HIGHWAY WORK PROPOSAL

Proposal Number:

STH 11

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

permanent signing.

Notice of Award Dated

COUNTY STATE PROJECT ID FEDERAL PROJECT ID PROJECT DESCRIPTION HIGHWAY

Racine 1320-20-60 Durand Avenue

CTH C to 71st Drive

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

Proposal Guaranty Required, \$ 40,000.00	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: May 10, 2016	CAMDLE
Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
August 19, 2016	NOT FOR BIBBING FOR COLO
Assigned Disadvantaged Business Enterprise Goal 0 %	This contract is exempt from federal oversight.

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

	submitting an electronic bid on the Internet.
ribed and sworn to before me this date	
(Signature, Notary Public, State of Wisconsin)	(Bidder Signature)
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)
(Date Commission Expires)	(Bidder Title)
Notary Seal	
For Department	Use Only

Date Guaranty Returned

PLEASE ATTACH PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

- Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 - 1. Electronic bid on the internet.
 - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
 - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at: http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid ExpressTM 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 ExpressTM 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://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B Submitting Electronic Bids

B.1 On the Internet

- (1) Do the following before submitting the bid:
 - 1. Have a properly executed annual bid bond on file with the department.
 - 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 - 1. Download the latest schedule of items reflecting all addenda from the Bid Express web site.
 - 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 - 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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 ExpressTM web site reflecting the latest addenda posted on the department's web site at:

http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite TM software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express Meb site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM 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 ExpediteTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is not the same on each page.
 - The check code printed on the printout of the ExpediteTM generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
 - 3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

Notary Seal Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

Time Period Valid (From/To)
Name of Surety	
Name of Contracto	r
Certificate Holder	Wisconsin Department of Transportation
	y that an annual bid bond issued by the above-named Surety is currently on file with the partment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder mend, extend or alter the coverage of the annual bid bond.
Cancellation:	Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

(Signature of Authorized Contractor Representative)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1320-20-60, Durand Avenue, CTH C to 71st Drive, STH 11, Racine County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2016 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system. 100-005 (20151210)

2. Scope of Work.

The work under this contract shall consist of ditch grading, milling asphaltic surface, hot mix asphalt (HMA) overlay, asphaltic shoulder safety edge, centerline rumble strip installation, railroad track removal, signal loop work, sidewalk and crosswalk installation, rectangular rapid flashing beacon installation, curb ramp upgrades, pavement marking, signing replacement, erosion control and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Work Restrictions

Maintain access to all side roads, and commercial and private properties at all times during the duration of this contract.

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Schedule of Operations – Roadway Construction

Conform to the requirements described below, unless the engineer approves modifications in writing.

There will be multiple mobilizations for such items as; traffic control, signing items, temporary pavement marking, permanent pavement marking, asphalt, concrete, sawing, and other incidental items related to the staging. No additional payments will be made by the department for said mobilizations.

No work along STH 11 shall start prior to 6:00 AM on Tuesday July 5, 2016.

The project shall be built in two stages, Stage 1 and Stage 2.

Stage 1:

Complete ditch work along IH 94 West Frontage Road/58th Road, including re-grading 130 feet of ditch along 58th Road and 440 feet of ditch along the realigned frontage road. Construct a small berm and install erosion control. Once the contractor begins this work it shall be fully completed before moving on to other work.

STH 11 work includes full depth milling (4.25 inches), removing rail from an at grade railroad crossing and reconstruction of that section, signal loop work on STH 11, milling (2 inches) and overlaying eastbound and westbound lanes, installation of centerline rumble strips between CTH C and Schoen Road, asphaltic shoulder safety edge, grading of existing gravel shoulders, pedestrian crossing upgrades at York Street and curb ramp modifications at several locations.

Full depth milling and paving, railroad track removal and reconstruction, and signal loop work on STH 11 shall be completed prior to the start of milling operations under Stage 1. Milled pavement surface shall not be left exposed for more than 24 hours. Stage 1 shall be completed and all related traffic control features shall be removed prior to 12:01 AM Tuesday, July 26, 2016.

If the contractor fails to complete Stage 1 work prior to 12:01 AM Tuesday July 26, 2016, the department will assess the contractor \$1,210 in interim liquidated damages for each calendar day that this work remains incomplete beyond 12:01 AM July 26, 2016. An entire calendar day will be charged for any period of time within a calendar day that this work remains incomplete beyond 12:01 AM.

Special high early strength (SHES) concrete shall be placed within 24 hours of removing pavement for the signal loop work on STH 11. For the signal loop work on US 45, SHES concrete shall be placed the same night the pavement was removed.

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Stage 2:

Complete signal loop work and mill and overlay on US 45. Stage 2 is divided into two sub stages, Stage 2A and Stage 2B, which consists of the construction work on US 45 southbound lane and northbound lane, respectively. Stage 2 work shall be completed during nighttime hours.

4. Traffic.

The schedule of operations shall conform to the construction staging as described in the plan unless the engineer approves, in writing, modifications to the plan. Submit all traffic control stage modification requests to the engineer at least seven days prior to an actual traffic control stage change. A request does not constitute approval. Substantially complete all work within a given stage prior to commencing work on the following stage.

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

IH 94 West Frontage Road/58th Road Ditch Construction:

Traffic shall be maintained on the existing West Frontage Road and 58th Road at all times. The work along 58th Road will necessitate a single lane closure with flag control. 58th Road shall be fully open to traffic in both directions at the end of each work day.

STH 11 Construction Work:

Construction work shall take place under flagging. Temporary portable rumble strip array shall be in place prior to milling and paving operations along STH 11. The maximum lane closures are as follows:

- CTH C to Industrial Park Drive: 1 Mile

- Industrial Park Drive to US 45: 1,000 Feet (6:00 AM to 9:00 AM and

3:00 PM to 7:00 PM)

3,000 Feet (9:00 AM to 3:00 PM)

- US 45 to 71st Drive: 2,000 Feet

Construction shall be phased so that one 11 foot wide lane is open to traffic between 6:00 AM and 7:00 PM. Two drivable lanes (minimum of 22 feet total) shall be available for traffic during the rest of the time.

Milling and paving operations on STH 11 which restrict through traffic to less than one lane in each direction at the intersection of US 45 shall be completed during off-peak hours of 9:00 AM and 3:00 PM.

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Work activities on US 45 shall take place between nighttime hours of 7:00 PM Monday, Tuesday, Wednesday, Thursday and Friday and 6:00 AM the following day. Each sub stage (Stage 2A and Stage 2B) shall be completed in one night and US 45 shall be open to traffic by 6:00 AM.

Traffic signals at STH 11 and US 45 shall be temporarily switched to flashing red during intersection work and also during Stage 2. Contractor shall contact the department electrical field unit at (414) 266-1170, a minimum of five business days before start of this work.

Do not begin or continue any work that closes traffic lanes on USH 45 outside the allowed time periods noted above specified in this contract.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction ≤16')	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
Full roadway closures	14 calendar days
System and service ramp closures	14 calendar days
Full system and service ramp closures	14 calendar days
Detours	14 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
System and service ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date. 108-057 (20150630)

5. Lane Rental Fee Assessment.

A General

The contract designates some lane closures to perform the work. The contractor will not incur a Lane Rental Fee Assessment for closing lanes during the allowable lane closure times. The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the allowable lane closure times. If a lane is obstructed at any time due to contractor

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operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

The allowable lane closure times are shown in the Traffic article.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule. Coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project.

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

A.1 Lane Rental Fee Assessment

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

\$220 per lane per hour broken into 15 minute increments

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

Lane Rental Fee Assessments will be made based on the applicable rate for any and all closures whether work is being performed or not. The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

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

B (Vacant)

C (Vacant)

D Measurement

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

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance.

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E (Vacant)

6. Holiday and Other Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 11 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From 12:00 PM Friday July 1, 2016 until 6:00 AM Tuesday July 5, 2016 for Independence Day;
- From 12:00 PM Monday July 25, 2016 until 6:00 AM Monday August 1, 2016 for the Racine County Fair.

107-005 (20050502)

7. Utilities.

The provisions of administrative rule TRANS 220 apply to this project. 107-065 (20080501)

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

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

The following utilities have facilities within the construction limits.

- **WisDOT Signals** has facilities within the project limits. Remove, adjust, reconstruct, discontinue and leave in place the signal facilities as shown in the plans.
- AT&T Wisconsin has 4 manhole Frame and covers which will need to be adjusted during construction when the final grade has be set. Location of these manhole are at Station's 144+75 LT, 148 LT (2 frame and covers) and 155 LT. Contact AT&T Wisconsin 2 weeks prior to adjustment. Adjustment will take approximately 5 days to complete per manhole.

AT&T Wisconsin contact is Mark Eder, phone (262) 896-7434 or me1754@att.com.

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The following utilities have facilities within the construction limits, however, no adjustments are anticipated:

• WisDOT Lighting

WisDOT Lighting contact is Eric Perea at (262) 574-5422 or eric.perea@dot.wi.gov

• Westshore Pipeline Company

Westshore Pipeline Company contact is Jeannette Fluke at (610) 904-4404 or ifluke@buckeye.com.

• Time Warner Cable

Time Warner Cable contact is Steve Cramer at (414) 277-4045 or wis.engineering@twcable.com.

• Village of Union Grove

Village of Union Grove contact is Mark Osmundsen at (262) 878-1818 or mosmundsen@uniongrove.net.

• We Energies – Electric

We Energies Electric Field contact is Francisco J Chavez at (414) 944-5540 or francisco.chavez@we-energies.com and office contact is Latroy Brumfield at (414) 221-5617 or latroy.brumfield@we-energies.com

• We Energies –Gas

We Energies Gas Field contact is Chris Degrave at (262) 886-7018 or chris.degrave@we-energies.com and office contact is Latroy Brumfield at (414) 221-5617 or latroy.brumfield@we-energies.com.

We Energies Gas and Electric have facilities within the construction limits. It is imperative that the highway contractor contact We Energies if removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification. We Energies Electric Dispatch # (800) 662-4797; We Energies Gas Dispatch # (800) 261-5325.

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8. Railroad Insurance and Coordination.

A Description

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

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Edward Oom at (612) 330-4553, Canadian Pacific Railway Company, Suite 9126, 120 South Sixth Street, Minneapolis, MN 55402. Include the following information on the insurance document:

Project: 1320-20-60

Route Name: STH 11, Racine Co

Crossing ID: 388101K

Railroad Subdivision: Waxdale Spur

Railroad Milepost: 16.82

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. Removal of warning devices by railroad. Coordinate with railroad to schedule warning device removal as related to track removal.

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

Contact Edward Oom, Manager Public Works, Suite 9126, 120 South Sixth Street, Minneapolis, MN 55402; TELEPHONE (612) 330-4553; email oom0001@cpr.ca for consultation on railroad requirements during construction.

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

A.4 Temporary Grade Crossing

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

A.5 Train Operation

Approximately 0 passenger trains and 0 through freight trains operate weekly through the construction site. There are no switching movements. The line has no operations on it.

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NOTE: This track is in negotiations for conversion to Rails to Trails. However, it is still railroad property, thus typical commercial general liability insurance will not provide coverage in the area on and near railroad property. Railroad protective liability insurance is required.

9. Erosion Control.

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

Provide the ECIP fourteen (14) calendar days prior to the pre-construction conference. Provide one copy of the ECIP to WisDOT and one copy of the ECIP to the WDNR Liaison, Craig Webster, (262) 574-2141. Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

Re-topsoil of graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 calendar days after placement of topsoil. If graded areas are left exposed for more than 14 calendar days, seed those areas with temporary seed.

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

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

Do not pump water from the construction site to a storm water conveyance without the water first passing through a sediment trap or filter bag.

Do not implement the contractor's Erosion Control Implementation Plan (ECIP) until the ECIP has been granted approval from the department. Provide the ECIP 14 days prior to the pre-construction meeting. Dust control and dewatering shall be addressed in the ECIP.

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10. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the meeting at least one week prior to the start of work under this contract. The contractor shall arrange for a suitable location for the meeting that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for the meeting. The contractor shall schedule the meeting with at least two weeks prior notice to the engineer to allow for these notifications. 108-060 (20141107)

11. 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://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

A.2 Contractor Testing for Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

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

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

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

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:
 - 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of OC 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.

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- 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 ^[1]
Aggregate Sampling Technician	
Aggregate Assistant Certified Technician (ACT-AGG)	
Aggregate Technician IPP	Aggregate Gradation
Aggregate Assistant Certified Technician (ACT-AGG)	Testing, Aggregate Fractured
	Particle Testing, Aggregate
	Liquid Limit and Plasticity
	Index Testing

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

(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

 $\frac{http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx}{}$

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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.

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- (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:

- (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.

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(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 - 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 - 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

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- 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
- 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
- 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 - 1. One non-random test on the first day of placement.
 - 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; 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.

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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)

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E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20151210)

12. Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.

A Description

This special provision describes reheating the abutting edge of the previously compacted layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction

C.1 Equipment

Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints

Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted layer in the adjacent lane as follows:

 Reheat the joint to within 60 degrees F (15 degrees C) of the mix temperature at the paver auger. Measure joint temperature immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

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D Measurement

The department will measure Reheating HMA Pavement Longitudinal Joints by the linear foot, acceptably completed, as measured along each joint for each layer of asphalt placed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 460.4110.S Reheating HMA Pavement Longitudinal Joints LF

Payment is full compensation for furnishing all the work required under this bid item. 460-015 (20140630)

13. HMA Pavement 4 MT 58-28 S, Item 460.6224.

A Description

This special provision describes providing HMA pavement including the binder under a combined bid item.

Define gradations, traffic levels, and asphaltic binder designation levels as follows:

<u>GRADATIONS</u>	<u>GRADATIONS</u> <u>TRAFFIC VOLUME</u>		DESIGN	DESIGNATION LEVEL	
(NMAS)					
1 37.5 mm	LT	Low	S	Standard	
2 25.0 mm	MT	Medium	Н	Heavy	
3 19.0 mm	HT	High	V	Very Heavy	
4 12.5 mm			Е	Extremely Heavy	
5 9.5 mm				-	
6 4.75 mm					

Construct HMA pavement of the type the bid item indicates encoded as follows:



Conform to standard spec 460 as modified in this special provision.

B Materials

Replace standard spec table 460-1 with the following to change the footnotes to refer to LT and MT mixes instead of E-0.3 and E-3 mixes:

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TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

				KEMIENIB			
SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
SIEVE	NOMINAL SIZE						
	37.5 mm	25.0 mm	19.0 mm	12.5 mm	9.5 mm	SMA 12.5	SMA 9.5
	(#1)	(#2)	(#3)	(#4)	(#5)	mm (#4)	mm (#5)
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	11.0	12.0	13.0	$14.0^{[1]}$	$15.0^{[2]}$	16.0	17.0
VMA							

^{[1] 14.5} for LT and MT mixes

Replace standard spec table 460-2 with the following to switch from E mixes to LT, MT, and HT mixes; and change the tensile strength ratio requirements to 0.75 without antistripping additive and 0.80 with antistripping additive:

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
ESALs x 106 (20 yr design life)	<2.0	2 - <8	>8	> 5 mil
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	65/	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791)	5	5	5	20
(max %, by weight)	(5:1 ratio)	(5:1 ratio)	(5:1 ratio)	(3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40	43	45	45
Sand Equivalency (AASHTO T176, min)	40	40	45	50

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^{[2] 15.5} for LT and MT mixes

Mixture type	LT	MT	HT	SMA
Gyratory Compaction				
Gyrations for Nini	6	7	8	8
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	160
Air Voids, %Va	4.0	4.0	4.0	4.0
(%Gmm Ndes)	(96.0)	(96.0)	(96.0)	(96.0)
% Gmm Nini	<= 91.5 ^[1]	$<=89.0^{[1]}$	<= 89.0	
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	
Dust to Binder Ratio ^[2] (% passing 0.075/Pbe)	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 – 75 ^{[3][4]}	65 - 75 ^{[3] [4]}	70 - 80
Tensile Strength Ratio (TSR) (ASTM 4867)				
no antistripping additive	0.75	0.75	0.75	0.75
with antistripping additive	0.80	0.80	0.80	0.80
Draindown at Production Temperature (%)				0.30

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

Replace standard spec 460.2.8.2.1.7 paragraph six with the following to base payment adjustment on the combined bid item unit price:

(6) The department will reduce payment for nonconforming QMP HMA mixtures, starting from the stop point to the point when the running average is back inside the warning limits, as follows:

PAYMENT FOR MIXTURE[1] [2]

	PRODUCED WITHIN	PRODUCED OUTSIDE
ITEM	WARNING BANDS	JMF LIMITS
Gradation	90%	75%
Asphalt Content	85%	75%
Air Voids	70%	50%
VMA	90%	75%

^[1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.

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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.

For #5 (9.5mm) and #4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76%.

^[4] For #2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

For #1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. The department will administer pay reduction under the Nonconforming QMP HMA Mixture administrative item.

C Construction

Replace standard spec table 460-3 with the following to switch from E mixes to LT, MT, and HT mixes:

TABLE 460-3 MINIMUM REQUIRED DENSITY^[1]

	THE TOTAL THE COLUMN TO THE CO				
LOCATION	LAVED	PERCENT OF TARGET MAXIMUM DENSITY			
LOCATION	LAYER	MIXTURE TYPE			
		LT AND MT	HT	SMA ^[5]	
TRAFFIC LANES ^[2]	LOWER	91.5 ^[3]	$92.0^{[4]}$		
I KAFFIC LANES	UPPER	91.5	92.0		
SIDE ROADS,	LOWER	91.5 ^[3]	$92.0^{[4]}$		
CROSSOVERS, TURN LANES, & RAMPS	UPPER	91.5	92.0		
SHOULDERS &	LOWER	89.5	89.5		
APPURTENANCES	UPPER	90.5	90.5		

The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

D Measurement

Add the following to standard spec 460.4:

The department will measure HMA Pavement (type) conforming to standard spec 460.4.

E Payment

Add the following to standard spec 460.5 to switch from E mixes to LT, MT, and HT mixes; to combine the pavement and binder bid items; and to specify a pay reduction for pavement placed with nonconforming binder:

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

ITEM NUMBER DESCRIPTION UNIT 460.6224 HMA Pavement 4 MT 58-28 S TON

Payment is full compensation for providing HMA Pavement including asphaltic binder.

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^[2] Includes parking lanes as determined by the engineer.

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

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

^[5] The minimum required densities for SMA mixtures are determined according to CMM 8-15.

In addition to any pay adjustment under standard spec 460.2.8.2.1.7(6), the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.

460-025 (20151210)

14. Locating No-Passing Zones, Item 648.0100.

For this project, the spotting sight distance in areas with a 55 mph posted speed limit is 0.21 miles (1108 feet). 648-005 (20060512)

15. General Requirements for Electrical Work.

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

Replace standard spec 651.3.3 (3) with the following:

(3) Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region Electrical personnel will perform the inspection.

16. Electric Wiring, 655.

Replace standard spec 655.5 (10) with the following:

(10) Payment for Loop Detector Wire is full compensation for furnishing and installing loop detector wire; for making necessary connections to the lead in cable; and for measuring the loop inductance and ground resistance.

17. Pavement Marking Grooved Preformed Thermoplastic Words, Item SPV.0060.01; Arrows Type 2, SPV.0060.02; Arrows Type 3, SPV.0060.03; Crosswalk 6-Inch SPV.0090.02; Crosswalk 24-Inch SPV.0090.03; Stop Bar 18-Inch, Item SPV.0090.04.

A Description

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

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B Materials

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

C Construction

C.1 General

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

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

C.2 Groove Depth

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

C.3 Groove Width – Linear Markings

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

C.4 Groove Position

Position the groove edge according to the plan details.

C.4.1 Linear Marking

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

C.4.2 Special Marking

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

C.5 Groove Cleaning

C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the sealant, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft³/min air flow

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and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 Asphalt

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

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

C.6 Preformed Thermoplastic Application

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

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

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

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

D Measurement

The department will measure Pavement Marking Grooved Preformed Thermoplastic by each unit, acceptably placed, or 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:

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ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Pavement Marking Grooved Preformed	Each
	Thermoplastic Words	
SPV.0060.02	Pavement Marking Grooved Preformed	Each
	Thermoplastic Arrows Type 2	
SPV.0060.03	Pavement Marking Grooved Preformed	Each
	Thermoplastic Arrows Type 3	
SPV.0090.02	Pavement Marking Grooved Preformed	LF
	Thermoplastic Crosswalk 6-Inch	
SPV.0090.03	Pavement Marking Grooved Preformed	LF
	Thermoplastic Crosswalk 24-Inch	
SPV.0090.04	Pavement Marking Grooved Preformed	LF
	Thermoplastic Stop Bar 18-Inch	

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

18. Temporary Portable Rumble Strip Array, Item SPV.0060.04.

A Description

This special provision describes providing, relocating, maintaining, and removing Temporary Portable Rumble Strip Arrays.

B Materials

Furnish RoadQuake2 or Roadquake2F temporary portable rumble strips, by Plastic Safety Systems (PSS) to be used at locations specified in the plan or as directed by the Engineer. Alternate products or methods must be preapproved by the Bureau of Traffic Operations (BTO).

C Construction

Placement

- 1. A temporary portable rumble strip array consists of three 11-foot temporary portable rumble strips installed transversely per traffic lane for each direction of travel at spacing of 8 to 10 feet, center to center.
- 2. Utilize Temporary Portable Rumble Strip Arrays when flagging is used with single lane closures for work operations anticipated to exceed two hours.
- 3. Only one work zone set up of Temporary Portable Rumble Strip Array, as shown in the project details, is required per direction of travel, as long as work zones are not spaced greater than 5 miles apart. Place series prior to the first work zone with impacts to travel lanes when multiple work zones exist in the same direction of travel.
 - Work zones in the same direction of travel spaced greater than 5 miles apart will require a separate Temporary Portable Rumble Strip set up.
- 4. Do not install Temporary Portable Rumble Strip Arrays until associated temporary warning signs are in place.
- 5. Prior to placement of the Temporary Portable Rumble Strip Array, clean the roadway of dust, sand, and other materials that may cause slippage. Assemble and place rumble strips in accordance with manufacturer recommendations.
- 6. Place one end of the temporary portable rumble strips 6 inches from the roadway centerline. Extend the strips perpendicular to the direction of travel so that the front tires of an approaching vehicle will contact the rumble strips at the same time. Ensure rumble strips lay flat on the roadway surface.

Maintenance

1. If the strips slide, become out of alignment, or are no longer in the wheel path of approaching vehicles, during the work period, thoroughly clean both sides of the temporary rumble strips and reset on a clean roadway.

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2. Repair or replace damaged strips immediately, at the contractor's expense.

D Measurement

The department will measure Temporary Portable Rumble Strip Array by each array of rumble strip array 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 Portable Rumble Strip Array Each

Payment is full compensation for providing, installing, relocating, maintaining, and removing temporary portable rumble strips.

19. Pavement Marking Grooved Epoxy Pavement Marking 4-Inch, Item SPV.0090.05.

A Description

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

B Materials

Furnish a 20 mils application of modified epoxy binder pavement marking, LS65, HPS-4 or Mark 55.4 in a grooved slot.

C Construction

C.1 General

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

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

C.2 Groove Depth for Asphalt

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

C.3 Groove Depth for Concrete

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

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C.4 Groove Width – Longitudinal Markings

Cut the groove one-inch wider than the width of the pavement marking.

C.5 Groove Position

Position the groove edge according to SDD 15C 8 sheet a. If necessary, groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the pavement marking segment. Achieve straight alignment with the grooving equipment.

C.6 Groove Cleaning

C.6.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and pavement marking tape. Use a high-pressure air blower with at least 185 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. 6.2 New Asphalt

Groove pavement 5 or more days after paving or when asphalt is firm.

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

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

C. 6.3 Existing Asphalt

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

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

D Measurement

The department will measure Pavement Marking Grooved Epoxy 4-Inch in length by the linear foot, placed according to the contract and accepted.

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E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.05Pavement Marking Grooved Epoxy 4-InchLF

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

20. Pavement Marking Grooved Preformed Plastic Tape 8-Inch, Item SPV.0090.01; 4-Inch, Item SPV.0090.06

A Description

This special provision describes furnishing, grooving, and installing preformed plastic pavement marking tape as shown on the plans, according to standard spec 646 of the standards specifications, and as hereinafter provided.

B Materials

Furnish grooved preformed plastic pavement marking tape and adhesive material, if required, from the department's approved products list.

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

C Construction

C.1 General

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

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

C.2 Groove Depth

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

C.3 Groove Width – Longitudinal Markings

Cut the groove 1-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.

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C.5 Groove Cleaning

C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the adhesive, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement 5 or more days after paving.

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

Use a high-pressure air blower with at least 185 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, apply an adhesive with lower than 91g/l VOC during the following period of time due to Volatile Organic Compound Limitations:

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

Use any adhesive from the preformed plastic approved products list in the remainder counties and for the remainder of the year.

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The adhesive must be dry (feels tacky but is no longer in liquid form) and have a matte finish rather than a glossy wet appearance.

Tamp the pavement marking tape with a tamper cart roller cut to fit the groove. Tamp three complete cycles with grooved modified equipment.

D Measurement

The department will measure Pavement Marking Grooved Preformed Plastic Tape (Width) 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.0090.01	Pavement Marking Grooved Preformed Plastic	Each
	Tape 8-inch	
SPV.0090.06	Pavement Marking Grooved Preformed Plastic	Each
	Tape 4-inch	

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

21. Rectangular Rapid Flashing Beacon (RRFB) System Station 124+80 RT, Item SPV.0105.01; Station 124+80 LT, Item SPV.0105.02; Station 125+00 RT, Item SPV.0105.03; Station 125+00 LT, Item SPV.0105.04.

A Description

This work shall consist of furnishing and installing to the department a solar powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies as described herein and as shown in the plans. Each assembly shall be solar powered and pedestrian activated. The assemblies shall be wirelessly controlled and multiple units shall be synchronized.

B Materials

Furnish a RRFB system with multiple assemblies. Each assembly may consist of, but not limited to, light indications, and electrical components (wiring, solid-state circuit boards, etc). An assembly may include the following items:

(1) Light Indications

- 1. Each indication shall be a minimum size of approximately 7" wide x 3" high with 8 high power LEDs
- 2. Two indications shall be installed on an assembly facing in the direction of approaching vehicular traffic. The two indications shall be aligned horizontally, with the longer dimension of the indication horizontal, and a minimum space between the two indications of

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- approximately 7" measured from inside edge of one indication to inside edge of second indication.
- 3. A 6 LED indication shall be installed on an assembly facing in the direction of approaching pedestrian traffic to serve as a confirmation for the pedestrian that the system has been activated.
- 4. The outside edges of the two indications, including any housing, shall not protrude beyond the outside edges of the integral signage of the assembly.
- 5. The light intensity of the indications shall be certified to meet the minimum specifications of the Society of Automotive Engineers (SAE) standard J595 Class 1(Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005 and be available upon request
- 6. Each indication shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque.
- 7. All exposed hardware shall be anti-vandal.
- 8. All individual components of the system shall be replaceable to allow for easy field repair and maintenance.

(2) Sign

1. All signs shall be supplied and installed under a separate bid item. However, the assemblies must be constructed to allow the appropriate space for the installation of the signs in the field.

(3) Control Circuit

- 1. The control circuit shall have the capability of independently flashing up to two independent outputs. The LED light outputs and flash pattern shall be completely programmable using windows based software
- 2. The controller shall be web enabled to allow for remote programming and system diagnostics. Including flash time, flash pattern and report system information, such as battery voltage, and temperature.
- 2. The flashing output shall have 70 to 80 periods of flashing per minute with a 100 millisecond duration on time. The output shall reach the output current as programmed for the duration of the pulse.
- 3. Each of the two yellow indications shall have 70 to 80 periods of flashing per minute and shall have alternating, but approximately equal, periods of flashing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, the yellow indications on the left side of the RRFB shall emit two slow pulses of light after which the yellow indications on the right side of the RRFB shall emit four rapid pulses of light followed by a long pulse.
- 4. Flash rates with the frequencies of 5 to 30 flashes/second shall not be used to avoid inducing seizures.

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- 5. The control circuit shall be installed in an IP67 NEMA rated enclosure
- 6. All circuit connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 3 feet deep for 30 minutes. Connectors shall be Deutsch DTM series or approved equal
- 7. All individual components of the system shall be replaceable to allow for easy field repair and maintenance.

(4) Battery

- 1. The Battery shall be a 12VDC Absorbed Glass Mat (AGM) sealed lead-acid, maintenance-free battery.
- 2. The Battery shall be rated at 45AH minimum and shall conform to Battery Council International (BCI) specifications.
 All batteries shall be sealed in a plastic film to provide moisture and corrosion resistance.
- 3. The Battery shall have a minimum operating temperature range of -76° to 140°F (-60° to 60°C).
- 4. All battery connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 3 feet deep for 30 minutes. Connectors shall be Deutsch DTM series or approved equal
- 5. The Battery shall be solar-charged with a capacity up to 30 days of autonomy without sunlight, varying with ambient temperature and number of activations. Solar calculations shall be provided

(5) Wireless Radio

- 1. Radio control shall operate on 900 MHz frequency hopping spread spectrum network.
- 2. Radio shall integrate with communication of RRFB system control circuit to activate light indications from pushbutton input.
- 3. The Radio shall synchronize all of the remote light indications so they will turn on within 120 msec of each other and remain synchronized through-out the duration of the flashing cycle.
- 4. Radio systems shall operate from 3.6 vdc to 15vdc.
- 5. The Radio unit shall have an LCD display to program flash time and communicate system information, such as battery voltage, battery temperature and solar charge level an onboard diagnostics.
- 6. All individual components of the system shall be replaceable to allow for easy field repair and maintenance.

(6) Pushbutton

- 1. The pushbutton shall be capable of continuous operation over a temperature range of -30 degrees F to 165 degrees F (-34 degrees C to 74 degrees C).
- 2. Pushbutton shall be ADA compliant.

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(7) Solar Panel

- 1. The Solar Panel shall provide 55 watts at peak total output.
- 2. The Solar Panel shall be affixed to an aluminum plate and bracket, adjustable at an angle of 45°- 60° to facilitate adjustment for maximum solar collection and optimal battery strength.
- 3. The Solar Panel Assembly (panel, plate and bracket) shall be mounted on a 360° rotatable pole cap mount, to facilitate adjustment for maximum solar collection and optimal battery strength.
- 4. The Solar Panel shall have a minimum operating temperature range of -40° to 185°F (-40° to 85°C).

(8) Pedestal Shaft

- 1. Shall meet the requirements as set forth in standard spec 657.2.4 for highway and structure construction.
- 2. Shall be a standard 4.5" OD aluminum pedestal pole. Supplied with one end threaded for easy installation into a pedestal base.
- 3. Shall be a 13' Schedule 80 pipe raw aluminum.
- 4. Incidental to RRFB.

(9) Pedestal Base

- 1. Shall meet the requirements as set forth in standard spec 657.2.5 for highway and structure construction.
- 2. The pedestal base shall be a cast aluminum pedestals mount on a concrete base attached by four internal anchor bolts imbedded in the base.
- 3. The Base shall have a large 8.5" square hand hole cover allowing access to the interior of the base.
- 4. Incidental to RRFB.

(10) Concrete Base

- 1. Shall meet the requirements as set forth in standard spec 654.2.1 for highway and structure construction, as applicable.
- 2. The concrete base shall be a Type 1 base (WisDOT bid item 654.0101) or approved equivalent.
- 3. Incidental to RRFB.

(11) Anchor Bolts

- 1. The anchor bolts shall be galvanized steel 1" x 42".
- 2. Set of 4 includes lock washer and nut.
- 3. Incidental to RRFB.

C Construction

The RRFB system will consist of multiple assemblies to be constructed by the contractor as shown on the plans.

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D Measurement

The department will measure Rectangular Rapid Flashing Beacon (RRFB) System (Station) as a 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:

ionowing old item.		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Rectangular Rapid Flashing Beacon (RRFB) System	LS
	Station 124+80 RT	
SPV.0105.02	Rectangular Rapid Flashing Beacon (RRFB) System	LS
	Station 124+80 LT	
SPV.0105.03	Rectangular Rapid Flashing Beacon (RRFB) System	LS
	Station 125+00 RT	
SPV.0105.04	Rectangular Rapid Flashing Beacon (RRFB) System	LS
	Station 125+00 LT	

Payment is full compensation for providing and installing a fully operational RRFB system consisting of multiple assemblies.

NOTE: The RRFB's at Station 124+80 and Station 125+00 are back to back and on one pole with 2 RRFB's mounted on either side with one push button facing the pedestrian crossing.

22. Remove Loop Detector Wire and Lead-in Cable, USH 45 and STH 11, Item SPV.0105.05.

A Description

This special provision describes removing loop detector wire and lead-in cable at USH 45 and STH 11. Removal will be according to standard spec 204, as shown in the plans, and as hereinafter provided.

B (Vacant)

C Construction

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

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

D Measurement

The department will measure Remove Loop Detector Wire and Lead-in Cable as a single lump sum unit of work for each intersection, acceptably completed.

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E Payment

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

following bid item:

ITEM NUMBER DESCRIPTION UNIT SPV.0105.05 Remove Loop Detector Wire and Lead in Cable, LS

USH 45 and STH 11

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

22. Grading, Shaping and Finishing Ditch Installation, Item SPV.0105.06.

A Description

This special provision describes excavating, filling, grading, shaping, compacting, and finishing, as necessary to construct the ditch as shown on the plans and in accordance to the pertinent requirements of standard specifications and as hereinafter provided.

B (Vacant)

C Construction

Dispose of all surplus and unsuitable material in accordance with standard spec 205.3.12.

D Measurement

The department will measure Grading, Shaping, and Finishing Ditch Installation as a single complete unit of work.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.06 Grading, Shaping and Finishing Ditch Installation LS

Payment is full compensation for all excavating, grading, shaping, and compacting; and for providing and placing fill, topsoil, fertilizer, seed, mulch, and erosion mat.

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November 2013 ASP-4

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6 ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

550.5.2 Piling

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

(3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:

Percent of Contract Length Driven

< 85

(85% contract length - driven length) x 20% unit price

> 115

(driven length - 115% contract length) x 5% unit price

643.2.1 General

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

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

Errata

Make the following corrections to the standard specifications:

641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

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

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 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://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

- (2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.
- (4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.
- (5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

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

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Effective August 2015 letting

BUY AMERICA PROVISION

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

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

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

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

WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

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

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

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

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

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

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

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

II. PAYROLL REQUIREMENTS

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

III. POSTINGS AT THE SITE OF THE WORK

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

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

IV. WAGE RATE REDISTRIBUTION

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

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

V. ADDITIONAL CLASSIFICATIONS

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

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

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

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

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

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

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

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

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

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

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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL	
Bricklayer, Blocklayer or Stonemason	25 10		Ψ · · 53.49	
Carpenter	33.68	19.99	53.67	
Cement Finisher	30.49	21.47	51.96	
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic random Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Department of Transportation or responsible governing agency requiartificial illumination with traffic control and the work is completed after	Day. 2) Add \$1.40/h res that work be pe	nr when the Wisc erformed at night	consin	
Electrician	33.93	22.77	56.70	
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	on Sunday, New Ye	ar's Day, Memor	ial Day,	
Fence Erector	23.73	19.09	42.82	
Ironworker	30.77	23.97	54.74	
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	on Sunday, New Ye	ar's Day, Memor	ial Day,	
Line Constructor (Electrical)	37.43	15.48	52.91	
Painter	29.22	16.69	45.91	
Pavement Marking Operator	30.27	18.79	49.06	
Piledriver	30.11	26.51	56.62	
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/2016. Premium Pay: Add \$.65/hr for Piledriver Loftsman; Add \$.75/hr for Sheet Piling Loftsman. 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.				
Roofer or Waterproofer	29.40	17.05	46.45	
Teledata Technician or Installer	22.25	12.33	34.58	
Tuckpointer, Caulker or Cleaner	35.10	18.39	53.49	

RACINE COUNTY Page 2

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	 \$	\$
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONL	Y 35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.64	46.24
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38
TRUCK DRIVERS			
Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	n Sunday, New Ye	ar's Day, Memor	ial Day,
Three or More Axle	28.75	13.54	42.29
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas E See DOT'S website for details about the applicability of this night world business/civilrights/laborwages/pwc.htm.	te on Sunday, Nev Day. 2) Add \$1.50/l k premium at: http	w Year's Day, Me hr night work pre	mium.
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	28.75	13.54	42.29
LABORERS			
General Laborer Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06 Premium Pay: Add \$.10/hr for topman; Add \$.15/hr for air tool operator vibrator or tamper operator (mechanical hand operated), chain saw of laborer; Add \$.26/hr for bottomman; Add \$.35/hr for bituminous worked sidewalk and pavement), strike off man; Add \$.32/hr for and line and and powderman; Add \$.75/hr for pipelayer. / DOT PREMIUMS: 1) Pay Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Add \$1.25/hr for work on projects involving temporary traffic control sowhen work under artificial illumination conditions is necessary as requiprep time prior to and/or cleanup after such time period).	or, joint sawer and perator and demo er (raker and lutem grade specialist; A two times the hoay, Thanksgiving Eetup, for lane and	filler (pavement) lition burning tord (an), formsetter ((ad \$.65/hr for blurly basic rate or (Day & Christmas (shoulder closure	n, ch curb, aster n Day. 2)
Asbestos Abatement Worker	22.05	18.41	40.46
Landscaper	26.12	20.03	46.15
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas E involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	te on Sunday, Nev Day. 2) Add \$1.25/ es, when work und	w Year's Day, Me hr for work on pr der artificial illum	morial ojects nation
Flagperson or Traffic Control Person Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D	te on Sunday, Nev	w Year's Day, Me	emorial

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
Department of Transportation or responsible governing agency require artificial illumination with traffic control and the work is completed after	res that work be peer sunset and before	erformed at night	\$:under
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.71	16.01	33.72
Railroad Track Laborer	14.50	3.55	18.05
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Towe Derrick, With or Without Attachments, With a Lifting Capacity of Over 10 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 L Crane With Boom Dollies; Traveling Crane (Bridge Type).	r or 10 .bs.,	21.15	58.87
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic radius Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT'S website for details about the applicability of this night wor business/ civilrights/ laborwages/ pwc. htm.	ate on Sunday, Nev Day. 2) Add \$1.50/h	v Year's Day, Me or night work pre	mium.
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower 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 Pilo (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rad Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT'S website for details about the applicability of this night wor business/ civilrights/ laborwages/ pwc. htm.	r or er; t 016; Add \$1.25/hr o ate on Sunday, Nev Day. 2) Add \$1.50/h	v Year's Day, Me or night work pre	mium.
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Scre Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vlbratory/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 & Gut 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, Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Gr 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 Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle	eed; ss ter g Tub cout	21.15	57.87

RACINE COUNTY Page 4

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY \$	HOURLY FRINGE BENEFITS \$	TOTAL \$
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); Winche & A- Frames.		¥	¥
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day See DOT'S website for details about the applicability of this night work p business/ civilrights/ laborwages/ pwc. htm.	on Sunday, New /. 2) Add \$1.50/h	Year's Day, Me ir night work pre	mium.
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); Jee Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	p	21.15	57.61
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day See DOT'S website for details about the applicability of this night work p business/ civilrights/ laborwages/ pwc. htm.	on Sunday, New /. 2) Add \$1.50/h	Year's Day, Me ir night work pre	mium.
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.		21.15	57.32
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day See DOT'S website for details about the applicability of this night work p business/ civilrights/ laborwages/ pwc. htm.	on Sunday, New /. 2) Add \$1.50/h	y Year's Day, Me or night work pre	mium.
Fiber Optic Cable Equipment.	28.89	17.95	46.84
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65 	21.71	63.36
Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraul Dredge Leverman or Diver's Tender; Mechanic or Welder.	•	21.71	63.36
Work Performed on the Great Lakes Including Deck Equipment Operator o Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.		17.85	53.57
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	35.46	20.40	55.86

RACINE COUNTY Page 5

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

Wisconsin Department of Transportation PAGE: 1 DATE: 03/03/16

SCHEDULE OF ITEMS REVISED:

CONTRACT: PROJECT(S): FEDERAL ID(S): 20160510015 1320-20-60 N/A

CONTRACTOR : LINE NO DESCRIPTION SECTION 0001 ROADWAY ITEMS 0010 | Asphaltic Surface Milling | 204.0150 Removing Curb & | 0020|Gutter | 160.000 0020 | Gutter 204.0155 Removing 90.000 |SY 0030 | Concrete Sidewalk 204.0200 Removing | 110.000| |LF 0040 Railroad Track 205.0100 Excavation 90.000 |CY 0050 Common 213.0100 Finishing 305.0110 Base Aggregate 0070 Dense 3/4-Inch 360.000 TON | 305.0120 Base Aggregate | 0080 | Dense 1 1/4-Inch | | | 42.000| |TON | 0080 | Dense 1 1/4-Inch 311.0110 Breaker Run 50.000 | |TON 0090| |390.0403 Base Patching | | 220.000 |SY 0100 | Concrete Shes

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SCHEDULE OF ITEMS

REVISED:

LINE	!	!	APPROX.	UNIT PRICE		BID AMOUNT	
NO	DESCRIPTION		UANTITY ND UNITS			DOLLARS	CTS
0110	440.4410 Incentive IRI Ride 	 DOL	9,288.000 9,288	1	.00000	92 	88.00
0120	455.0605 Tack Coat 	 GAL	2,530.000 2,530.000			 	
0130	460.2000 Incentive Density HMA Pavement 	 DOL	3,890.000 3,890.000	1	.00000	38	90.00
	460.4110.S Reheating HMA Pavement Longitudinal Joints	 LF	11,700.000				•
0150	460.6224 HMA Pavement 4 MT 58-28 S 	 TON	6,890.000		•		
0160	465.0110 Asphaltic Surface Patching 	 TON	140.000				
	465.0475 Asphalt Center Line Rumble Strips 2-Lane Rural	 LF	2,220.000		•		
0180	601.0411 Concrete Curb & Gutter 30-Inch Type D 	 LF	100.000				
0190	602.0410 Concrete Sidewalk 5-Inch 	 SF	90.000				
0200	602.0505 Curb Ramp Detectable Warning Field Yellow	 SF	96.000 96.000		. 	 	
0210	606.0100 Riprap Light 	 CY	9.000			 	

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REVISED:

SCHEDULE OF ITEMS CONTRACT:

20160510015

PROJECT(S): FEDERAL ID(S): 1320-20-60

N/A

CONTRACTOR :_ ITEM DESCRIPTION LINE NO |619.1000 Mobilization | 1.000 |EACH |625.0100 Topsoil 50.000 0230 |628.1504 Silt Fence | | 410.000| |LF 0240| | 628.1520 Silt Fence | 0250|Maintenance | | 150.000| |LF 0250|Maintenance | 628.1905 Mobilizations | 0260 | Erosion Control | | 4.000| |EACH | 0260 Erosion Control 628.1910 Mobilizations 0270 | Emergency Erosion 2.000 EACH Control |628.7015 Inlet | 13.000 | | EACH 0280 | Protection Type C |628.7020 Inlet | 11.000| |EACH | 0290 Protection Type D 628.7504 Temporary Ditch 35.000 |LF 0300 Checks |628.7555 Culvert Pipe 1.000 |EACH 0310 | Checks |631.1000 Sod Lawn | 50.000| |SY 0320

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REVISED:

SCHEDULE OF ITEMS

CONTRA	ACTOR :			
LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE DOLLARS CTS	BID AMOUNT
	 634.0618	AND UNITS 	<u>-</u> 	DULLARS CIS
	637.2210 Signs Type II Reflective H 	 636.510 SF	 	
	637.2215 Signs Type II Reflective H Folding 	 29.840 SF	 .	 .
	637.2230 Signs Type II Reflective F 	 411.000 SF		
	638.2602 Removing Signs Type II 	 126.000 EACH	 .	 .
	638.3000 Removing Small Sign Supports 	 114.000 EACH		
	642.5001 Field Office Type B 	 1.000 EACH		
0400	643.0100 Traffic Control (project) 01. 1320-20-60	 1.000 EACH	 	 .
	643.0300 Traffic Control Drums 	 135.000 DAY		 .
	643.0410 Traffic Control Barricades Type II 	 32.000 DAY		
	643.0420 Traffic Control Barricades Type III 	 26.000 DAY	 .	

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REVISED:

SCHEDULE OF ITEMS

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	!	B DOLLARS CTS
	643.0500 Traffic Control Flexible Tubular Marker Posts	 45.000 EACH	 	
0450	643.0600 Traffic Control Flexible Tubular Marker Bases	 45.000 EACH		
0460	643.0705 Traffic Control Warning Lights Type A 	74.000		
0470	643.0715 Traffic Control Warning Lights Type C 	 40.000 DAY		
	643.0900 Traffic Control Signs 	 524.000 DAY	 .	
0490	643.1050 Traffic Control Signs PCMS 	 4.000 DAY	 	
	645.0130 Geotextile Fabric Type R 	 27.000 SY	 	
0510	646.0106 Pavement Marking Epoxy 4-Inch 	 5,465.000 LF	 .	
0520	646.0406 Pavement Marking Same Day Epoxy 4-Inch	 18,785.000 LF		
0530	648.0100 Locating No-Passing Zones 	 2.320 MI		
0540	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	 1,106.000 LF	 	

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SCHEDULE OF ITEMS

REVISED:

LINE	ITEM DESCRIPTION 	APPROX.	UNIT PRICE	BID AMOUNT	
NO		QUANTITY AND UNITS	DOLLARS CTS		
	649.0403 Temporary Pavement Marking Epoxy 4-Inch	 12,702.000 LF	 		
0560	649.0600 Temporary Pavement Marking Removable Tape 6-Inch	 46.000 LF			
	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	 96.000 LF	 		
0580	650.4500 Construction Staking Subgrade 	 530.000 LF	 	 	
0590	650.8000 Construction Staking Resurfacing Reference	 11,700.000 LF			
	650.9910 Construction Staking Supplemental Control (project) 01. 1320-20-60	 LUMP 	 LUMP 		
	650.9920 Construction Staking Slope Stakes 	 530.000 LF	 	.	
0620	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	 29.000 LF			
	652.0800 Conduit Loop Detector 	 664.000 LF	 		
	653.0135 Pull Boxes Steel 24x36-Inch 	 2.000 EACH	 .	 .	

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SCHEDULE OF ITEMS REVISED:

LINE	ITEM DESCRIPTION 	APPROX. QUANTITY AND UNITS		UNIT PRICE		BID AMOUNT	
NO				DOLLARS	CTS	 DOLLARS	CTS
	655.0700 Loop Detector Lead In Cable	 LF	1,976.000			 	
	655.0800 Loop Detector Wire	 LF	2,174.000				
0670	690.0150 Sawing Asphalt	 LF	2,810.000			 	
0680	SPV.0060 Special 01. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	 EACH	4.000			 	
	SPV.0060 Special 02. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	 EACH	6.000 			 	
0700	SPV.0060 Special 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	 EACH	2.000			 	
0710	SPV.0060 Special 04. Temporary Portable Rumble Strips	 EACH	4.000			 	
0720	SPV.0090 Special 01. PAVEMENT MARKING GROOVED PREFORMED PLASTIC TAPE, 8-INCH	 LF	1,018.000			 	
	SPV.0090 Special 02. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH	 LF	1,162.000			 	

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SCHEDULE OF ITEMS

REVISED:

LINE		APPROX. QUANTITY	UNIT PR		BID AMOUNT	
NO	DESCRIPTION				DOLLARS	CTS
0740	SPV.0090 Special 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 24-INCH	 138.000 LF			 	
0750	SPV.0090 Special 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH	 407.000 LF		•	 	
	SPV.0090 Special 05. PAVEMENT MARKING GROOVED EPOXY 4-INCH	 14,884.000 LF		.	 	
0770	SPV.0090 Special 06. PAVEMENT MARKING GROOVED PREFORMED PLASTIC TAPE 4-INCH	373.000 LF			 	
0780	SPV.0105 Special 01. REGTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM STATION 124+80 RT	LUMP	LUMP		 	
0790	SPV.0105 Special 02. REGTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM STATION 124+80 LT	LUMP	LUMP		 	
0800	SPV.0105 Special 03. REGTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM STATION 125+00 RT	LUMP	LUMP		 	
0810	SPV.0105 Special 04. REGTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM STATION 125+00 LT	LUMP	LUMP			
	SPV.0105 Special 05. REMOVE LOOP DETECTOR WIRE & LEAD IN CABLE USH 45 & STH 11	LUMP	LUMP			

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SCHEDULE OF ITEMS

REVISED:

CONTRA LINE	ACTOR : 	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS	
0830	SPV.0105 Special 06. GRADING, SHAPING, AND FINISHING DITCH INSTALLATION	 LUMP 	 LUMP 	 	
	SECTION 0001 TOTAL		 	·	
	TOTAL BID			·	

PLEASE ATTACH SCHEDULE OF ITEMS HERE