HIGHWAY WORK PROPOSAL

Proposal Number:

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

COUNTY STATE PROJECT ID FEDERAL PROJECT ID

PROJECT DESCRIPTION

HIGHWAY

Sauk 5271-01-71

Prairie du Sac- Lodi Wisconsin River Bridge B-11-19 STH 60

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

Proposal Guaranty Required, \$ 75,000.00	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: April 8, 2014 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
November 21, 2014	NOT FOR BIDDING FOR OSES
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.

collusion, or otherwise taken any action in restraint of free competitive bidding in	n connection with this proposal bid.
Do not sign, notarize, or submit this Highway Work Proposal when	n submitting an electronic bid on the Internet.
Subscribed 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

Type of Work	
Grading, base aggregate dense, asphaltic pavement, concrete pave	ment, Structure B-11-19.
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

Info Tech Inc. 5700 SW 34th Street, Suite 1235 Gainesville, FL 32608-5371

email: mailto:customer.support@bidx.com

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

B Submitting Electronic Bids

B.1 On the Internet

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

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

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

- 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 Corpora	te 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	R PRINCIPAL	NOTARY FO	R SURETY
(Da	ate)	(Dat	e)
State of Wisconsin)	State of Wisconsin)
) ss. _ County)) ss. County)
On the above date, this instrument vnamed person(s).	vas acknowledged before me by the	On the above date, this instrument w named person(s).	as acknowledged before me by the
(Signature, Notary Pub	lic, State of Wisconsin)	(Signature, Notary Publi	c, State of Wisconsin)
(Print or Type Name, Notary	Public, State of Wisconsin)	(Print or Type Name, Notary	Public, State of Wisconsin)
(Date Commi	ssion Expires)	(Date Commiss	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 5271-01-71, Prairie du Sac – Lodi, Wisconsin River Bridge B-11-19, STH 60, Sauk County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2014 Edition, as published by the department, and these special provisions.

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

100-005 (20130615)

2. Scope of Work.

The work under this contract shall consist of grading, base aggregate dense, asphaltic pavement, concrete pavement, Structure B-11-19 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.

Complete all construction operations on STH 60 prior to 12:01 AM November 22, 2014.

Revise standard spec 108.11 as follows:

If the contractor fails to complete all construction operations prior to 12:01 AM November 22, 2014, the department will assess the contractor \$10,000 in liquidated damages for each calendar day that any work remains incomplete after 12:01 AM, November 22, 2014. An entire calendar day will be charged for any period of time within a calendar day that any work remains incomplete beyond 12:01 AM.

Fish Spawning

There shall be no instream disturbance of the Wisconsin River as a result of construction activity under or for this contract, from May 15, 2014 to September 15, 2014 both dates inclusive, in order to avoid adverse impacts upon the spawning of fish.

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Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Migratory Birds

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

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure Over Waterway with Debris Capture System.

A depredation permit was prepared by the US Department of Agriculture on January 9, 2014 and sent to the U.S. Fish and Wildlife Service for approval. If the permit is not approved, the contractor will be required to use one of the alternate methods to prevent the swallows from nesting.

4. Traffic Control.

Close STH 60 to traffic during construction. A detour will follow STH 78, USH 12 and STH 188

Prior to moving traffic onto the detour, a right turn lane shall be constructed at the intersection of STH 188 and USH 12. The turn lane will accommodate traffic turning from southbound STH 188 to westbound USH 12. Shoulder closures on STH 188 and USH 12 will be allowed to construct the turn lane during daytime hours.

Concrete pavement patching at the STH 60/STH 78/Water Street intersection will be allowed during weekday night time hours of 8:00 PM to 6:00 AM. Concrete pavement patches shall be open to traffic by 6:00 AM.

5. Federal Aviation Association Coordination.

Code of Federal Regulations (CFR), Title 14, Part 77.3 requires FAA advance notification if the contractor will use any equipment taller than 90 feet above the grade level of the bridge. The contractor shall notify

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6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 60 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 23, 2014 to 6:00 AM Tuesday, May 27, 2014 for Memorial Day;
- From noon Thursday, July 3, 2014 to 6:00 AM Monday, July, 7, 2014 for Independence Day;
- From noon Friday, August 29, 2014 to 6:00 AM Tuesday, September 2, 2014 for Labor Day.

107-005 (20050502)

7. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection protocols.pdf for disinfection:

- 1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
- 2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
- 3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and

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- 4. Disinfect your boat, equipment and gear by either:
 - a. Washing with ~212° F water (steam clean), or
 - b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site. 107-055 (20130615)

8. Construction Over or Adjacent to Navigable Waters.

Supplement standard spec 107.19 with the following:

The Wisconsin River is classified as a navigable waterway. A boat traffic control detail is included in the plans and has been approved by the Department of Natural Resources. 107-060 (20040415)

9. Environmental Protection, Bald Eagles.

All work must be completed between April 1 and November 1 of the construction year. Working within this timeframe will avoid disturbing winter foraging bald eagles. If the work must extend outside of this time frame, the US Fish and Wildlife Service will need to be contacted for a permit.

Additional measures to follow in order to minimize disturbance to nesting bald eagles in the area of the project:

As of 2010, all known eagle nests are well outside the recommended buffer zone for this project. If eagle nests are found within ½ mile of the project boundary, contact the US Fish and Wildlife Service (US F&WS) office for additional consultation. Depending on the proximity of the nesting activity and the type of work being done, a permit may be required.

Implement refuse control measures to prevent attracting eagles to garbage; remove all road-killed animals from road to prevent eagle-vehicle strikes.

Monitor and minimize dispersal of any contaminants in the area.

Inform the US F&WS of any unusual eagle activity noted during or after the project (new nest building, road-killed eagles, etc.)

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10. Utilities.

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

There are several utility facilities attached to the bridge that will remain in service during the duration of the project. Take whatever measures necessary to ensure that these facilities are not damaged by work operations, including falling debris from the bridge deck removal and during painting operations. Under this contract, the existing deck will be replaced and the existing steel girders repainted on Structure B-11-19. During the painting operations utility lines attached to the cross braces between the girders shall be detached, temporarily supported, and reattached. The utility owner shall supply a utility connection work plan, which will be discussed at a required coordination meeting after the bid letting and prior to beginning work.

Special construction methods may be needed to work around the existing utility facilities and attachment hardware. If any of the attached hardware is damaged by the bridge work, contact the appropriate utility company and make arrangements to replace the utility-supplied material. The utility company will be responsible for the costs of all work involving their facilities; excluding the cost of detaching, temporarily supporting and reattaching the existing facilities on the structure which will be paid for as part of the contract.

The following utilities have facilities located within the project limits:

Charter Communications has a conduit located on the north side of the structure which is attached to the cross braces between the girders. This facility also is located underground along the abutment wing walls for the structure and along the north side of the roadway to the project limits. Coordination with Charter will be required during construction for the painting operations of the existing cross braces and girders.

Charter Communications contact is Harlow Jarvis, (608) 235-1911.

Frontier North has a conduit located on the south side of the structure which is attached to the cross braces between the girders. This facility also is located underground along the abutment wing walls for the structure and along the south side of the roadway to the project limits. Coordination with Frontier will be required during construction for the painting operations of the existing cross braces and girders.

Frontier North contact is Brian Van Ooyen, (608) 837-1151.

Merrimac Communications has a conduit located on the north side of the structure which is attached to the cross braces between the girders. This facility also is located underground along the abutment wing walls for the structure and along the north side of the roadway to the project limits. Coordination with Merrimac will be required during construction for the painting operations of the existing cross braces and girders.

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Merrimac Communications also has buried fiber optic facilities located at the USH 12 and STH 188 intersection. Their facility is located near the right-of-way line on both USH 12 and STH 188 and crosses USH 12 at approximately Station 1042+50. Merrimac Communications will lower the fiber optic cable crossing USH 12 at approximately Station 1042+50 to an approximate depth of 4 to 5 feet from finished grade. The facility will be lowered before the start of construction.

Merrimac Communications contact is Brandon Suchla, (608) 370-1608.

Prairie du Sac Municipal Electric has lighting on the south side of the bridge which is being replaced as part of the contract. Conduit for the lighting is located in the parapet of the bridge. Temporary lighting will not be needed during construction. New poles, luminaries, conduit and wiring will be placed by the lighting contractor as part of the contract. Conduit will be placed in the new parapet. Lighting conduit is also located crossing the west approach to the bridge at the intersection with Water Street.

Prairie du Sac contact is Patrick Drone, (608) 963-1164.

Madison Gas and Electric has a buried gas line located at the intersection of USH 12 and STH 188. Their facility is located near the right-of-way line on both USH 12 and STH 188. It also crosses USH 12 in the vicinity of the right turn lane which will be constructed on this area. Coordination with the contractor during construction will be required. No conflicts are anticipated.

Madison Gas and Electric contact is Don McClain, (608) 252-5618.

WisDOT Electric

The Wisconsin DOT owns and maintains the lighting system located at the USH 12 and STH 188 interchange which is on the detour route. Construction of a right turn lane will require the relocation on one light pole and a pull box. Relocation of these facilities is included in the contract.

WisDOT contact is Dena Dramm (608) 246-5360.

11. Erosion Control Structures.

Within seven calendar days after the commencement of work on the bridge superstructure, place all permanent erosion control devices, including riprap, erosion mat, ditch checks, seed, fertilizer, mulch, soil stabilizer, or any other item required by the contract or deemed necessary by the engineer. These devices shall be in place in the area under the bridge and on both sides of the roadway, from the waterway to a point 100-feet behind the backwall of the abutment. Within said limits, place these devices to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as directed by the engineer. Prior to initial construction operations, place turbidity barriers, silt screens, and other temporary erosion

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control measures as shown on the plans, and remove them after the permanent erosion control devices are in place unless directed otherwise by the engineer.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived. 107-070 (20030820)

12. Thrie Beam Connection To Vertical Face Parapet.

Standard spec 614.3.2.3 and S.D.D. 14 B 45-3e Midwest Guardrail Ssytem Thrie Beam Transition (MGS) shall be modified as follows:

The Thrie Beam attachment at existing Structure B-11-87, Station 31+58 shall be installed using a backing plate on the outside face of the parapet to prevent spalling of the existing parapet while drilling hole for the new attachment.

13. Abatement of Asbestos Containing Material Structure B-11-19, Item 203.0210.S.01.

A Description

This special provision describes abating asbestos containing material on structures in accordance to the plans, the pertinent provisions of the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction

James Gondek, License Number All-108099, inspected Structure B-11-19 for asbestos on August 18, 2011 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: gaskets located where the bridge railing attaches to the concrete parapet. Approximately 3350 square feet of material is present.

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is available from Mahesh Shrestha (608) 245-2674. In accordance to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Mahesh Shrestha (608) 245-2674 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

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

- · Site Name: Structure B-11-19, STH 60 over the Wisconsin River
- · Site Address: Lat. 43.293856° N, Long. 89.721268° W
- Ownership Information: WisDOT Southwest Region, 2101 Wright Street, Madison WI 53704
- Contact: Mahesh Shrestha
- Phone: (608) 245-2674
- Age: 43 years old. This structure was constructed in 1971.
- Area: 42,668 SF of deck

Insert the following paragraph in Section 6.g.:

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

D Measurement

The department will measure Abatement of Asbestos Containing Material (Structure) as a single complete unit of work, completed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 203.0210.S.01 Abatement of Asbestos Containing Material Structure LS B-11-19

Payment is full compensation for submitting necessary forms; removing all asbestos; properly disposing of all waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

203-005 (20120615)

14. Removing Old Structure Over Waterway With Debris Capture System Station 24+54.50, Item 203.0700.S.01.

Conform to standard spec 203 as modified in this special provision.

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Add the following to standard spec 203:

203.3.6 Removals Over Waterways and Wetlands

203.3.6.3 Removing Old Structure Over Waterway with Debris Capture System

- (1) Remove the existing Structure B-11-19 over the Wisconsin River in large sections and conforming to the contractor's approved structure removal plan. Due to the very sensitive nature of the Wisconsin River, provide a debris capture and containment system for superstructure removal that prevents all large pieces and virtually all other debris, including fine particles and slurry, from entering the waterway or wetland.
- (2) Submit a structure removal plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal plan without the department's written approval of the plan. Include the following information in the structure removal plan:
 - Methods and schedule to remove the structure.
 - Methods to control potentially harmful environmental impacts.
 - Methods to avoid or minimize the discharge of any pollutant to the waterway or wetland during superstructure removal.
 - Details of the debris capture and containment system for superstructure removal including contingency plans to deal with potential failures.
 - Methods to control dust and contain slurry.
 - Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

Add the following Removing Old Structure bid item to standard spec 203.5.1:

ITEM NUMBER DESCRIPTION UNIT 203.0700.S.01 Removing Old Structure Over Waterway With Debris LS Capture System Station 24+54.50

203-025 (20080902)

15. Base Aggregate Dense ¾-Inch, Item 305.0110.

Revise standard spec 301.2.4.3 as follows:

Furnish aggregate classified as crushed stone for ³/₄-Inch base when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

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

Revise standard spec 305.2.2.1 as follows:

Use 1 ¼-Inch base aggregate that conforms to the following gradation requirements:

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

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

17. 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.

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^{3 - 10} percent passing when base is 3 50% crushed gravel.

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

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

A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
 - 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
 - 2. Divide the aggregate into uniformly sized sublots for testing as follows:

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

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B Materials

B.1 Quality Control Plan

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

B.2 Personnel

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

Required Certification Level:	Sampling or Testing Roles:
Aggregate Technician IPP	Aggregate Sampling ^[1]
Aggregate Sampling Technician	
Aggregate Assistant Certified Technician (ACT-AGG)	
, , ,	
Aggregate Technician IPP	Aggregate Gradation Testing,
Aggregate Assistant Certified Technician (ACT-AGG)	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.

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B.3 Laboratory

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

Materials Management Section

3502 Kinsman Blvd.

Madison, WI 53704

Telephone: (608) 246-5388

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

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- 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.

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- Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:

Gradation	AASHTO T 27
Material finer than the No. 200 sieve.	AASHTO T 11

- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
 - 1. Control limits are at the upper and lower specification limits.
 - 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.

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- 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
- 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

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

B.6.3 Liquid Limit and Plasticity

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 - 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 - 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

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- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
 - 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
 - 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
 - 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

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- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
 - 1. Split sample testing.
 - 2. Proficiency sample testing.
 - 3. Witnessing sampling and testing.
 - 4. Test equipment calibration checks.
 - 5. Reviewing required worksheets and control charts.
 - 6. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

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

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or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2. 301-010 (20100709)

18. Expansion Device, Structure B-11-19.

A Description

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

B Materials

The minimum thickness of the polychloroprene strip seal shall be ½-inch for non-reinforced elastomeric glands and 1/8-inch for reinforced glands. Furnish the strip seal gland in lengths suitable for a continuous one-piece installation at each individual expansion joint location. Provide preformed polychloroprene strip seals that conform to the requirements ASTM D3542, and have the following physical properties:

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

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

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

Model	Numbe	r
Strip Seal	Gland S	Size*

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

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

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

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

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

19. Expansion Device Modular Structure B-11-19, Item 502.3110.S.01.

A Description

This special provision describes furnishing and installing a shop-fabricated waterproof modular expansion device in accordance to standard spec 502, the plans, and as hereinafter provided. The modular expansion joint device shall seal the deck surface, curbs, gutters, and parapet walls as indicated on the plans. Any leaking or seeping of water through the joint will be cause for rejection of the modular expansion device.

B Materials

B.1 General

Furnish parts and elements that have material properties meeting the physical and chemical requirements shown in their manufacturer's technical data or as noted below, except as modified by pertinent parts of the standard specifications, this special provision, or the plans. Furnish certified test results from the manufacturer attesting to physical and chemical properties. Do not use any aluminum components or hardware.

B.2 Modular Expansion Device System Components

Furnish components for the Modular Expansion Device System from one of the following manufacturers and model series:

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- D.S. Brown Company, Steelflex Modular D-Series (419) 257-3561
- R.J. Watson, Inc., Modular RJW-Series (716) 741-2166
- Watson, Bowman, & Acme Inc., Wabo-Maurer STM-Series (716) 691-7566

B.3 Steel Plates, Bars, Shapes, and Sheets

Furnish steel plates, bars, shapes, and extrusions that have been fabricated from high strength, low alloy grade 50 or grade 50W steel conforming to ASTM A709, or as shown on the approved shop drawings. Anchor bars and support bar boxes may be fabricated from ASTM A709 grade 36 steel. Furnish anchor bolts, bolts, nuts, and washers that conform to the requirements of ASTM A325. Secondary shapes or joint components may be assembled with bolts, nuts, and washer conforming to ASTM A490.

Furnish stainless steel sheets for the sliding surfaces of support bars that conform to the requirements of ASTM A167, alloy 304, 20 micro-inch RMS finish.

B.4 Elastomeric Seal Elements

Furnish preformed elastomeric seal elements that are polychloroprene (neoprene) of a rectangular or strip cross section having a minimum thickness of ½-inch and conform to ASTM D3542 modified to omit the recovery test. The elastomeric seal elements shall meet the following physical properties:

Property	Requirement	Test Method
Tensile Strength, min	2000 psi	ASTM D412
Elongation @ Break, min	250%	ASTM D412
Hardness, Type A, Durometer	60± 5 pts	ASTM D2240
Compression Set, 70 Hrs @ 212° F, max	35%	D395 Method, B Modified
Ozone Resistance, after 70 hours at 100°	No Cracks	ASTM D1149 and D518,
F under 20% Strain with 100 pphm ozone		Method A
Mass Change in Oil 3 after 70 hours @	45%	ASTM D471
212° F, Mass Change, max		

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

The seal element shall be one piece, and full length of the expansion joint including curb and parapet face projections. The lubricated adhesive for installing the preformed elastomeric elements in place shall be one-part moisture curing polyurethane and hydrocarbon solvent mixture as recommended by the manufacturer.

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B.5 Support Bars

Place support bars parallel to the roadway at a maximum support assembly spacing of 4'-0". Furnish support bars that are not less than 1½-inches in width and at least 4-inches in height; each transverse center beam shall have an individual support bar.

Support bars shall incorporate stainless steel sliding surfaces to minimize resistances to joint movements. Stainless steel shall be welded to support bars. Support the support bars above, below, and laterally as required to prevent uplifting, transmit bearing loads, and to maintain positioning of the bar.

Fabricate support bar bearings from polyurethane compound with PTFE self lubricating surfaces having engineering properties equivalent to adiprene, Teflon, or cast nylon with MDS. Positively lock the support bar bearings and springs or spacers into the support box by a dowel or pin. The connection must permit subsequent removal and replacement of the bearings and springs. The support bar springs shall be constructed similarly to the bearings but shall provide the required precompressive force to maintain the support bar in place while under traffic loads. Use a suitable equilibrium device that works counter to the compression forces of the sealing elements to maintain equalized expansion properties for each element across the modular joint assembly. Furnish anchor plates for the support bar springs or neoprene blocks that have a minimum thickness of ¾-inch.

B.6 Transverse Center Beams

Transverse center beams shall be at least of 4½-inches in height and have a minimum vertical web thickness of ¾-inch. Design transverse center beams for an AASHTO HS25 live loading plus 30 percent impact. Make shop splices in the transverse center beam with a full penetration weld. The exterior transverse beams shall have a minimum vertical web thickness of ¾-inch

The connections between the transverse center beams and support bars shall be a full penetration weld in accordance to the details shown on the plans. Full penetration welds to be tested by ultrasound using the compressive criteria.

B.7 Support Bar Boxes

Furnish support bar boxes that consist of steel plates not less than ½-inch in thickness fabricated with continuous welds at all joints. The inside dimensions of the box shall be consistent with all boxes and within +0.040 inches of prescribed height as measured where the bearings and spring compress about the support bar. Fabricate support box plates with a continuous weld. Make anchorage details as shown on the plans.

B.8 Structural Steel Surfaces

Galvanize after fabrication, in accordance to ASTM A123, all structural steel surfaces of the expansion joint devices and anchorages, except ASTM A-490 bolts, components of stainless steel, and parts coated with polyurethane, adipene, nylon, or Teflon.

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Galvanize or metallize in accordance to standard spec 635 all bolts, nuts, washers, and steel components that are not galvanized using the above procedure, including all ASTM A-490 bolts.

If a retainer clip is used for locking the neoprene strip type seal, continuously weld it on its top side. Due to the galvanizing coating requirement, also make a continuous weld underneath the clip.

All welding shall be in accordance to AWS D1.5 or D1.6 of the welding code and shall be done by certified welders only. A shop certified under AISC category for simple structures shall perform fabrication.

The fabricator will be permitted to shop weld pre-galvanized transverse roadway sections, complete with anchorages, of the expansion device steel extrusions. The pre-galvanized roadway sections shall be not less than 10 feet long. The pre-galvanized roadway side sections shall have additional anchorages, if required, so as to provide an anchorage within 9 inches of each end of the section. Abutting ends shall be beveled ½-inch on three sides and deburred. All galvanizing shall be completely removed from the areas to be welded. The pre-galvanized sections shall be groove welded on three sides with care taken to prevent weld material from entering the gland groove. The weld across the top of the extrusion shall be ground smooth and all areas of galvanizing damaged by the welding operations shall be repaired in accordance to standard spec 635. Make field splices in transverse center roadway sections with a partial penetration weld.

C Construction

The manufacturer of the prefabricated expansion joint assembly shall prepare shop drawings showing details of the assembly and installation.

Support the modular joint assembly at 8'-0 minimum spacing along both sides of the joint. Construct the modular expansion device system in accordance to the details shown on the shop drawings. Tolerance requirements shall be in accordance to AASHTO specifications.

Install in accordance to the plan details, the manufacturer's and supplier's approved shop drawings, and as directed by the engineer. In addition, the manufacturer shall submit current product literature with the shop drawings and the shop drawings shall reflect that literature.

Remove all modular expansion joint forming material from the joint opening. Pre-set the modular joint assembly in accordance to the approved shop drawings, joint temperature setting data, and specifications. The maximum joint opening for a single modular unit shall be 3 inches.

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The joint assembly manufacturer shall furnish technical assistance to the contractor and engineer through the personal services of a technical representative, who is a fulltime employee of the manufacturer during installation of the joint sealing systems. This representative shall be accessible to the engineer and shall be at the site during the work that involves the setting of all parts of each modular expansion joint assembly. The contractor shall be responsible for informing the representative prior to the date of installation

D Measurement

The department will measure Expansion Device Modular (Structure) as a single lump sum unit for the structure, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 502.3110.S.01 Expansion Device Modular Structure B-11-19 LS

Payment is full compensation for furnishing and placing the device complete in place; furnishing and completely installing all elements and parts of the joints, anchors, armor or structural metal; galvanizing materials; furnishing and installing all hardware, pads, bonding material, and reinforcing bars within the blockout not otherwise covered for payment, and barrier railing plates. 502-021 (20100709)

20. Polymer Overlay, Item 509.5100.S.

A Description

This special provision describes furnishing and applying two layers of a two-component polymer overlay system to the bridge decks shown on the plans. The minimum total thickness of the overlay system shall be ½".

B Materials

B.1 General

Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department's approved product list.

B.2 Polymer Resin

The polymer resin base and hardener shall be composed of two-component, 100% solids, 100% reactive, thermosetting compound with the following properties:

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Property	Requirements	Test Method
Gel Time ^A	15 - 45 minutes @ 73° to 75° F	ASTM C881
Viscosity A	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm
Shore D Hardness B	60-75	ASTM D2240
Absorption ^B	1% maximum at 24 hr	ASTM D570
Tensile Elongation ^B	30% - 70% @ 7 days	ASTM D638
Tensile Strength ^B	>2000 psi @ 7 days	ASTM D638
Chloride Permeability ^B	<100 coulombs @ 28 days	AASHTO T277

A Uncured, mixed polymer binder
B Cured, mixed polymer binder

B.3 Aggregates

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

Aggregate Properties:

Property	Requirement	Test Method
Moisture Content*	½ of the measured aggregate absorption, %	ASTM C566
Hardness	³ 6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face and 80% with at least 2 fractured faces of material retained on No.16	ASTM 5821
Absorption	≤1%	ASTM C128

^{*} Sampled and tested at the time of placement.

Gradation:

Sieve Size	% Passing by Weight
No. 4	100
No. 8	30 – 75
No. 16	0-5
No. 30	0-1

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B.4 Required Properties of Overlay System

The required properties of the overlay system are listed in the table below:

Property	Requirement ^A	Test Method
Minimum Compressive Strength at 8 Hrs. (psi)	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C 579 Method B, Modified ^B
Thermal Compatibility	No Delaminations	ASTM C 884
Minimum Pull-off Strength	250 psi @ 24 hrs	ACI 503R, Appendix A

A Based on samples cured or aged and tested at 75°F

B.5 Approval of Bridge Deck Polymer Overlay System

A minimum of 20 working days prior to application, submit product data sheets and specifications from the manufacturer, and a certified test report to the engineer for approval. The engineer may request samples of the polymer and/or aggregate, prior to application, for the purpose of acceptance testing by the department.

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

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

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

C Construction

C.1 General

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

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^B Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

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

C.2 Deck Preparation

C.2.1. Deck Repair

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to repair the concrete deck will be paid for under other items. Ensure that products used for deck patching are compatible with the polymer overlay system.

NOTE: Some polymer systems require concrete patch material to be in place a minimum of 28-days before overlaying - contact polymer manufacturer before completing deck patching/repair.

C.2.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface a profile meeting CSP 5 according to the International Concrete Repair Institute Technical Guideline No. 03732. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ACI 503R, Appendix A of the ACI *Manual of Concrete Practice*. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of ½ inches or more is greater than 50% of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours prior to the application of the overlay system.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 by sand blasting, using wire wheels, or other approved method.

Just prior to overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely. If any prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (breeze blast) the exposed surfaces.

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

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Create a transitional area approaching transverse expansion joints and ends of the deck using the shotblasting machine or other approved method. Remove 5/16" to 3/8" of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

The engineer may consider alternate surface preparation methods per the overlay system manufacture's recommendations. The engineer will approve the final surface profile and deck cleanliness prior to the contractor placing the polymer overlay.

C.3 Application of the Overlay

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

- Ambient air temperature is below 50°F;
- Deck temperature is below 50°F;
- Moisture content in the deck exceeds 4.5% when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured in accordance to ASTM D4263;
- Rain is forecasted during the minimum curing periods listed under C.5;
- Materials component temperatures below 50°F or above 99°F;
- Concrete age is less than 28 days unless approved by the engineer;
- The deck temperature exceeds 100°F;
- If the gel time is 10 minutes or less at the predicted high air temperature for the day.

After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck. Begin overlay placement as soon as possible after surface preparation operations.

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a standard chip spreader or equivalent machine that can provide a uniform, consistent coverage of aggregate. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place, but will require additional applications before opening to traffic.

After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer. Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer. Apply all courses of the overlay

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system before opening the area to traffic. Do not allow traffic on the treated area until directed by the engineer.

After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer. Prior to applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.

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

C.4 Application Rates

Apply the polymer overlay in two separate courses in accordance to the manufacturer's instructions, but not less than the following rate of application.

Course	Minimum Polymer Rate ^A (GAL/100 SF)	Aggregate ^B (LBS/SY)
1	2.5	10+
2	5.0	14+

A The minimum total applications rate is 7.5 GAL/100 SF.

C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

	Average temperature of deck, polymer								
	and aggregate components in °F								
Course	50-54 55-59 60-64 65-69 70-74 75-79 80-84								
1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.	1 hr.	
2	8 hrs.								

C.6 Repair of Polymer Overlay

Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation. Submit repair procedures from the manufacturer to the engineer for approval. Absent a manufacturer's repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete prior to placement of polymer overlay; and place the polymer overlay according to section C.3.

D Measurement

The department will measure Polymer Overlay in area by the square yard, acceptably completed.

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^B Application of aggregate shall be of sufficient quantity to completely cover the polymer.

E Payment

The department will pay for measured quantities at the contract unit price under the

following bid item:

ITEM NUMBER DESCRIPTION **UNIT** 509 5100 S Polymer Overlay SY

Payment is full compensation for preparing the surface; for tensile bond testing; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials. Concrete Deck Repair will be paid for separately. 509-030 (20130615)

21. Preparation and Coating of Top Flanges Structure B-11-19, Item 517.0900.S.01.

A Description

This special provision describes thoroughly cleaning and coating the top surface and edges of the top flanges, removing loose paint, rust, mill scale, dirt, oil, grease, or other foreign substances until the specified finish is obtained.

B (Vacant)

C Construction

In accordance to SSPC SP-10, blast clean to a near white finish the top surface and edges of the top flanges that have no paint on them, and paint them with one coat of an approved zinc rich primer. No collection of blast waste material is required.

In accordance to SSPC SP-2 or SP-3, clean all areas of rust and loose paint on the top surface and edges of the top flanges, which have paint on them, by wire brushing, grinding or other mechanical means. Wash the top surface and edges of the top flanges and give them one coat of an approved zinc-rich primer.

Where plans call for the cleaning of other painted structural steel including hanger assemblies, bearings, field splices, and connections, clean areas of loose paint and rust by wire brushing, grinding, or other mechanical means as necessary and in accordance to SSPC SP-2, SP-3, or SP-11. Sound paint need not be removed with the exception of an area 12-inches on either side of hanger assembly centerlines. Clean this area to base metal in accordance to SSPC SP-10, or SP-11.

In accordance to SSPC SP-2, or SP-3, thoroughly clean by wire brushing, grinding or other mechanical means as necessary the surface area of exposed steel members that are to be imbedded in the new concrete, and wash and give one coat of an approved zinc rich primer to these areas

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Furnish and erect tarpaulins or other materials to collect all of the spent paint containing material resulting from blasting or hand and power tool cleaning and coating. Minimize dust during all clean-up activities. Collect and store waste material at the end of each work day or more often if needed. Store waste materials in the hazardous waste containers provided. Lock and secure all waste containers at the end of each work day. Cover the container(s) at all times except when adding or removing waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water. Transportation and disposal of such waste material will be the responsibility of the department.

Damage to existing painted surfaces as a result of construction operations, shall be restored to the approval of the engineer at the contractor's expense.

D Measurement

The department will measure Preparation and Coating of Top Flanges (Structure) as a single complete unit of work for the structure, completed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.0900.S.01 Preparation and Coating of Top Flanges Structure LS

B-11-19

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the coating. 517-010 (20100709)

22. Structure Repainting Recycled Abrasive Structure B-11-19, Item 517.1800.S.01.

A Description

This special provision describes surface preparation and painting of the metal surfaces in accordance to the manufacturer's recommendations and as hereinafter provided.

A.1 Areas to be Cleaned and Painted

All structural metal surfaces of:

1. Structure B-11-19 102,000 SF.

Areas are approximate and given for informational purposes only.

B Materials

B.1 Coating System

Furnish a complete coating system from the department's approved list. The color for the finish coating material shall match the color number shown below in accordance to

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Federal Standard Number 595B, as printed in 1989. Supply the engineer with the product data sheets before any coating is applied. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, and the minimum drying time between coats.

Finish Color: Federal Color ID #30475.

The color of the primer must be such that a definite contrast between it and the color of the blasted steel is readily apparent. There shall be a color contrast between all subsequent coats for the paint system selected. Submit color samples of the primer to the engineer for approval.

C Construction

C.1 Surface Preparation

Prior to blast cleaning, solvent clean all surfaces to be coated in accordance to SSPC-SP1. A No. 10 Near White Blast Cleaning according to Steel Structures Painting Council Specification Ten will be required on all metal surfaces to be painted. Prime the same day all metal surfaces receiving a No. 10 blast or re-blast before application.

The steel grit and any associated equipment brought to the site and used for blast cleaning shall be clean. Remove immediately dirty grit or equipment brought to the site at no expense to the department. Furnish an abrasive that has a gradation such that it will produce a uniform surface profile between 1 to 3 mils on the steel surface, as measured with extra profile course Testex Replica Tape. Use a minimum air pressure for abrasive blasting, measured at the nozzle, of 90 psi.

The abrasive blasting and recovery system shall be a completely integrated self-contained system for abrasive blasting and recovery. It shall be an open blast and recovery system that will allow no emissions from the recovery operation. The recovery equipment shall be such that the amount of contaminants in the clean recycled steel grit shall be less than 1 percent by weight.

Remove by grinding all fins, tears, slivers, and burred or sharp edges that are present on any steel member, or that appear during the blasting operation, and re-blast the area to give a 1 to 3 mils surface profile.

Remove all spent material and paint residue from steel surfaces with a good commercial grade vacuum cleaner equipped with a brush-type cleaning tool, and hand wipe the steel surfaces with a clean soft cloth. The airline used for surface preparation shall have an inline water trap and the air shall be free of oil and water as it leaves the airline.

Take care to protect freshly coated surfaces from subsequent blast cleaning operations. Thoroughly wire brush damaged primed surfaces with a non-rusting tool, or if visible rust occurs, re-blast to a near white condition. Clean and re-prime the brushed or blast cleaned surfaces within the time recommended by the manufacturer.

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C.2 Coating Application

Apply paint in accordance to the manufacturer's recommendations in a neat workmanlike manner. Paint application shall normally be by airless spray.

The engineer may allow the use of conventional spray equipment after satisfactory demonstration by the contractor of the proper technique and handling of that equipment.

Mix the paint or coatings in accordance to the manufacturer's directions to a smooth lump-free consistency. After mixing and during application, continuously stir the paint or coating under constant slow speed agitation by use of a jiffy mixer.

Prior to applying the prime coat, stripe with primer all edges, rivet and bolt heads, nuts and washers by either brush or spray application.

Remove all dry spray by vacuuming, wiping, or sanding if necessary.

If the application of the coating at the required thickness in one coat produces runs, bubbles, or sags; apply a "mist-coating" in multiple passes of the spray gun; separate the passes by several minutes. Where excessive coating thickness produces "mud-cracking", remove such coating back to soundly bonded coating and re-coat the area to the required thickness

The resultant paint film shall be smooth and uniform, without skips or areas of excessive paint.

The coating is supplied for normal use without thinning. If in cool weather it is necessary to thin the coating for proper application, thin in accordance to the manufacturer's recommendations.

During surface preparation and coating application the ambient and steel temperature shall be between 39 degrees F and 100 degrees F. The steel temperature shall be at least 5 degrees F above the dew point temperature. (This requires the steel to be dry and free of any condensation or ice regardless of the actual temperature of the steel.) The relative humidity shall not exceed 85%.

Paint thickness shall be as follows:

Dry Film Thickness

Prime Coat 3 mils min.
Intermediate Coat 3 mils
Top Coat 3 mils

Time to recoat shall be according to the manufacturer's recommendations.

The dry film thickness will be determined by use of a magnetic film thickness gage. The gage shall be calibrated for dry film thickness measurement in accordance to SSPC-PA 2. Dry film thickness in each area measured will be based on an average of three gage

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readings, after calibration of the gage to account for surface profile of the bare steel as a result of surface preparation.

D Measurement

The department will measure Structure Repainting Recycled Abrasive (Structure) as a single complete unit of work, completed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.1800.S.01 Structure Repainting Recycled Abrasive Structure B-11-19 LS

Payment is full compensation for preparing and cleaning the designated surfaces; furnishing and applying the paint; and for providing the listed equipment. 517-050 (20050502)

23. Labeling and Disposal of Waste Material.

The EPA ID number for Structure B-11-19 is WIR000147330.

Presently, the state has an exclusive mandatory use contract with a private waste management contractor to transport and dispose of hazardous waste.

The state's waste management contractor shall furnish and deliver appropriate hazardous waste containers and site-specific labels to each bridge site. The provided containers shall be placed at pre-selected drop-off and pick-up points at each bridge site, and these locations shall be determined at the preconstruction conference. The custody of the containers and labels shall be the responsibility of the painting contractor while they are at the job site.

Report all reportable spills and discharges in accordance to the contingency plan.

Labels are site-specific. Check the labels to ensure that the project ID, structure number, and EPA ID match the structure generating the waste. Apply a label to each drum when it is opened for the first time. Fill in the date on the label the first day material is accumulated in the drum. The following page is an example of a properly filled-in label.

During paint removal operations, continuously monitor and notify the project inspector of the status of waste generation and quantity stored so that timely disposal can be arranged. 517-055 (20100709)

24. Portable Decontamination Facility, Item 517.6001.S.

A Description

This special provision describes furnishing and maintaining weekly or more often if needed, a single unit portable decontamination facility as hereinafter provided.

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B Materials

Supply adequate heating equipment with the necessary fuel to maintain a minimum temperature of 68° F in the facility.

The portable decontamination facility shall consist of a separate "Dirty Room", "Shower Room" and "Clean Room". The facility shall be constructed so as to permit use by either sex. The facility shall have adequate ventilation.

The "Dirty Room" shall have appropriately marked containers for disposable garments, clothing that requires laundering, worker shoes, and any other related equipment. Each container shall be lined with poly bags for transporting clothing, or for disposal. Benches shall be provided for personnel.

The "Shower Room" shall include self-contained individual showering stalls that are stable and well secured to the facility. Provide showers with a continuous supply of potable hot and cold water. The wastewater must be retained for filtration, treatment, and/or for proper disposal.

The "Clean Room" shall be equipped with secure storage facilities for street clothes and separate storage facilities for protective clothing. The lockers shall be sized to store clothing, valuables and other personal belongings for each worker. Benches shall be provided for personnel.

Supply a separate hand wash facility, either attached to the decontamination facility or outside the containment.

C Construction

Properly contain, store, and dispose of the wastewater.

D Measurement

The department will measure Portable Decontamination Facility by the unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.6001.S Portable Decontamination Facility Each

Payment is full compensation for furnishing and maintaining a portable decontamination facility.

517-060 (20050502)

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25. Negative Pressure Containment and Collection of Waste Materials, Structure B-11-19, Item 517.4500.S.01.

A Description

This special provision describes providing a dust collector to maintain a negative air pressure in the enclosure; furnishing and erecting enclosures as required to contain, collect and store waste material resulting from the preparation of steel surfaces for painting, and repainting, including collection of such waste material, and the labeling and storage of waste material in approved hazardous waste containers, all as hereinafter provided.

B (Vacant)

C Construction

Erect an enclosure to completely enclose (surround) the blasting operations. The ground, slope paving, or roadway cannot be used as the bottom of the enclosure. So that there are no visible emissions to the air or ground or water, design, erect, operate, maintain and disassemble the enclosures in such a manner to effectively contain and collect dust and waste materials resulting from surface preparation and paint over spray. Where bulkheads are required, construct them of plywood and properly seal them. Suspend all enclosures over water from the structure or as approved by the engineer.

Construct the enclosure of flexible materials such as tarpaulins or of rigid materials such as covered plywood, or of a combination of flexible and rigid materials. Systems manufactured and provided by Eagle Industries, Detroit Tarps, or equal, are preferred. The tarpaulins shall be lined, either as part of the tarp system or have a separate plastic lining. Maintain all materials free of tears, cuts or holes. The vertical sides of the enclosure shall extend from the bottom of the deck down to the level of the work platform or barge where used for structures over water, and shall be fastened securely to those levels to prevent the wind from lifting them. Bulkheads are required between beams to enclose the blasting area as approved by the engineer. Where bulkheads are required, construct them of plywood and properly seal them. To prevent spent materials and paint over spray from escaping the enclosed area, overlap and fasten together all seams. Place groundcovers under all equipment prior to operations or as approved by the engineer.

To allow proper cleaning, inspection of structures or equipment, and painting, provide safe adequate artificial lighting in areas where natural light is inadequate.

Provide a dust collector so that there are no visible emissions outside of the enclosure and so that a negative air pressure inside the enclosure is maintained. The dust collector shall be sized to maintain the minimum air flow based on the cross-sectional area of the enclosure.

A combination of positive air input and negative air pressure may be needed to maintain the minimum airflow within the enclosure.

Filter all air exhausted from the enclosure to create a negative pressure within the enclosure so as to remove all hazardous and other particulate matter.

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As a safety factor for structures over water, provide for scum control. Effectively contain the scum that forms on the water and does not sink in place from moving upstream or downstream by the use of floating boom devices.

If in the use of floating boom devices the scum tends to collect at the devices, contain, collect, store the scum, and do not allow it to travel upstream or downstream beyond the devices. Remove the scum at least once a day or more often if needed.

Collect and store at the bridge site for disposal all waste material or scum collected by this operation, or any that may have fallen onto the ground tarps. Collect and store all waste material and scum at the end of each workday or more often if needed. Storage shall be in provided hazardous waste containers. Label each container as it is filled, using the labels provided by the Hazardous Waste Disposal contractor. Check the label and ensure that the project ID, bridge number and EPA ID match the structure. Fill in the generation date when the first material is placed in the container. Secure all containers at the end of each workday. Keep the containers covered at all times except to add or remove waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain, or exposed to standing water.

In a separate operation, recover the recyclable abrasive for future application, and collect the paint and/or corrosion particles for disposal. Sand is not an acceptable abrasive.

D Measurement

The department will measure Negative Pressure Containment and Collection of Waste Materials (Structure) as a single complete unit of work for each structure designated in the contract, completed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.4500.S.01 Negative Pressure Containment and Collection of Waste Materials Structure B-11-19

Payment is full compensation for designing, erecting, operating, maintaining, and disassembling the containment devices; providing negative pressure exhaust ventilation; collecting, labeling, and for storing spent materials in provided hazardous waste containers. 517-065 (20101008)

26. Concrete Staining Structure B-11-19, Item 517.1010.S.01.

A Description

Furnish and apply a two coat concrete stain to the outside concrete surfaces of the structure parapets, as detailed in the plans and as hereinafter provided.

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B Materials

B.1 Mortar

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement: Tri-Mix by TK Products

Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied in accordance to manufacturer's recommendations:

Acrylic Bonding Admixture: TK-225 by TK Products

Achro 60 by Thoro Products Achro Set by Master Builders

B.2 Concrete Stain

Use concrete stain manufactured for use on exterior concrete surfaces, consisting of a base coat and a pigmented sealer finish coat. Use the following products, or equal as approved by the department, as part of the two coat finish system:

Finish Color: Federal Color ID #30475.

Tri-Sheen Concrete Surfacer, Smooth by TK Products
Tri-Sheen Acrylic by TK Products
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
Safe-Cure and Seal EPX by Chem Masters
H + C Shield Plus by Sherwin-Williams

C Construction

C.1 General

Furnish, prepare, apply, cure, and store all materials in accordance to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

C.2 Preparation of Concrete Surfaces

Provide a sack rubbed finish in accordance to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an

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acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

C.3 Staining Concrete Surfaces

Apply the concrete stain in accordance to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall be as given on the plan. Tint the base coat to match the finish coat; the two coats shall be compatible with each other.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

C.4 Test Areas

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the department approves the test panels.

C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces in accordance to the plan.

D Measurement

The department will measure Concrete Staining (Structure) in area by the square foot of surface, acceptably prepared and stained.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.1010.S.01 Concrete Staining Structure B-11-19 SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels. 517-110 (20100709)

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27. Anchor Assemblies Light Poles on Structures, Item 657.6005.S.

A Description

This special provision describes furnishing and installing anchor bolt assemblies for light poles as shown on the plans, and as hereinafter provided.

B Materials

Furnish anchors of the size and spacing as given on the plans, and that conform to ASTM A449 or AASHTO M314 GR 55. The upper 8 inches of the bolts, nuts, and washers shall be hot-dipped galvanized in accordance to ASTM A153, Class C. Provide enlarged threads on nuts for proper fit after galvanizing.

C Construction

Provide two nuts and two washers per anchor bolt, and install per light standard manufacturer's recommendations.

D Measurement

The department will measure Anchor Assemblies Light Poles on Structures as a unit for each individual anchor bolt assembly, 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 657.6005.S Anchor Assemblies Light Poles on Structures Each

Payment is full compensation for furnishing and installing the anchorages. 657-060 (20100709)

28. Cleaning and Painting Bearings, Item SPV.0060.01.

A Description

This special provision describes cleaning and painting the existing steel bearings on structures as shown on the plans, as directed by the engineer, and in accordance to standard spec 517.

B Materials

Furnish a complete epoxy coating system from the department's approved product list. Use the same coating system for all repairs due to handling, shipping and erecting, and for all other uncoated areas. The color of epoxy shall be white and the urethane coating material shall match the color number shown on the plans in accordance to Federal Standard Number 595B, as printed in 1989. Supply the engineer with the product data sheets before any coating is applied. The product data sheets shall indicate the mixing and thinning directions, the minimum drying time for shop or field applied coats, and the recommended procedures for coating galvanized bolts, nuts, and washers.

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C Construction

C.1 Surface Preparation

Clean areas of loose paint and rust by wire brushing, grinding, or other mechanical means. Sound paint does not need to be removed.

After clean up and storage of waste material, blast cleaning is allowed for only those areas where paint has been removed. Shield adjacent painted areas during blast cleaning operations. The blasting sand does not have to be collected.

Furnish adequate containment methods as required to contain and collect waste material resulting from the preparation of painted steel surfaces for painting. All cleanup activities should minimize dust. Store waste materials in hazardous waste containers provided by the department.

C.2 Coating Application

Apply paint in a neat, workmanlike manner, and in accordance to the manufacturer's instructions and recommendations. Paint application shall be brushed on.

D Measurement

The department will measure Cleaning and Painting Bearings as each individual bearing, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.01Cleaning and Painting BearingsEach

Payment is full compensation for preparing and cleaning the designated bearings; furnishing and applying the paint; cleaning up, and containing and collecting all waste materials.

29. Lighting Control Cabinet, Item SPV.0060.02.

A Description

The work under this item shall consist of furnishing and installing 100 Ampere 120/240 VAC lighting control cabinets, as shown in the plans. To the extent possible, provide components from the same manufacturer. Conform to standard spec 651.2(4) regarding listed components. Electrical service and concrete control cabinet base will be measured separately.

B Materials

Furnish, deliver and install Lighting Control Cabinet from the department Qualified Product List to the project site.

C (Vacant)

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D Measurement

The department will measure Lighting Control Cabinet as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.02Lighting Control CabinetEach

Payment is full compensation for furnishing and installing the lighting control cabinet.

30. Boat Traffic Control, Item SPV.0105.03.

A Description

This special provision describes placement of navigation buoys in the Wisconsin River to accommodate staged construction on Structure B-11-19 while maintaining boat traffic.

B Materials

Furnish navigation buoys at locations shown in the plan details for boat traffic control. Buoys shall conform to the inland Waterway Marking Regulations as specified by the Wisconsin Department of Natural Resources.

Buoys shall be cylindrical, a minimum 36 inches above the water line and a minimum 7 inches in diameter.

Lettering on buoys shall be black.

No wake buoys shall be white with an 11-inch diameter orange circle.

No boats buoys shall be white with an 11-inch wide by 14-inch tall orange diamond/ cross inside.

Buoys shall have warning lights and anchors capable of keeping the buoy in place.

C Construction

Place buoys at locations specified in the plans. Inspect the buoys daily to ensure that they are in acceptable condition and location. Replace any buoys which are damaged or missing.

D Measurement

The department will measure Boat Traffic Control as a single complete lump sum unit of work, completed in accordance to the contract and accepted.

E Payment

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

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UNIT LS

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

31. Railing Steel Type C3 Galvanized Pedestrian B-11-19, Item SPV.0105.01.

A Description

This special provision describes fabricating, galvanizing, painting and installing railing in accordance to standard specs 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

B Materials

All materials for railing shall be new stock, free from defects impairing strength, durability and appearance. Railing assemblies shall be galvanized and receive a two-coat paint system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

B.1 Coating System

B.1.1 Galvanizing

After fabrication, blast clean steel railing assemblies per SSPC-SP6 and galvanize according to ASTM A123. Vent holes shall be drilled in members as required to facilitate galvanizing and drainage. Location and size of vent holes are to be shown on the shop drawings. All burrs at component edges, corners and at holes shall be removed and sharp edges chamfered before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed in accordance to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when painted, will produce unacceptable aesthetic and/or visual qualities, will not be permitted.

B.1.2 Two-Coat Paint System

After galvanizing, paint all exterior surfaces of steel railing assemblies and inside of rail elements at field erection and expansion joints as hereinafter provided. All galvanized surfaces to be painted shall be cleaned per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface shall then be brush blast cleaned per SSPC-SP16 to create a slight angular surface profile per manufacturer's recommendation for adhesion of the tie coat. Blasting shall not fracture the galvanized finish or remove any dry film thickness. After cleaning, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use a preapproved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats shall be of contrasting colors, and come from the same manufacturer.

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Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applier. The review shall include a visit to the facility performing the work if requested by the paint manufacturer. Provide written confirmation, from the paint manufacturer to the engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of the engineer. Manufacturer	Coat	Products	Dry Film Minimum Thickness (mils)	Min. Time ¹ Between Coats (hours)
Sherwin Williams 1051 Perimeter Drive	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
Suite 710 Schaumburg, IL 60173 (847) 330-1562	Тор	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carboline 350 Hanley	Tie	Rustbond Penetrating Sealer FC	1	36
Industrial St. Louis, MO 63144 (314) .644-1000	Tie Tie	Carboguard 60 Carboguard 635	4.0 to 6.0 4.0 to 6.0	10 1
(511).011.1000	Тор	Carbothane 133 LH(satin)	4	NA
Wasser Corporation 4118 B Place NW	Tie	MC-Ferrox B 100	3.0 to 5.0	8
Suite B Auburn, WA 98001 (253) 850-2967	Тор	MC-Luster 100	2.0 to 4.0	NA
PPG Protective and Marine Coatings	Tie	Amercoat 399	3.0 to 5.0	3
P.O. Box 192610 Little Rock, AR 72219-2610 (414) 339-5084	Тор	Amercoat 450H	2.0 to 4.0	NA

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¹ Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

B.2 Shop Drawings

Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the paint manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

C Construction

C.1 Delivery, Storage and Handling

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If coating is damaged, contractor shall repair or replace railing assemblies to the approval of the engineer at no additional cost to the owner. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted without the approval of the engineer.

C.2 Touch-up and Repair

For minor damage caused by shipping, handling or installation to coated surfaces, touchup the surface in conformance with the manufacturer's recommendations. If damage is excessive, the railing assembly shall be replaced at no additional cost to the owner. The contractor shall provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

D Measurement

The department will measure Railing Steel Type C3 Galvanized Pedestrian B-11-19 as a single lump sum unit for each structure where railing is acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.01 Railing Steel Type C3 Galvanized Pedestrian B-11-19 LS

Payment is full compensation for fabricating, galvanizing, painting, transporting, and installing the railing, including any touch-up and repairs.

32. Remove and Reinstall Light Pole, Item SPV.0105.02.

A Description

This special provision describes the removing, salvaging and reinstalling of a light pole and attachments located in the intersection of USH 12 and STH 188.

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B Materials

Existing light pole and luminaries will be removed, salvaged, and reinstalled at the location shown in the plans. Items required to connect the relocated light pole to the existing lighting circuit will be paid for using the appropriate bid item.

C Construction

Carefully remove the existing poles and attachments to prevent any damage. Install the salvaged pole at the new location.

D Measurement

The department will measure Remove and Reinstall Light Pole as a single complete lump sum unit of work, completed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.02Remove and Reinstall Light PoleLS

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

33. Utility Adjustment Merrimac Communications, Item SPV.0105.04; Utility Adjustment Charter Communications, Item SPV.0105.05; Utility Adjustment Frontier North, Item SPV.0105.06.

A Description

This special provision describes the labor associated with the disconnection, temporary support, and reconnection of three utility lines which are suspended from the cross bracing on the girders of Structure B-11-19.

B (Vacant)

C Construction

Detach, temporarily support, and reattach utilities during the girder painting operations. Discuss the utility connection work plan, which is provided by the utility, at a meeting to be held prior to beginning work on the structure. The utilities will be responsible for the replacement of any damaged hardware, and will perform inspection and approval of the work.

D Measurement

The department will measure Utility Adjustment (Utility) as a single lump sum unit of work, acceptably completed.

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E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Utility Adjustment Merrimac Communications	LS
SPV.0105.05	Utility Adjustment Charter Communications	LS
SPV.0105.06	Utility Adjustment Frontier North	LS

Payment is full compensation for the detachment, temporary support, and reattachment of facilities attached to the structure.

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ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Release of Routine Retainage

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

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

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

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

ADDITIONAL SPECIAL PROVISION 6

ASP 6 - Modifications to the standard specifications

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

101.3 Definitions

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

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

105.11.1 Partial Acceptance

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

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

105.11.2 Final Acceptance

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

105.11.2 Project Acceptance

105.11.2.1 Inspection

105.11.2.1.1 General

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

105.11.2.1.2 Unacceptable or Not Complete

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

105.11.2.1.3 Substantially Complete

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

105.11.2.1.4 Complete

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

105.11.2.2 Conditional Final Acceptance

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

105.11.2.3 Final Acceptance

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

105.13.3 Submission of Claim

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

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

107.17.3 Railroad Insurance Requirements

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

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

107.26 Standard Insurance Requirements

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

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

TABLE 107-1 REQUIRED INSURANCE AND MINIMUM COVERAGES

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

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

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

108.14 Terminating the Contractor's Responsibility

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

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

109.2 Scope of Payment

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

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

109.6.1 General

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

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

109.7 Acceptance and Final Payment

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

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

450.3.3 Maintaining the Work

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

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

455.3.2.5 Maintaining Tack Coat

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

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

460.2.2.3 Aggregate Gradation Master Range

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

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

TABLE 400.4	400DE04TE		DANIOE AND VALA DECLUDERAENTO	
TABLE 460-1	$\Delta(i(iRF(i\Delta)F)$	GRADATION MASTER	RANGE AND VMA REQUIREMENTS	

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

^{[1] 14.5} for E-3 mixes.

460.2.7 HMA Mixture Design

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

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

^{[2] 15.5} for E-3 mixes.

TABLE 460-2 MIXTURE REQUIREMENTS

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

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

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

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

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

 $^{^{[5]}}$ For 25.0mm nominal maximum size mixes, the specified VFB lower limit is 67%.

460.2.8.2.1.5 Control Limits

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

(1) Conform to the following control limits for the JMF and warning limits based on a running average of the last 4 data points:

ITEM	JMF LIMITS	WARNING LIMITS	
Percent passing given sieve:			
37.5-mm	+/- 6.0	+/- 4.5	
25.0-mm	+/- 6.0	+/- 4.5	
19.0-mm	+/- 5.5	+/- 4.0	
12.5-mm	+/- 5.5	+/- 4.0	
9.5-mm	+/- 5.5	+/- 4.0	
2.36-mm	+/- 5.0	+/- 4.0	
75-µm	+/- 2.0	+/- 1.5	
Asphaltic content in percent	- 0.3	- 0.2	
Air voids in percent	+/- 1.3	+/- 1.0	
VMA in percent ^[1]	- 0.5	- 0.2	

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

460.2.8.2.1.6 Job Mix Formula Adjustment

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

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

520.3.8 Protection After Laying

Delete the entire subsection.

614.2.1 General

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

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

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

614.2.3 Steel Rail and Fittings

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

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

614.2.7 Crash Cushions

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

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

616.3.1 General

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

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

618.3.3 Restoration

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

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

627.3.1 General

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

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

637.3.2.1 General

Delete paragraph three effective with the December 2013 letting.

670.3.4.2 Post-Construction Work

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

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

Errata

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

415.3.14 Protecting Concrete

Correct errata by referencing the opening to service specification.

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

501.2.9 Concrete Curing Materials

Correct errata by changing AASHTO M171 to ASTM C171.

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

607.2 Materials

Correct errata by changing AASHTO M198 to ASTM C990.

637.2.1.3 Sheet Aluminum

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

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

637.3.3.4 Performance

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

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

646.3.3.4 Proving Period

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

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

ADDITIONAL SPECIAL PROVISION 7

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

ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal

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

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DECEMBER 2013

BUY AMERICA PROVISION

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

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

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

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

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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 SAUK COUNTY

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

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

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

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

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

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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.58	19.20	54.78
Carpenter	30.16	15.31	45.47
Cement Finisher	32.09	16.13	48.22
Future Increase(s): Add \$1.87 on 6/1/13; Add \$1.87 on 6/1/14; Add \$ 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 requiantificial illumination with traffic control and the work is completed after	ate on Sunday, Nev Day. 2) Add \$1.40/l res that work be pe	w Year's Day, Me hr when the Wisc erformed at night	morial consin
Electrician	32.55	19.31	51.86
Fence Erector	28.00	4.50	32.50
Ironworker	30.90	19.11	50.01
Line Constructor (Electrical)	31.29	15.34	46.63
Painter	26.65	13.10	39.75
Pavement Marking Operator	26.65	15.63	42.28
Piledriver	30.66	15.31	45.97
Roofer or Waterproofer	18.75	4.50	23.25
Teledata Technician or Installer	18.00	6.53	24.53
Tuckpointer, Caulker or Cleaner	32.01	16.85	48.86
Underwater Diver (Except on Great Lakes)	37.45	19.45	56.90
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ON	LY 33.35	14.21	47.56
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	/35.50	15.09	50.59
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.94	13.57	39.51
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.08	12.96	37.04
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.90	33.65

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TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	<u></u> \$	 \$	\$
TRUCK DRIVERS			
Single Axle or Two Axle	33.22	18.90	52.12
Three or More Axle Future Increase(s): Add \$1.85/hr on 6/1/2013. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rail Independence Day, Labor Day, Thanksgiving Day & Christmas Day		17.13 ar's Day, Memor	40.44 ial Day,
Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basi Day, Independence Day, Labor Day, Thanksgiving Day & Christma See DOT's website for details about the applicability of this night white://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index.	27.77 ic rate on Sunday, Nev as Day. 2) Add \$1.50/ work premium at:		
Pavement Marking Vehicle	23.84	14.91	38.75
Shadow or Pilot Vehicle	33.22	18.90	52.12
Truck Mechanic	22.50	16.19	38.69
LABORERS			
General Laborer Future Increase(s): Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2013; Add \$1.6	r tamper operator (meer; Add \$.15/hr for bitue off man; Add \$.20/hgrade specialist; Add \$ay, New Year's Day, Nay. 2) Add \$1.25/hr for sures, when work und	minous worker (r for blaster and 5.45/hr for pipela lemorial Day, work on projects ler artificial illumi	yer. S ination
Asbestos Abatement Worker	27.56	12.55	40.11
Landscaper Future Increase(s): Add \$1.70/hr on 6/1/13; Add \$1.60/hr on 6/1/1 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basi Day, Independence Day, Labor Day, Thanksgiving Day & Christminvolving temporary traffic control setup, for lane and shoulder clo conditions is necessary as required by the project provisions (inclusive time period).	c rate on Sunday, Nev as Day. 2) Add \$1.25/ sures, when work und	hr for work on pro ler artificial illumi	ojects ination
Flagperson or Traffic Control Person Future Increase(s): Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basi Day, Independence Day, Labor Day, Thanksgiving Day & Christman Department of Transportation or responsible governing agency re artificial illumination with traffic control and the work is completed	c rate on Sunday, Nevas Day. 2) Add \$1.25/ quires that work be pe	hr when the Wisc erformed at night	consin
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.81	12.22	30.03
Railroad Track Laborer	20.25	6.81	27.06

SAUK COUNTY Page 3

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
HEAVY EQUIPMENT OPERATORS	\$	\$	\$
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower Derrick, With or Without Attachments, With a Lifting Capacity of Over 10 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 L Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT's website for details about the applicability of this night work http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shi	r or 0 .bs., ate on Sunday, New Day. 2) Add \$1.50/r k premium at:		
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. of 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 Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic raday, Independence Day, Labor Day, Thanksgiving Day & Christmas Esee DOT's website for details about the applicability of this night work http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shi	er; t te on Sunday, New Day. 2) Add \$1.50/h k premium at:		
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 & Gutt 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; Grump; Hydro-Blaster (10,000 PSI or Over); Loading 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 F Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor o Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Wind A- Frames. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.	34.22 eed; Tub out); Rig;	19.90	54.12

BAS	OURLY SIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL \$
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2 See DOT's website for details about the applicability of this night work prenhttp://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.) Add \$1.50/hr		
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2 See DOT's website for details about the applicability of this night work prenhttp://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm.) Add \$1.50/hr		
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2 See DOT's website for details about the applicability of this night work premetts:) Add \$1.50/hr		
http://roadwaystandards.dot.wi.gov/hcci/labor- wages- eeo/ index. shtm. Fiber Optic Cable Equipment.	25.74	15.85	41.59

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REVISED:

SCHEDULE OF ITEMS

LINE	ITEM	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	DOLLARS CTS	
SECTIO	ON 0001 CONTRACT ITEMS				
0010	203.0210.S ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. B-11-19	!	 LUMP 		
0020	203.0700.S REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM (STATION) 01. 24+54.50	 LUMP 	 LUMP 		
	204.0100 REMOVING PAVEMENT	 875.000 SY		 	
	204.0150 REMOVING CURB & GUTTER	 645.000 LF		 	
	204.0155 REMOVING CONCRETE SIDEWALK	72.000		 	
	204.0165 REMOVING GUARDRAIL	 712.000 LF		 	
	204.0195 REMOVING CONCRETE BASES	 2.000 EACH		 	
0080	204.0220 REMOVING INLETS	 1.000 EACH		 .	
	205.0100 EXCAVATION COMMON	 893.000 CY	 	 	

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SCHEDULE OF ITEMS

REVISED:

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	1	 DOLLARS CTS
0100	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-11-19	 LUMP 	 LUMP 	
	210.0100 BACKFILL STRUCTURE	 223.000 CY		
0120	213.0100 FINISHING ROADWAY (PROJECT) 01. 5271-01-71	 1.000 EACH	 	
	305.0110 BASE AGGREGATE DENSE 3/4-INCH 	 20.000 TON		
	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	 1,200.000 TON		 .
	415.0080 CONCRETE PAVEMENT 8-INCH 	 435.000 SY		
	415.0090 CONCRETE PAVEMENT 9-INCH 	 235.000 SY		
	415.0410 CONCRETE PAVEMENT APPROACH SLAB	 144.000 SY	 	 .
	416.0610 DRILLED TIE BARS 	236.000 EACH		
	416.0620 DRILLED DOWEL BARS	 120.000 EACH		
0200	416.1715 CONCRETE PAVEMENT REPAIR SHES 	 60.000 SY	 	

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CONTRACT: 20140408034

PROJECT(S): FEDERAL ID(S): 5271-01-71 N/A

LINE	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS		S DOLLARS CTS
0210	455.0605 TACK COAT 	 58.000 GAL	 	
	465.0105 ASPHALTIC SURFACE 	 455.000 TON	 	
	502.0100 CONCRETE MASONRY BRIDGES 	 1,544.000 CY	 .	
0240	502.3100 EXPANSION DEVICE (STRUCTURE) 01. B-11-19	 LUMP 	 LUMP 	
0250	502.3110.S EXPANSION DEVICE MODULAR (STRUCTURE) 01. B-11-19		 LUMP 	
	502.3200 PROTECTIVE SURFACE TREATMENT 	 622.000 SY	 	.
	502.5010 MASONRY ANCHORS TYPE L NO. 6 BARS 	 384.000 EACH	 .	.
0280	505.0605 BAR STEEL REINFORCEMENT HS COATED BRIDGES	 373,480.000 LB	 	
	509.5100.S POLYMER OVERLAY 	 3,584.000 SY	 .	 .
	514.0460 FLOOR DRAINS TYPE H 	 4.000 EACH		
	514.2625 DOWNSPOUT 6-INCH 	 32.000 LF	 .	

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LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0320	516.0500 RUBBERIZED MEMBRANE WATERPROOFING 	 39.000 SY		
0330	517.0900.S PREPARATION AND COATING OF TOP FLANGES (STRUCTURE) 01. B-11-19	 LUMP 	 LUMP 	
	517.1010.S CONCRETE STAINING (STRUCTURE) 01. B-11-19	 11,741.000 SF) .	 .
0350	517.1800.S STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 01. B-11-19	•	 LUMP 	
0360	517.4500.S NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 01. B-11-19	İ	 LUMP 	
0370	517.6001.S PORTABLE DECONTAMINATION FACILITY 	 1.000 EACH	 	 .
	520.8000 CONCRETE COLLARS FOR PIPE 	 1.000 EACH		 .
	601.0105 CONCRETE CURB TYPE A 	 80.000 LF)	 .
	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A 	 130.000 LF)	
0410	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	 32.000 LF	 	

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SCHEDULE OF ITEMS

CONTRACT:

N/A	
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LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0420	601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J	 243.000 LF	 	
0430	601.0555 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A	 85.000 LF	 	
0440	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	 300.000 LF	 	
	602.0410 CONCRETE SIDEWALK 5-INCH	 764.000 SF		
0460	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	 16.000 SF	 	
	606.0400 RIPRAP EXTRA-HEAVY	 461.000 CY	 	
0480	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	 8.000 LF	 	
	611.0624 INLET COVERS TYPE H	 3.000 EACH		
	611.1003 CATCH BASINS 3-FT DIAMETER	 1.000 EACH	 	
	611.1230 CATCH BASINS 2X3-FT 	 1.000 EACH	 	
	611.8105 ADJUSTING CATCH BASIN COVERS	 2.000 EACH		

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SCHEDULE OF ITEMS

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LINE NO	ITEM DESCRIPTION	APPROX.	ļ	UNIT PR	BID AM	
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS	DOLLARS	CTS
	611.9710 SALVAGED INLET COVERS 	 	 000 		 	
	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH 	 120.	 000 		 	
0550	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH 	 165.	 000 		 	
	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING	 2.	 000 		 	
	614.0150 ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	 	 000 			
0580	614.2300 MGS GUARDRAIL 3 	 625.	 000 		 	
	614.2500 MGS THRIE BEAM TRANSITION 	 126.	 000 		 	
	614.2610 MGS GUARDRAIL TERMINAL EAT 	 2. EACH	 000 		 	
0610	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 5271-01-71	 1. EACH	 000 			
0620	619.1000 MOBILIZATION 	 1.0 EACH	 000 		 	
	625.0500 SALVAGED TOPSOIL 	 430.	 000 			

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LINE	ITEM DESCRIPTION 	APPROX.	UNIT PRICE	BID AMOUNT	
NO		QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS	
0640	627.0200 MULCHING	200.000	 	 	
	628.2006 EROSION MAT URBAN CLASS I TYPE A	 430.000 SY	 	 	
	628.7005 INLET PROTECTION TYPE A 	 4.000 EACH	 	 	
	628.7010 INLET PROTECTION TYPE B 	 4.000 EACH			
0680	629.0210 FERTILIZER TYPE B 	 12.600 CWT			
	630.0120 SEEDING MIXTURE NO. 20 	 11.160 LB		 	
	630.0200 SEEDING TEMPORARY	 4.860 LB		 .	
	634.0614 POSTS WOOD 4X6-INCH X 14-FT 	 21.000 EACH	 	 	
	634.0616 POSTS WOOD 4X6-INCH X 16-FT 	 3.000 EACH			
	634.0620 POSTS WOOD 4X6-INCH X 20-FT	 2.000 EACH	 	 .	
	637.2210 SIGNS TYPE II REFLECTIVE H 	 258.000 SF			

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SCHEDULE OF ITEMS

REVISED:

LINE	ITEM	APPROX.	Į.	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS	
	638.2102 MOVING SIGNS TYPE II 	 1.000 EACH	 		
	638.2602 REMOVING SIGNS TYPE II 	33.000 EACH		 	
	638.3000 REMOVING SMALL SIGN SUPPORTS 	 17.000 EACH	 	 	
	638.4000 MOVING SMALL SIGN SUPPORTS 	 1.000 EACH		 	
	642.5001 FIELD OFFICE TYPE B 	 1.000 EACH			
0800	643.0100 TRAFFIC CONTROL (PROJECT) 01. 5271-01-71	 1.000 EACH	 		
	643.0300 TRAFFIC CONTROL DRUMS 	 268.000 DAY	 		
	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	 2,548.000 DAY		 	
	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A 	3,768.000		 	
	643.0900 TRAFFIC CONTROL SIGNS	 56.000 DAY		 	
	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I 	 4.000 EACH	 	 .	

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LINE	ITEM DESCRIPTION 	APPROX.		UNIT PRICE		BID AMOUNT	
NO		QUANTITY AND UNITS	. !	OOLLARS		DOLLARS	CTS
0860	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II 	 4.00 EACH	 00 			 	
	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 01. 5271-01-71	 1.00 EACH	 00 			 	
0880	643.3000 TRAFFIC CONTROL DETOUR SIGNS 	 19,980.00 DAY	 00 			 	·
0890	645.0120 GEOTEXTILE FABRIC TYPE HR 	 739.00 SY	00			 	•
	646.0106 PAVEMENT MARKING EPOXY 4-INCH 	 4,830.00 LF	00			 	•
0910	646.0126 PAVEMENT MARKING EPOXY 8-INCH 	 200.00 LF	 00 			 	
	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2	 3.00 EACH	 00 			 	
0930	647.0356 PAVEMENT MARKING WORDS EPOXY 	 1.00 EACH	 00 			 	
0940	647.0456 PAVEMENT MARKING CURB EPOXY 	 190.00 LF	00			 	
	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH	 70.00 LF	00			 	
	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	 10.00 EACH	 00 			 	

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SCHEDULE OF ITEMS

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT	
NO		QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CT	
0970	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	 300.000 LF		 	
0980	650.4000 CONSTRUCTION STAKING STORM SEWER	 1.000 EACH		 	
0990	650.4500 CONSTRUCTION STAKING SUBGRADE 	 615.000 LF		 	
	650.5000 CONSTRUCTION STAKING BASE	 372.000 LF	 	 	
1010	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	 388.000 LF	 	 .	
1020	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT	 243.000 LF	 	 .	
1030	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 5271-01-71	 LUMP	 LUMP 	 	
1040	650.9920 CONSTRUCTION STAKING SLOPE STAKES	 558.000 LF	 	 .	
	652.0125 CONDUIT RIGID METALLIC 2-INCH	 21.000 LF	 	 .	
1060	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	 1,597.000 LF	 	 .	
1070	653.0135 PULL BOXES STEEL 24X36-INCH	 3.000 EACH	 	 	

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SCHEDULE OF ITEMS REVISED:

CONTRACT: PROJECT(S): FEDERAL ID(S): 20140408034 5271-01-71 N/A

CONTRACTOR : LINE | ITEM DESCRIPTION NO |653.0222 JUNCTION BOXES | ______ 9.000 |EACH 1080|18X12X6-INCH 653.0905 REMOVING PULL | 1.000| |EACH | 1090 BOXES 654.0102 CONCRETE BASES 2.000 | |EACH | 1100 TYPE 2 |654.0106 CONCRETE BASES | | 2.000| |EACH | 1110 TYPE 6 |655.0615 ELECTRICAL WIRE | 1130|LIGHTING 10 AWG | | 1,650.000| |LF 655.0620 ELECTRICAL WIRE 450.000| |LF 1140 LIGHTING 8 AWG | 655.0625 ELECTRICAL WIRE | 1150 | LIGHTING 6 AWG 600.000 |LF 656.0100 ELECTRICAL |LUMP |LUMP 1160 SERVICE METER SOCKET (LOCATION) 01. SW QUADRANT WATER ST INTERSECTION 657.0310 POLES TYPE 3 10.000 EACH 1170|

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LINE NO	ITEM DESCRIPTION 	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT		
NO			DOLLARS	CTS	DOLLARS	CTS	
1180	657.6005.S ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	 EACH	9.000	 			
	659.1115 LUMINAIRES UTILITY LED A	 EACH	10.000	 	.		
1200	690.0150 SAWING ASPHALT 	 LF	274.000	 	•		
1210	690.0250 SAWING CONCRETE 	 LF	438.000	 	·		
1220	715.0502 INCENTIVE STRENGTH CONCRETE STRUCTURES	 DOL	9,264.000	 	1.00000	92	64.00
1230	SPV.0060 SPECIAL 01. CLEANING AND PAINTING BEARINGS	 EACH	30.000	 	 		
	SPV.0060 SPECIAL 02. LIGHTING CONTROL CABINET	 EACH	1.000	 	.		
	SPV.0105 SPECIAL 01. RAILING TYPE C3 GALVANIZED PED B-11-19	LUMP		 LUMP 			
	SPV.0105 SPECIAL 02. REMOVE AND REINSTALL LIGHT POLE	LUMP		 LUMP 			
1270	SPV.0105 SPECIAL 03. BOAT TRAFFIC CONTROL	 LUMP 		 LUMP 			
	SPV.0105 SPECIAL 04. UTILITY ADJUSTMENT	 LUMP		 LUMP 			

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SCHEDULE OF ITEMS REVISED:

CONTRACT:

PROJECT(S): FEDERAL ID(S):

20140408034	5271-01-71	N/A
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LINE NO	ITEM DESCRIPTION 	APPROX. QUANTITY AND UNITS	UNIT PRICE	BID AMOUNT	
			DOLLARS CTS	DOLLARS CT	
 1290	SPV.0105 SPECIAL 05. UTILITY ADJUSTMENT CHARTER COMMUNICATION	 LUMP 	 LUMP	 	
 1300 	SPV.0105 SPECIAL 06. UTILITY ADJUSTMENTS FRONTIER NORTH	 LUMP	 LUMP		
	SECTION 0001 TOTAL				
 	TOTAL BID		 		

PLEASE ATTACH SCHEDULE OF ITEMS HERE