required in the event of an emergency situation such as equipment failure preventing the placement of precast panels during the allowable lane closure hours.

Panel installation will not occur until the precast concrete pavement panel installation plan is approved by the department.

C.4 Precast Concrete Pavement Repairs

C.4.1 Sawing Concrete for Repairs

Do not saw repair areas more than 72 hours prior to pavement removal and installation of the new precast concrete pavement panel. Limit overcut on all sawing to less than 0.75 feet into the adjacent panel or lane. Upon panel installation, epoxy seal any overcut locations in accordance to standard spec 416.2.3.2.

C.4.2 Removing Existing Pavement

Complete all pavement removals in accordance to standard spec 416. Rubblization, breaking, or impact methods will not be allowed.

C.4.3 Verification of Existing Base Material and Base Leveling Course

Upon pavement removal, prepare the foundation in accordance to standard spec 211 prior to placing the base leveling course material. Removal and replacement of poor existing base material is incidental to the contract.

Install, compact, and grade base leveling course material to a plane required to position the panels to match the surrounding concrete pavement to an accuracy of plus or minus 1/8-inch. Use grading equipment and methods demonstrated in test panel installation. Do not exceed a total thickness of 1-inch of base leveling course material. Prior to placing the panels check the base surface with a 10-foot straight edge and a depth gage to ensure the required surface accuracy. Correct the variation of the surface of the base leveling course to 1/8-inch or less. Correct all areas of the base surface not conforming to this smoothness requirement prior to precast concrete pavement panel installation.

C.5.4 Precast Concrete Panel Installation

Prior to shipment of the precast panels and prior to placement on site, the contractor and engineer will inspect all precast panels to assure they are free of defects, cracks and damage, slab dimensions meet tolerance requirements, dowel bars or slots meet tolerances, and surface texture and finish matches existing pavement. The contractor is responsible for panel acceptability, but the engineer reserves the right to inspect, reject, or apply partial pay to panels not meeting this specification. No cracked or damaged installed panels will be allowed to remain in place prior to opening to USH 12 daily traffic.

Follow handling and transportation of precast panels as instructed by the precast pavement system fabricator. Lift panels at designated points using fabricator approved inserts and procedures.

For multiple-panel repairs, mark out the leading edges of all panels to ensure proper placement and fit prior to placement of any panels. The marks shall account for proper joint widths as indicated on the panel layout drawing. Prior to placement of each panel, apply bond breaker to dowels, ends of the previously-placed panels, existing longitudinal joint, or existing pavement as indicated in the approved installation instructions.

Check the surface match between the new panel(s) to ensure it is within plus or minus 1/8-inch of each other vertically on all four sides. If the surface match exceeds this tolerance, remove the panel and regrade and recompact the base leveling course material such that the required surface tolerance is met. Grinding of the precast panels or adjacent existing pavement to achieve tolerances is prohibited.

Place panels such that the width of each transverse joint is 3/4-inch or less and each longitudinal joint is 3/4-inch in width or less.

C.5.5 Dowel Bars and Grouting

Install dowel bars as indicated in the approved fabrication and installation instructions, and in accordance to the standard specifications.

Complete patching and placement of curing agent for the doweled joint grouting within 48-hours of precast concrete pavement panel placement.

Place the bedding grout within 48 hours of panel placement. If reopened to traffic prior to bedding grout being placed, reset panel to specified tolerances in this special provision.

C.5.6 Damage by Contractor

At no cost to the department, repair any damage to the precast concrete pavement due to the contractor's operations.

D Measurement

The department will measure Concrete Pavement Replacement Precast 10-Inch by the square yard acceptably completed for repairs installed in the areas designated in the plans including the test panel section or in areas designated by the department.

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	Concrete Pavement Replacement Precast 10-Inch	SY

Payment is full compensation for removing and disposing of existing pavement; supply of all materials for and fabrication of precast concrete pavement panels; preparation of existing foundation in accordance to standard spec 211; providing base leveling materials; preparation and shaping of the leveling base; delivery, handling, and placement of the

precast concrete pavement panels; furnishing and installing dowel bars placed in precast panels, grouting dowel bars; furnishing and installing bedding grout; for survey, layout and design of the panel system, shop drawings and required reports, presentations and meetings, installations in test sections; sawing of longitudinal joints; and all equipment, labor and incidentals necessary to perform the work.

Sawing concrete, in accordance to standard spec 690, and Drilled Dowel Bars shall be paid separately under the respective bid items.

94. Clean Abutment Seats, Item SPV.0180.03.

A Description

This special provision describes cleaning dirt and debris from existing abutment seats.

B (Vacant)

C Construction

Clean the exposed horizontal surfaces of the abutment seats to remove all accumulated dirt, debris, and loose particles by either brooming and water pressure, or by water and air pressure.

Implement necessary procedures to contain and collect waste materials and to minimize debris dropping onto the surfaces below. Properly dispose of waste materials in a manner satisfactory to the engineer.

D Measurement

The department will measure Clean Abutment Seats 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
SPV.0180.03	Clean Abutment Seats	SY

Payment is full compensation for cleaning abutments seats: containing and collecting the dirt and debris; for properly disposing of all materials.

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

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

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

I. BASIC CONCEPTS

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

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 6 (number) TrANS Graduate(s) be utilized on this contract.

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

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 3 (number) TrANS Apprentice(s) be utilized on this contract.

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

I. RATIONALE AND SPECIAL NOTE

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

NOTE: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

II. IMPLEMENTATION

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

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

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

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

IV. TRANS TRAINING

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

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

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

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

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3 DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1. Description

General

- a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
- b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
 - i. Produce accurate and complete quotes.
 - ii. Understand highway plans applicable to their work.
 - iii. Understand specifications and contract requirements applicable to their work.
 - iv. Understand contracting reporting requirements.
- c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

<http://www.dot.wisconsin.gov/business/engrserv/dbe-main.htm>

2. Definitions

- a. Interpret these terms, used throughout this additional special provision, as follows:
 - i. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
 - ii. **DBE:** A disadvantaged business enterprise (DBE) certified as a DBE by the department and included on the department's list of certified DBE's who are determined to be ready, willing and able.
 - iii. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
 - iv. **Discretionary Goal:** A contractor assigned DBE goal, typically abbreviated as "Disc" on the cover of the Highway Work Proposal, which is enforced as committed.
 - v. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
 - vi. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
 - vii. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal, including projects with discretionary goals. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized

comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. Department's DBE Evaluation Process

a. Documentation Submittal

Within 10 business days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506] and all necessary attachment A forms, as well as, Good Faith Waiver Form [DT1202] and supporting documentation as necessary. If the contractor fails to furnish the required forms within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

i. Bidder Meets DBE Goal

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

ii. Bidder Does Not Meet DBE Goal

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

5. Department's Criteria for Good Faith Effort

The Code of Federal Regulations {CFR}, 49 CFR Part 26-Appendix A, is the guiding regulation concerning good faith efforts. However, the federal regulations do not define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own process when making a determination of good faith.

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

- b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.
- c. Prime Contractors should:
 - i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
 - ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, **as required by federal rules**. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
 - (1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.
 - (2) SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
 - a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
 - b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.
 - (3) Second solicitation should take place within 5 days
 - a. An email solicitation is highly recommended for this second solicitation
 - (4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
 - (5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.
 - (6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - a. Email to all prospective DBE firms in relevant work areas
 - b. Phone call log to DBE firms who express interest via written response or call.
 - c. Fax/letter confirmation
 - d. Copy of the DBE quotes
 - e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.
- d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.
 - i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its

- capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.
- ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
 - iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
 - (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.
 - (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- e. After notification of contract award, submit '**Commitment to Subcontract**' form within the time period specified in the contract.
 - i. Provide the following information along with department form DT1202:
 - (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.
 - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
 - (3) Photocopies or electronic copies of all written solicitations to DBE's.
 - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
 - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.
 - f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office
6150 Fond du Lac Ave.
Milwaukee, WI 53218
Phone: 414-438-4583 / 608-266-6961
Fax: 414-438-5392
E-mail: DOTDBESupportServices@dot.wi.gov

6. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so

requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

7. Department's Criteria for DBE Participation

Department's DBE List

- a. The department maintains a DBE list on the department's website at <http://app.mylcm.com/wisdot/Reports/WisDotUCPDirectory.aspx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

8. Counting DBE Participation

Assessing DBE Work

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

9. Commercially Useful Function

- a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- b. A DBE is performing a commercially useful function if the following conditions are met:
- c. For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
- d. For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

10. Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at

<http://www.dot.wisconsin.gov/business/engrserv/docs/dbe-trucking-notice.pdf>

11. Manufacturers and Suppliers

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

12. DBE Prime

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

13. Joint Venture

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

14. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will credit the portion of the work performed by the DBE protégé firm
- b. On every other project that the mentor protégé team identifies itself on.
- c. For no more than one half of the total contracted DBE goal on any WisDOT project.

15. DBE Replacement

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:

<http://www.dot.wisconsin.gov/business/engrserv/docs/policyreplacingdbe.pdf>

16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

17. Contract Modifications

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

18. Payment

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

APPENDIX A
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

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

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

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

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

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

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

All questions should be directed to:

Project Manager, John Doe,
Phone: (000) 123-4567
Email: Joe@joetheplumber.com
Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ☐ Yes, we will be quoting on the projects and items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have some one contact me at this number

Prime Contractor 's Contact Person

Phone: _____
Fax: _____
Email: _____

DBE Contractor Contact Person

Phone _____
Fax _____
Email _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

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

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

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

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

APPENDIX B BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C

Types of Efforts considered in determining GFE

This list represents concepts being assessed; analysis requires additional steps

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

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

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

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
 - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- D.
 - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
 - E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
 - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
 - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E

Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
 - d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

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

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
 - c. Add attachments to a sub-quote
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
 - c. Add attachments to a sub-quote
 - d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select “Order Bid Express.” The Small Business Network is a part of the Bid Express Basic Service.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

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

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

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6**ASP 6 - Modifications to the standard specifications**

Make the following revisions to the 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 460-1 for the mixture produced.
- (3) Have an HMA technician certified at level II make related process adjustments. If mixture redesign is necessary, submit a new JMF, subject to the same specification requirements as the original JMF.

520.3.8 Protection After Laying

Delete the entire subsection.

614.2.1 General

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

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

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>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

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

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

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

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

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

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

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

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

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

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

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

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

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

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

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

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

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

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective with September 2004 Letting

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

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

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

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

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

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

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

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

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

II. PAYROLL REQUIREMENTS

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

III. POSTINGS AT THE SITE OF THE WORK

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

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

IV. WAGE RATE REDISTRIBUTION

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

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

V. ADDITIONAL CLASSIFICATIONS

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

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

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

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

**ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
DANE 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 regarding the proper trade or classification to be used for any worker on a public works project.

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.58	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	32.94	18.80	51.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	28.00	4.50	32.50
Ironworker	30.90	19.11	50.01
Line Constructor (Electrical)	31.29	15.34	46.63
Painter	26.65	13.10	39.75
Pavement Marking Operator	29.22	16.71	45.93
Piledriver	30.66	15.31	45.97
Roofer or Waterproofor	30.40	2.23	32.63
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	17.00	46.64
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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.90	33.65

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, Dumptror, 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	14.94	38.78
Shadow or Pilot Vehicle	33.22	18.90	52.12
Truck Mechanic	22.50	16.19	38.69

LABORERS

General Laborer	28.35	13.90	42.25
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	28.35	13.90	42.25
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	23.41	6.91	30.32

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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 Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. 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 Mfr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; 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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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 Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	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; Oilier; 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

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI140010

DATE: January 3, 2014

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:		Basic Hourly Rates	Fringe Benefits		Basic Hourly Rates	Fringe Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	\$29.32	14.53	<u>Truck Drivers:</u>		
				1 & 2 Axles	23.82	18.32
				Three or More Axles; Euclids, Dumptr & Articulated, Truck Mechanic.....	23.97	18.32
Group 2:	Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer	29.42	14.53			
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	29.47	14.53			
Group 4:	Line and Grade Specialist	29.67	14.53			
Group 5:	Blaster and Powderman	29.52	14.53			
Group 6:	Flagperson and Traffic Control Person	25.67	14.53			

CLASSES OF LABORER AND MECHANICS

Bricklayer	28.41	12.81
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker	31.50	20.03
Cement Mason/Concrete Finisher	32.09	16.13
Electrician		See Page 3
Line Construction		
Lineman.....	38.25	18.00
Heavy Equipment Operator	34.43	16.71
Equipment Operator.....	30.60	15.41
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	21.04	12.16
Painter, Brush	24.50	16.27
Painter, Spray, Structural Steel,Bridges.....	25.50	16.27
Well Drilling:		
Well Driller.....	16.52	3.70

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0, dated January 3, 2014.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI140010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: January 3, 2014

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer	\$36.72	\$20.10	(scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator.	\$35.72	\$20.10
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.	\$36.22	\$20.10	Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	\$35.46	\$20.10
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.	\$35.17	\$20.10
			Group 6: Off - road material hauler with or without ejector.....	\$29.27	\$20.10
			Premium Pay: EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hours		

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI140010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: January 3, 2014

LABORERS CLASSIFICATION:

Rates

Benefits

			Area 4 -	BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.
Electricians				
Area 1	\$28.40	16.676		
Area 2:				
Electricians.....	29.13	17.92	Area 5 -	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area 3:				
Electrical contracts under \$130,000	26.24	16.85		
Electrical contracts over \$130,000	29.41	16.97		
Area 4:	28.10	17.24	Area 6 -	KENOSHA COUNTY
Area 5	28.61	16.60		
Area 6	35.25	19.30	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 8				
Electricians.....	30.60	24.95% + 10.33	Area 9 -	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 9:				
Electricians.....	32.94	18.71	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 10	28.97	19.55	Area 11 -	DOUGLAS COUNTY
Area 11	31.91	23.60	Area 12 -	RACINE (except Burlington township) COUNTY
Area 12	32.87	19.23	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Area 13	32.82	22.51	Area 14 -	Statewide.
Teledata System Installer			Area 15 -	DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.
Area 14				
Installer/Technician	21.89	11.83		
Sound & Communications				
Area 15				
Installer	16.47	14.84		
Technician	24.75	16.04		
Area 1 -	CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.			
Area 2 -	ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON and WASHBURN COUNTIES			
Area 3 -	FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)			

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>

FEBRUARY 1999

**NOTICE TO BIDDERS
WAGE RATE DECISION**

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20140311004PROJECT(S):
1206-04-62FEDERAL ID(S):
WISC 2014063

CONTRACTOR : _____

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

SECTION 0001 CONTRACT ITEMS

0010	108.3100.S INCENTIVE/DISINCENTIVE FOR INTERIM COMPLETION OF WORK 01. JOHN NOLEN DRIVE SUBSEGMENT	CD	10.000	5000.00000	50000.00	
0020	108.3100.S INCENTIVE/DISINCENTIVE FOR INTERIM COMPLETION OF WORK 02. SB JOHN NOLEN DRIVE TO EB US 12 RAMP	CD	7.000	5000.00000	35000.00	
0030	108.3100.S INCENTIVE/DISINCENTIVE FOR INTERIM COMPLETION OF WORK 03. PARK STREET SUBSEGMENT	CD	10.000	5000.00000	50000.00	
0040	108.3100.S INCENTIVE/DISINCENTIVE FOR INTERIM COMPLETION OF WORK 04. IH39/WB US 12 SUBSEGMENT	CD	5.000	5000.00000	25000.00	
0050	108.4400 CPM PROGRESS SCHEDULE	EACH	1.000	.	.	
0060	201.0120 CLEARING	ID	18.000	.	.	
0070	201.0220 GRUBBING	ID	18.000	.	.	

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REVISED:

CONTRACT:
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CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0080	203.0200 REMOVING OLD STRUCTURE (STATION) 01. 551EB+20	LUMP	LUMP		.	
0090	203.0200 REMOVING OLD STRUCTURE (STATION) 02. 564EB+25	LUMP	LUMP		.	
0100	203.0200 REMOVING OLD STRUCTURE (STATION) 03. 551WB+24	LUMP	LUMP		.	
0110	203.0200 REMOVING OLD STRUCTURE (STATION) 04. 564WB+25	LUMP	LUMP		.	
0120	203.0200 REMOVING OLD STRUCTURE (STATION) 05. 22EB+00	LUMP	LUMP		.	
0130	203.0225.S DEBRIS CONTAINMENT (STRUCTURE) 01. B-13-280	LUMP	LUMP		.	
0140	204.0100 REMOVING PAVEMENT	32.000 SY	.		.	
0150	204.0150 REMOVING CURB & GUTTER	332.000 LF	.		.	
0160	204.0157 REMOVING CONCRETE BARRIER	2,151.000 LF	.		.	
0170	204.0165 REMOVING GUARDRAIL	14,284.000 LF	.		.	
0180	204.0190 REMOVING SURFACE DRAINS	2.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0190	204.0195 REMOVING CONCRETE BASES	6.000 EACH	.		.	
0200	204.0220 REMOVING INLETS	3.000 EACH	.		.	
0210	204.0270 ABANDONING CULVERT PIPES	1.000 EACH	.		.	
0220	205.0100 EXCAVATION COMMON	26,655.000 CY	.		.	
0230	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-13-17	LUMP	LUMP		.	
0240	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 02. B-13-192	LUMP	LUMP		.	
0250	206.6000.S TEMPORARY SHORING	1,110.000 SF	.		.	
0260	210.0100 BACKFILL STRUCTURE	850.000 CY	.		.	
0270	213.0100 FINISHING ROADWAY (PROJECT) 01. 1206-04-62	1.000 EACH	.		.	
0280	305.0110 BASE AGGREGATE DENSE 3/4-INCH	12,390.000 TON	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0290	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	62.000 TON	.		.	
0300	415.0100 CONCRETE PAVEMENT 10-INCH	87,718.000 SY	.		.	
0310	415.0410 CONCRETE PAVEMENT APPROACH SLAB	1,574.000 SY	.		.	
0320	415.1100 CONCRETE PAVEMENT HES 10-INCH	3,316.000 SY	.		.	
0330	416.0610 DRILLED TIE BARS	69,063.000 EACH	.		.	
0340	416.0620 DRILLED DOWEL BARS	18,344.000 EACH	.		.	
0350	416.1010 CONCRETE SURFACE DRAINS	6.000 CY	.		.	
0360	416.1110 CONCRETE RUMBLE STRIPS SHOULDER	88,108.000 LF	.		.	
0370	416.1710 CONCRETE PAVEMENT REPAIR	5,461.000 SY	.		.	
0380	416.1715 CONCRETE PAVEMENT REPAIR SHES	5,112.000 SY	.		.	
0390	416.1720 CONCRETE PAVEMENT REPLACEMENT	5,295.000 SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0400	420.1000.S CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING	335,463.000 SY	.		.	
0410	455.0105 ASPHALTIC MATERIAL PG58-28	8.000 TON	.		.	
0420	455.0605 TACK COAT	2.000 GAL	.		.	
0430	460.1103 HMA PAVEMENT TYPE E-3	131.000 TON	.		.	
0440	465.0105 ASPHALTIC SURFACE	255.000 TON	.		.	
0450	465.0110 ASPHALTIC SURFACE PATCHING	200.000 TON	.		.	
0460	465.0315 ASPHALTIC FLUMES	30.000 SY	.		.	
0470	502.0100 CONCRETE MASONRY BRIDGES	6.000 CY	.		.	
0480	502.0717.S CRACK SEALING EPOXY	1,920.000 LF	.		.	
0490	502.3100 EXPANSION DEVICE (STRUCTURE) 01. B-13-16	LUMP	LUMP		.	
0500	502.3100 EXPANSION DEVICE (STRUCTURE) 02. B-13-17	LUMP	LUMP		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0510	502.3100 EXPANSION DEVICE (STRUCTURE) 03. B-13-191	LUMP	LUMP		.	
0520	502.3100 EXPANSION DEVICE (STRUCTURE) 04. B-13-192	LUMP	LUMP		.	
0530	502.3100 EXPANSION DEVICE (STRUCTURE) 05. B-13-280	LUMP	LUMP		.	
0540	502.3200 PROTECTIVE SURFACE TREATMENT	3,643.000 SY	.		.	
0550	502.3215.S PROTECTIVE SURFACE TREATMENT RESEAL	4,557.000 SY	.		.	
0560	502.5005 MASONRY ANCHORS TYPE L NO. 5 BARS	1,042.000 EACH	.		.	
0570	502.5010 MASONRY ANCHORS TYPE L NO. 6 BARS	46.000 EACH	.		.	
0580	505.0605 BAR STEEL REINFORCEMENT HS COATED BRIDGES	35,020.000 LB	.		.	
0590	505.0904 BAR COUPLERS NO. 4	32.000 EACH	.		.	
0600	505.0905 BAR COUPLERS NO. 5	24.000 EACH	.		.	
0610	505.0906 BAR COUPLERS NO. 6	80.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0620	505.0907 BAR COUPLERS NO. 7	40.000 EACH	.		.	
0630	506.6000 BEARING ASSEMBLIES EXPANSION (STRUCTURE) 01. B-13-280	4.000 EACH	.		.	
0640	506.7050.S REMOVING BEARINGS (STRUCTURE) 01. B-13-280	4.000 EACH	.		.	
0650	509.0301 PREPARATION DECKS TYPE 1	405.100 SY	.		.	
0660	509.0302 PREPARATION DECKS TYPE 2	162.500 SY	.		.	
0670	509.1000 JOINT REPAIR	441.000 SY	.		.	
0680	509.1500 CONCRETE SURFACE REPAIR	120.000 SF	.		.	
0690	509.2000 FULL-DEPTH DECK REPAIR	71.000 SY	.		.	
0700	509.2500 CONCRETE MASONRY OVERLAY DECKS	369.000 CY	.		.	
0710	509.9005.S REMOVING CONCRETE MASONRY DECK OVERLAY (STRUCTURE) 01. B-13-280	3,181.000 SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0720	520.0118 CULVERT PIPE CLASS III 18-INCH	11.000 LF	.		.	
0730	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH	2.000 EACH	.		.	
0740	520.7000 CLEANING CULVERT PIPES	1.000 EACH	.		.	
0750	520.8000 CONCRETE COLLARS FOR PIPE	6.000 EACH	.		.	
0760	520.9700.S CULVERT PIPE LINERS (SIZE) 01. 18-INCH	102.000 LF	.		.	
0770	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION	102.000 EACH	.		.	
0780	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH	28.000 LF	.		.	
0790	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH	60.000 LF	.		.	
0800	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	3.000 EACH	.		.	
0810	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH	1.000 EACH	.		.	
0820	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A	244.000 LF	.		.	

SCHEDULE OF ITEMS

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			DOLLARS	CTS	DOLLARS	CTS
0830	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	68.000 LF	.		.	
0840	602.0405 CONCRETE SIDEWALK 4-INCH	1,164.000 SF	.		.	
0850	603.0105 CONCRETE BARRIER SINGLE-FACED 32-INCH	2,956.000 LF	.		.	
0860	603.1142 CONCRETE BARRIER TYPE S42	80.000 LF	.		.	
0870	603.1342 CONCRETE BARRIER TYPE S42B	669.000 LF	.		.	
0880	603.1356 CONCRETE BARRIER TYPE S56B	41.000 LF	.		.	
0890	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	30,477.000 LF	.		.	
0900	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	30,477.000 LF	.		.	
0910	606.0100 RIPRAP LIGHT	1.000 CY	.		.	
0920	611.0420 RECONSTRUCTING MANHOLES	1.000 EACH	.		.	
0930	611.0530 MANHOLE COVERS TYPE J	1.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0940	611.0535 MANHOLE COVERS TYPE J-SPECIAL	2.000 EACH	.		.	
0950	611.0639 INLET COVERS TYPE H-S	2.000 EACH	.		.	
0960	611.0642 INLET COVERS TYPE MS	1.000 EACH	.		.	
0970	611.3230 INLETS 2X3-FT	2.000 EACH	.		.	
0980	611.3901 INLETS MEDIAN 1 GRATE	1.000 EACH	.		.	
0990	611.8115 ADJUSTING INLET COVERS	98.000 EACH	.		.	
1000	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH	195.000 LF	.		.	
1010	614.0150 ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	6.000 EACH	.		.	
1020	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH	49.000 LF	.		.	
1030	614.0305 STEEL PLATE BEAM GUARD CLASS A	1,325.000 LF	.		.	
1040	614.0515 GUARDRAIL STIFENED LHW	125.000 LF	.		.	

SCHEDULE OF ITEMS

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20140311004PROJECT(S):
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WISC 2014063

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1050	614.0805 CRASH CUSHIONS PERMANENT LOW MAINTENANCE	2.000 EACH	.		.	
1060	614.0905 CRASH CUSHIONS TEMPORARY	19.000 EACH	.		.	
1070	614.2300 MGS GUARDRAIL 3	16,289.000 LF	.		.	
1080	614.2310 MGS GUARDRAIL 3 HS	263.000 LF	.		.	
1090	614.2320 MGS GUARDRAIL 3 QS	225.000 LF	.		.	
1100	614.2330 MGS GUARDRAIL 3 K	400.000 LF	.		.	
1110	614.2340 MGS GUARDRAIL 3 L	338.000 LF	.		.	
1120	614.2500 MGS THRIE BEAM TRANSITION	1,879.000 LF	.		.	
1130	614.2610 MGS GUARDRAIL TERMINAL EAT	54.000 EACH	.		.	
1140	614.2620 MGS GUARDRAIL TERMINAL TYPE 2	17.000 EACH	.		.	
1150	616.0406 FENCE CHAIN LINK SALVAGED 6-FT	30.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1160	619.1000 MOBILIZATION	1.000 EACH	.		.	
1170	620.0300 CONCRETE MEDIAN SLOPED NOSE	56.000 SF	.		.	
1180	625.0100 TOPSOIL	34,363.000 SY	.		.	
1190	627.0200 MULCHING	2,049.000 SY	.		.	
1200	628.1104 EROSION BALES	9,356.000 EACH	.		.	
1210	628.1504 SILT FENCE	28,067.000 LF	.		.	
1220	628.1520 SILT FENCE MAINTENANCE	28,067.000 LF	.		.	
1230	628.1905 MOBILIZATIONS EROSION CONTROL	16.000 EACH	.		.	
1240	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	6.000 EACH	.		.	
1250	628.2004 EROSION MAT CLASS I TYPE B	32,315.000 SY	.		.	
1260	628.7020 INLET PROTECTION TYPE D	237.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1270	628.7504 TEMPORARY DITCH CHECKS	363.000 LF	.		.	
1280	628.7570 ROCK BAGS	7.000 EACH	.		.	
1290	629.0210 FERTILIZER TYPE B	29.000 CWT	.		.	
1300	630.0130 SEEDING MIXTURE NO. 30	809.000 LB	.		.	
1310	630.0200 SEEDING TEMPORARY	1,212.000 LB	.		.	
1320	634.0616 POSTS WOOD 4X6-INCH X 16-FT	2.000 EACH	.		.	
1330	634.0618 POSTS WOOD 4X6-INCH X 18-FT	30.000 EACH	.		.	
1340	637.2210 SIGNS TYPE II REFLECTIVE H	829.000 SF	.		.	
1350	638.2602 REMOVING SIGNS TYPE II	79.000 EACH	.		.	
1360	638.3000 REMOVING SMALL SIGN SUPPORTS	27.000 EACH	.		.	
1370	642.5401 FIELD OFFICE TYPE D	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1380	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 1206-04-62	167.000 DAY	.		.	
1390	643.0300 TRAFFIC CONTROL DRUMS	88,509.000 DAY	.		.	
1400	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	2,878.000 DAY	.		.	
1410	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	5,756.000 DAY	.		.	
1420	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	23,588.000 DAY	.		.	
1430	643.0800 TRAFFIC CONTROL ARROW BOARDS	790.000 DAY	.		.	
1440	643.0900 TRAFFIC CONTROL SIGNS	22,979.000 DAY	.		.	
1450	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I	22.000 EACH	.		.	
1460	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	109.000 EACH	.		.	
1470	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE	429.000 SF	.		.	
1480	643.1050 TRAFFIC CONTROL SIGNS PCMS	1,623.000 DAY	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1490	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 01. 1206-04-62	1.000 EACH	.		.	
1500	643.3000 TRAFFIC CONTROL DETOUR SIGNS	7,109.000 DAY	.		.	
1510	645.0130 GEOTEXTILE FABRIC TYPE R	5.000 SY	.		.	
1520	646.0106 PAVEMENT MARKING EPOXY 4-INCH	136,959.000 LF	.		.	
1530	646.0126 PAVEMENT MARKING EPOXY 8-INCH	6,548.000 LF	.		.	
1540	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH	22,059.000 LF	.		.	
1550	646.0600 REMOVING PAVEMENT MARKINGS	484,634.000 LF	.		.	
1560	646.0790.S REMOVING RAISED PAVEMENT MARKERS	500.000 EACH	.		.	
1570	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	791.000 LF	.		.	
1580	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH	23,796.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1590	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	2,345.000 LF	.		.	
1600	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH	394,849.000 LF	.		.	
1610	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	77,988.000 LF	.		.	
1620	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH	7,615.000 LF	.		.	
1630	649.1700 TEMPORARY PAVEMENT MARKING ARROWS	10.000 EACH	.		.	
1640	649.2100 TEMPORARY RAISED PAVEMENT MARKERS	5,610.000 EACH	.		.	
1650	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	638.000 LF	.		.	
1660	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM	2.000 EACH	.		.	
1670	653.0135 PULL BOXES STEEL 24X36-INCH	3.000 EACH	.		.	
1680	654.0105 CONCRETE BASES TYPE 5	2.000 EACH	.		.	
1690	654.0108 CONCRETE BASES TYPE 8	4.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1700	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	1,657.000 LF	.		.	
1710	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	2.000 EACH	.		.	
1720	657.0322 POLES TYPE 5-ALUMINUM	2.000 EACH	.		.	
1730	670.0100 FIELD SYSTEM INTEGRATOR	LUMP	LUMP		.	
1740	670.0200 ITS DOCUMENTATION	LUMP	LUMP		.	
1750	674.0200 CABLE MICROWAVE DETECTOR	935.000 LF	.		.	
1760	674.0300 REMOVE CABLE	880.000 LF	.		.	
1770	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY	6.000 EACH	.		.	
1780	690.0150 SAWING ASPHALT	668.000 LF	.		.	
1790	690.0250 SAWING CONCRETE	18,742.000 LF	.		.	
1800	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT	21,900.000 DOL	1.00000		21900.00	

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			DOLLARS	CTS	DOLLARS	CTS
1810	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	2,700.000 HRS	5.00000		13500.00	
1820	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	3,000.000 HRS	5.00000		15000.00	
1830	SPV.0025 SPECIAL 01. POLYESTER POLYMER CONCRETE MASONRY	3.300 CF	.		.	
1840	SPV.0035 SPECIAL 01. CONCRETE MASONRY DECK PATCHING	1.000 CY	.		.	
1850	SPV.0035 SPECIAL 02. BACKFILL CONTROLLED LOW STRENGTH SPECIAL	14.000 CY	.		.	
1860	SPV.0045 SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN WITH COMMUNICATION	710.000 DAY	.		.	
1870	SPV.0045 SPECIAL 02. SAFETY VEHICLE	142.000 DAY	.		.	
1880	SPV.0060 SPECIAL 01. MANHOLES TYPE E SPECIAL	2.000 EACH	.		.	
1890	SPV.0060 SPECIAL 02. SECURING STRUCTURE COVERS	116.000 EACH	.		.	
1900	SPV.0060 SPECIAL 03. TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP	62.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1910	SPV.0060 SPECIAL 04. TEMPORARY THRIE BEAM CONNECTION	18.000 EACH	.		.	
1920	SPV.0060 SPECIAL 05. REPLACE MISSING CONDUIT PLUG	6.000 EACH	.		.	
1930	SPV.0060 SPECIAL 06. TENSION ANCHOR ROD	18.000 EACH	.		.	
1940	SPV.0060 SPECIAL 07. CLEAN AND PROTECT ANCHOR ROD	34.000 EACH	.		.	
1950	SPV.0060 SPECIAL 08. REMOVE SIGN BRIDGE WALKWAY	5.000 EACH	.		.	
1960	SPV.0060 SPECIAL 09. REMOVE GROUT PAD	5.000 EACH	.		.	
1970	SPV.0060 SPECIAL 10. INSTALL RODENT SCREEN	18.000 EACH	.		.	
1980	SPV.0060 SPECIAL 11. INSTALL OR TIGHTEN SIGN PANEL HARDWARE	16.000 EACH	.		.	
1990	SPV.0060 SPECIAL 12. INSTALL OR TIGHTEN HANDHOLE COVER BOLT	3.000 EACH	.		.	
2000	SPV.0060 SPECIAL 13. INSTALL SIGN BRIDGE ID PLAQUE	8.000 EACH	.		.	
2010	SPV.0060 SPECIAL 14. TENSION TRUSS CONNECTION BOLT	95.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2020	SPV.0060 SPECIAL 15. CONCRETE PAVEMENT CORNER REPAIR FULL DEPTH	420.000 EACH	.		.	
2030	SPV.0060 SPECIAL 16. CONCRETE BARRIER TRANSITION SECTION 32-INCH	8.000 EACH	.		.	
2040	SPV.0060 SPECIAL 17. REMOVING LIGHTING ASSEMBLIES	2.000 EACH	.		.	
2050	SPV.0060 SPECIAL 18. MOVING LIGHTING ASSEMBLIES	4.000 EACH	.		.	
2060	SPV.0060 SPECIAL 19. TEMPORARY CONCRETE BARRIER GATE	2.000 EACH	.		.	
2070	SPV.0060 SPECIAL 20. CONCRETE BARRIER TEMPORARY EMERGENCY REPAIR MOBILIZATION	12.000 EACH	.		.	
2080	SPV.0060 SPECIAL 21. SALVAGE AND REINSTALL SIGN	25.000 EACH	.		.	
2090	SPV.0060 SPECIAL 22. TEMPORARY BARRIER DELINEATORS ATTACHED TO EX MEDIAN BARRIER OR PARAPET	111.000 EACH	.		.	
2100	SPV.0060 SPECIAL 23. REPOSITIONING TRAFFIC CONTROL DEVICES FOR CLOSURES	284.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2110	SPV.0060 SPECIAL 24. TEMPORARY TRAFFIC CONTROL SIGNAL COVERING	14.000 EACH	.		.	
2120	SPV.0085 SPECIAL 01. CONCRETE PAVEMENT CORNER REPAIR PARTIAL DEPTH	107,200.000 LB	.		.	
2130	SPV.0090 SPECIAL 01. FILL EXISTING RUMBLE STRIPS	47,665.000 LF	.		.	
2140	SPV.0090 SPECIAL 02. RESTORE EXISTING RUMBLE STRIPS	23,857.000 LF	.		.	
2150	SPV.0090 SPECIAL 03. SAWING CONCRETE PRECAST PANEL INSTALLATION	11,062.000 LF	.		.	
2160	SPV.0090 SPECIAL 04. SAWING PAVEMENT DECK PREPARATION AREAS	58.000 LF	.		.	
2170	SPV.0090 SPECIAL 05. SILICONE BRIDGE JOINT SEALANT	222.000 LF	.		.	
2180	SPV.0090 SPECIAL 06. REMOVING PAVEMENT MARKINGS WATER BLASTING	58,377.000 LF	.		.	
2190	SPV.0090 SPECIAL 07. TRAFFIC CONTROL GAWK SCREEN FURNISHED	26,236.000 LF	.		.	
2200	SPV.0090 SPECIAL 08. TRAFFIC CONTROL GAWK SCREEN INSTALLED	33,566.000 LF	.		.	
2210	SPV.0090 SPECIAL 09. TRAFFIC CHANNELIZING CURB SYSTEM DELIVERED	2,681.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2220	SPV.0090 SPECIAL 10. TRAFFIC CHANNELIZING CURB SYSTEM INSTALLED	4,158.000 LF	.		.	
2230	SPV.0090 SPECIAL 11. TEMPORARY PAVEMENT MARKING WET REFLECTIVE CONTRAST REMOVABLE TAPE 8-IN	12,045.000 LF	.		.	
2240	SPV.0090 SPECIAL 12. TEMPORARY PAVEMENT MARKING WET REFLECTIVE CONTRAST REMOVABLE TAPE 4-IN	104,395.000 LF	.		.	
2250	SPV.0090 SPECIAL 13. PROFILE CURB CUT	1,040.000 LF	.		.	
2260	SPV.0105 SPECIAL 01. INSPECT PRIMARY BOLTED CONNECTIONS	LUMP	LUMP		.	
2270	SPV.0105 SPECIAL 02. TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE SPECIAL EVENT	LUMP	LUMP		.	
2280	SPV.0105 SPECIAL 03. SURVEY PROJECT (1206-04-62)	LUMP	LUMP		.	
2290	SPV.0105 SPECIAL 04. CONCRETE BARRIER TEMPORARY PRECAST EMERGENCY REPAIR STANDBY TIME	LUMP	LUMP		.	
2300	SPV.0170 SPECIAL 01. PREPARE FOUNDATION FOR CONCRETE PAVEMENT SPECIAL	1,204.000 STA	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2310	SPV.0170 SPECIAL 02. STREET SWEEPING	38.000 STA	.		.	
2320	SPV.0180 SPECIAL 01. CONCRETE PAVEMENT REPAIR PRECAST 10-INCH	3,849.000 SY	.		.	
2330	SPV.0180 SPECIAL 02. CONCRETE PAVEMENT REPLACEMENT PRECAST 10-INCH	1,179.000 SY	.		.	
2340	SPV.0180 SPECIAL 03. CLEAN ABUTMENT SEATS	178.000 SY	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	

PLEASE ATTACH SCHEDULE OF ITEMS HERE