

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

Proposal Number:

**21**

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Sheboygan	4996-01-48	WISC 2013 221	U P Rail Corridor Pennsylvania Avenue - Martin Avenue	Off System
Sheboygan	4996-17-71	WISC 2013 223	Rails to Trails Conversion U P Rail Corridor Pennsylvania Avenue - Martin Avenue	Non-Highway

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

Proposal Guaranty Required, \$ 75,000.00 Payable to: Wisconsin Department of Transportation	<b>Attach Proposal Guaranty on back of this PAGE.</b>
Bid Submittal Due  Date: April 9, 2013 Time (Local Time): 9:00 AM	
Contract Completion Time  Seventy Five (75) Working Days	
Assigned Disadvantaged Business Enterprise Goal	
<b>6 %</b>	
Firm Name, Address, City, State, Zip Code  <b>SAMPLE</b> <b>NOT FOR BIDDING PURPOSES</b>  This contract is exempt from federal oversight.	

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

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

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

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)\_\_\_\_\_  
(Print or Type Name, Notary Public, State Wisconsin)\_\_\_\_\_  
(Date Commission Expires)

Notary Seal

\_\_\_\_\_  
(Bidder Signature)\_\_\_\_\_  
(Print or Type Bidder Name)\_\_\_\_\_  
(Bidder Title)**For Department Use Only**

Type of Work Grading, storm sewer, base aggregate, curb and gutter, HMA pavement, concrete sidewalk, signing, street lighting, pavement marking, structure removal, and Structure B-59-318.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

## BID PREPARATION

### **Preparing the Proposal Schedule of Items**

#### **A General**

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

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

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

#### **B Submitting Electronic Bids**

##### **B.1 On the Internet**

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

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

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

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

**Bidder Name**

**BN00**

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

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

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

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

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





# PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

## PRINCIPAL

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

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

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

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

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

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

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

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

## NOTARY FOR PRINCIPAL

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

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

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

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

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

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

**Notary Seal**

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

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

## NOTARY FOR SURETY

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

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

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

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

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

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

**Notary Seal**

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



# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

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

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



**FEBRUARY 1999**

**LIST OF SUBCONTRACTORS**

Section 66.29(7), Wisconsin Statutes, provides that a bidder, as a part of his proposal, shall submit a list of the subcontractors he proposes to contract with and the class of work to be performed by each, provided that to qualify for such listing each subcontractor must first submit his bid in writing to the general contractor at least 48 hours prior to the time of bid closing. It further provides that a proposal of a bidder shall not be invalid if any subcontractor, and the class of work to be performed by such subcontractor, has been omitted from a proposal.

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.

<b>Name of Subcontractor</b>	<b>Class of Work</b>	<b>Estimated Value</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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



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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 4996-01-48 UP Rail Corridor, Pennsylvania Avenue – Martin Avenue, Off System, and Project 4996-17-71 Rails to Trails Conversion of UP Rail Corridor, Pennsylvania Avenue – Martin Avenue, City of Sheboygan, Non Highway, located in Sheboygan 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, 2013 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 (20120615)

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

The work under this contract shall consist of structure removal, grading, base aggregate, storm sewer, asphalt and concrete pavement, curb and gutter, Structure B-59-318, street lighting, traffic signals, pavement marking, signing 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.

Center Avenue and Wisconsin Avenue shall not be closed at the same time. St. Clair Avenue and Michigan Avenue shall not be closed at the same time. Saemann Avenue and Geele Avenue shall not be closed at the same time. Loop detector installation on Superior Avenue shall be performed only between 7:00 PM and 6:00 AM on Monday night through Thursday night. Each loop detector shall be installed in a single night including pavement removal and placement of special high-early strength concrete pavement.

### **4. Traffic.**

All streets crossing the U.P. Rail Corridor shall remain open to traffic at all times except as follows. Closures shall be limited to a maximum of 20 feet beyond the construction limits unless shown otherwise on the traffic control plans. Access for local property owners shall be maintained at all times.

The westbound parking lane of Pennsylvania Avenue may be closed. Center Avenue shall be closed. Wisconsin Avenue shall be closed. The southbound parking lane of Water Street and North 13<sup>th</sup> Street may be closed. Erie Avenue shall remain open to traffic with one lane in each direction using the inside lanes. St. Clair Avenue shall be closed. Michigan Avenue shall be closed.

#### **14<sup>th</sup> Street/Calumet Drive/Superior Avenue Stage 1**

The outer through lanes on 14<sup>th</sup> Street and Calumet Drive shall be closed. One through lane in both the northbound and southbound directions and the northbound and southbound left turn lanes shall remain open to traffic. The westbound right turn lane on Superior Avenue shall be closed. One through lane in both the eastbound and westbound directions and the westbound left turn lane shall remain open to traffic except as required for loop detector installation. Loop detector installation on the westbound lanes of Superior Avenue shall be performed by closing the left turn lane and through lane at separate times while maintaining one lane open for westbound traffic. Loop detector installation on Superior Avenue shall be performed at night as described in the article "Prosecution and Progress."

#### **14<sup>th</sup> Street/Calumet Drive/Superior Avenue Stage 2**

The inner through lanes on 14<sup>th</sup> Street and Calumet Drive shall be closed. One through lane in both the northbound and southbound directions and the northbound left turn lane shall remain open to traffic. All lanes on Superior Avenue shall remain open to traffic.

Saemann Avenue shall be closed between Calumet Drive and North 15<sup>th</sup> Street. The eastbound Saemann Avenue to southbound North 15<sup>th</sup> Street right turn shall remain open to traffic at all times.

#### **15<sup>th</sup> Street/Calumet Drive Stage 1A**

The outer through lanes on Calumet Drive shall be closed. One through lane in both the northbound and southbound directions and the southbound left turn lane on Calumet Drive shall remain open to traffic. The outer southbound through lane and southbound right turn lane on 15<sup>th</sup> Street shall be closed. The northbound through lane and the southbound through/left turn lane on 15<sup>th</sup> Street shall remain open to traffic.

#### **15<sup>th</sup> Street/Calumet Drive Stage 1B**

The outer through lanes on Calumet Drive shall be closed. One through lane in both the northbound and southbound directions and the southbound left turn on Calumet Drive lane shall remain open to traffic. The inside southbound through/left turn lane on 15<sup>th</sup> Street shall be closed. The northbound through lane and the southbound through/left turn lane on 15<sup>th</sup> Street shall remain open to traffic.

#### **15<sup>th</sup> Street/Calumet Drive Stage 2**

The inside through lanes on Calumet Drive shall be closed. One through lane in both the northbound and southbound directions and the northbound and southbound left turn lanes on Calumet Drive shall remain open to traffic. All lanes on 15<sup>th</sup> Street shall remain open to traffic.

Geele Avenue shall be closed. The eastbound parking lane of Martin Avenue may be closed.

## **5. Utilities.**

This contract does not come under the provision of Administrative Rule Trans 220. 107-065 (20080501)

**AT&T** has overhead communications lines that cross the project at New York Avenue, 200' north of Erie Avenue, 200' north of Michigan Avenue, and Geele Avenue. AT&T has two buried ducts that cross the project at Erie Avenue and a buried copper and buried fiber optic at Martin Avenue. No relocations are anticipated.

**Alliant Energy** has overhead electric lines crossing the project at Center Avenue, New York Avenue, Commerce Street, Erie Avenue, at the alleys between Erie Avenue and St. Clair Avenue, between St. Clair Avenue and Michigan Avenue, between Michigan Avenue and Huron Avenue between Huron Avenue and Superior Avenue, and at Geele Avenue.

**Charter Communications** has overhead cable television lines on the Alliant Energy poles. No relocations are anticipated.

**Mayline Company** has a buried fiber optic data line that crosses the project at Station 10+33 and between Station 13+00 and Station 13+70. No relocations are anticipated.

**NET-LEC** has a buried fiber optic data line that crosses the project at Station 89+90. This utility is approximately 5.5 feet deep. No relocations are anticipated.

**Windstream** has a buried fiber optic data line that crosses the project at Geele Avenue. No relocations are anticipated.

**Plastics Engineering Company** has an abandoned fiber optic data line that crosses the project at Station 80+89 and runs along the east side of the project from Station 80+89 to Martin Avenue. This line does not have to be repaired if it is damaged.

**Sheboygan Water Utility** has water mains crossing the project at Wisconsin Avenue, Erie Avenue, St. Clair Avenue, Michigan Avenue, Huron Avenue, Superior Avenue, Mehrtens Avenue, Saemann Avenue, and Martin Avenue. No relocations are anticipated.

The **City of Sheboygan** has buried street light cables crossing at Pennsylvania Avenue (Station 10+28), Michigan Avenue (Station 42+86 and Station 43+38), Superior Avenue (Station 51+30), Saemann Avenue (Station 66+09), and Calumet Drive (between Station 71+50 and Station 72+30). Sanitary sewer crossings are located in Center Avenue, Wisconsin Avenue, Michigan Avenue, Huron Avenue, Saemann Avenue, Geele Avenue, and Martin Avenue. Sanitary manhole adjustments are included in the project. No other relocations are anticipated.

**Wisconsin Public Service Corporation** has gas mains crossing the project at Pennsylvania Avenue, Center Avenue, Wisconsin Avenue, Station 33+85, the alley at Station 40+82, Michigan Avenue, Huron Avenue, Mehrrens Avenue, Saemann Avenue, Geele Avenue, and Martin Avenue. A possible conflict exists on the NW corner of Center Ave. and Commerce St. Contact Mike Lowther of WPS, (920) 451-3743, if this gas main conflicts with the storm sewer and they will relocate it concurrently with construction of this project. No other relocations are anticipated.

## **6. Railroad Insurance and Coordination.**

### **A Description**

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

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

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

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

Project 4996-01-48 and 4996-17-71  
Route Name U.P. Rail Corridor, Sheboygan County  
Crossing ID: South of 180-264P  
Railroad Subdivision: Lake Shore

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

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

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

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

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

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

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

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

Approximately 4 switching movements per month occur at the project site. Switching movements operate at up to 10 mph.

107-026 (20110930)

### **7. Erosion Control.**

*Supplement standard spec 107.20 with the following:*

Pursue operations in a timely and diligent manner continuing all construction operations methodically from the initial removal operation through the subsequent grading and placement of base aggregate. Install inlet silt protection devices installed the same day that the inlet is constructed.

Place topsoil immediately after the completion of the pavement or sidewalk. Seed, fertilize, and place erosion mat on all topsoiled areas within ten calendar days after the placement of the pavement or sidewalk.

### **8. Environmental Protection – Emerald Ash Borer.**

The emerald ash borer (EAB) has resulted in a quarantine of ash trees (*Fraxinus*, sp) by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Wisconsin Department of Natural Resources (DNR).

Ash trees include the following species:

Green ash (*F. pennsylvanica*) is found throughout the state, but is most common in southern Wisconsin. It may form pure stands or grow in association with black ash, red maple, swamp white oak, and elm. It grows as an associate in upland hardwood stands, but is most common in and around stream banks, floodplains, and swamps.

Black ash (*F. nigra*) is distributed over the entire state but is most frequently found in northern Wisconsin. It is most common in swamps, but is also found in other wet forest types.

Blue ash (*F. quadrangulata*) is a threatened species that is currently found only at a few sites in Waukesha County. The species is at the edge of its range in Wisconsin, but is common in states farther south. The species is not of commercial importance.

Mountain ash (*Sorbus Americana* and *S. decora*) is not a true ash and is not susceptible to EAB infestation.

**Follow and obey the following Wisconsin Department of Agriculture, Trade, and Consumer Protection order:**

ATCP 21.17 Emerald ash borer; import controls and quarantine.

IMPORTING OR MOVING REGULATED ITEMS FROM INFESTED AREAS; PROHIBITION. Except as provided in sub. (3), no person may do any of the following:

(a) Import a regulated item under sub. (2) into this state if that item originates from an emerald ash borer regulated area identified in 7CFR 301.53-3.

(b) Move any regulated item under sub. (2) out of an emerald ash borer regulated area that is identified in 7CFR 301.53-3 and located in this state.

Note: the United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) periodically updates the list of regulated areas in 7CFR 301.53-3. Subsection (1) applies to new regulated areas as those areas are identified in the CFR.

REGULATED ITEMS. The following are regulated items for purposes of sub. (1):

The emerald ash borer, *Agrilus planipennis* (Fairmaire) in any living stage.

Ash trees.

Ash limbs, branches, and roots.

Ash logs, slabs or untreated lumber with bark attached.

Cut firewood of all non-coniferous species.

Ash chips and ash bark fragments (both composted and uncomposted) larger than one inch in diameter.

Any other item or substance that may be designated as a regulated item if a DATCP pest control official determines that it presents a risk of spreading emerald ash borer and notifies the person in possession of the item or substance that it is subject to the restrictions of the regulations.



**Regulatory Considerations**

The quarantine means that ash wood products may not be transported out of the quarantined area.

If ash trees are identified within clearing and grubbing limits of the Project, the following measures are required for the disposal:

**Chipped ash trees**

May be left on site if used as landscape mulch within the project limits.

May be buried on site within the right-of-way in accordance to standard spec 201.3 (14).

May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer in accordance to standard spec 201.3 (15).

May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).

Burning chips is optional if in compliance with standard spec 201.3.

Chips must be disposed of immediately and may not be stockpiled.

Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

**Ash logs, branches, and roots**

May be buried without chipping within the existing right-of-way or on adjacent properties in accordance to standard spec 201.3 (14)(15).

May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).

Burning is optional if in compliance with standard spec 201.3.

Ash logs, branches, and roots must be disposed of immediately and may not be stockpiled.

All additional costs will be incidental to clearing and grubbing items.

Anyone moving firewood or ash products from the state or these counties is subject to state and federal fines up to \$1,000.00. All fines are the responsibility of the contractor. Obtain updated quarantine information at the DNR Firewood Information Line at (800) 303-WOOD.

**Updates for compliance**

Each year, as a service, the Wisconsin Department of Agriculture, Trade and Consumer Protection distributes an updated federal CFR listing to nursery license holders and other affected persons in this state. More frequent updates, if any, are available on the department's website at [www.datcp.state.wi.us](http://www.datcp.state.wi.us). Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224-4573, by visiting the department's website, or by writing to the following address:

Wisconsin Department of Agriculture, Trade and Consumer Protection  
Division of Agricultural Resource Management  
P.O. Box 8911  
Madison WI 53708-8911

(2) REGULATED ITEMS. More frequent updates, if any, are available on the department's website at [www.datcp.state.wi.us](http://www.datcp.state.wi.us). Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224-4573, by visiting the department's website, or by writing to the above address.

**9. Construction Over or Adjacent to Navigable Waters.**

*Supplement standard spec 107.19 with the following:*

The Sheboygan River is classified as a navigable waterway.

If the contractor desires to perform the work on B-59-318 using any temporary falsework or barges that reduce the horizontal or vertical clearance to less than the dimensions of the permanent structure, a permit must be obtained from the U.S. Coast Guard. For permit application requirements contact:

Lee D. Soule  
Bridge Maintenance Specialist  
9<sup>th</sup> Coast Guard District (DPB)  
1240 East Ninth Street  
Cleveland, OH 44199-2060  
Phone: (216) 902-6085  
Fax: (216) 902-6088  
Email: [Lee.D.Soule@uscg.mil](mailto:Lee.D.Soule@uscg.mil)

107-060 (20040415)

## **10. Notice to Contractor – Contamination Beyond Construction Limits.**

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following site:

1. Station 94+00 to 95+30 from 18 feet RT of centerline to 10 feet RT of centerline.

Testing indicated that tetrachloroethene (PCE)-contaminated soil is present at the following site:

2. Station 68+40 to 68+60 from 15 feet LT of centerline to 20 feet LT of centerline.

The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting: Richard G. LeMahieu  
AECOM, 4135 Technology Parkway, Sheboygan, WI 53083, (920) 451-2752.  
107-100 (20050901)

## **11. Notice to Contractor, Railroad Ballast Handling.**

Existing railroad ballast may contain low levels of hazardous materials. Reuse the railroad ballast on-site as fill or in the lower portion of the base aggregate, in a position so that it is covered by either 1 foot of soil and topsoil, or by base aggregate and permanent pavement. Stockpile the ballast on-site as needed to accommodate contractor's operations. The railroad ballast may be hauled from one portion of the project to another, but shall not be hauled or disposed of off-site.

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

John Roelke, License Number All-119523, inspected Structure Structure B-59-318 and Structure P-59-715 for asbestos on February 25, 2010. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: David Schmidt, WisDOT Northeast Region, (920) 492-0137.

In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to David Schmidt, WisDOT Northeast Region, 944 Vanderperren Way, Green Bay, WI 54304 and DOT

BTS-ESS Attn: Hazardous Materials Specialist PO Box 7965, Madison, WI, 53707-7965.  
In addition, comply with all local or municipal asbestos requirements.

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

- Site Name: Structure B-59-318, U.P. Rail Corridor over Sheboygan River
  - Site Address: Section 22, Town 15 North, Range 23 East, City of Sheboygan
  - Ownership Information: Sheboygan County Planning and Resources Dept.  
508 New York Avenue, Sheboygan, WI 53081
  - Contact: Jill Treadway, JT Engineering, Inc.
  - Phone: (920) 468-4771
  - Age: 65 years old. This structure was constructed in 1948.
  - Area: 4629 SF of deck
- 
- Site Name: Structure P-59-715, U.P. Rail Corridor over Wisconsin Avenue
  - Site Address: Section 22, Town 15 North, Range 23 East, City of Sheboygan
  - Ownership Information: Sheboygan County Planning and Resources Dept.  
508 New York Avenue, Sheboygan, WI 53081
  - Contact: Jill Treadway, JT Engineering, Inc.
  - Phone: (920) 468-4771
  - Age: 107 years old. This structure was constructed in 1906.
  - Area: 1,394 SF of deck

Insert the following paragraph in Section 6.g.:

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

107-125 (20120615)

### **13. Removing Old Structure Station 29+94.**

*Conform to the requirements of standard spec 203 and as follows:*

Salvage the limestone blocks from the bridge abutments, wing walls and adjacent retaining wall for use in retaining walls on other portions of the project. Remove mortar from the limestone blocks. Temporarily store the blocks as necessary adjacent to the right-of-way at the city boat launch parking lot at the corner of Commerce Street and Niagara Avenue. Load and haul the blocks to the retaining wall locations. Excess blocks beyond what is needed to construct the retaining walls will remain the property of Sheboygan County. Store excess blocks at the location described above for pick up by the Sheboygan County Highway Department. Contact Aaron Brault, County Planner, 508 New York Avenue, Sheboygan, WI 53081-4126, (920) 459-3766, to arrange for removal of the excess blocks. Include the costs for salvaging, mortar removal, storing, loading and hauling the blocks in the item of Removing Old Structure Station 29+94.

**14. Removing Retaining Wall Station 20+60, Item 204.9105.S.01; Removing Retaining Wall Station 23+80, Item 204.9105.S.02; Removing Retaining Wall Station 53+24, Item 204.9105.S.03.**

**A Description**

Remove Retaining Walls in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

**B (Vacant)**

**C Construction**

Remove retaining walls to the either the bottom of the footing or to two feet below finished grade, if the bottom of the footing is greater than two feet below finished grade. Salvage limestone blocks as described in the article Removing Structure. Backfill excavations resulting from the removal of retaining walls with material from adjacent grading operations. Compact backfill in accordance to the requirements for standard compaction of standard spec 207.3.6.2.

**D Measurement**

The department will measure Removing Retaining Wall as a single lump sum unit of work for each retaining wall, acceptably completed.

**E Payment**

*Supplement standard spec 204.5 to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9105.S.01	Removing Retaining Wall Station 20+60	LS
204.9105.S.02	Removing Retaining Wall Station 23+80	LS
204.9105.S.03	Removing Retaining Wall Station 53+24	LS

Salvaging, loading and hauling of limestone blocks will be paid for under the item of Removing Old Structure Station 29+94.  
204-025 (20041005)

**15. Removing Railroad Hardware, Item 204.9060.S.01.**

**A Description**

Remove railroad hardware in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided. Railroad Hardware consists of crossing signals, crossing gates, signal control boxes, and battery boxes. Railroad Hardware will become the property of the contractor.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Removing Railroad Hardware by each individual unit of work, acceptably completed.

**E Payment**

*Supplement subsection 204.5 of the standard specifications to include the following:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Railroad Hardware	Each

Payment is full compensation for removing railroad hardware. Removal of concrete bases associated with the railroad hardware will be paid for under the item of Removing Concrete Bases.

204-025 (20041005)

**16. Removing Railroad Track.**

*Conform to the requirements of standard spec 204 and as follows:*

The rails removed from the railroad track will remain the property of Sheboygan County. Remove, load and haul the rails to a scrap yard designated by Sheboygan County. The maximum one-way haul distance will be  $\frac{3}{4}$  mile measured from the point on the project nearest the scrap yard.

Provide scale tickets from the scrap yard to document the quantity of rail removed. Provide tickets to Aaron Brault, County Planner, 508 New York Avenue, Sheboygan, WI 53081-4126, (920) 459-3766.

**17. Common Excavation.**

*Conform to the requirements of standard spec 205 and as follows:*

Removal of existing railroad ties in areas where the rails are not present will be paid for as common excavation.

**18. 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, 305, and 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
  1. Production and placement control and inspection.
  2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

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

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

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

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

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

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

## **B Materials**

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

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



## B.2 Personnel

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

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

- <sup>[1]</sup> Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.
- (2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

## B.3 Laboratory

- (1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:
- Materials Management Section  
3502 Kinsman Blvd.  
Madison, WI 53704  
Telephone: (608) 246-5388  
<http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

## B.4 Quality Control Documentation

### B.4.1 General

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

### B.4.2 Records

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

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

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

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

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

- (6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

## **B.6 Test Methods**

### **B.6.1 Gradation**

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

### **B.6.2 Fracture**

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

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

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

## **B.7 Corrective Action**

### **B.7.1 General**

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

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

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

## **B.8 Department Testing**

### **B.8.1 General**

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

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

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

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

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

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

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

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

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

### **C (Vacant)**

### **D (Vacant)**

### **E Payment**

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

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

301-010 (20100709)

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

### **A Description**

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

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

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

### **B Materials**

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

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

## **B.2 Testing**

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

## **B.3 Equipment**

### **B.3.1 General**

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

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

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

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



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

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.
- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft<sup>3</sup> of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft<sup>3</sup> of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

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

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

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

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

- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

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

**Table 1**

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

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

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

**Table 2**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (6) If 2 consecutive subplot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

## **B.5 Department Testing**

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

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

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

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

## **B.6 Dispute Resolution**

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.
- (2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- (3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV subplot density test results or retesting of the subplot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

## **B.7 Acceptance**

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

## **C (Vacant)**

## **D (Vacant)**

## **E Payment**

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

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

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

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

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

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

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

- (3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.
  - (4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.
  - (5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.
- 460-020 (20100709)

## **20. Expansion Device, B-59-318.**

### **A Description**

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

### **B Materials**

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

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

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

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

<b>Manufacturer</b>	<b>Model Number Strip Seal Gland Size*</b>		
	<b>4-Inch</b>	<b>5-Inch</b>	<b>6-Inch</b>
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)

## **21. Install Conduit Into Existing Item, Item 652.0700.S.**

### **A Description**

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

### **B Materials**

Use Nonmetallic Conduit 2-inch or 3-inch, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

### **C Construction**

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

#### **D Measurement**

The department will measure Install Conduit Into Existing Item by each individual unit, acceptably completed. Up to five conduits entering a structure at a single entry point into the existing structure will be considered a single unit. Each additional group of five conduits or less, or each group of five conduits or less entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute an additional unit of payment.

#### **E Payment**

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

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

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

### **22. Electrical Wiring Grounded Conductor and Equipment Grounding Conductor for Traffic Signals.**

*Replace standard spec 655.2.5 with the following:*

For the ground conductor, use white insulation. For the equipment grounding conductor, use green insulation or green insulation with a yellow tracer applied by thermoset method.

Furnish 10 AWG or 8 AWG, or both, XLP, USE rated, 600 volt AC, single conductor, stranded copper for conductors.

### **23. Salvaged Railroad Ballast Base, Item SPV.0035.01.**

#### **A Description**

This special provision describes salvaging railroad ballast for use in the lower layer of base.

#### **B (Vacant)**

#### **C Construction**

Grade existing railroad ballast to the width, depth and grades shown on the plan. Verify that there is sufficient depth of ballast present by windrowing ballast and the exposing the subgrade elevation during grading. Compact in accordance to the requirements of standard spec 305.3.2. Load and haul excess ballast to areas of deficiency.



**D Measurement**

The department will measure Salvaged Railroad Ballast Base by the cubic yard incorporated into the work in its final position, 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.0035.01	Salvaged Railroad Ballast Base	CY

Payment is full compensation for salvaging, grading, shaping, compacting, loading and hauling existing railroad ballast.

**24. Coloring Concrete Coral Buff, Item SPV.0035.02; Coloring Concrete Charcoal, Item SPV.0035.03.**

**A Description**

Produce colored concrete in accordance to standard spec 405 and as follows.

**B Materials**

*Conform to standard spec 405.2.1 except provide the following colors.*

For Coloring Concrete Coral Buff provide integral pigment matching in color to Butterfield Uni-Mix Integral Colorant Coral Buff (U15). For Coloring Concrete Charcoal provide integral pigment matching in color to Butterfield Uni-Mix Integral Colorant Charcoal (U28). The named products are for the purpose of establishing a color standard only.

*Supplement standard spec 405.2.4.1, Colored Concrete Mix Approval General, with the following:*

Test slab color will be evaluated for approval no earlier than 5 days after the test panel was poured and sealed.

**C (Vacant)****D Measurement**

*Conform to the requirements of standard spec 405.4.*

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.02	Coloring Concrete Coral Buff	CY
SPV.0035.03	Coloring Concrete Charcoal	CY

Payment is full compensation for furnishing all items as listed in subsection 405.5 of the standard specifications.

**25. Adjusting Water Valve Boxes, Item SPV.0060.01.**

**A Description**

Adjust water valve boxes to the following requirements.

**B (Vacant)**

**C Construction**

Adjust existing valve boxes to the required elevation by adjusting the valve box vertically; removing a section of valve box; or by inserting a cast iron valve box riser section if required. Additional valve box risers, if required through no fault of contractor's operations, will be provided by the Sheboygan Water Utility. Contact Rich Dale at (920) 459-3800.

**D Measurement**

The department will measure Adjusting Water Valve Boxes as each individual adjusted valve box, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Adjusting Water Valve Boxes	Each

Payment is full compensation for furnishing all excavation, for furnishing riser sections as necessary, and for adjusting.

**26. Remove Existing Lighting Assemblies, Item SPV.0060.02.**

**A Description**

Remove existing lighting assemblies as shown on the plans and described herein.

**B (Vacant)**

**C Construction**

The existing lighting circuits shown on the plans are based upon the information available, but may not be accurate. Prior to performing lighting removal, verify the existing lighting conductor routing and circuitry in the area of the lighting assemblies to be removed. Contact the Sheboygan City Engineer at (920) 459-3394 to arrange to have the city electrician assist in verifying conductor routing and circuitry and de-energizing the circuits. If the lighting circuits are not as shown notify the engineer and provide the corrected information on a red-lined plan sheet so that plan modifications can be designed if necessary.

Disconnect existing underground branch circuit from pole wiring and fuses in pole handhole. Remove existing underground wire from existing conduit. Abandon conduit in place. Remove the existing concrete bases. Transport existing poles to City of Sheboygan Municipal Service Building yard at 2026 New Jersey Avenue and place where directed by City of Sheboygan.

**D Measurement**

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

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Removing Existing Lighting Assemblies	Each

Payment is full compensation for verifying conductor routing and circuitry; for providing and installing all materials including hardware, fittings, mounting devices, and attachments necessary to completely relocate existing lighting assemblies. Removal of existing concrete bases will be paid for under the Removing Concrete Bases bid item.

**27. Remove and Re-Install Existing Lighting Assemblies, Item SPV.0060.03.**

**A Description**

Remove existing Lighting Assemblies, relocate them to new locations, and install them on new concrete bases, as shown on the plans and described herein.

**B Materials**

Provide materials as indicated on the plans.

**C Construction**

The existing lighting circuits shown on the plans are based upon the information available, but may not be accurate. Prior to performing lighting removal, verify the existing lighting conductor routing and circuitry in the area of the lighting assemblies to be removed. Contact the Sheboygan City Engineer at (920) 459-3394 to arrange to have the city electrician assist in verifying conductor routing and circuitry and de-energizing the circuits. If the lighting circuits are not as shown notify the engineer and provide the corrected information on a red-lined plan sheet so that plan modifications can be designed if necessary.

Disconnect existing underground branch circuit from pole wiring and fuses in pole handhole. Remove existing underground wire from existing conduit. Remove the existing concrete bases. Provide new Type 5 concrete bases, anchor bolts, and hardware. Re-install removed lighting assemblies on new concrete bases. Reuse existing underground conduit and provide new as indicated on the drawings. Reuse existing wires in the pole. Provide new wire extended from existing circuits.

**D Measurement**

The department will measure Remove and Re-Install Existing Lighting Assemblies as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Remove and Re-install Existing Lighting Assemblies	Each

Payment is full compensation for removing and reinstalling, verifying conductor routing and circuitry; for providing and installing all materials including hardware, fittings, mounting devices, wire, and attachments necessary to completely relocate existing lighting assemblies. Removal of existing concrete bases and construction of new concrete bases will be paid for under their respective bid items.

**28. Concrete Base for Control Cabinet A, Item SPV.0060.04; Concrete Base for Control Cabinet B, Item SPV.0060.05.**

**A Description**

Furnish and install concrete control cabinet bases as shown on the plans and described herein.

**B Materials**

Provide concrete bases similar in design to the standard Type 9 concrete bases and in accordance to standard spec 654:

- Provide materials and modifications as detailed on the drawings.

**D Measurement**

The department will measure Concrete Base for Control Cabinets A and B as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Concrete Base for Control Cabinet A	Each
SPV.0060.05	Concrete Base for Control Cabinet B	Each

Payment is full compensation for providing and installing all materials necessary to completely construct the concrete base.

**29. Control Cabinet A, Item SPV.0060.06; Control Cabinet B, Item SPV.0060.07.**

**A Description**

Furnish and install Control Cabinets as shown on the plans and described herein.

**B Materials**

Provide control cabinets in accordance to standard spec 656 and with the following modifications:

- Provide materials and modifications as detailed on the drawings.

**D Measurement**

The department will measure Control Cabinets A and B as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Control Cabinet A	Each
SPV.0060.07	Control Cabinet B	Each

Payment is full compensation for providing and installing all materials necessary to completely construct the control cabinet.

**30. Decorative Lighting Assembly Type A, Item SPV.0060.08.**

**A Description**

Furnish and install decorative light poles, bolt covers, decorative lights, and appurtenances as shown on the plans and described herein.

**B Materials**

Provide Decorative lighting assembly as shown in the plans and as specified herein. The decorative lighting assembly including integral arm shall be as manufactured by Philips Gardco Lighting/Valmont Industries, Inc. Gardco Model GL13-1-2/4/5-70LA-NW-BLK-SPR fixture and Valmont Model R1308-30504T4L-D1-335-AB-HH-NC pole. Fixture wattage, voltage, color and accessories shall be coordinated with City of Sheboygan personnel. Gardco/Valmont are represented by Tom Tews at (262) 970-0300. Gardco fixture: Gulwing 13 inch, 71.2 watt, LED lamps, 240Volt 1 phase, black powder coat finish, Type II lighting distribution. Valmont pole: round aluminum, 14 foot, with top cap, 5 inch diameter at butt, 3 inch diameter at top, black anodized finish, handhole 90 degrees from fixture orientation, nut covers, 105 ksi anchor bolts and anchor base. Provide fixture with 3 # 12, single conductor, stranded copper, RHW/USE insulated, rated 600Volt, AC conductors in the pole from the fixture head to the pole handhole with additional 18 inches of slack wire at the handhole.

**D Measurement**

The department will measure Decorative Lighting Assembly Type A as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Decorative Lighting Assembly Type A	Each

Payment is full compensation for providing and installing all materials including hardware, fittings, mounting devices, wire, and attachments necessary to completely install the decorative lighting assembly.

**31. Lighting Pole Type A Concrete Base, Item SPV.0060.09.****A Description**

Furnish and install concrete bases as shown on the plans and described herein.

**B Materials**

Provide concrete bases in accordance to standard spec 654 and similar in design to the standard Type 5 concrete bases with the following modifications:

- Bolt circle shall be 8.63 inches with 9.61 inch square base plate.
- Anchor bolts shall be 3/4"x 17"x 3" L.

**D Measurement**

The department will measure Lighting Pole Type A Concrete Base as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Lighting Pole Type A Concrete Base	Each

Payment is full compensation for providing and installing all materials necessary to completely construct the concrete bases.

**32. Lighting Pole Type A Bridge Mounting Base, Item SPV.0060.10.****A Description**

This special provision describes furnishing and installing bridge mounting as shown on the plans and described herein.

**B Materials**

Provide mounting bases in accordance to standard spec 652 and 653, as described herein and detailed on the drawings:

- 9.61 inch square by 0.63 inch thick steel mounting plate as provided by the pole manufacturer to match mounting plate attached to pole.
- 4 – ¾ inch x 23 inch type 304 stainless steel threaded anchor bolts.
- Type 304 stainless steel hardware consisting of ¾ inch nuts, washers, and lock washers.

**D Measurement**

The department will measure Lighting Pole Type A Bridge Mounting Base as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Lighting Pole Type A Bridge Mounting Base	Each

Payment is full compensation for providing and installing all materials necessary to completely construct the bridge mounting bases.

**33. Exposing Existing Utilities, Item SPV.0060.11.****A Description**

Expose existing utilities under paved and unpaved surfaces and provide horizontal and vertical coordinates of the exposed utility to determine potential utility conflicts in advance of grading work for this project.

**B Materials****B.1 Granular Backfill**

Provide granular backfill conforming to standard spec 209.

**C Construction****C.1 General**

Schedule this work a minimum of one week in advance of any grading work under this project to allow the engineer and utilities time to resolve any conflicts that may be discovered. Coordinate all existing utility exposures with the engineer. Arrange for utility locators to mark the utility locations. Notify representatives of the utility owner or their agents at least 24 hours in advance of the work so that they may be present when the work commences.

## **C.2 Construction Method**

Saw cut or core the pavement in a large enough area to provide room for a 12-inch diameter hole. Use a high pressure water jet capable of loosening the base and soils to the depth necessary. Extract the soil gravel and water mix using a wet vacuum machine. Expose the existing utility sufficiently to determine the top elevation and diameter. Take precautions to protect the integrity of the existing utility and avoid and damage to protective coatings or wrappings. Promptly notify the utility owner if any damage or service interruption occurs. Repair any damage caused by the contractor's negligence or carelessness at the contractor's expense.

Survey the horizontal and vertical location of the exposed utility to the nearest 0.1 foot. Identify horizontal locations with a coordinate northing and easting referenced to the Wisconsin County Coordinate System (WCCS), Sheboygan County. Provide elevations referenced to the project bench marks.

Keep the utility exposed and available for visual inspection until all work is completed in a given location. If the utility remains exposed overnight or for a prolonged period of time, cover the hole with traffic rated steel plating and protect with all necessary traffic control devices that may be required by applicable standards or as directed by the engineer.

Backfill the hole with granular backfill conforming to standard spec 209 except that backfill material placed within 18 inches of the exposed utility shall pass a one-inch sieve.

## **C.3 Documentation**

Provide the engineer with coordinates and elevations of each utility referenced to the proposed alignment with a station and offset. Document the size and/or diameter, composition and description of each utility exposed. Provide digital photographs of the exposed utility to the engineer in jpeg format.

## **D Measurement**

The department will measure Exposing Existing Utilities as each individual utility location, acceptably completed. If the distance from the existing ground above the utility to the top of the exposed utility is between 0 and 6 feet, the department will measure each location as a single unit of work. If the distance from the existing ground above the utility to the top of the exposed utility is greater than 6 feet, but less than 12 feet, the department will measure each location as two units of work. Exposures greater than 12 feet in depth are not covered under this item.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Exposing Existing Utilities	Each



Payment is full compensation for furnishing all materials including granular backfill; for excavating, disposal of excavated materials, backfilling and compacting; for staking, surveying, measuring, recording and photographing the location of the exposed utility; for providing documentation and photographs of all utility locations to the engineer; for furnishing all traffic control and safety barriers required during the work.

**34. Manhole Covers Type J Special, Item SPV.0060.12; Inlet Covers Type H Special, Item SPV.0060.13.**

**A Description**

Construct manhole and inlet covers in accordance to standard spec 611 and as shown in the plans.

**B Materials**

Manhole Covers Type J Special shall be Neenah 1050-2000 Frame and Neeneah 1050-0018 Vented Lid.

Inlet Covers Type H Special shall be Neenah 3067-2000 Frame, Neenah 3067-0004 Grate, and Neenah 3067-7007 Curb Box with fish loon logo and text: "Dump No Waste Drains to Fresh Water."

**C (Vacant)**

**D Measurement**

The department will measure Manhole Covers Type J Special and Inlet Covers Type H Special by each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Manhole Covers Type J Special	Each
SPV.0060.13	Inlet Covers Type H Special	Each

Payment is full compensation conforming to standard spec 611.5.

**35. Traffic Signal Controller and Cabinet STH 42/Saemann/15th St., Item SPV.0060.14.**

**A Description**

**A.1 General**

- (1) This special provision describes furnishing, installing, and making operational, a traffic signal controller and fully equipped cabinet at the intersection of STH 42 (Calumet Drive) and 15<sup>th</sup> Street and STH 42 (Calumet Drive) and Saemann Avenue. The traffic signal controller shall be an Eagle EPAC 3608 M52.

- (2) Submit a Certification of Compliance from the signal vendor, the contractor, or the company that wired the cabinet certifying that the cabinet and equipment as furnished, conform to the plan and specifications. Ensure that the certificate of compliance is on the letterhead stationery, signed by an authorized officer of the company, and notarized. Submit five copies to the engineer.
- (3) It is the responsibility of the contractor or his designee that all functions within the controller, cabinet, switches, and other timing parameters, and that all electrical and electronics components are in proper working condition. In addition, it is the responsibility of the contractor or his designee to ensure it meets the plan and the specifications, and shall demonstrate this to the engineer or his designee at the field location.
- (4) After mounting the cabinet on the cabinet foundation, connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. Connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work.
- (5) The delivered cabinet at the intersection shall perform in accordance to the standard specifications, the plan details, and special provisions once the field wiring is connected. It shall also be the responsibility of the contractor to have the person responsible for wiring the cabinet present at the location when the field wiring is connected to the cabinet wiring. In addition, the contractor assumes liability for any damage or damage due to malfunctions or improper wiring.
- (6) The controller shall be a fully traffic actuated, solid state, digital microprocessor controller, capable of providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan.
- (7) The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system. The equipment items included shall be, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications. The signal timing plan will be furnished by the City of Sheboygan.
- (8) Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be in accordance to the accompanying plans and with NEMA Standards Publication No. TSI-1976 including Revisions No. 1 and No. 2.

- (9) The intersection controller unit shall be capable of a minimum of 8-phase operation plus four programmable overlaps regardless of whether preemption, coordination or the special programming is used. Wire the intersection cabinet for a minimum of 16 and include a minimum of 16 3-circuit load switches to run the sequence of operations in the plans.

## **B Electrical and Operational Aspects**

### **B.1 Buffering**

- (1) Internally buffer all logic circuit inputs to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

### **B.2 Timing Features**

- (1) All controller timing parameters shall be fully programmable from the front panel using switches and/or keyboard inputs, and memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, nonlocking detection mode and recall switches shall also be accessible on the front panel.

### **B.3 Minimum Green Timing**

- (1) The passage timer shall time concurrently with the minimum green timer, so that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

### **B.4 Dual Ring Timing**

- (1) In the dual ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. The controller shall provide barrier protection against concurrent timing of two conflicting phases; no phases assigned to one side of the barrier shall be permitted to time concurrently, if a conflict will occur. The controller shall service calls on a single entry basis, and both rings shall cross the barrier simultaneously in accordance to the following logic: (a) Phases timing concurrently shall terminate simultaneously if both have a gap out due to excessive time between actuations. (b) Phases timing concurrently shall terminate simultaneously if both have a maximum time out. (c) In the event that one phase has not achieved a gap out or maximum time out, the other gapped out phase shall be permitted to leave the gapped out condition and retime an extension when an actuation is received.

### **B.5 Manual (Police) Control**

- (1) If manual control is used, actuation of the manual control shall permit manual advance of the Walk, Pedestrian Clearance, and Green interval terminations only. Manual termination of Yellow or All Red clearance intervals shall not be permitted.

### **B.6 Red Revert**

- (1) Provide an adjustable red revert control to assure adequate red display when recycling a phase during call-away or red rest mode operation. A call for service to a different phase shall be preceded by an all-red clearance interval, as programmed.

## **B.7 Coordination**

- (1) The controller shall be capable of operation in progressive coordination systems and mutual coordination and shall contain, but not be limited to, the following external inputs, with all functions brought out:

Vehicle/Pedestrian Detectors per phase	Pedestrian Omit per phase
Phase Omit per phase	Hold per phase
Omit Red Clearance per ring	Internal Maximum Inhibit per ring
Maximum II per ring	Red rest per ring
Stop Timing per ring	Force-Off per ring
Select Minimum Recall per controller	Manual Control per controller
Semi-Mode per controller	External Start per controller

## **B.8 Minimum Safe Timings Control**

- (1) Controllers shall not accept any operator input or stored timing parameters that would result in intervals shorter than the following: yellow clearance - 3.0 seconds; minimum walk - 4.0 seconds; minimum pedestrian clearance - 6.0 seconds. At the beginning of each of the above intervals, the controller shall check the previously stored data against these minimums. If an operator attempts to load an incorrect timing parameter, the controller unit shall output a unique error code on the front panel display. As an alternate to minimum timing control, a coded keyboard entry security feature may be provided.

## **B.9 Indicator Lights and Switches**

- (1) Provide indicator lights to show the status of each signal phase on. Indicator lights shall also be used to show interval status, phase termination information, and presence of vehicular and pedestrian calls for each phase. Also provide an indicator light to show the status of the backup battery charging circuit.
- (2) The controller shall have an on off switch and fuse for AC power.

## **B.10 Data Display**

- (1) If keyboard entry is supplied, the front panel shall contain a display panel consisting of LED display characters. The face of the display shall be scratch, chemical, and solvent resistant. In the case of writing data or parameters into the controller, there shall be a visual indication that the data has been accepted. The number of characters shall be adequate to read or write all data and parameters in decimal format together with a data descriptor in either alpha numeric format, or thumbwheel switch display.

## **B.11 Diagnostic Program**

- (1) A diagnostic program shall be prepared by the manufacturer of the controller unit that will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

### **B.12 Maintenance of Controller**

- (1) For ease of service, the controller shall be divided to a minimum of the following separate circuit boards:
  1. CPU/Memory
  2. Input/Output
  3. Front Panel
  4. Power Supply
- (2) Each board shall be easily removable without requirements for special tools.
- (3) The microprocessor supplied shall be the type that has a Fluke Pod that is compatible.
- (4) All electronic components shall be removable by a PACE (model PPS-5) solder station and all integrated chips over 20 pins must be on sockets.

### **C Monitoring**

- (1) Provide a NEMA PLUS monitor with all components and circuitry, independent to the controller and having the capacity to handle a minimum of 16 channels. The monitor shall detect conflicting indications, controller voltage drops, and the absence of reds as follows:
  1. Conflicting indications shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the conflict monitor.
  2. The +24 VDC cabinet power source shall be monitored by the conflict monitor. If that voltage drops to an unsatisfactory level, the monitor shall cause the controller to revert to flashing mode. Upon resumption of normal voltages, the controller shall resume normal stop and go operation without the necessity of manual resetting.
  3. The absence of any required red signal voltage at the field connection terminals in the controller assembly shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset.
  4. After power interruption (exceeding 457 +/- 25 milliseconds) to the controller assembly a flashing period (4 to 10 seconds adjustable) shall precede the start up (initialization) sequence. This feature can be resident in either the monitor or the controller.
  5. The flash circuit shall be wired in a failsafe manner so that the intersection will revert to and remain in flashing mode whenever and for as long as either the controller mechanism or the monitor is disconnected.

6. Indicator lights shall be: a) an indicator for each channel shall be provided with latch status of failure, b) +24V light inputs, c) conflict light, d) conflict monitor power light and program board ajar light, e) power interrupt after failure light, f) red failure light.
7. G or W vs. Y signals on the same channel: This function shall be enabled on a per unit basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk versus yellow indications active on one channel. It shall be recognized as a failure if the condition exists for 850 +/- 150 milliseconds. This failure shall always be considered a latched failure when enabled.
8. G, W, or Y vs. R signals on the same channel: This function shall be enabled on a per channel basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk or yellow versus red indications active on one channel. It shall be recognized as a failure if the condition exists for 850 ±150 milliseconds. This failure shall always be considered a latched failure when enabled.

#### **D Terminal Facilities**

- (1) Terminal facilities shall consist of all devices external to the controller unit that are necessary to complete the intersection control. Terminal facilities supplied shall be protected by a single 30-amp circuit breaker. The 30-amp breaker shall feed a signal bus supplied through a solid state bus relay and radio interference line filter. The bus relay shall be a normally open, 60 amp, solid state relay. Terminal facilities shall also include applicable load switch panels of sufficient capacity to accommodate 8 vehicle phases, 8 pedestrian phases, and 4 overlap phases and shall include a minimum of 16 solid state 3 circuit load switches with visual indicators. Flash transfer relays and two double circuit flashers shall also be provided. The internal wiring in the load switch panels shall be insulated wiring of sufficient size or the individual outputs fused so that the wiring will not be damaged by shorted output light circuits. Printed circuits in the load switch panels will not be acceptable.
- (2) Use terminal strips to terminate controller cable, signal head cables and vehicle and pedestrian detector cables. Terminate all controller inputs and outputs on an interface panel. All interface and output terminal connections shall be the screw down type.
- (3) Fuse all interconnect terminal facilities to incoming lines.

## **E Cabinet Switches**

- (1) Locate the following switches inside the cabinet on a maintenance panel:
  - a. Controller On/Off
  - b. Cabinet Light
  - c. Stop Time (Three Position)

POSITION	LABEL SWITCH	FUNCTION
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove the stop time input to the controller
Lower	Normal	Connects the Monitor to the controller stop time input

- (2) Provide switches for all vehicle phases and all even pedestrian phases.

- (3) Locate the following switches behind the police access door:
  - a. Signal/Off
  - b. Flash/Normal

- (4) The above switches shall function as follows:

SIGNAL	OFF
Flash	Signals Flash
Normal	Signals Normal

- (5) Manual Detector Operation. Provide three position switches external to the controller that will permit manual detector calls and manual detector disconnect for each phase independently. The switches shall be spring loaded and shall rest in the center (non-operative) position. The switches shall be appropriately labeled and shall operate as follows:

UPPER POSITION:	Spring loaded:	Disconnect detector
CENTER POSITION:	Normal detector operation	
LOWER POSITION:	Spring loaded:	Test call is placed to controller.

## **F Cabinet and Cabinet Equipment**

- (1) Furnish the controller completely housed in a door-in-door ground mounted (without anchor bolts) metal cabinet of minimum size 44 inches wide, minimum 24 inches deep, and minimum 52 inches to maximum 60 inches high.
- (2) Provide a cabinet of clean-cut design and appearance. The size of the cabinet shall be such as to provide ample space for housing the controller, and all of the associated electrical devices which are to be furnished with the controller, together with any other auxiliary devices herein specified.

The cabinet shall be constructed from type 5052-H32 aluminum with a minimum thickness of 0.125 inches. Furnish the cabinet with a natural, uncoated, aluminum finish inside and outside. Continuously weld all seams. The surface shall be smooth, free of marks and scratches. Use stainless steel for all external hardware.

The top of the cabinet shall incorporate a 1-inch slope toward the rear to prevent rain accumulation. A rain channel shall be incorporated into the design of the main door opening to prevent liquids from entering the enclosure.

The roof of the cabinet shall incorporate an exhaust plenum with a vent screen. Perforations in the vent screen shall not exceed 0.125 inches in diameter.

The lower section of the cabinet door shall be equipped with a louvered air entrance. The air inlet shall be large enough to allow sufficient air flow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for Type 3R ventilated enclosures. A non-corrosive, vermin- and insect-proof, removable air filter shall be secured to the air entrance. The filter shall fit snugly against the cabinet door wall.

The cabinet door opening shall be a minimum of 80 percent of the front surface of the cabinet. The main door and police door-in-door shall each close against a weatherproof and dust-proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.188 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.188 inches thick by 0.500 inches wide. The gaskets shall be permanently bonded to the cabinet.

The main door shall be equipped with a three-point latching mechanism. The upper and lower locking points of the latching mechanism shall each have a pair of nylon rollers. The handle on the main door shall utilize a shank of stainless steel 3/4 inches minimum diameter. The handle shall include a hasp for the attachment of an optional padlock. The cabinet door handle may turn either clockwise or counterclockwise to open, and shall not extend outwards past the edge of the door at any time. The lock assembly shall be positioned so the key will not cause any interference with the handle, or a person's hand on the handle, when opening the cabinet door.

The main door shall include a solid stainless steel rod stop and catch mechanism capable of rigidly holding the door open at approximately 90, 120, and 180 degrees under windy conditions. The operator must be able to engage and disengage the catch with a shoed or booted foot.

The main door hinge shall be a one-piece, continuous piano hinge with a minimum 0.25 inch stainless steel pin running the entire length of the right side of the door (right-handed). The hinge shall be attached in such a manner that no rivets or bolts are exposed.

The main door shall be equipped with a brass Corbin tumbler lock No. 2, swing away dust cap, and two keys No. 2.

The police door-in-door shall be provided with a brass treasury type standard police lock Corbin No. R357SGS, or exact equivalent, and one key.



- (3) All cabinets shall have the following:
1. A 15-amp circuit breaker for auxiliary equipment.
  2. A plug-in type EDCO SHA-1250, or Atlantic/Pacific approved equal, surge protector shall be mounted internally within the traffic signal cabinet and shall be connected across the load terminal of the circuit breaker(s) that is installed on the circuit that provides power to the control equipment. A General Electric Varistor, catalog #V130PA20A, shall be installed at the load terminals of each circuit breaker from the hot line to the grounded current carrying neutral conductor.
  3. Incandescent light socket and 100-watt vibration resistant incandescent light bulb.
  4. Solid state jack mounted NEMA flasher(s) with visual indicators and completely wired base, rated for at least 10 amps per circuit at 74 degrees C.
  5. Control switches, including controller power switch, stop time switch, cabinet light switch, and emergency flash switch.
  6. All switches specified in section E.
  7. Necessary fuses and circuit breakers.
  8. All wiring harnesses including detector harnesses. Loop detector harness connector shall be MS-3106B018-IS fully wired terminals I and J which shall go to separate isolated terminals. One loop harness shall be provided for each of the phases (i.e. 01 - 08).
  9. **Duplex power receptacle.** A 120 VAC 20 amp, NEMA 5-20R GFI convenience outlet shall be mounted in each cabinet for energizing equipment or tools. The outlet shall be fuse protected.
  10. **Radio interference filter.** Each control cabinet shall be equipped with a single radio interference suppressor of sufficient ampere rating to handle the load requirements. The RIS shall be installed at the input power point. It shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50DB over a frequency range of from 200KHZ to 75MHZ, when used in connection with normal installations. The radio interference suppressor shall be hermetically sealed in a substantial metal case that shall be filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two No. 8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall not be rated less than 35 amperes. The RIS shall be designed for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and shall meet the standards of UL and Radio Manufacturer's Association.

11. **Cabinet grounding.** In all controller cabinets and auxiliary cabinets, the AC common, the logic ground, and the chassis ground shall be isolated from each other the same as detailed by NEMA Standard.
  12. **Suppressors.** Each 120 VAC circuit that serves as inductive device, such as a pan motor or a mechanical relay, shall have a suppressor to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point. One RC network shall be wired in parallel with each inductive device.
  13. **Power Panel Cover.** Provide a light, tough, transparent, weather-resistant, non-yellowing, thermoplastic cover, rigidly mounted over the full power panel, with access holes for circuit breakers and other equipment, and open on the sides for ventilation.
- (4) All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MILW-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without a clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.
  - (5) The cabinet shall provide weather protection and forced ventilation, air filters and heaters, with adjustable thermostat switches, and comply with the environmental and operating standards outlined in NEMA Specification TSI-1-1976. Provide a 250 watt element heater. Install in the lower portion of the cabinet. Provide a thermostat with an adjustable setting from 0 to 100 degrees F. Install the thermostat on the interior ceiling of the cabinet well away from the cabinet light or any heat source.
  - (6) Ventilate the controller cabinet containing by means of a 120 VAC, 60HZ, tube axial compact type fan located in the top of the cabinet plenum. The fans free delivery airflow shall be greater than 100 cubic feet per minute. The magnetic field of fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp or have bearing failure within a 7 year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The thermostat's turn on setting shall be adjustable from 80 to 120 degrees F. The fan shall run until the cabinet temperature decreases to a lower temperature which shall be adjustable from 70 to 110 degrees Fahrenheit. The fan shall be fused.
  - (7) Mount one set of vertical "C" channels compatible with Unistrut channel nuts on each interior side wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring mounted nuts or studs. Install three vertical "C" channels or three slotted rails on the interior back wall of the cabinet. All mounting channels and rails shall extend to within 7 inches of the top and bottom of the cabinet and shall be of sufficient strength to rigidly hold specified shelves and equipment.

Provide two 11-inch width adjustable aluminum shelves to support the controller and external equipment. The top shelf surface shall be located not less than 43 inches above the bottom of the cabinet and shall provide a minimum of 12 inches clearance from the top of the shelf to any obstruction above the shelf. The lower shelf surface shall be located 32.5 inches from the bottom of the cabinet.

The main panel shall be constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and formed so as to eliminate any flexing when plug-in components are installed.

The main panel shall be mounted with the bottom of the panel a minimum of 9 inches above the bottom of the cabinet. The main panel shall be hinged at the bottom to allow easy access with simple tools to all wiring on the rear of the panel. It shall not be necessary to remove any shelf-mounted equipment to hinge down the main panel. There shall be sufficient slack in the load bay wiring to allow for dropping the load bay.

The main panel shall be fully wired with sixteen load switch sockets: eight phases of vehicular, eight phases of pedestrian, and four phases of overlap operation; eight emergency flash transfer relay sockets; one flasher socket; and two main panel BIU rack slots. Position the 16 load switch sockets in two horizontal rows of eight sockets each. Support the load switches by a bracket or shelf extending at least three inches from the main panel.

All load switch and flash transfer relay sockets shall be labeled. Label reference designators by silk-screening on the front and rear of the main panel to match drawing designations.

- (8) Locate bus and flash transfer relays, flashers, load switches, circuit breakers, and interference filters on a standard panel consistent with the intersection plan. Design shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.
- (9) Neatly fold and cap any cables, wires or circuits that are not being used. These wires shall be neatly tied and stowed away in or on the terminal facilities.
- (10) Terminal facilities arrangement shall be in a fashion so that trouble shooting of load bay or behind the load bay can be accomplished with simple tools. This means that the load bay will be hinged so that it can be dropped down for ease of maintenance. There will be sufficient slack in the load bay wiring to allow for dropping the load bay.
- (11) Protect all control cables, i.e., detector harnesses, controller harnesses, harnesses which connect manual/vehicle detector switches, by a nylon jacket or provide equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.

- (12) If any branch circuit wiring or control wiring does not conform to the wire specifications, the supplier will be considered as not meeting the specifications and proper corrective action will be exercised against the supplier.
- (13) Provide a 4 input PED isolation circuit to isolate controller logic ground from the field wiring. Outputs from the PED isolator shall be connected to phases 2,4,6,8.

#### **G Solid State Load Switches**

- (1) Load switches shall meet the requirements of NEMA TSI-Part 5 for three circuit load switches.
- (2) Each load switch shall contain three individually replaceable, molded case, solid state relay modules. Each relay module shall utilize optical isolation between the control and the load circuits. The module shall have the functions and terminal assignments as specified in NEMA TSI-Part 5.
- (3) Each panel of load switches shall either be rack mounted or shall have a switch support bracket extending across the entire length of the switch panel.
- (4) The load bay arrangement from left to right in the cabinet shall be as described below:
  - 1. Vehicular Phasing shall be groups first - 01, 02, 03, 04, 05, 06, 07, 08.
  - 2. Pedestrian Phasing shall be followed second - 02, 04, 06, 08.
  - 3. Any other special phasing shall be grouped last.

#### **H Shop Drawings and Manuals**

- (1) Submit detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet to the department for approval.
- (2) At the time of the delivery, furnish the following:
  - 1. Two sets of installation, operations, and maintenance manuals per cabinet for each type of equipment and their replacement parts. The manuals shall as a minimum include the following information:
    - a) Table of contents
    - b) Operating procedure
    - c) Step-by-step maintenance and trouble-shooting information for the entire assembly.
    - d) Part numbers
    - e) Maintenance checklists.
  - 2. Two sets of cabinet wiring diagrams located in a sealable heavy-duty clear plastic envelope mounted on the inside of the front door.

## **I Supplier Warranty**

- (1) The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description. Provide a warranty statement which stipulates that the cabinet and all supplied equipment are warranted for two years from the date of purchase, FOB at the factory or an Authorized Repair Depot.
- (2) If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the department shall then return the spare component to the supplier.

## **J Preemption**

### **J.1 General**

- (1) These specifications detail a preemptor program for use with 2 through 8-phase-actuated controller.
- (2) The preemptor shall be capable of being adaptable to meet the various types of applications such as railroad, fire station, and bridge preempts.
- (3) The preemptor shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user.

### **J.2 Preempt Program**

- (1) Preempt Registration. The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.
- (2) Preempt Delay. As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum.
- (3) As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervals will time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.

- (4) Entry Clearance Phase(s) Select. Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.
- (5) Dwell Sequence. After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omissible by setting the timer to zero.
- (6) Exit Sequence. After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

## **K Time Base Coordination**

- (1) These specifications detail a Time Base Coordinator program for use with 2 through 8-phase actuated controller.
- (2) The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper pre-programmed time to achieve the coordinated operation of an intersection with other intersections or the desired operation of an isolated intersection. The coordinators may also use a programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment for anticipated special events, etc.
- (3) The time base coordinator shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The time base coordinator shall be completely programmable by the user.

## **L Loop Detector Amplifiers**

### **L.1 Materials and Construction Methods**

- (1) All loop detector amplifiers supplied shall be two channel shelf-mounted units with digital output timing, and sequential scanning. The amplifier shall operate in compliance with all the requirements specified herein, when connected to an inductance loop plus lead-in of from 0 to 1000 microhenries with a loop parameter as low as 5.0 at the amplifiers operating frequency.

- (2) Each channel shall be self-tuning and shall be fully operational within one minute after power up. After a power interruption, the channel shall automatically return to normal operation. Two conventional single channel front panel mounted MS3102a18-1P connectors for each amplifier shall be provided.
- (3) Each channel shall have a fail-safe design such that if the loop sensor circuit is broken, the channel shall output a continuous vehicle call.
- (4) Couple the loop sensor to the channel input circuitry through isolation transformers. This arrangement shall provide continued operation of the channel even if the loop sensor in the street develops resistive leakage or becomes grounded.
- (5) Provide lightning protection for each amplifier as an integral part of its own circuitry. The protection shall enable the detector to withstand the discharge of a 10 microfarad capacitor, charged to  $\pm 1000$  volts. The discharge shall be applied directly across the detector loop input pins with no loop load present. The protection shall also enable the detector to withstand the discharge from a 10 microfarad capacitor, charged to 1 to 2000 volts. The discharge shall be applied directly across either the detector loop input pins or across either side of the loop input pins to earth ground. For this test, the detector chassis shall be grounded and the detector loop input pins shall have a 5.0 ohm dummy resistive load connected across them.
- (6) The detector circuits shall be so designed that changes due to environmental drift and applied power shall not cause an actuation. The detectors shall be capable of compensating or tracking for an environmental change of up to but not exceeding  $1 \times 10$  minus 3% charge in inductance per second. This requirement must be met within two hours after initial application of operating power.
- (7) Each detector channel shall have a minimum of three sensitivity settings and these shall be front panel selectable. The most sensitive setting shall respond to an inductance change of 0.02%. The least sensitive setting may be chosen by the manufacturer such that accurate and repeatable occupancy measurements may be obtained. This setting must cause the detector channel to respond to a 0.14-0.4% change in inductance.
- (8) Each detector channel shall have a front panel mounted indicator to provide a visual indication of each vehicle detection. A detector channel shall not cross talk with any other channel within the same module.
- (9) The unit shall operate over input voltage from 95VAC to 135VAC and shall neither originate nor be sensitive to electrical transients in excess of proposed NEMA standards. Provide varistors between power lines to limit transient voltages.
- (10) Provide extension and delay timing for each channel independently as described below:

## **L.2 Delay Timing**

- (1) Delay detector output for selected interval of 1 to 30 seconds in 1-second increments. Each new detection restarts the delay timer.

## **L.3 Extension Timing**

- (1) Extends vehicle calls up to 7.75 seconds in 0.50 second increments.

## **L.4 Green Gating**

- (1) Green signals from the controller shall be wired to the detector to modify timing functions. When green is true, delay timing is disabled. When green is false, extension timing is disabled. The green input signals may be DC or direct line voltage AC.

## **L.5 Smart Indicators**

- (1) Normal indicator operation is provided when neither timer is active. Delay and extensions are distinguished by 4 hertz and 16 hertz flashing respectively.
- (2) Provide the necessary Loop Detector Amplifiers as required on the plan.

## **M Cabinet Testing**

- (1) During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.

## **N Measurement**

- (1) The department will measure Traffic Signal Controller and Cabinet STH 42/Saemann/15<sup>th</sup> St., completed in accordance to the contract and accepted, as a single lump sum unit of work.

## **O Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Traffic Signal Controller and Cabinet STH 42/Saemann/15 <sup>th</sup> St.	Each

- (2) Payment is full compensation for furnishing and installing the signal controller and MMU together with cabinet, cabinet equipment, terminal facilities, load switches, detector amplifiers, and fittings as are necessary to assure that the controller will perform the said functions; and for shop drawings and manuals, warranty, signal timing installation, and testing.



**36. Fence Chain Link Vinyl Coated 4-Foot, Item SPV.0090.01.**

**A Description**

Furnish and install new vinyl clad chain link fencing in accordance to the pertinent plan details, standard spec 616, as directed by the engineer, and as hereinafter provided.

**B Materials**

Provide chain link fence with a bonded polyvinyl chloride (PVC) coating and conforming to AASHTO M181 type IV, class B. Provide fabric woven of 9-gage wire in 2-inch diamond pattern mesh with both the top and bottom selvages knuckled. Also provide PVC-coated ties and tension bars conforming to AASHTO M181. Ensure that the color of all fencing components matches the color of the chain link fence fabric the plans specify.

**C Construction**

Color match the fencing components with the railing framework materials before painting the framework. Install chain link fence fabric conforming to standard spec 616.3.3.3 and the plan details. Touch up painted framework surfaces marred by fencing installation.

**D Measurement**

The department will measure Fence Chain Link Vinyl Coated 4-Foot by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Fence Chain Link Vinyl Coated 4-Foot	LF

Payment is full compensation for providing, fabricating, transporting, erecting and tensioning all fence components; for painting the framework, including touch up.

**37. Concrete Curb and Gutter 32-Inch Type A Special, Item SPV.0090.03;  
Concrete Curb and Gutter 32-Inch Type D Special, Item SPV.0090.04.**

**A Description**

Construct concrete curb and gutter in accordance to standard spec 601 and as shown in the plans.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Concrete Curb and Gutter 32-Inch Type A and D Special by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Concrete Curb and Gutter 32-Inch Type A Special	LF
SPV.0090.04	Concrete Curb and Gutter 32-Inch Type D Special	LF

Payment is full compensation conforming to standard spec 601.5.

**38. Storm Sewer Pipe PVC 4-Inch, Item SPV.0090.05; Storm Sewer Pipe PVC 6-Inch, Item SPV.0090.06.**

**A Description**

Construct PVC storm sewer as shown on the plans, in accordance to the pertinent requirements of section 607 of the standard specifications and as hereinafter provided.

**B Materials**

Furnish Polyvinyl Chloride (PVC) pipe with rubber gasket joints conforming to ASTM D-2241 with wall thickness SDR-21.

Provide Crushed stone bedding and cover material conforming to the requirements for Coarse Aggregate Size No. 1 of standard spec 501.

**C Construction**

Extend crushed stone bedding and cover material from four inches below the pipe to one foot above the top of the pipe.

**D Measurement**

The department will measure Storm Sewer Pipe PVC (Size) by the linear foot, measured along the centerline of the pipe, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Storm Sewer Pipe PVC 4-Inch	LF
SPV.0090.06	Storm Sewer Pipe PVC 6-Inch	LF

Payment is full compensation for providing and installing all materials including bedding and cover material; for furnishing all excavation, sheeting and shoring, backfilling, compacting, disposing of surplus excavated material.

**39. Modify Emergency Vehicle Preemption System STH 42 (Calumet Dr.) and N 15th St. and STH 42 (Calumet Dr.) and Saemann Ave., Item SPV.0105.01; STH 42 (N 14th St.) and Superior Ave., Item SPV.0105.02.**

**A Description**

This special provision describes removal and salvage, storage, and reinstallation of salvaged emergency vehicle preemption (EVP) receivers and confirmation lights, and for making all connections necessary to provide a fully operational system as shown on the plan.

**B Materials**

Provide cable per manufacturer's requirements for EVP system.

**C Construction**

Remove existing emergency vehicle detectors and confirmation lights from the signal poles as shown in the plans and store the EVP detectors until reinstallation. EVP detectors shall be stored in a location protected from weather, sun, vandalism, or any conditions that may damage the detector.

Remove existing EVP cable from the conduit system and dispose of outside the right-of-way.

Reinstall EVP detectors and confirmation lights at the locations shown on the plans and according to manufacturer's instructions to provide a fully operational system.

Install new traffic signal EVP detector cable to run continuously (without splices) from the cabinet to the EVP detector.

Mark each end of the lead appropriately as to which signal phase it is associated with.

Do not splice detector cable from the detector assembly to the controller terminations.

Make all connections in the cabinet necessary to provide a fully operational EVP system. Coordinate with the City of Sheboygan to arrange testing of each receiver and the overall preemption system using city emergency vehicles under realistic conditions. Adjust detectors and other system equipment to provide the specified detection ability.

**D Measurement**

The department will measure Modify Emergency Vehicle Preemption System (location) as a single lump sum unit of work, acceptably completed.

**E Payment**

Pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Modify Emergency Vehicle Preemption System STH 42 (Calumet Dr.) and N 15 <sup>th</sup> St. and STH 42 (Calumet Dr.) and Saemann Ave.	LS
SPV.0105.02	Modify Emergency Vehicle Preemption System STH 42 (N 14 <sup>th</sup> St.) and Superior Ave.	LS

Payment is full compensation for removing, salvaging, storing, reinstalling, testing, and making fully operational an EVP system.

**40. Remove Traffic Signals STH 42 (Calumet Dr.) and N 15th St. and STH 42 (Calumet Dr.) and Saemann Ave., Item SPV.0105.03; STH 42 (N 14th St.) and Superior Ave., Item SPV.0105.04.**

**A Description**

This special provision describes removing existing traffic signals at the following intersections in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans; EVP equipment will not be removed under this special provision.

- STH 42 (Calumet Dr.) and N 15<sup>th</sup> St. and STH 42 (Calumet Dr.) and Saemann Ave.
- STH 42 (N 14<sup>th</sup> St.) and Superior Ave.

**B (Vacant)****C Construction**

Arrange for the de-energizing of STH 42 (Calumet Dr.) and N 15<sup>th</sup> St., STH 42 (Calumet Dr.) and Saemann Ave., and STH 42 (N 14<sup>th</sup> St.) and Superior Ave. with the City of Sheboygan after receiving approval from the engineer that the existing traffic signals can be removed. Contact Ryan Sazama at (920) 459-3485 at least three working days prior to the need for de-energizing to make arrangements for the city electrician to perform this work. The city electrician will require one hour to perform the work.

Notify the engineer at least three working days prior to the proposed removal of the traffic signals to obtain approval for removal. Direct voice contact or exchange of emails must be made with the engineer. Voice messages and unanswered emails do not constitute direct contact.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the pedestal and transformer bases from each standard and pole. Remove the signal heads, mast arms, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Remove the traffic signal control cabinet. Ensure that all access handhole doors and all associated hardware remain intact. Dispose of the

remaining underground signal cable and internal wires. Deliver the remaining materials to the City of Sheboygan at the Department of Public Works/Municipal Service Building located at 2026 New Jersey Avenue, Sheboygan, WI. Contact Ryan Sazama at (920) 459-3485 at least three working days prior to delivery to make arrangements.

#### **D Measurement**

The department will measure Remove Traffic Signals (location) as a single lump sum unit of work, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Remove Traffic Signals STH 42 (Calumet Dr.) and N 15th St. and STH 42 (Calumet Dr.) and Saemann Ave.	LS
SPV.0105.04	Remove Traffic Signals STH 42 (N 14th St.) and Superior Ave.	LS

Payment is full compensation for removing, disassembling traffic signals, scrapping of some materials, disposing of scrap material, and for delivering the requested materials to the City of Sheboygan.

### **41. Vehicular Video Detection System, Item SPV.0105.05.**

#### **A Description**

This work shall consist of furnishing, installing, and placing into operation a vehicular video detection system (VDS) as shown on the plans.

#### **B Materials**

This specification sets forth the minimum requirements for a system that detects vehicles on a roadway by processing video images and providing detection outputs to a traffic signal controller. The materials shall also include all brackets, mounting hardware, cable, terminations, interface panels, detector racks, processors, and all other incidentals for the installation of the video detection equipment. The vehicular video detection system shall be an Iteris Edge 2 video system.

Furnish and install the following equipment:

- a. Video detection camera
- b. Video detection processor, rack, and extension module
- c. System Software
- d. System Interfaces
- e. Flat screen color monitor, protective case, and mouse
- f. All cables, wires, surge protectors, fuses, connectors, and other equipment needed to make the VDS operational

### **B.1 System Hardware**

The VDS shall consist of one video camera, a video detection processor (VDP) capable of processing from one to two video sources, and a mouse.

### **B.2 System Software**

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on board video menu and a pointing device to place the zones on a video image. Up to 24 detection zones per camera view shall be available. A separate computer shall not be required to program the detection zones.

### **B.3 Available System Configuration**

**Table 1. VDS Configuration**

DESCRIPTION	NO. VIDEO INPUTS	NO. VIDEO OUTPUTS	MOUNTING CONFIGURATION	POWER SUPPLY REQUIREMENTS
Dual-Channel Rack Mounted	2	1	Rack Mount (NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack

### **B.4 System Interfaces**

The following interfaces shall be provided for the configuration identified in Table 1.

1. Video Input - Each video input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source (camera sensor or VCR). The interface connector shall be BNC type and shall be located on the front of the video processing unit. The video input shall have the capability to select 75-ohm or high impedance (Hi-Z) termination.
2. Video Lock LED - A LED indicator shall be provided to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.
3. Video Output - One video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to toggle through each input video channel. In the absence of a valid video signal, the channel shall be skipped and the next valid video signal shall be switched. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Overlays shall be able to be turned off by the user. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC type.

4. Serial Communications - A serial communications port shall be provided on the front panel. The serial port shall be compliant with EIA232 electrical interfaces and shall use a DB9 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented and interface software shall be provided. The interface protocol shall support multi-drop or point-to-multipoint communications. Each VDS shall have the capability to be addressable.
5. Contact Closure Output - Open collector contact closure outputs shall be provided. Four open collector outputs shall be provided. The VDPs shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
6. Detection LEDs - LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. Rack-mounted video processors shall have a minimum of four (4) LEDs. Rack-mounted extension modules shall have two or four LEDs to indicate detection.
7. Mouse Port - A USB mouse port shall be provided on the front panel of the rack mount video processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration. An optical mouse shall be provided with each video processor.

### **B.5 General System Functions**

Detection zones shall be programmed via an onboard menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.

The VDP shall store up to three different detection zone patterns. The VDP can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device.

The VDP shall detect vehicles in real time as they travel across each detection zone.

The VDP shall have an EIA232 port for communications with an external computer. The VDP EIA232 port shall be multi-drop capable.

The VDP shall accept new detection patterns from an external computer through the EIA232 port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™-based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.

The VDP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

The VDP shall send its detection patterns to an external computer through the EIA232 port when requested when the external computer uses the correct communications protocol for uploading detection patterns.

The VDP shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference with the video signal.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. A user-selected output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

## **B.6 Vehicle Detection**

Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.

The VDP shall provide up to 24 open collector output channels per camera input using one or more extension modules.

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from each video camera. No separate computer shall be required to program the detection zones.

Up to 3 detection zone patterns shall be saved for each camera within the VDP memory. The VDP's memory shall be non-volatile to prevent data loss during power outages.

The selection of the detection zone pattern for current use shall be done through a menu. It shall be possible to activate a detection zone pattern from VDP memory and have that detection zone pattern displayed within 1 second of activation.

The VDP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

When a vehicle is detected within a detection zone, the corners of the detection zone shall activate on the video overlay display to confirm the detection of the vehicle.



Detection shall be at least 98% accurate in good weather conditions, and at least 93% accurate under artifact conditions. Artifact conditions are combinations of weather and lighting conditions that result from shadows, fog, rain, snow, etc.

The VDP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The VDP shall output a constant call on any detector channel corresponding to a zone being modified.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

The VDP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.

The VDP shall output a constant call for each enabled detector output channel if a loss of video signal occurs. The VDP shall output a constant call during the background learning period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.

Up to six detection zones per camera view shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the EIA232 port. The zone shall also have the capability to calculate and store average speed and lane occupancy at bin intervals of 10 seconds, 20 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes and 60 minutes.

## **B.7 VDP Hardware**

The VDP and extension module (EM) shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power and provide contact closure outputs. No adapters shall be required to mount the VDP or EM in a standard detector rack. Detector rack rewiring shall not be required.

The EM shall be provided to avoid the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack. The extension module shall be connected to the VDP by a 8 wire cable with modular connectors, and shall output contact closures in accordance to user selectable channel assignments. The EM is available in 2, 4, or 32 channel configurations.

### **B.7.1 Input Power**

The VDP and EM shall be powered by 12/24 volts DC. VDP power consumption shall not exceed 7 watts. The EM power consumption shall not exceed 2.5 watts.

### **B.7.2 Detection Outputs**

The VDP and EM shall include detector output pin out compatibility with industry standard detector racks. The 32-channel EM shall provide output through a 37-pin "D" connector on the front panel.

### **B.7.3 Video Inputs**

VDPs shall include one, two or four BNC video input connections suitable for composite video inputs. The video input shall include a switch selectable 75-ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection.

### **B.7.4 Video Outputs**

The front of the VDP shall include one BNC video output providing real time video output that can be routed to other devices.

### **B.7.5 Mechanical**

The VDP shall operate satisfactorily as set forth in this special provision and as shown in the plans in a temperature range from -34 °C to +74 °C and a humidity range from 0% RH to 95% RH, non-condensing as set forth in NEMA specifications.

The front panel of the VDP shall have detector test switches to allow the user to place calls on each channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

The front face of the VDP shall contain indications, such as LED displays, to enable the user to view real time detections for each channel of detection when the system is operational.

The VDP shall include an EIA232 port for serial communications with a remote computer. This port shall be a 9-pin "D" subminiature connector on the front of the VDP.

The VDP shall utilize non-volatile memory technology to enable the loading of modified or enhanced software through the EIA232 port and without modifying the VDP hardware.

## **B.8 Video Detection Camera**

Video detection cameras used for traffic detection shall be furnished by the video detection processor (VDP) supplier and shall be qualified by the supplier to ensure proper system operation. Operate as set forth in this special provision and as shown on the plans.

The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 1.0 lux to 10,000 lux.

The imager luminance signal to noise ratio (S/N) shall be more than 50 dB.

The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 470 TV lines. The CCD imager shall have a minimum effective area of 768(h) x 494(v) pixels.

The camera shall include an electronic shutter control based upon average scene luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter.

The camera shall utilize automatic white balance.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.

The horizontal field of view shall be adjustable from 5.4 to 50.7 degrees. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a 10x zoom lens with a focal length of 3.8 mm to 38.0 mm.

The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.

The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The enclosure shall be made of 6061 anodized aluminum. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view. The camera enclosure with sunshield shall be less than 6" diameter, less than 18" long, and shall weigh less than 6 pounds when the camera and lens are mounted inside the enclosure.

The enclosure shall be designed so the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.

The camera enclosure shall include a proportionally controlled heater, where the output power of the heater varies with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.

The glass face shall also employ a special coating to minimize the buildup of environmental debris such as dirt and water.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -34 °C to +60 °C and a humidity range from 0% RH to 100% RH. Measurement of satisfactory video shall be based upon VDP system operation.

The camera shall be powered by 120-240 VAC 50/60 Hz. Power consumption shall be 45 watts or less under all conditions. An optional DC power configuration shall be available for 12 VDC operation.

The VDS shall be fully operational for detection zones at distances shown on the plan.

The camera enclosure shall be equipped with separate, weather-tight connections for power and video cables at the rear of the enclosure. These connections may also allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module (LAM) supplied by the VDP supplier. Video and power shall not reside within the same connector.

The video signal shall be fully isolated from the camera enclosure and power cabling.

## **C Construction**

### **C.1 Installation**

The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors should be used at both the camera and cabinet ends. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

The power cabling shall be 16 AWG three conductor cable with a minimum outside diameter of 0.325 inch and a maximum diameter of 0.490 inch. The cabling shall comply with the National Electric Code, as well as local electrical codes. Cameras may acquire power from the luminaire if necessary.

The VDS camera and processor shall be installed by factory-certified installers as recommended by the supplier and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

## **C.2 Limited Supplier Warranty**

The supplier shall provide a limited three-year warranty on the video detection system.

During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factory-certified personnel or factory-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

## **C.3 Maintenance and Support**

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for onsite technical support services.

Installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Traffic Signal Technician certified.

All product documentation shall be written in the English language.

## **D Measurement**

The department will measure Vehicular Video Detection System, as a single lump sum unit of work for the complete system, 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.0105.05	Vehicular Video Detection System	LS

Payment is full compensation for furnishing and installing the video detection system, testing and set up, and making the video detection system fully operational.

**42. Modify Traffic Signal Cabinet STH 42 (N 14<sup>th</sup> St.) and Superior Ave., Item SPV.0105.07.**

**A Description**

This special provision describes the modification of the traffic signal cabinet to accommodate new traffic signal equipment and revised traffic signal operations at the intersection of STH 42 (N 14<sup>th</sup> St.) and Superior Ave. Complete all work in conformance with standard spec 651.

**B Materials**

Furnish all materials and equipment required to operate the intersection traffic as shown on the plans and in the sequence of operations, including, but not limited to, circuit breakers, load switches, pedestrian pushbutton opto isolator, detector amplifiers, surge protectors, varistors, and other cabinet equipment. All equipment shall be new.

**C Construction**

Install the new equipment and modify the traffic signal cabinet to accommodate new signal equipment as shown on the plan and in accordance to standard spec 651. Program the traffic signal controller and conflict monitor to accommodate the updated traffic signal timing and phasing as shown on the plan and in the traffic signal timing plan. Install the revised signal timing plan. Contact Ryan Sazama at (920) 459-3485 to obtain the timing plan.

Make the proposed signal system complete from the source of supply to the most remote unit. Test all new and reconnected grounded conductors, equipment grounding conductors, and ungrounded conductors as specified in standard spec 651.3.3. Test all loop detectors and preemption. The completed cabinet shall be fully functional to operate all the existing and new traffic signal equipment, lighting equipment, and the proposed traffic signal timing plan.

Prepare three sets of cabinet wiring diagrams showing the entire cabinet. Place two cabinet wiring diagram sets in a heavy duty clear plastic envelope mounted on the inside of the front cabinet door, and provide one cabinet wiring diagram set to the engineer.

Demonstrate the cabinet operation to the engineer. Contact the engineer and Ryan Sazama, City Engineer at (920) 459-3485, a minimum of three working days in advance of the proposed review time to arrange the demonstration.

**D Measurement**

The department will measure Modify Traffic Signal Cabinet STH 42 (N 14th St.) and Superior Ave., as a single lump sum unit of work, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.07	Modify Traffic Signal Cabinet STH 42 (N 14 <sup>th</sup> St.) and Superior Ave.	LS

Payment is full compensation for furnishing and installing cabinet materials and equipment; modifying the traffic signal cabinet and controller; furnishing and installing miscellaneous items such as, but not limited to, wire nuts, splice kits, connectors, tape, insulating varnish, and ground lug fasteners; cleaning up and disposing of all waste; testing the cabinet; and demonstrating the cabinet.

**43. Concrete Pavement Joint Layout, Item SPV.0105.08.****A Description**

- (1) This special provision describes providing a concrete pavement joint layout design for intersections and marking the location of all joints in the field.

**B (Vacant)****C Construction**

- (1) Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete pavement to prevent uncontrolled cracking. Submit a joint layout design to the engineer before paving each intersection. Mark the location of all concrete pavement joints in the field. Follow the plan details for joints in concrete pavements making adjustments as required to fit field conditions.

**D Measurement**

- (1) The department will measure Concrete Pavement Joint Layout as a single lump sum unit of work for all joint layout designs and marking, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.08	Concrete Pavement Joint Layout	LS

- (2) Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.
- (3) The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

#### **44. Railing Steel Galvanized Pedestrian, Item SPV.0105.09.**

##### **A Description**

Fabricate, galvanize, paint and install railing in accordance to standard spec 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

##### **B Materials**

Provide all materials for railing from new stock, free from defects impairing strength, durability and appearance. Galvanize railing assemblies and apply 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. Drill vent holes in members as required to facilitate galvanizing and drainage. Show the location and size of vent holes on the shop drawings. Remove all burrs at component edges, corners and at holes and chamfer sharp edges 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. Clean all galvanized surfaces to be painted per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. Brush blast clean the cleaned surface 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 should be of contrasting colors, and come from the same manufacturer.

Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applicator. 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.

<b>Manufacturer</b>	<b>Coat</b>	<b>Products</b>	<b>DRY FILM MINIMUM THICKNESS  (mils)</b>	<b>MIN. TIME<sup>1</sup> BETWEEN COATS (hours)</b>
<b>Sherwin Williams</b> 1051 Perimeter Drive Suite 710 Schaumburg, IL 60173 (847) 330-1562	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
	Top	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
<b>Carboline</b> 350 Hanley Industrial St. Louis, MO 63144 (314) 644-1000	Tie	Rustbond Penetrating Sealer FC	1	36
	Tie	Carboguard 60	4.0 to 6.0	10
	Tie	Carboguard 635	4.0 to 6.0	1
	Top	Carbothane 133 LH(satin)	4	NA
<b>Wasser Corporation</b> 4118 B Place NW Suite B Auburn, WA 98001 (253) 850-2967	Tie	MC-Ferrox B 100	3.0 to 5.0	8
	Top	MC-Luster 100	2.0 to 4.0	NA

<sup>1</sup> 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, thoroughly inspect all materials to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. If coating is damaged, 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, touch-up the surface in conformance with the manufacturer's recommendations. If damage is excessive as determined by the engineer, replace the railing assembly at no additional cost to the owner. 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 Galvanized Pedestrian 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.0105.09	Railing Steel Galvanized Pedestrian	LS

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

## **45. Stamped Concrete Sidewalk 5-Inch Item SPV.0165.01.**

### **A Description**

Construct stamped concrete for sidewalk in accordance to the standard spec 602, as shown on the plans, and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

Construct stamped concrete sidewalk in accordance to standard spec 602 and as herein provided.

#### **C.1 Placement**

Uniformly apply liquid release agent onto the concrete while it is still in a plastic state to provide clean release of imprinting tools from the concrete surface without lifting imprint or tearing concrete.

While initially finished concrete is in plastic state, accurately align and place imprinting stamps. Monitor the setting up of the concrete. Once the concrete has set to the point it can be stamped, begin stamping. Uniformly pound or press imprint tools into concrete to produce required pattern and depth of imprint on concrete surface. Remove platform tools immediately. Hand texture and stamp edges and surfaces unable to be imprinted by stamp mats. Touch up imperfections such as broken comers, double imprints and surface cracks.

Stamp concrete consistently so that stamped concrete does not have a vertical elevation difference of ½ inch or depressions in concrete capable of causing ponding water or ice. For concrete hand stamped edges and surfaces that are unable to be imprinted by platform tools, use texture mats and single blade hand stamps to match platform tool stamping pattern. Finish imprinting to match pre-construction mock ups.

#### **D Measurement**

The department will measure Stamped Concrete Sidewalk 5-Inch by the square foot, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Stamped Concrete Sidewalk 5-Inch	SF

Payment for Stamped Concrete Sidewalk 5-Inch bid item is full compensation according to standard spec 602.5.2.

### **46. Wall Limestone Block Gravity Station 53+24, Item SPV.0165.02; Wall Limestone Block Gravity Station 200+31, Item SPV.0165.03.**

#### **A Description**

Erect a permanent earth retention system from salvaged limestone blocks in accordance to the lines, dimension, elevations and details as shown on the plans and provided in the contract.

#### **B Materials**

##### **B.1 Wall Components**

Conform to the requirements hereinafter provided.

##### **B.1.1 Backfill**

Wall Backfill, Type A

Comply with the requirements for coarse aggregate No. 1 as given in standard spec 501.2.5.4. Use Wall Backfill, Type A for all backfill placed within a zone from the base of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall.

Place a layer of Geotextile Fabric Type “DF” (Schedule B) vertically between the retained soil and the Type A backfill. Extend the geotextile fabric from the top of the leveling pad to 6 inches below the surface of the retained soil. Wrap the geotextile across the top of the Type A backfill to the back of block wall facing.

### **B.1.2 Wall Facing**

Use salvaged limestone blocks from the removal of Structure P-59-715 for wall facing.

Cut blocks as necessary to match the length of the wall as shown on the plan. The minimum embedment to the bottom of the limestone block shall be 1 foot 6 inches.

### **B.1.3 Leveling Pad**

Use a compacted leveling pad made from base aggregate dense 1¼ inch as given in section 305 of the standard specifications. The depth of the aggregate leveling pad shall be as shown on the plans or 12-inches minimum. The aggregate leveling pad shall be as wide as the blocks plus 12 inches with 12 inches of pad extending beyond the front face of the wall. Place the bottom of the blocks horizontal for all walls except for the wall in Workers' Water Street Park that shall match the slope of the adjacent bike path. One hundred percent of the block surface shall bear on the leveling pad. The leveling pads steps shall keep the bottom of the wall within one block's thickness of the minimum embedment, i.e. minimum embedment plus up to the thickness of one block.

## **C Construction**

Construct the limestone block gravity wall at the locations and to the dimensions shown on the plan and as directed by the engineer. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the front face of the wall.

Place and work stones as needed to create tight abutted joints. Field trim as necessary keeping filler pieces to a minimum. A minimum of 75% of joints shall be 2" or less. Remaining joints shall be as tight as possible. Offset vertical joints from adjacent rows by 6 inches.

Place materials in the areas as indicated on the plans and as detailed in this specification. Use 8-inch maximum backfill lifts. Closely follow erection of each course of wall facing blocks with backfilling.

Compact each layer of wall backfill Type A with at least three passes of lightweight manually operated compaction equipment acceptable to the engineer.

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the limestone blocks. At no expense to the department, correct any such damage or misalignment as directed by the engineer.

Do not operate tracked or wheeled equipment within 3 feet of the back face of the blocks. The engineer may order the removal of any large or heavy equipment that may cause damage or misalignment of the limestone blocks.

After construction of the wall, restore the surrounding area located above and below all limestone block retaining wall sites to its original condition and to the finished details on the plans.

**D Measurement**

The department will measure Wall Limestone Block Gravity (location) by the square foot of face on a vertical plane between the top of the leveling pad and a line indicating the top of wall as shown on the plans. Unless directed by the engineer, wall area constructed above or below these limits will not be measured for payment.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.02	Wall Limestone Block Gravity Station 53+24	SF
SPV.0165.03	Wall Limestone Block Gravity Station 200+31	SF

Payment is full compensation for preparing the site, including all necessary excavation and disposal of surplus materials; providing, cutting and working blocks as necessary, constructing the retaining wall; providing backfill, backfilling, and compacting the backfill; furnishing and installing geotextile fabric. Railings and other items above the top of the wall will be paid for separately.

Any required topsoil, fertilizer, seeding or sodding and mulch will be paid for at the contract unit price of topsoil, fertilizer, seeding or sodding and mulch, respectively.

**47. Curb Ramp Detectable Warning Field Natural Patina Special, Item SPV.0165.04.**

**A Description**

Construct curb ramp detectable warning fields in accordance to standard spec 602 and as shown in the plans.

**B Materials**

Curb Ramp Detectable Warning Fields Natural Patina Special shall be Neenah 4984-0101.

**C (Vacant)**

**D Measurement**

The department will measure Curb Ramp Detectable Warning Field Natural Patina Special by the square foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.04	Curb Ramp Detectable Warning Field Natural Patina Special	SF

Payment is full compensation conforming to standard spec 602.5.

#### **48. Concrete Joint Sealing, Item SPV.0180.01.**

##### **A Description**

Furnish and install joint sealer for concrete pavement as shown on the plans, and as hereinafter provided.

##### **B Materials**

Conform to the requirements of the standard specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements Concrete Joint Sealer, Hot-Poured Elastic Type, ASTM Designation: D6690.

##### **C Construction**

Place joint sealer as shown on the plans and in accordance to the manufacturer's instructions. Seal all longitudinal, transverse, and construction joints prior to allowing any traffic on the pavement.

##### **D Measurement**

The department will measure Concrete Joint Sealing by the square yard of pavement, sealed and acceptably completed.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Concrete Joint Sealing	SY

Payment is full compensation for providing all materials, and for placing materials.

#### **49. Concrete Pavement Approach Slab Special, Item SPV.0180.02.**

##### **A Description**

Construct concrete pavement approach slab special as shown on the plans and as hereinafter provided.

##### **B Materials**

Furnish and use materials conforming to the requirements of standard spec 501.

##### **C Construction**

Construct Concrete Pavement Approach Slab Special in accordance to standard spec 416.

**D Measurement**

The department will measure Concrete Pavement Approach Slab Special by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.02	Concrete Pavement Approach Slab Special	SY

Payment is full compensation for providing concrete; for reinforcement, joints, and joint materials; for hauling, mixing, placing, finishing, curing, and protecting the concrete; for hauling and placing reinforcement and joint materials, including fillers; and for preparing the foundation.





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**ADDITIONAL SPECIAL PROVISION 1 (ASP 1)  
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)  
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS**

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The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including “pipeline” activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

*TrANS* is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor’s needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

### ***I. BASIC CONCEPTS***

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

- 1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of \$5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that   2   (number) TrANS Graduate(s) be utilized on this contract.

- 2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 1 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

## ***I. RATIONALE AND SPECIAL NOTE***

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

***NOTE:*** *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

## ***II. IMPLEMENTATION***

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

#### **IV. TRANS TRAINING**

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

#### **V. APPRENTICESHIP TRAINING**

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

### ADDITIONAL SPECIAL PROVISION 3 DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

#### 1. Description

##### General

- a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
- b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
  - i. Produce accurate and complete quotes.
  - ii. Understand highway plans applicable to their work.
  - iii. Understand specifications and contract requirements applicable to their work.
  - iv. Understand contracting reporting requirements.
- c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

<http://www.dot.wisconsin.gov/business/engrserv/dbe-main.htm>

#### 2. Definitions

- a. Interpret these terms, used throughout this additional special provision, as follows:
  - i. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
  - ii. **DBE:** A disadvantaged business enterprise (DBE) certified as a DBE by the department and included on the department's list of certified DBE's who are determined to be ready, willing and able.
  - iii. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
  - iv. **Discretionary Goal:** A contractor assigned DBE goal, typically abbreviated as "Disc" on the cover of the Highway Work Proposal, which is enforced as committed.
  - v. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
  - vi. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
  - vii. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

#### 3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal, including projects with discretionary goals. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized

comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

#### **4. Department's DBE Evaluation Process**

##### **a. Documentation Submittal**

Within 10 business days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506] and all necessary attachment A forms, as well as, Good Faith Waiver Form [DT1202] and supporting documentation as necessary. If the contractor fails to furnish the required forms within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

##### **i. Bidder Meets DBE Goal**

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage achieved. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

##### **ii. Bidder Does Not Meet DBE Goal**

- (1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.
- (2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:
  - a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.
  - b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

#### **5. Department's Criteria for Good Faith Effort**

The Code of Federal Regulations {CFR}, 49 CFR Part 26-Appendix A, is the guiding regulation concerning good faith efforts. However, the federal regulations do not define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own process when making a determination of good faith.

- a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

- b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.
- c. Prime Contractors should:
  - i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
  - ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, **as required by federal rules**. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
    - (1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.
    - (2) SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
      - a. Primes must ask DBE firms for a response in their solicitations. *See Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
      - b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.
    - (3) Second solicitation should take place within 5 days
      - a. An email solicitation is highly recommended for this second solicitation
    - (4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
    - (5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.
    - (6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
      - a. Email to all prospective DBE firms in relevant work areas
      - b. Phone call log to DBE firms who express interest via written response or call.
      - c. Fax/letter confirmation
      - d. Copy of the DBE quotes
      - e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.
- d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.
  - i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its

- capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.
- ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
  - iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
    - (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.
    - (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- e. After notification of contract award, submit '**Commitment to Subcontract**' form within the time period specified in the contract.
    - i. Provide the following information along with department form DT1202:
      - (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.
      - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
      - (3) Photocopies or electronic copies of all written solicitations to DBE's.
      - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
      - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.
  - f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office  
6150 Fond du Lac Ave.  
Milwaukee, WI 53218  
Phone: 414-438-4583 / 608-266-6961  
Fax: 414-438-5392  
E-mail: [DOTDBESupportServices@dot.wi.gov](mailto:DOTDBESupportServices@dot.wi.gov)

## 6. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so



requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

## **7. Department's Criteria for DBE Participation**

### **Department's DBE List**

- a. The department maintains a DBE list on the department's website at <http://app.mylcm.com/wisdot/Reports/WisDotUCPDirectory.aspx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

## **8. Counting DBE Participation**

### **Assessing DBE Work**

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

## **9. Commercially Useful Function**

- a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- b. A DBE is performing a commercially useful function if the following conditions are met:
- c. For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
- d. For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

**10. Trucking**

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at

<http://www.dot.wisconsin.gov/business/engrserv/docs/dbe-trucking-notice.pdf>

**11. Manufacturers and Suppliers**

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

**12. DBE Prime**

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

**13. Joint Venture**

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces.

**14. Mentor Protégé**

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will credit the portion of the work performed by the DBE protégé firm
- b. On every other project that the mentor protégé team identifies itself on.
- c. For no more than one half of the total contracted DBE goal on any WisDOT project.

**15. DBE Replacement**

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:

<http://www.dot.wisconsin.gov/business/engrserv/docs/policyreplacingdbe.pdf>

**16. Changes to the approved DBE Commitment Form DT1506**

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

**17. Contract Modifications**

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors, that were committed to equal work items, in the original contract.

**18. Payment**

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

**APPENDIX A**  
**Sample Contractor Solicitation Letter Page 1**  
*This sample is provided as a guide not a requirement*

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GFW SAMPLE MEMORANDUM

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**TO:** DBE FIRMS  
**FROM:** POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR  
**SUBJECT:** REQUEST FOR DBE QUOTES  
LET DATE & TIME  
**DATE:** MONTH DAY YEAR  
**CC:** DBE OFFICE ENGINEER

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Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at <http://roadwaystandards.dot.wi.gov/hcci/>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. **Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.** We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <http://roadwaystandards.dot.wi.gov/hcci/>

All questions should be directed to:

Project Manager, John Doe,  
Phone: (000) 123-4567  
Email: [Joe@joetheplumber.com](mailto:Joe@joetheplumber.com)  
Fax: (000) 123- 4657

## Sample Contractor Solicitation Letter Page 2

*This sample is provided as a guide not a requirement*

### REQUEST FOR QUOTATION

Prime's Name: \_\_\_\_\_

Letting Date: \_\_\_\_\_

Project ID: \_\_\_\_\_

**Please check all that apply**

- ☐ Yes, we will be quoting on the projects and items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have some one contact me at this number

**Prime Contractor 's Contact Person**

Phone: _____
Fax: _____
Email: _____
_____

**DBE Contractor Contact Person**

Phone _____
Fax _____
Email _____
_____

**Please circle the jobs and items you will be quoting below**

Proposal No.	1	2	3	4	5	6	7
County							

**WORK DESCRIPTION:**

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

## **APPENDIX B BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT**

*This list is not a set of requirements; it is a list of potential strategies*

### **Primes**

- Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

### **DBE**

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

## APPENDIX C

### Types of Efforts considered in determining GFE

*This list represents concepts being assessed; analysis requires additional steps*

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

**APPENDIX D**  
**Good Faith Effort Evaluation Guidance**  
*Excerpt from Appendix A of 49 CFR Part 26*

**APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS**

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
  - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
  - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
  - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- D.
    - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
    - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
  - E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
  - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
  - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.



## Appendix E

### Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
  - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
  - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
  - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
  - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
  - d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
  - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
  - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
  - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
  - b. Easily locate pre-qualified and certified small and disadvantaged businesses
  - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
  - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
  - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
  - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
  - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
  - c. Add attachments to a sub-quote
3. Create and send unsolicited sub-quotes to specific contractors:
  - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
  - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
  - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
  - c. Add attachments to a sub-quote
  - d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
  - a. Receive a confirmation that your sub-quote was opened by a prime
  - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
  - c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
  - a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select “Order Bid Express.” The Small Business Network is a part of the Bid Express Basic Service.
  - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

#### **ADDITIONAL SPECIAL PROVISION 4**

Payment to all Subcontractors. Within 10 calendar days of receipt by a contractor of a progress payment for work performed, materials furnished, or materials stockpiled by a subcontractor, the contractor shall pay that subcontractor for all work satisfactorily performed and for all materials furnished or stockpiled.

The contractor agrees further to release retainage amounts to each subcontractor within 10 calendar days after the subcontractor's work is satisfactorily completed. In addition, whenever the Department reduces the contract retainage amount, within 10 calendar days of receipt by a contractor of a retainage payment, the contractor must reduce the total amount retained from subcontractors to no more than remains retained by the Department.

The contractor shall pay the subcontractor within the time frames described above unless the contractor complies with both of the following within 10 calendar days of receiving the Department's progress payment:

- 1) The contractor notifies the subcontractor in writing that the work is not satisfactorily completed.
- 2) The contractor requests approval from the Department to delay payment because the subcontractor has not satisfactorily completed the work.

The contractor's request for approval should include the written notification to the subcontractor and shall provide sufficient documentation of good cause to assist the engineer in making a timely decision. If the engineer does not grant approval, the contractor shall pay the subcontractor within 10 calendar days of the Department's decision.

All subcontracting agreements made by a contractor shall include the above provisions and shall be binding on all contractors and subcontractors.

The contractor certifies compliance with the requirements of this Additional Special Provision by signing the contract. This clause applies to both DBE and non-DBE subcontractors.



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

*Make the following revisions to the 2013 edition of the standard specifications:*

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**106.3.4.3.1 General**

*Replace paragraph two with the following effective with the November 2012 letting:*

- (2) Required sampling and testing methodologies and documentation are specified in CMM chapter 8.
  - (3) If disputed, approval of materials and components, as well as acceptance of the work incorporating those materials or components, is subject to review under the QMP dispute resolution process.
- 

**107.17.3 Railroad Insurance Requirements**

*Replace the entire text with the following effective with the August 2012 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 department has accepted the work as specified in 105.11.2.4.
- (2) Provide railroad protective liability insurance coverage written as specified in 23 CFR part 646 subpart A. Provide a separate policy for each railroad owning tracks on the project. Ensure that the railroad protective liability insurance policies provide the following minimum limits of coverage:
  - 1. Coverage A, bodily injury liability and property damage liability; \$2 million per occurrence.
  - 2. Coverage B, physical damage to property liability; \$2 million per occurrence.
  - 3. An annual aggregate amount of \$6 million that shall apply separately to each policy renewal or extension.
- (3) Obtain coverage from insurance companies licensed to do business in Wisconsin that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.
- (4) Submit the following to each railroad owning tracks on the project as evidence of that railroad's respective coverage:
  - 1. A certificate of insurance for the types and limits of insurance specified in 107.26.
  - 2. The railroad protective liability insurance policy or other acceptable documentation to the railroad company.
- (5) Submit the following to the region as evidence of the required coverage:
  - 1. A copy of the letter to the railroad company transmitting the submittal documents specified in 107.17.3(4).
  - 2. A certificate of insurance for the required railroad protective liability coverages.
- (6) Do not begin work on the right of way or premises of the railroad company until the region receives the submittals specified in 107.17.3(5) and notification from the railroad company that the contractor has provided sufficient insurance information to begin work.
- (7) Notify the railroad and the region immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations within 50 feet of the railroad right of way immediately if insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.

**460.2.8.3.1.4 Department Verification Testing Requirements**

*Replace paragraph four with the following effective with the December 2012 letting:*

- (4) The department will randomly test each design mixture at the following minimum frequency:
- FOR TONNAGES TOTALING:
- Less than 501 tons ..... no tests required
- From 501 to 5,000 tons..... one test
- More than 5,000 tons..... add one test for each additional 5,000-ton increment

**501.2.1 Portland Cement**

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

- (1) Use cement conforming to ASTM specifications as follows:
- Type I portland cement; ASTM C150.
  - Type II portland cement; ASTM C150.
  - Type III portland cement; ASTM C50, for high early strength.
  - Type IP portland-pozzolan cement; ASTM C595, except maximum loss on ignition is 2.0 percent.
  - Type IS portland blast-furnace slag cement; ASTM C595.
  - Type IL portland-limestone cement; ASTM C595, except maximum nominal limestone content is 10 percent with no individual test result exceeding 12.0 percent.

**501.2.5.5 Sampling and Testing**

*Replace the entire text with the following effective with the January 2013 letting:*

- (1) Sample and test aggregates for concrete according to the following:
- |  |                           |
|--|---------------------------|
| Sampling aggregates .....  | AASHTO T2                 |
| Lightweight pieces in aggregate .....                                | AASHTO T113               |
| Material finer than No. 200 sieve .....                              | AASHTO T11                |
| Unit weight of aggregate .....                                       | AASHTO T19                |
| Organic impurities in sands .....                                    | AASHTO T21                |
| Sieve analysis of aggregates .....                                   | AASHTO T27                |
| Effect of organic impurities in fine aggregate .....                 | AASHTO T71                |
| Los Angeles abrasion of coarse aggregate .....                       | AASHTO T96                |
| Freeze-thaw soundness of coarse aggregate.....                       | AASHTO T103               |
| Sodium sulfate soundness of aggregates .....                         | AASHTO T104               |
| Specific gravity and absorption of fine aggregate .....              | AASHTO T84                |
| Specific gravity and absorption of coarse aggregate .....            | AASHTO T85                |
| Flat & elongated pieces based on a 3:1 ratio.....                    | ASTM D4791 <sup>[1]</sup> |
| Sampling fresh concrete .....  | AASHTO R60                |
| Making and curing concrete compressive strength test specimens ..... | AASHTO T23                |
| Compressive strength of molded concrete cylinders .....              | AASHTO T22                |

<sup>[1]</sup> As modified in CMM 8-60.

**501.2.6 Fly Ash**

*Replace paragraph three with the following effective with the March 2013 letting:*

- (3) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.

---

**501.3.1.1.1 Air-Entrained Concrete**

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

- (1) Prepare air-entrained concrete with type I, IL, II, IS, or IP portland cement and sufficient air-entraining admixture to produce concrete with the air content specified in 501.3.2.4.

---

**503.2.2 Concrete**

Replace paragraph five with the following effective with the March 2013 letting:

- (5) Furnish prestressed concrete members cast from air-entrained concrete, except I-type girders may use non-air-entrained concrete. Use type I, IL, IS, , IP, II, or III portland cement. The contractor may replace up to 30 percent of type I, IL, II, or III portland cement with an equal weight of fly ash, slag, or a combination of fly ash and slag, except for prestressed box girders and slabs, the contractor shall replace 20-30 percent of the cement with fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.6 and slag conforms to 501.2.7. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.2 for air-entrained concrete. Use only size No. 1 coarse aggregate conforming to 501.2.5.4.

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**506.3.22 Shop Inspection**

Replace paragraph one with the following effective with the July 2010 letting:

- (1) The engineer or an independent inspection agency under department contract may inspect all structural steel and miscellaneous metals furnished. The department will provide the contractor with monthly consultant inspection invoices and identify any quality deficiencies at the fabrication facility.

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**506.5 Payment**

Add paragraph nine as follows effective with the June 2010 letting:

- (9) The department will limit costs for inspections conducted under 506.3.2 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

---

**507.2.2.1 General**

Replace paragraph four with the following effective with the December 2012 letting:

- (4) Ensure that there are no unsound knots or knot holes. Also ensure that there are no tight knots of a diameter exceeding one-quarter of the greater dimension at the point where they occur. Measure a knot by taking its diameter at right angles to the length of the timber. Ensure that the sum of sizes of all knots in any one-foot length does not exceed 2 times the size of the largest allowed single knot. The engineer will treat cluster knots as if they were a single knot. A cluster knot is 2 or more knots grouped together, with the fibers of the wood deflected around the entire unit.

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**512.3.1 Driving and Cutting Off**

Replace the entire text with the following effective with the December 2012 letting:

**512.3.1.1 General**

- (1) Coordinate driving operations to prevent damage or displacement of concrete in substructure units or damage to adjacent facilities due to vibrations.
- (2) Drive sheeting with a variation of 1/4 inch or less per foot from the vertical or from the batter the plans show. Ensure that the sheetpiles are within 6 inches of the plan position after driving. Do not damage sheetpiles attempting to correct for misalignment.

- (3) Remove and replace, or otherwise correct, sheetpiles the engineer deems unacceptable under 105.3. Submit details of planned corrections to the engineer for review and approval before initiating any corrective actions.
- (4) Drive sheetpiles to or beyond the required tip elevation the plans show.

#### **512.3.1.2 Driving System**

- (1) Furnish a sheetpile driving system capable of driving the sheetpiles to the required minimum tip elevation the plans show.
- (2) The engineer may order the contractor to remove a pile driving system component from service if it causes insufficient energy transfer or damages the sheetpiles. Do not return a component to service until the engineer determines that it has been satisfactorily repaired or adjusted.
- (3) Drive sheetpiles with diesel, air, steam, gravity, hydraulic, or vibratory hammers.

#### **512.3.1.3 Cut-Offs**

- (1) Cut off sheetpiles at the elevations the plans show or as the engineer directs. Pile cut-offs become the property of the contractor. Dispose of cut-offs not incorporated into the work.

### **518.2.1 General**

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

- (1) Furnish portland cement and water as specified in 501.2. Unless the engineer allows an alternate, use either type I, IL, IS, , or IP portland cement.

### **526.3.3 Temporary Structures**

Replace paragraphs two through four with the following effective with the January 2013 letting:

- (2) Inspect temporary structures conforming to the National Bridge Inspection Standards (NBIS) and the department's structure inspection manual before opening to traffic. Perform additional inspections, as the department's structure inspection manual requires, based on structure type and time in service. Submit inspection reports on department form DT2007 to the engineer and electronic copies to the department's bureau of structures maintenance section. Ensure that a department-certified active team leader, listed online in the department's highway structures information system (HSIS), performs the inspections.
- (3) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.4. Contractor-furnished materials remain the contractor's property upon removal.

### **614.2.5 Wood Posts and Offset Blocks**

Retitle and replace the entire text with the following effective with the July 2012 letting:

#### **614.2.5 Posts and Offset Blocks**

##### **614.2.5.1 Wood Posts and Offset Blocks**

- (1) Furnish sawed posts and offset blocks of one of the following species:
 

Douglas fir	Southern pine	Ponderosa pine	Jack pine	White pine
Red pine	Western hemlock	Western larch	Hem-fir	Oak
- (2) Ensure that posts are the size the plans show and conform to the nominal and minimum dimensions tabulated in 507.2.2.3. The contractor does not have to surface the posts. Provide posts of the net length the plans show after setting and cut off.
- (3) Use stress graded posts rated at 1200 psi  $f_b$  or higher. Determine the stress grade rating for douglas fir, western larch, and southern pine as specified in 507.2.2.4.
- (4) For hem-fir, hemlock, red pine, white pine, jack pine, ponderosa pine, and oak conform to the following:



TABLE 614-1 PROPERTIES FOR WOOD POSTS AND BLOCKS

SPECIES			WESTERN HEMLOCK, HEM-FIR, RED PINE, WHITE PINE, JACK PINE, PONDEROSA PINE		OAK	
MAXIMUM SLOPE OF GRAIN			1 in 15		1 in 12	
NOMINAL WIDTH OF FACE			6"	8"	6"	8"
SHAKES, CHECKS, AND SPLITS	GREEN		1"	1 3/8"	2 3/8"	3 1/8"
	SEASONED		1 1/2"	2"	2 5/8"	3 1/2"
MAXIMUM WANE			1"	1 3/8"	1 1/8"	1 5/8"
MAXIMUM ALLOWABLE KNOTS	NARROW FACE	MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"	2 1/8"	2 3/8"
		END <sup>[1]</sup>	2 3/4"	3 1/4"	4 1/4"	4 3/4"
		SUM IN MIDDLE 1/2 OF LENGTH <sup>[2]</sup>	11"	13"	17"	19
	WIDE FACE	EDGE KNOT N MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"		
		EDGE KNOT AT END <sup>[1]</sup>	2 3/4" 7	3 1/4"		
		CENTERLINE	1 3/8"	1 7/8"	2 1/4"	2 7/8"
		SUM IN MIDDLE 1/2 OF LENGTH	5 1/2"	7 1/2"	9"	11 1/2"

<sup>[1]</sup> But do not exceed the maximum allowable knot on the centerline of the wide face of the same piece.

<sup>[2]</sup> But do not exceed 4 times the maximum allowable knot on the centerline of the wide face of the same piece.

- (5) Pressure treat posts and offset blocks as specified in 507.2.2.6. Use one of the oil-soluble preservatives or chromated copper arsenate conforming to 507.2.3. Use the same material for offset blocks and posts and treat material used in each continuous installation with the same type of preservative.

#### 614.2.5.2 Steel Posts

- (1) Furnish steel posts conforming to AASHTO M270 Grade 36 and galvanized according to AASTHO M111.

#### 614.2.5.3 Plastic Offset Blocks

- (1) Furnish plastic offset blocks from the department's approved products list.

### 614.3.1 General

Replace the entire text with the following effective with the July 2012 letting:

- (1) Paint the ends of cut-off galvanized posts, rail, bolts, cut or drilled surfaces of galvanized components, and areas of damaged zinc coating with 2 coats of zinc dust/zinc oxide paint. Clean the damaged and adjacent areas thoroughly before applying paint.
- (2) Apply 2 coats of wood preservative to cut surfaces of wood components. Use the same preservative originally used to treat that component or use a 2-percent solution of copper naphthenate conforming to AWWA Standard P8 or P36.

#### 614.3.2.1 Installing Posts

Replace paragraph four with the following effective with the July 2012 letting:

- (4) Cut post tops to the finished elevation the plans show.

**628.2.13 Rock Bags**

Replace paragraph one with the following effective with the November 2012 letting:

- (1) Furnish rock bags made of a porous, ultraviolet resistant, high-density polyethylene or geotextile fabric that will retain 70% of its original strength after 500 hours of exposure according to ASTM D4355 and a minimum in-place filled size of 18-inches long by 12-inches wide by 6-inches high. Ensure that the fabric conforms to the following:

TEST REQUIREMENT	METHOD	VALUE
Minimum Tensile	ASTM D4632	
Machine direction		70 lb minimum
Cross direction		40 lb minimum
Elongation	ASTM D4632	
Machine direction		20% minimum
Cross direction		10 % min
Puncture	ASTM 4833	65 lbs minimum
Minimum Apparent Opening		0.0234 inches (No. 30 sieve)
Maximum Apparent Opening		0.0787 inches (No. 10 sieve)

**639.2.1 General**

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

- (2) For grout use fine aggregate conforming to 501.2.5.3 and type I, IL, IS, or IP portland cement.

**649.3.1 General**

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

- (3) For pavements open to all traffic, apply centerline and no-passing barrier line markings as follows:
- On intermediate pavement layers, including milled surfaces, on the same day the pavement is placed or milled.
  - On the upper layer of pavement, on the same day the pavement is placed unless the contractor applies permanent marking on the same day the pavement is placed.

If weather conditions preclude same-day application, apply as soon as weather allows. Do not resume next-day construction operations until these markings are completed unless the engineer allows otherwise.

- (4) If required to apply no passing zone temporary pavement marking, reference the beginning and end of all existing no-passing barrier lines. Apply temporary no-passing barrier lines at those existing locations. If the contract contains the Locating No-Passing Zones bid item, relocate the no-passing zones as specified in section 648 for permanent marking.

**701.4.2 Verification Testing**

Replace paragraph two with the following effective with the December 2012 letting:

- (2) The department will sample randomly at locations independent of the contractor's QC tests and use separate equipment and laboratories. The department will conduct a minimum of one verification test for each 5 contractor QC tests unless specific QMP provisions specify otherwise.

**715.2.3.1 Pavements**

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

- (2) Provide a minimum cement content of 565 pounds per cubic yard, except if using type I, IL, or III portland cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.

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**715.3.1.3 Department Verification Testing**

Replace paragraph one with the following effective with the December 2012 letting:

- (1) The department will perform verification testing as specified in 701.4.2 except as follows:
  - Air content, slump, and temperature: a minimum of 1 verification test per lot.
  - Compressive strength: a minimum of 1 verification test per lot.

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**Errata**

Make the following corrections to the 2013 edition of the standard specifications:

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**102.12 Public Opening of Proposals**

Correct 102.12(1) errata by changing htm to shtm in the web link.

- (1) The department will publicly open proposals at the time and place indicated in the notice to contractors. The department will post the total bid for each proposal on the Bid Express web site beginning at 9:30 AM except as specified in 102.8. If a proposal has no total bid shown, the department will not post the bid. After verification for accuracy under 103.1, the department will post bid totals on the department's HCCI web site.

<http://roadwaystandards.dot.wi.gov/hcci/bid-letting/index.shtm>

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**107.22 Contractor's Responsibility for Utility Facilities, Property, and Services**

Correct errata by eliminating references to the department. Costs are determined by statute.

- (3) If the contractor damages or interrupts service, the contractor shall notify the utility promptly. Coordinate and cooperate with the utility in the repair of the facility. Determine who is responsible for repair costs according to Wisconsin statutes 66.0831 and 182.0175(2).
- 

**204.3.2.2 Removing Items**

Correct errata by changing the reference from 490.3.2 to 490.3.

- (5) Under the Removing Asphaltic Surface Milling bid item, remove and dispose of existing asphaltic pavement or surfacing by milling at the location and to the depth the plans show. Mill the asphaltic pavement or surfacing as specified for milling salvaged asphaltic pavement in 490.3.
- 

**501.2.9 Concrete Curing Materials.**

Correct errata by changing AASHTO M171 to ASTM C171.

- (4) Furnish polyethylene-coated burlap conforming to ASTM C171 for white burlap-polyethylene sheets.
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**506.2.6.5.2 Pad Construction**

Correct errata by changing ASTM A570 to ASTM A1011.

- (4) For the internal steel plates use rolled mild steel conforming to ASTM A36, or ASTM A1011 grade
- 

**512.3.3 Painting**

Correct errata by changing 511.3.5 to 550.3.11.3.

- (1) Paint permanent steel sheet piling as specified for painting steel piling in 550.3.11.3.

**513.2.2.8 Toggle Bolts**Correct errata by changing ASTM A570 to ASTM A1011.

- (1) Use toggle bolts made of steel, conforming to the plans. Make the assembly from the material specified below:

Toggle bolt and pin ..... Cold finished steel heat-treated Brinell 311-363 ASTM A354.  
 Toggle washer ..... Hot rolled steel ASTM A1011. Manufacturer's standard washer.  
 Spacer nut ..... Grade 1213, ASTM A108. Cold finished steel heat-treated ASTM A325.

**660.2.1 General**Correct errata by changing section 511 to 550.

- (1) Furnish materials conforming to the following:

Concrete ..... section 501  
 Concrete bridges ..... section 502  
 Luminaires ..... section 659  
 Steel piling ..... section 550  
 Steel reinforcement ..... section 505

**660.3.2.3 Pile Type Foundations**Correct errata by changing section 511 to 550.

- (1) Drive piles as specified in for steel piling in section 550.

**701.3 Contractor Testing**Correct errata by updating AASHTO T141 to AASHTO R60 and changing AASHTO T309 to ASTM C1064.

- (1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Also perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Use test methods as follows:

**TABLE 701-2 TESTING STANDARDS**

TEST	TEST STANDARD
Washed P 200 analysis	AASHTO T11 <sup>[1]</sup>
Sieve analysis of fine and coarse aggregate	AASHTO T27 <sup>[1]</sup>
Aggregate moisture	AASHTO T255 <sup>[1]</sup>
Sampling freshly mixed concrete	AASHTO R60
Air content of fresh concrete	AASHTO T152 <sup>[2]</sup>
Concrete slump	AASHTO T119 <sup>[2]</sup>
Concrete temperature	ASTM C1064
Concrete compressive strength	AASHTO T22
Making and curing concrete cylinders	AASHTO T23
Standard moist curing for concrete cylinders	AASHTO M201

<sup>[1]</sup> As modified in CMM 8-60.

<sup>[2]</sup> As modified in CMM 8-70.

**ADDITIONAL SPECIAL PROVISION 7**

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



**ADDITIONAL SPECIAL PROVISION 9**  
**Electronic Certified Payroll Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

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

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

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

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under



this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.



(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

##### **a. Apprentices (programs of the USDOL).**

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### **b. Trainees (programs of the USDOL).**

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.



i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

**Goals for Minority Participation for Each Trade:**

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

**Goals for female participation for each trade: 6.9%**

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director  
Office of Federal Contract Compliance Programs  
Ruess Federal Plaza  
310 W. Wisconsin Ave., Suite 1115  
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

**APRIL 2012**

**ADDITIONAL FEDERAL-AID PROVISIONS**

**BUY AMERICA**

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials 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.

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/hidden/ws4567.doc>

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**Effective with September 2004 Letting**

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

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

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

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

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

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

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

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

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

## **II. PAYROLL REQUIREMENTS**

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

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

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

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

## **IV. WAGE RATE REDISTRIBUTION**

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



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

## **V. ADDITIONAL CLASSIFICATIONS**

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

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

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

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

**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
SHEBOYGAN COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development  
for the Department of Transportation  
Pursuant to s. 103.50, Stats.  
Issued on April 1, 2012

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

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	32.66	15.92	48.58
Carpenter	29.06	15.16	44.22
Cement Finisher	29.35	15.05	44.40
Electrician	33.21	18.45	51.66
Fence Erector	35.62	0.00	35.62
Ironworker	27.48	21.54	49.02
Line Constructor (Electrical)	35.97	18.08	54.05
Painter	28.00	11.15	39.15
Pavement Marking Operator	23.46	9.45	32.91
Piledriver	28.11	23.82	51.93
Roofer or Waterproofer	16.50	4.54	21.04
Teledata Technician or Installer	23.15	6.11	29.26
Tuckpointer, Caulker or Cleaner	31.16	16.02	47.18
Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	33.87	16.10	49.97
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	15.65	44.43
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	13.07	38.25
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27

**TRUCK DRIVERS**

Single Axle or Two Axle	22.35	16.19	38.54
Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013.			

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	22.50	16.19	38.69
Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/2013.			
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptr, Off Road Material Hauler	26.77	18.90	45.67
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Pavement Marking Vehicle	23.84	14.70	38.54
Shadow or Pilot Vehicle	24.76	15.35	40.11
Truck Mechanic	24.91	15.35	40.26

**LABORERS**

General Laborer	26.92	13.45	40.37
Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2014.			
Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer.			
DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	24.26	12.88	37.14
Landscaper	26.92	13.45	40.37
Future Increase(s): Add \$1.60/hr on 6/1/12; Add \$1.70/hr on 6/1/13; Add \$1.60/hr on 6/1/14.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	20.68	17.85	38.53
Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/2013; Add \$1.60/hr on 6/1/2014.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.09	14.40	31.49
Railroad Track Laborer	12.50	7.57	20.07

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
<b>HEAVY EQUIPMENT OPERATORS</b>			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	34.22	18.90	53.12
Backhoe (Track Type) Having a Mfrgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.72	18.90	52.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfrgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches	33.22	18.90	52.12

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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& A- Frames.			
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	32.96	18.90	51.86
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	32.67	18.90	51.57
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1.75/hr on 6/1/14.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
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Fiber Optic Cable Equipment.	24.39	15.45	39.84
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01
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Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	36.20	18.81	55.01
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Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	26.80	18.52	45.32
-----			
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	26.80	18.52	45.32
-----			

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
-----	\$-----	\$-----	\$-----

SUPERSEDES DECISION WI20070010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: February 1, 2013

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits	Truck Drivers:	Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler .....	\$26.92 .....	13.45	1 & 2 Axles .....	23.16 .....	17.13
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); .....	27.02 .....	13.45	Three or More Axles; Euclids, Dumptr & Articulated, Truck Mechanic.....	23.31 .....	17.13
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man.....	27.07 .....	13.45			
Group 4: Line and Grade Specialist .....	27.27 .....	13.45			
Group 5: Blaster and Powderman .....	27.12 .....	13.45			
Group 6: Flagperson; Traffic Control .....	23.55 .....	13.45			

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0, dated January 4, 2013; Modification #1 dated February 1, 2013.

CLASSES OF LABORER AND MECHANICS

Bricklayer .....	30.77 .....	16.62
Carpenter .....	30.48 .....	15.80
Millwright .....	32.11 .....	15.80
Piledriverman .....	30.98 .....	15.80
Ironworker .....	28.23 .....	22.72
Cement Mason/Concrete Finisher .....	31.52 .....	16.30
Electrician .....	See Page 3	
Line Construction		
Lineman.....	38.25 .....	18.00
Heavy Equipment Operator .....	34.43 .....	16.71
Equipment Operator.....	30.60 .....	15.41
Heavy Groundman Driver.....	26.78 .....	14.11
Light Groundman Driver .....	24.86 .....	13.45
Groundsman.....	21.04 .....	12.16
Painters .....	23.37 .....	11.52
Well Drilling:		
Well Driller.....	16.52 .....	3.70



SUPERSEDES DECISION WI20070010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: February 1, 2013

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer .....	\$35.22	\$19.65	(scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator. ....	\$34.22	\$19.65
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer. ....	\$34.72	\$19.65	Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner. ....	\$33.96	\$19.65
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper. ....	\$33.67	\$19.65
			Group 6: Off - road material hauler with or without ejector.....	\$27.77	\$19.65
			Premium Pay: EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hours		

SUPERSEDES DECISION WI20070010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: February 1, 2013

LABORERS CLASSIFICATION: Rates Benefits

			Area 4 -	BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.
Electricians				
Area 1	\$27.80	16.52		
Area 2:				
Electricians.....	29.13	17.92	Area 5 -	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area 3:				
Electrical contracts under \$130,000 .....	26.24	16.85		
Electrical contracts over \$130,000 .....	29.41	16.97		
Area 4:	28.10	17.24		
Area 5	28.61	16.60		
Area 6	35.25	19.30	Area 6 -	KENOSHA COUNTY
Area 8				
Electricians.....	30.00	17.76	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 9:				
Electricians.....	32.94	18.71	Area 9 -	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 10	28.97	19.55		
Area 11	31.27	23.12		
Area 12	32.87	19.23		
Area 13	32.20	21.64	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Teledata System Installer				
Area 14			Area 11 -	DOUGLAS COUNTY
Installer/Technician .....	21.89	11.83		
Sound & Communications			Area 12 -	RACINE (except Burlington township) COUNTY
Area 15				
Installer .....	16.47	14.84	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Technician.....	24.75	16.04	Area 14 -	Statewide.
Area 1 -			Area 15 -	DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.
CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.				
Area 2 -				
ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON and WASHBURN COUNTIES				
Area 3 -				
FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)				

**FEBRUARY 1999**

**NOTICE TO BIDDERS  
WAGE RATE DECISION**

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.



## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20130409021PROJECT(S):  
4996-01-48  
4996-17-71FEDERAL ID(S):  
WISC 2013221  
WISC 2013223

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

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

## SECTION 0001 CONTRACT ITEMS

0010	201.0105 CLEARING	39.000				
		STA	.		.	
0020	201.0120 CLEARING	71.000				
		ID	.		.	
0030	201.0205 GRUBBING	39.000				
		STA	.		.	
0040	201.0220 GRUBBING	71.000				
		ID	.		.	
0050	203.0200 REMOVING OLD STRUCTURE (STATION) 01. STA. 29+94	LUMP	LUMP			.
0060	204.0100 REMOVING PAVEMENT	3,322.000				
		SY	.		.	
0070	204.0150 REMOVING CURB & GUTTER	638.000				
		LF	.		.	
0080	204.0155 REMOVING CONCRETE SIDEWALK	1,085.000				
		SY	.		.	
0090	204.0170 REMOVING FENCE	94.000				
		LF	.		.	
0100	204.0195 REMOVING CONCRETE BASES	32.000				
		EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0200 REMOVING RAILROAD TRACK	6,953.000 LF	.		.	
0120	204.0205 REMOVING UTILITY POLES	12.000 EACH	.		.	
0130	204.0220 REMOVING INLETS	14.000 EACH	.		.	
0140	204.0245 REMOVING STORM SEWER (SIZE) 01. 12"	167.000 LF	.		.	
0150	204.0245 REMOVING STORM SEWER (SIZE) 02. 15"	69.000 LF	.		.	
0160	204.9060.S REMOVING (ITEM DESCRIPTION) 01. RAILROAD HARDWARE	8.000 EACH	.		.	
0170	204.9105.S REMOVING (ITEM DESCRIPTION) 01. RETAINING WALL STATION 20+60	LUMP	LUMP		.	
0180	204.9105.S REMOVING (ITEM DESCRIPTION) 02. RETAINING WALL STATION 23+80	LUMP	LUMP		.	
0190	204.9105.S REMOVING (ITEM DESCRIPTION) 03. RETAINING WALL STATION 53+24	LUMP	LUMP		.	
0200	205.0100 EXCAVATION COMMON ***	12,849.000 CY	.		.	

## Wisconsin Department of Transportation

PAGE: 3

DATE: 02/07/13

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			DOLLARS	CTS	DOLLARS	CTS
0210	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-59-318	LUMP	LUMP		.	
0220	210.0100 BACKFILL STRUCTURE	50.000 CY	.		.	
0230	214.0100 OBLITERATING OLD ROAD	4.000 STA	.		.	
0240	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	5,800.000 TON	.		.	
0250	320.0135 CONCRETE BASE 7-INCH	1,503.000 SY	.		.	
0260	415.0080 CONCRETE PAVEMENT 8-INCH	255.000 SY	.		.	
0270	415.0090 CONCRETE PAVEMENT 9-INCH	898.000 SY	.		.	
0280	416.0160 CONCRETE DRIVEWAY 6-INCH	68.000 SY	.		.	
0290	416.0610 DRILLED TIE BARS	581.000 EACH	.		.	
0300	416.0620 DRILLED DOWEL BARS	80.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
0310	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES	128.000 SY	.		.	
0320	455.0105 ASPHALTIC MATERIAL PG58-28	105.000 TON	.		.	
0330	455.0605 TACK COAT	337.000 GAL	.		.	
0340	460.1100 HMA PAVEMENT TYPE E-0.3	1,908.000 TON	.		.	
0350	460.2000 INCENTIVE DENSITY HMA PAVEMENT	1,240.000 DOL	1.00000		1240.00	
0360	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	4.000 TON	.		.	
0370	502.0100 CONCRETE MASONRY BRIDGES	172.000 CY	.		.	
0380	502.3100 EXPANSION DEVICE (STRUCTURE) 01. B-59-318	LUMP	LUMP		.	
0390	502.3200 PROTECTIVE SURFACE TREATMENT	517.000 SY	.		.	
0400	502.6105 MASONRY ANCHORS TYPE S 5/8-INCH	60.000 EACH	.		.	
0410	505.0405 BAR STEEL REINFORCEMENT HS BRIDGES	2,460.000 LB	.		.	



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			DOLLARS	CTS	DOLLARS	CTS
0420	505.0605 BAR STEEL REINFORCEMENT HS COATED BRIDGES	30,330.000 LB	.		.	
0430	506.0605 STRUCTURAL STEEL HS	2,990.000 LB	.		.	
0440	516.0500 RUBBERIZED MEMBRANE WATERPROOFING	12.000 SY	.		.	
0450	520.8000 CONCRETE COLLARS FOR PIPE	5.000 EACH	.		.	
0460	601.0600 CONCRETE CURB PEDESTRIAN	25.000 LF	.		.	
0470	602.0410 CONCRETE SIDEWALK 5-INCH	15,535.000 SF	.		.	
0480	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	538.000 LF	.		.	
0490	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	157.000 LF	.		.	
0500	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	4.000 LF	.		.	
0510	611.0420 RECONSTRUCTING MANHOLES	1.000 EACH	.		.	
0520	611.0545 MANHOLE COVERS TYPE L	1.000 EACH	.		.	

## Wisconsin Department of Transportation

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0530	611.0642 INLET COVERS TYPE MS	7.000 EACH	.		.	
0540	611.1230 CATCH BASINS 2X3-FT	13.000 EACH	.		.	
0550	611.2004 MANHOLES 4-FT DIAMETER	2.000 EACH	.		.	
0560	611.3901 INLETS MEDIAN 1 GRATE	7.000 EACH	.		.	
0570	611.8110 ADJUSTING MANHOLE COVERS	6.000 EACH	.		.	
0580	611.8115 ADJUSTING INLET COVERS	2.000 EACH	.		.	
0590	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH	150.000 LF	.		.	
0600	614.0920 SALVAGED RAIL	117.000 LF	.		.	
0610	619.1000 MOBILIZATION	1.000 EACH	.		.	
0620	624.0100 WATER	33.000 MGAL	.		.	
0630	625.0100 TOPSOIL	18,029.000 SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0640	628.1104 EROSION BALES	250.000 EACH	.		.	
0650	628.1504 SILT FENCE	2,020.000 LF	.		.	
0660	628.1520 SILT FENCE MAINTENANCE	2,020.000 LF	.		.	
0670	628.1905 MOBILIZATIONS EROSION CONTROL	11.000 EACH	.		.	
0680	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	5.000 EACH	.		.	
0690	628.2006 EROSION MAT URBAN CLASS I TYPE A	17,124.000 SY	.		.	
0700	628.2008 EROSION MAT URBAN CLASS I TYPE B	750.000 SY	.		.	
0710	628.7005 INLET PROTECTION TYPE A	10.000 EACH	.		.	
0720	628.7010 INLET PROTECTION TYPE B	1.000 EACH	.		.	
0730	628.7015 INLET PROTECTION TYPE C	29.000 EACH	.		.	
0740	628.7555 CULVERT PIPE CHECKS	5.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0750	628.7560 TRACKING PADS	1.000				
		EACH	.		.	
0760	629.0210 FERTILIZER TYPE B	11.000				
		CWT	.		.	
0770	630.0140 SEEDING MIXTURE NO. 40	325.000				
		LB	.		.	
0780	630.0200 SEEDING TEMPORARY	490.000				
		LB	.		.	
0790	634.0416 POSTS WOOD 4X4-INCH X 16-FT	3.000				
		EACH	.		.	
0800	634.0808 POSTS TUBULAR STEEL 2X2-INCH X 8-FT	37.000				
		EACH	.		.	
0810	634.0812 POSTS TUBULAR STEEL 2X2-INCH X 12-FT	18.000				
		EACH	.		.	
0820	637.0202 SIGNS REFLECTIVE TYPE II	359.470				
		SF	.		.	
0830	638.2102 MOVING SIGNS TYPE II	1.000				
		EACH	.		.	
0840	638.2602 REMOVING SIGNS TYPE II	1.000				
		EACH	.		.	
0850	638.3000 REMOVING SMALL SIGN SUPPORTS	1.000				
		EACH	.		.	

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WISC 2013223

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			DOLLARS	CTS	DOLLARS	CTS
0860	638.4000 MOVING SMALL SIGN SUPPORTS	1.000 EACH	.		.	
0870	642.5001 FIELD OFFICE TYPE B	1.000 EACH	.		.	
0880	643.0100 TRAFFIC CONTROL (PROJECT) 01. 4996-01-48	1.000 EACH	.		.	
0890	643.0300 TRAFFIC CONTROL DRUMS	7,050.000 DAY	.		.	
0900	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	2,520.000 DAY	.		.	
0910	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	2,120.000 DAY	.		.	
0920	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	1,400.000 DAY	.		.	
0930	643.0800 TRAFFIC CONTROL ARROW BOARDS	315.000 DAY	.		.	
0940	643.0900 TRAFFIC CONTROL SIGNS	5,180.000 DAY	.		.	
0950	646.0106 PAVEMENT MARKING EPOXY 4-INCH	136.000 LF	.		.	
0960	646.0126 PAVEMENT MARKING EPOXY 8-INCH	109.000 LF	.		.	

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WISC 2013223

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

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0970	646.0600 REMOVING PAVEMENT MARKINGS	512.000 LF	.		.	
0980	647.0146 PAVEMENT MARKING ARROWS EPOXY TYPE 6	1.000 EACH	.		.	
0990	647.0160 PAVEMENT MARKING ARROWS EPOXY TYPE 2R	1.000 EACH	.		.	
1000	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2	1.000 EACH	.		.	
1010	647.0176 PAVEMENT MARKING ARROWS EPOXY TYPE 3	1.000 EACH	.		.	
1020	647.0356 PAVEMENT MARKING WORDS EPOXY	2.000 EACH	.		.	
1030	647.0556 PAVEMENT MARKING STOP LINE EPOXY 12-INCH	249.000 LF	.		.	
1040	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	2.000 EACH	.		.	
1050	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	1,645.000 LF	.		.	
1060	647.0786 PAVEMENT MARKING CROSSWALK EPOXY 18-INCH	506.000 LF	.		.	
1070	647.0955 REMOVING PAVEMENT MARKINGS ARROWS	2.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1080	647.0965 REMOVING PAVEMENT MARKINGS WORDS	1.000 EACH	.		.	
1090	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	3,430.000 LF	.		.	
1100	650.4000 CONSTRUCTION STAKING STORM SEWER	22.000 EACH	.		.	
1110	650.5000 CONSTRUCTION STAKING BASE	7,992.000 LF	.		.	
1120	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	2,096.000 LF	.		.	
1130	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-59-318	LUMP	LUMP		.	
1140	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 4996-01-48	LUMP	LUMP		.	
1150	650.9920 CONSTRUCTION STAKING SLOPE STAKES	7,992.000 LF	.		.	
1160	652.0120 CONDUIT RIGID METALLIC 1 1/2-INCH	168.000 LF	.		.	
1170	652.0220 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1 1/2-INCH	7,520.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1180	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	1,242.000 LF	.		.	
1190	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	220.000 LF	.		.	
1200	652.0605 CONDUIT SPECIAL 2-INCH	551.000 LF	.		.	
1210	652.0615 CONDUIT SPECIAL 3-INCH	780.000 LF	.		.	
1220	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM	3.000 EACH	.		.	
1230	652.0800 CONDUIT LOOP DETECTOR	665.000 LF	.		.	
1240	653.0135 PULL BOXES STEEL 24X36-INCH	2.000 EACH	.		.	
1250	653.0140 PULL BOXES STEEL 24X42-INCH	15.000 EACH	.		.	
1260	653.0900 ADJUSTING PULL BOXES	4.000 EACH	.		.	
1270	653.0905 REMOVING PULL BOXES	22.000 EACH	.		.	
1280	654.0101 CONCRETE BASES TYPE 1	6.000 EACH	.		.	



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			DOLLARS	CTS	DOLLARS	CTS
1290	654.0102 CONCRETE BASES TYPE 2	11.000 EACH	.		.	
1300	654.0105 CONCRETE BASES TYPE 5	2.000 EACH	.		.	
1310	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG	1,080.000 LF	.		.	
1320	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG	165.000 LF	.		.	
1330	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG	5,390.000 LF	.		.	
1340	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG	1,450.000 LF	.		.	
1350	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	4,660.000 LF	.		.	
1360	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	27,432.000 LF	.		.	
1370	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	5,585.000 LF	.		.	
1380	655.0700 LOOP DETECTOR LEAD IN CABLE	6,040.000 LF	.		.	
1390	655.0800 LOOP DETECTOR WIRE	3,160.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1400	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STA 33+05	LUMP	LUMP			.
1410	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. STA 74+60	LUMP	LUMP			.
1420	657.0100 PEDESTAL BASES	6.000 EACH	.			.
1430	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	11.000 EACH	.			.
1440	657.0305 POLES TYPE 2	3.000 EACH	.			.
1450	657.0310 POLES TYPE 3	3.000 EACH	.			.
1460	657.0315 POLES TYPE 4	5.000 EACH	.			.
1470	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	5.000 EACH	.			.
1480	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	1.000 EACH	.			.
1490	657.0595 TROMBONE ARMS 25-FT	6.000 EACH	.			.

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			DOLLARS	CTS	DOLLARS	CTS
1500	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	9.000 EACH	.		.	
1510	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	28.000 EACH	.		.	
1520	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL	7.000 EACH	.		.	
1530	658.0120 TRAFFIC SIGNAL FACE 5-12 INCH VERTICAL	1.000 EACH	.		.	
1540	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH	28.000 EACH	.		.	
1550	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH	7.000 EACH	.		.	
1560	658.0225 BACKPLATES SIGNAL FACE 5 SECTION 12-INCH	1.000 EACH	.		.	
1570	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH	24.000 EACH	.		.	
1580	658.0500 PEDESTRIAN PUSH BUTTONS	19.000 EACH	.		.	
1590	658.0600 LED MODULES 12-INCH RED BALL	32.000 EACH	.		.	
1600	658.0605 LED MODULES 12-INCH YELLOW BALL	31.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1610	658.0610 LED MODULES 12-INCH GREEN BALL	31.000 EACH	.		.	
1620	658.0615 LED MODULES 12-INCH RED ARROW	4.000 EACH	.		.	
1630	658.0620 LED MODULES 12-INCH YELLOW ARROW	10.000 EACH	.		.	
1640	658.0625 LED MODULES 12-INCH GREEN ARROW	9.000 EACH	.		.	
1650	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH	24.000 EACH	.		.	
1660	658.5069 SIGNAL MOUNTING HARDWARE (LOCATION) 01. STH 42 (CALUMET DR.) & N 15TH ST. AND STH 42 & SAEMANN AVE.	LUMP	LUMP		.	
1670	658.5069 SIGNAL MOUNTING HARDWARE (LOCATION) 02. STH 42 (N 14TH ST.) & SUPERIOR AVE.	LUMP	LUMP		.	
1680	659.0115 LUMINAIRES UTILITY HPS 150 WATTS	4.000 EACH	.		.	
1690	659.0125 LUMINAIRES UTILITY HPS 250 WATTS	5.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1700	661.0200 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) 01. STH 42 (CALUMET DR.) & N 15TH ST.	LUMP	LUMP		.	
1710	661.0200 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (LOCATION) 02. STH 42 (N 14TH ST.) & SUPERIOR AVE.	LUMP	LUMP		.	
1720	690.0150 SAWING ASPHALT	50.000 LF	.		.	
1730	690.0250 SAWING CONCRETE	2,682.000 LF	.		.	
1740	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT	500.000 DOL	1.00000		500.00	
1750	715.0502 INCENTIVE STRENGTH CONCRETE STRUCTURES	966.000 DOL	1.00000		966.00	
1760	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	1,200.000 HRS	5.00000		6000.00	
1770	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	600.000 HRS	5.00000		3000.00	
1780	SPV.0035 SPECIAL 01. SALVAGED RAILROAD BALLAST BASE	1,410.000 CY	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1790	SPV.0035 SPECIAL 02. COLORING CONCRETE CORAL BUFF	69.000 CY	.		.	
1800	SPV.0035 SPECIAL 03. COLORING CONCRETE CHARCOAL	4.000 CY	.		.	
1810	SPV.0060 SPECIAL 01. ADJUSTING WATER VALVE BOXES	1.000 EACH	.		.	
1820	SPV.0060 SPECIAL 02. REMOVE EXISTING LIGHTING ASSEMBLIES	2.000 EACH	.		.	
1830	SPV.0060 SPECIAL 03. REMOVE AND RE-INSTALL EXISTING LIGHT ASSEMBLIES	2.000 EACH	.		.	
1840	SPV.0060 SPECIAL 04. CONCRETE BASE FOR CONTROL CABINET A	1.000 EACH	.		.	
1850	SPV.0060 SPECIAL 05. CONCRETE BASE FOR CONTROL CABINET B	1.000 EACH	.		.	
1860	SPV.0060 SPECIAL 06. CONTROL CABINET A	1.000 EACH	.		.	
1870	SPV.0060 SPECIAL 07. CONTROL CABINET B	1.000 EACH	.		.	
1880	SPV.0060 SPECIAL 08. DECORATIVE LIGHTING ASSEMBLY TYPE A	81.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1890	SPV.0060 SPECIAL 09. LIGHTING POLE TYPE A CONCRETE BASE	77.000 EACH	.		.	
1900	SPV.0060 SPECIAL 10. LIGHTING POLE TYPE A BRIDGE MOUNTING BASE	4.000 EACH	.		.	
1910	SPV.0060 SPECIAL 11. EXPOSE EXISTING UTILITIES	5.000 EACH	.		.	
1920	SPV.0060 SPECIAL 12. MANHOLE COVERS TYPE J SPECIAL	1.000 EACH	.		.	
1930	SPV.0060 SPECIAL 13. INLET COVERS TYPE H SPECIAL	13.000 EACH	.		.	
1940	SPV.0060 SPECIAL 14. TRAFFIC SIGNAL CONTROLLER AND CABINET STH 42/SAEMANN/15TH ST	1.000 EACH	.		.	
1950	SPV.0090 SPECIAL 01. FENCE CHAIN LINK VINYL COATED 4-FOOT	712.000 LF	.		.	
1960	SPV.0090 SPECIAL 03. CONCRETE CURB & GUTTER 32-INCH, TYPE A SPECIAL	1,306.000 LF	.		.	
1970	SPV.0090 SPECIAL 04. CONCRETE CURB & GUTTER 32-INCH, TYPE D SPECIAL	818.000 LF	.		.	
1980	SPV.0090 SPECIAL 05. STORM SEWER PIPE PVC 4-INCH	2.000 LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1990	SPV.0090 SPECIAL 06. STORM SEWER PIPE PVC 6-INCH	2.000 LF	.		.	
2000	SPV.0105 SPECIAL 01. MODIFY EMERGENCY VEHICLE PREEMPTION SYSTEM STH 42/SAEMANN/15TH ST	LUMP	LUMP		.	
2010	SPV.0105 SPECIAL 02. MODIFY EMERGENCY VEHICLE PREEMPTION SYSTEM STH 42/SUPERIOR AVE	LUMP	LUMP		.	
2020	SPV.0105 SPECIAL 03. REMOVE TRAFFIC SIGNALS STH 42/SAEMANN/15TH ST	LUMP	LUMP		.	
2030	SPV.0105 SPECIAL 04. REMOVE TRAFFIC SIGNALS STH 42/SUPERIOR AVE	LUMP	LUMP		.	
2040	SPV.0105 SPECIAL 05. VEHICLE VIDEO DETECTION SYSTEM	LUMP	LUMP		.	
2050	SPV.0105 SPECIAL 07. MODIFY TRAFFIC SIGNAL CABINET STH 42/SUPERIOR AVE	LUMP	LUMP		.	
2060	SPV.0105 SPECIAL 08. CONCRETE PAVEMENT JOINT LAYOUT	LUMP	LUMP		.	
2070	SPV.0105 SPECIAL 09. RAILING STEEL GALVANIZED PEDESTRIAN	LUMP	LUMP		.	
2080	SPV.0165 SPECIAL 01. STAMPED CONCRETE SIDEWALK 5-INCH	300.000 SF	.		.	



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			DOLLARS	CTS	DOLLARS	CTS
2090	SPV.0165 SPECIAL 02. WALL LIMESTONE BLOCK GRAVITY STA. 53+24	113.000 SF	.		.	
2100	SPV.0165 SPECIAL 03. WALL LIMESTONE BLOCK GRAVITY STA. 200+31	279.000 SF	.		.	
2110	SPV.0165 SPECIAL 04. CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SPECIAL	712.000 SF	.		.	
2120	SPV.0180 SPECIAL 01. CONCRETE JOINT SEALING	1,153.000 SY	.		.	
2130	SPV.0180 SPECIAL 02. CONCRETE PAVEMENT APPROACH SLAB SPECIAL	28.000 SY	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	



**PLEASE ATTACH SCHEDULE OF ITEMS HERE**